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Experience Design from a Performative Perspective: Designing the Emegrence of Enactive Participation in Live Events

PhD Thesis

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Διδακτορική διατριβή

Σοφία Μυτιληναίου

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To Teachers that contributed, regardless of their profession,
and to my parents for their support all the way.

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Abstract

Conserving and promoting intangible culture involves a fundamental methodological dilemma as live, transient and ever-changing in nature. In the framework of this thesis, experience design and live art are suggested to offer an innovative perspective in studying and preserving non-material forms of culture, as they have long embraced the ephemeral and the unforeseen. Particularly, performance as artistic medium and social-cultural practice can offer designers an insight on setting the context for live events to unfold, wherein audience members become co-creators of the educational and artistic experience that emerge on the fly. Surpassing the ambiguous borderline of art and design, of everyday life and artistic experience, and re-evaluate the role of artist and audience, artist and artwork, both experience design and live art concentrate on staging audience participation in live events. This thesis studies the ways performers of live art apply to incite people become emancipated participants, and following, is willing to translate this knowledge into design strategies to preserve and promote the intangible and the ephemeral.

Keywords: design, experience design, performance, live art, event, audience participation, aesthetics, senses, narrative.

Περίληψη

Η διατήρηση και προώθηση του μη-υλικού πολιτισμού αντιμετωπίζει ένα βασικό μεθοδολογικό ζήτημα, ως εφήμερο και διαρκώς εξελισσόμενο γεγονός. Στα πλαίσια της συγκεκριμένης διατριβής, ο *σχεδιασμός εμπειριών* (experience design) και η *ζωντανή τέχνη* (live art) προτείνονται ως ικανά πεδία να προσφέρουν μια καινοτόμο προσέγγιση στη μελέτη και διατήρηση μη-υλικών μορφών πολιτισμού, καθώς ακριβώς εστιάζουν στη διαχείριση του εφήμερου και του απρόβλεπτου. Συγκεκριμένα, η επιτέλεση (ή δράση, performance) σαν καλλιτεχνικό μέσο και κοινωνικοπολιτισμική πρακτική μπορεί να προσφέρει στους σχεδιαστές γνώση και εμπειρία σχετικά με την οργάνωση ζωντανών γεγονότων, με εκπαιδευτικό και καλλιτεχνικό χαρακτήρα, στα οποία οι συμμετέχοντες μετατρέπονται σε συνδημιουργούς της όλης εμπειρίας. Υπερβαίνοντας τα όρια μεταξύ τέχνης και σχεδιασμού, καθημερινής ζωής και καλλιτεχνικής εμπειρίας, μεταξύ καλλιτέχνη και θεατή, καλλιτέχνη και έργου τέχνης, τόσο ο *σχεδιασμός εμπειριών* όσο και η *ζωντανή τέχνη* οργανώνουν (θέτουν επί σκηνής, με την ευρύτερη έννοια του όρου σκηνή) τη διάδραση και συμμετοχή του κοινού σε ζωντανά γεγονότα. Η διατριβή αυτή αποτελεί αρχικά μια μελέτη των τρόπων που χρησιμοποιούν οι καλλιτέχνες της *ζωντανή τέχνη* - αλλά και παράλληλων θεατρικών πεδίων – για τη μεταβολή του θεατή σε ενεργό συμμετέχοντα. Σε δεύτερο επίπεδο, τα αποτελέσματα μεταφέρονται στο πεδίο του σχεδιασμού ως προτάσεις και στρατηγικές διατήρησης και προώθησης μη-υλικών και εφήμερων μορφών πολιτισμού.

Keywords: σχεδιασμός, σχεδιασμός εμπειριών, επιτέλεση, ζωντανή τέχνη, γεγονός, συμμετοχή κοινού, αισθητική, αισθήσεις, αφήγηση.

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Acknowledgements

As an only child I grew up feeling isolated most of the time. I loved playing a particular game though: my island. I used to gather all the things I love with me on a chair or bed and pretend there was sea all around me I could not cross to reach others. This island was my home and my challenge to mature. There is no sea, only steps to make one by one and reach out and touch not only what we think we want, but what is good for us in a deeper level. As a grownup I feel happy every time I make a connection, a creative association among people, approaches, differences, even disputes. My thesis aspired to be another bridge.

I need to thank 'my island' for getting me so far through my thesis. And my 'island' is consisted of people, generous and inspired people who contributed in multiple levels. My parents come first, not only out of respect, but because they literally supported me every step of this way with a smile, even when I had none to give back. The second person I experienced the entire route with is my supervisor professor Evi Sampanikou, and I mostly appreciate her guidance and support through our mutual endeavour to accomplish this research. An important person that has been there for me as teacher and friend is John Britton. We have danced together a lot (never enough) through our physical theatre performances and he helped these legs step in life out of love and pleasure, not fear, in front of the audience and beyond. My island is also more beautiful and prosperous due to three more professors of my advisory committee: Gerasimos Pavlogergatos, Angeliki Avgitidou and Theano S. Terkenli, who listened and stood by me during the obstacles I faced with an open mind and heart, through their own perspective. Apart from my teachers, I would like to thank my friends and fellow travellers, for being patient with me and believing in me all the way: Magdalina Pandraklaki, Pinelopi Gierrou, Eva Tzouma, Antony Los, and Ilias Pastos. Help comes in numerous ways I cannot describe in words and like gratitude is mainly felt, profoundly in case of these people. I have serious doubts I could make it without their precious friendship. Lastly I would like to help all the people, directors and audience members, who accepted my invitation and contributed in this research by stating their personal experience during the equivalent interviews. Their feelings and thoughts enlightened this thesis with essential conclusions. I feel sincere gratitude for this 'island' of teachers, friends and interviewees for helping this endeavour to reach completion.

P.S. The same day I emailed my supervisor the entire thesis to correct, I met my future husband. I don't believe in luck, so I also thank him for 'knowing' when to come into my life.

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General introduction

i) Definition and formulation of the topic

This thesis attempts to study contemporary design tendencies oriented towards experiences and live events, as a tool for preserving and promoting the intangible culture. Whereas tangible forms of human culture are conserved in time, in accordance to the features and decay of their materiality, intangible forms are destined to be experienced through live participatory events or recorded archives. Research methods already adapted from relevant cultural, social and environmental studies do not yet achieve to embrace the elusive and constantly fleeting nature of intangible cultural forms. As ephemeral, they always emerge and vanish out of people interrelationship and interaction within particular spatial and socio-cultural contexts. The intangible culture involves practices condemned to evanescence, necessitating participants' (artists as well as audience) interaction and collaboration to come to existence and be witnessed again. Such cultural events are better studied and safeguarded when personally lived and experienced. This research concentrates on the common ground between experience design and live art (along with performance studies) in creating and studying live events with cultural and artistic content.

The intangible aspect of culture though has recently put weight on civilians' social practices. Contemporary theories on culture and art are progressively concerned with the intricacy and ingenuity of relationships and systems, "the invisible and immaterial, the evolutive and the evanescent" (Ascott, 2007, p. 277). Indicatively, the ICOMOS (International Council on Monuments and Sites), which was constituted by the UNESCO World Heritage List in 1978 as the "the primary repository for the original documentation of the cultural and mixed (natural and cultural) properties" (ICOMOS, 2011), found ICICH (International Committee on Intangible Cultural Heritage) no earlier than 2005. According to the *Convention for the Safeguarding of the Intangible Cultural Heritage 2003*:

> "The 'intangible cultural heritage' means the practices, representations, expressions, knowledge, skills – as well as the instruments, objects, artefacts and cultural spaces associated therewith – that communities, groups and, in some cases, individuals recognize as part of their cultural heritage. This intangible cultural heritage, transmitted from generation to generation, is constantly recreated by communities and groups in response to their environment, their interaction with nature and their history, and provides them with a sense of identity and continuity, thus promoting respect for cultural diversity and human creativity" (UNESCO, 2003).

In case of cultural events and contemporary design strategies people are the means of creating and promoting cultural practices and products. It is social groups' and individuals' power to co-shape and mould the cultural and social scheme they live in and affects their personality. Particularly, the *Convention on the Protection and Promotion of the Diversity of Cultural Expressions 2005* indicates (in Article 11: Participation of civil society) the significant

role of civilians in safeguarding and evolving cultural expressions, and incite common people's *active participation* to attain these objectives (UNESCO, 2005). In the same Convention, the role of artists and people involved (creators and supporters) in the creative process is particularly stressed among the methods of promoting cultural expressions (Article 7). Design thought and practice have already embraced concepts and methods applied in performance art and studies, endeavouring to incite meaningful changes in individuals' everyday interactions. Cultural performances are more than practices and products of culture – they are "the eye by which culture sees itself and the drawing board on which creative actors sketch out what they believe to be more apt or interesting 'designs for living'" (Turner, 1986, p. 24). According to the objectives of this thesis, emphasis is placed at the ways performance has contributed to reassign the relationship between the audiences and the artists/performers, and particularly at people's critical role in shaping the final outcome. Audience members become participants and co-creators of the course of the event.

Design practice and thought have evolved significantly the last decades and the disjunctive line between art and design is less discrete. For Hileman, 'design today is an increasingly social art' (1998), and accordingly contemporary fields of design, like experience design, are not further restricted to previous boundaries; they overflow those borders to make aesthetic experiences for those participating. Experience design is about creating substantial and valuable experiences; about designing the context and increasing the potentialities of making people happier in a broader sense. The term *substantial* aptly describes the quality of optimized designed experiences, underlining not only the importance of any kind, but the substance itself, the *inscape*, meaning the essential quality of a thing, place, person, and so on, especially as expressed in an artistic work (Merriam-Webster's Collegiate Dictionary, 2010), corresponding therefore to the Greek *ousia*.

This thesis suggests designing for experiences to emerge among common people under the perspective of experience design can enlighten the way immaterial forms of culture are presented and safeguarded. Instead of merely studying presenting documents and records of (past and/or current) experiences particular groups of people *(others)* have within certain cultural scheme(s), scholars and researchers are offered the opportunity to *personally get engaged in and influence the course of events as active participants*. Experience design and live art, recently emerged in the global map of art and design to embrace live events, in correlation with relevant creative fields, like interaction design and performance art respectively. Both fields are compound and still vaguely defined. As umbrella terms they include a wide spectrum of practices, media, places and strategies, concentrating at people's experiences and interactivities. Experience design and performance practices are mutually concerned with delivering meaningful, prolific and gratifying experiences to people, aspiring to take audience participation to a more profound level.

Furthermore, performance art/live art and experience design projects share an essential common factor: they comprise organic synthesis, i.e. they are much more than the composition of their constituent parts, as moulded out of the relationships emerged among diverse elements. Directing a performance play, like designing for experiences to occur, involves objects placed respectively on the physical and/or virtual scene, still or embedded with appropriate potentials and behaviour that unfold in time, as well as people and

performers that interact with the audience in choreographed and/or improvised patterns. The broader field of design, and experience design in particular, has been oriented towards *directing* events, i.e. *staging* human interactivity and participation. Besides, digital media are integrated in both live art and experience design projects, converting the human body into a digitally-enhanced interface; an embodied interface, where the physical, the virtual, the potential, and the imaginary are associated. Both fields focus on the time *when* and the place (and interface) *where* live participatory experiences, events and performances unfold. Live art and experience design are mutually concerned with setting the context *with* the people *for* interactivity, experience and eventually culture to emerge and develop.

At this point, it is critical to stress *that experience design is not another field of art but rather a design approach on the notions of live, event, and experience.* Similar, live art is applied as cultural strategy to incorporate creative processes and hybrid practices that "invest in ideas of process, presence and experience as much as the production of objects and things; art that is immediate and real" (Keidan, 2004). For the objectives of this research, live art is the general framework to approach the ephemeral and the unexpected, as well as people's participation, whereas performance studies and practice offer an insight at the method applied to create change, to re-enact stories, meet the past wisdom and knowledge and evolve it to co-create contemporary forms of intangible culture. In conformance with the approach of Shaughnessy (2012) and Pearson, "I prefer 'performance': to embrace the fullest range of practices originating in theatre and visual art and to demonstrate affiliations with the academic field of performance studies" (2010, p. 1). *It is essential to stress that in the context of this thesis, live art (including the notions of performance and performance art) is the contemporary context, while performance studies the established method and theoretical base for live events to emerge and audiences to be engaged as active participants.*

The principal topic of this research concerns contemporary types of audience participation in live events with cultural and educational objectives. These modes of participation are further studied in the field of live art and performance in general as ancestors of inciting live and participatory artistic happenings. And applying performance involves "artists engaging with individuals and groups as participants in projects which seek, in various ways to challenge, intervene, liberate, change, transport or transform" (Shaughnessy, 2012, p. 187). As theoretical approach embraces 'resistant' and 'transcendent' practices, creating work which empowers individuals as autonomous agents and also facilitates collective identities (Kershaw, 1999). This research initially aspires to stress and study the different modes of audience participation, lately emerged in contemporary forms of art although rooted back in performance art, and to endeavour to demarcate these modes. Following, a new term *(enactive participation)* is proposed in a theoretical basis, borrowed from the cognitive sciences and the educational psychology, to define a mode of participation that involves (actually presupposes) conventional participation – i.e. emotional and mental engagement along with typical bodily responses (like applause, laugh, and crying) – but exceeds it to include active physical involvement and collaboration in the flow of the event. Following, the characteristics and qualities of this mode of participation are examined within specific performance events, as well as the way it was incited by their directors.

Experience design is a novel cross-discipline approach on design thought and practice that focuses on staging interactions and events to unfold, i.e. setting the general contest for experiences to emerge among people, objects and environments. In accordance with contemporary tendencies in design stressing that designing meaningful experiences is 'the heart and soul of innovation' (Diller, Shedroff, & Rhea, 2006, p. 29), experience design emphasizes at the experience people make out of a design result, rather that the product itself, reflecting a shift towards post-materialistic approach. Designers care more about the experiences they want to deliver and the memories/stories people will make of them, instead of the design outcome as an end-in-itself. Respectively, live art along with performance studies have long ago challenged the common concept on the artwork, as well as the relationship of the audience and the artist(s) in (live and now digital) performances practices. Both offer an insight in organizing events to narrate stories, wherein audience may become co-creators of the entire event. The last decades, museums and exhibition spaces already incorporate mixed-reality technologies to preserve and promote both tangible and non-tangible culture.

Contemporary design approaches are no longer object-oriented but rather interaction- and experience-oriented, thus creating an 'expanded' version of the postmodern tradition of conceptual art. Experience design thought embraces a holistic, systemic approach in creating substantial experiences for people, in favour of the qualitative impact design outcomes may bring to our lives; a sincere attempt to stage meaningful participation and intervention in the course of things. Hence, design appertains more to direction and staging of events, rather than the creation of stable artefacts. Experience Design is a fresh design approach that concerns the study and creation of products, processes, services, events, and environments with a focus placed on the quality of the individual experience and culturally relevant solutions. Experience design projects involve a spectrum of cultural practices that extend from technologically-mediated outdoor and indoor activities of everyday life, to the fields of creativity and arts, combining with entertaining, educational, and commercial goals among others. For the purposes of this work, we focus on the creation of live events with educational and artistic content. This innovative design field aspires to merge everyday life and artistic experience, the physical and the potential (i.e. virtual and imaginative), spectator and creator, looking and actively participating, participant and artwork, stage and experiential space. Experience design involves setting the overall framework for experiences and events to occur; a holistic approach on the content and context where people's interactions and performances emerge.

Experience design projects and performance (art) events involve sequences of events. Although material elements may be included (scenery, objects, etc.), the lack of materiality in the essence of the work-events condemns them to evanescence. For Rubidge, "it is the sense of being, or becoming, that the participants experience through their deeper physiological responses as they become absorbed", referring to installations to further underline their ephemeral and experiential character (2011, pp. 112-113). Planning an experience is more about *directing* events (happenings), like in case of scenic arts (theatre, dance, film, and performance) within physical and/or mixed-reality worlds. Design integrates 'figures of staging', meaning the arrangement in space of static and dynamic aspects, resembling in this way to the creation of the stage set, involving "the disposition and

movements of an ensemble of actors, putting them in poses and fundamentally regulating them so as to produce patterns and actions" (Anceschi, 2010). As the designed result *becomes* an event, the designer's role (in the broader sense and particularly in case of experience design) becomes similar to the director's, who supervises and sets on scene (mise en scene) people's interactivities and experiences within a place with particular affordances. Integrated mixed-reality technologies enhance these affordances as potentialities embedded to the context (i.e. environment and objects) where meaningful performances and experiences are designed to emerge.

Design is about offering augmentations of human abilities. Comprehending and exploiting the creative power of people for the benefit of the society is a critical objective of this thesis, offering them the opportunity to participate and equally contribute to live events. Therefore, the notion *enactive* is introduced to describe a mode of *participation* that firstly, by including individuals' phenomenal body, defying spectators' passivity during the live event, and secondly, by giving them the opportunity to get personally involved and intervene in the course of the event. The notion of *enactive* is borrowed from cognitive science (Varela, Thomson, & Rosch, 1993) and is proposed to be applied to describe a kind of incorporeal participation that first of all exceeds the boundaries of interacting with digital interfaces, and involves other bodies and individuals (performers and people) as well. Mixed-reality technologies have become an essential partner in the performance of people during an event. Particularly mixed-reality environments offer the opportunity for experiences to emerge beyond the limitations of presence and communication in the here and now of the physical world. Additionally, enactive participation, as a form of bodily interaction, also encompasses personal engagement in interfering in the final outcome of the event, which may not be the same as every time stems out of everybody involved – audience, performers, designers, facilitators, experts. Performing enactively with mixed-reality technologies in live events, for artistic and educational purposes, involves being immersed in the realms of art and everyday life, beyond bodily and physical restrictions, defying traditional concepts of individuals' role during a performance.

In addition, live art and experience design strategies have made diverse and mutual advancements in encompassing the potentialities of virtual and mixed-reality environments, turning such technologies into a vital vehicle of directing collective experiences. Live art and performance art have long integrated hybrid forms of space, light, cameras, video-projection, microphones, sensors, interactive real-time digital signal processing synthesizers, computer software, resulting into new modes of performance to be created, like networked ones. In parallel, movement and folding of space and time has become an essential part of digital art, design, animation and film editing. Mixed-reality technologies enable both performers and experience design practitioners to configure spatial unities beyond physical limitations. The emergent interactivities are depended on the media incorporated, as different media offer the opportunity for different sensorial experiences to occur, combining data of diverse stimuli. By aggregating such media and technologies, designers and performers set the frame for respective multisensory experiences to occur. A sense of *becoming* therefore expresses both works, transforming them into work-processes.

Experience design projects (probably involving objects, interfaces, services, environments and/or systems) also emerge in time out of human presence, participation and interaction with them; they involve mainly events. Concerning type of (art and design)

works, Deleuze introduces the notion of *objectile,* i.e. object that emerges in time and use and therefore entails continuity and evolution*.* For Carpo, *objectile* is an entity associated with a function that potentially comprises multiple variations (of matter, form, etc.) and objects (2004). What these terms imply is a sense of motion from *continual variation*, *perpetual development* and *form 'becoming'* (Eisenman, 2004, pp. 44-45). The notions of *fold* and *object-event* express the idea of continual process, rather than a materialized product, of progress and not necessarily of actual visual or tactile folds. Respectively, a design work that is also modulated in time, moulded out of people's interaction and participation, may be named as *work-event,* or simply *event*.

This thesis concentrates on staging experiences and events *for* people *with* people, endeavouring this essential quality to emerge among designers, performers and audiences, personally engaged as equal, enactive participants within a particular context. An approach at the ambiguous border lines of art and design, to create live events with cultural content, under the perspective of performance practice and studies. Liberating art and design works from their materiality, entails creating events experienced on the fly within a particular socio-cultural context. Such work-events, or simply events, are participatory processes wherein a sense of becoming and evolution inheres. Like life, events are about change and human experience; creativity and interactivity are components of this evolution. In addition, mixed-reality technologies contribute to this endeavour by offering designers the opportunity not to be restricted to physical properties and qualities. The actual unfold of collective experience on occasion of the design project is of more importance than its stabilization into a final form. This collective experience involve a sense of change and becoming: people become personally engaged with the design process and affect the final result, design projects are appropriated in use and evolve in time due to the affordances of digital media incorporated, and design projects are occasions for people to converse in physical, emotional and cognitive level. Contemporary art and design concept is more about sharing moments, thoughts and feelings; about shaping common experiences.

In the framework of this thesis, it is suggested that staging events wherein audience becomes physically engaged, not only in the narrowed sense of interacting with an interface, but performing with another body as well, while also contributing at the course of the event, is the next level of safeguarding the intangible. Experience design and performance practices may mutually offer an insight in organizing events wherein people may get personally involved as participants and not merely spectators. After all, "creating together can be a powerful vehicle for learning" (Condon, 2007, p. 21). As the sense of fluidity, change, and becoming is imminent in the nature of intangible culture, this thesis suggests an insight from experience design and live art, to embrace the ephemeral. Organizing participatory events can enable audience members to experience by themselves narratives (stories, tales, legends, and myths among others) and most importantly become co-creators of the event. *For the purposes of this thesis, we focus on live participatory events with artistic, educational and entertaining character as a vehicle to safeguard and promote the intangible heritage.*

ii) Specification. Borders and limitations

The principal topic raised in this thesis concerns the convergence of experience design a cutting-edge design field, and live art rooted back in performance art and studies, to create

live participatory events and safeguard intangible forms culture, as the latter is attached to a type of performance to be experienced and thoroughly studied. The secondary scope concentrates at contemporary types of participation in live events with cultural and educational objectives. *Conventional participation* involves the emotional and mental engagement along with typical bodily responses (like applause, laugh, and crying). *Enactive participation* though is proposed as term (defined in a theoretical basis in chapter 4) as a mode of participation that actually presupposes *conventional participation* but exceeds it to include physical involvement and collaboration in the flow of the event. This research initially specifies this gap in the definition of different modes of audience participation, lately emerged in contemporary forms of art. Secondly, suggests the introduction of the term *enactive participation,* borrowed from the cognitive sciences and the educational psychology, to enrich the spectrum of audience engagement. Lastly, studies the characteristics, benefits and impediments, of this mode of participation faced in terms of directors and audience members in the frames of specific live artistic events.

This thesis comprises the study of contemporary types of participation in live events with cultural and educational objectives, firstly in a theoretical basis extended in the broader contemporary western world of art and design, and secondly through the selected case studies all presented in Athens and Thessaloniki in Greece between 2010 and 2014. This space-time context sets specific limitations regarding the differences between the social and political reality in Greece, endeavouring to cope within a devastating economic crisis, and the corresponding conditions in other places facing more or less relevant adversities. Practically, at this place and time not only high-priced productions and past over-scaled spectacles but even ordinary TV shows were significantly decreased. In addition, mixed-reality technologies are much less affordable and incorporated in comparison to other western societies. Severe financial problems though affected dramatically the fields of art and science in multiple ways. Regarding my thesis, I only had the opportunity during this time period to experience and study just one artwork, *Situation Rooms*, applying digitally-enhanced equipment to guide the audience experience through the experts' stories. The live participatory work was hosted in the frames of *Fast Forward Festival* at Onassis Cultural Centre, created by the German Rimini Protokoll. Hence, although mixed-reality technologies were in advance among the principal topics under study as enabler of audience enactive participation, the extent of exploration was limited to one work.

An additional horizon, with specific strengthens and restrictions, is configured by my relation to the subject as researcher and PhD candidate. I am a professional designer who specializes at the field of graphic, web and interface design for more than a decade now and aspires to develop in the field of experience design. In parallel, I am an amateur physical theatre performer the last ten years, who loves to train in this field as ceaselessly offers me the ground to become a better person in psychical and social level. Hence, my perspective over this research is determined and enriched by this twofold quality of mine, as professional designer and potential performer, designating a more holistic view and perception about being an audience member and creator of live events, in both fields.

Similarly, the interviewed audience members that participated at the three case studies have also shaped a personal opinion regarding their experience they shared and enlightened the qualities of each live event through their perspective. Their evaluation though initially reflects the social and artistic conditions in Greece during the time 2011-

2014, and can even indicate some clues regarding the joy and/or the difficulties they faced participating in such artworks, especially for the first time, which are definitely far beyond the objectives of this current research. Moreover, their personal relation to this type of works that incite enactive participation was also determined by the fact that a significant number of audience members were professional actors. Therefore, their perspective was twofold involving their role as audience member and the familiar role of having the responsibility of the performer who acts out his part of the show. In my view, their answers to the research questions were more refined, descriptive, and clarifying without alleging any subjective opinion on how the performance would have been improved at points in any way. I mostly appreciate all interviewees though for sharing their viewpoints and assist me to step into their shoes and endeavour to register, analyze and associate together a few slices and aspects of their experiences.

Finally, another determinant involves the nature of live events that incite enactive participation; they are evanescent and ever changing. No event is ever the same to experience. It is altered every time performed in accordance with the audience and audience-performers interaction and participation. This aspect was evident to anyone who experienced such a performance more than once. Since the overall outcome is always evolving, each performance is unique as co-moulded by audience and practitioners. Even though experiencing an event is by nature an entirely subjective process, differentiated form anyone else's present, the audience experiences in such participatory events are also differentiated by the fact that the unforeseen behaviour and participation of common people is embrace shaping the experiences of everyone engaged in collective level. Practically, even though two (at least) interviewees were chosen to describe their experience about a certain artwork, what they witnessed is possibly dissimilar to a certain extent, since the emerged stories and interactions were never the same. This consequence was definite even from the first interviews I conducted and was given significant consideration during the analysis of the results.

iii) Chapters overview

The content of this thesis unfolds structured in the following chapters. In the **first chapter** comprises the core of this thesis, where the overall frame and topic are analyzed, regarding audience participating in experience design live events for cultural and educational objectives, as well as the research strategy comprising the convergence of experience design and live art under this scope. This study aspires to set the theoretical basis regarding how live events can serve, under the umbrella of experience design, as a method of safeguarding intangible culture, wherein people can enactively participate, in correlation to technology and media incorporated. Experience design and live art organize the overall context for audience experiences and events to emerge. Explicitly, an analysis is made on how non-material forms of culture are associated with live events involving social groups and individuals, as well as the reasons why the fields of experience design and live art can offer a fresh though profound perspective on organizing the general context for people to encounter and participate. Both fields are innovative and stage frameworks of interaction, i.e. moments of engagement for the participants, aiming at optimizing the overall impression and creating positive memories. A new notion is also suggested to describe a

mode of participation that exceeds the conventional way a typical theatrical play is experienced, turning spectators into enactive participants of the work/event. The critical issue under study and research is audience participation in live events, and the disciplines of experience design and performance are applied, as creative participatory processes, to offer an insight in the context of digital age and culture.

In **chapter two** the spectrum of people participation is explored during the design process in general, as well as in the context of experience design projects in particular. Design in a broader sense, and especially experience design, are approached as participatory creative process, both practice and result, where designers cooperate with scientists and specialists of other artistic fields and people to create adequate circumstances for desirable events and meaningful experiences to emerge. As collaboration, dialogue and participation comprise crucial factors in this research, design as participatory process is studied, in the context of digital age and culture. According to contemporary trends, design thought and practice not only tend to incorporate collaboration among artistic and scientific fields, as well as domains of art and design, but also overcomes past limits to embrace the contribution of individuals. People are not only regarded users and/or consumers of goods and services, expected to merely interact with the design result. Nowadays, individuals are involved during the creative procedure as well, offering feedback at certain development phases. Finally, the notion of change and becoming, although inherent in every creative process, is particularly evident in contemporary design strategies for two essential reasons: firstly, because integrated mixed-reality technologies result in configuring digitally enhanced contexts (environments, systems) wherein experiences occur, and secondly since the final outcome embraces audience participation, hence the ephemeral and the unexpected. Interaction and participation are the creative vehicle as well as the common ground where art/design and science, the physical and the potential, materiality and information, practitioners and individuals meet.

The opportunity offered to audience to become collaborators of the artistic event in physical and mixed-reality environments - whether an experience design project, a performance act or a live event - is the core of this thesis. The following **third chapter** explores the common ground between the two axes under study: experience design and performance (art and studies); two contemporary creative disciplines seemingly irrelevant, share common perspectives on organizing audience interactivities and live events with artistic content. The notion of performance and its derivatives is analyzed, in the context of everyday life and artistic experience, with reference to: 1) human encounter and interactivity within cultural-social framework; 2) the integration of digitally-enhanced elements and environments; 3) the contribution of performance studies (and especially the performative turn) in the study of human experience and interactivity; and finally 4) the influence of poststructuralism and posthumanism in perceiving and designing for events using technologically advanced systems. Further on the third chapter, mixed-reality technologies are under study as basic factor of performance enabling an immersion in this luminal third place, a gateway to potential worlds, where boundaries are deliberately blurred between artistic and scientific disciplines, between performers and audience, among the virtual, imagined and physical, between everyday reality and art. Lastly, the mutual perspectives of experience design and performance studies are remarked: blurring the boundaries of daily and artistic experience; various common concepts, methods and tools

that accrue from the field of performance and theatre, applied in the design thought and practice; the notion of *mise-en-scène*; and particularly the fact that the audience may be given the opportunity to become enactive participants of the whole event. Chapter three concentrates at audience participation in performance practices, as configured by specific contemporary theories, philosophical perspectives and turns (like poststructuralism, postmodernism, performance studies and performative turn), as well as the influence of incorporated mixed-reality technologies in live art events, and finally designates the common ground of experience design and performance fields, under this scope.

In **chapter four** weight is put at the notion of enactive participation, defined as the mode of *participation* that firstly, embraces spectators' physical interaction during the live event with other people and the surrounding set, and secondly, by giving them the opportunity to get personally involved and collaborate in the live event. In this case, both the *formal cause* (i.e. scenario, plot of the whole action) and the *material cause* (i.e. what is made of) of the live event are modified and their transition is analyzed here. In this chapter, focus is placed firstly, on the *aesthesis* when experiencing an event, emphasizing at the corporeal interaction of the living performing body. Moreover, the formal cause is studied as live events are works open to people interference, open to chaos, partly scripted and partly improvised, comprising a synthesis of parallel stories unfolding simultaneously. Existing forms of audience participation are also studied in contemporary theatre and performance plays, and a new form of participation is proposed, covering the gap of audience interaction that exceeds conventional forms of spectatorship. My proposal is based on the juxtaposition of Cognitive Science (Varela, Thomson, & Rosch, 1993), as well as Cognitive Psychology and Cognitive Learning Theory in Educational Psychology (Bruner, 1990), applied in the fields of experience design and designed live events for artistic and cultural purposes. *Enactive participation* has a twofold meaning involving firstly, somatic interaction with the surroundings and others participating, and secondly, an audience role that exceeds spectatorship to include guided audience collaboration as the event unfolds. The first aspect is related to the aesthetics through the senses (material cause), whereas the second to the narrative structure of live events (formal cause) - associated respectively with the *sensual thread* and the *compositional thread* of experience (McCarthy & Wright, 2004). *Enactive participation* along with mixed-reality technologies, props and scenery become the actual material out of which live events (like performance practices) are constituted.

At this point, the theoretical section of thesis is complete leading to the three work-events under study to explore the potentials and limitations of enactive participation through the eyes of creators and audiences. Beforehand, the methodology used to approach and research the overall thesis is presented in the **fifth chapter**. Specifically, the methodological tools evaluated suitable and applied involve at first literature review to find the convergent points between experience design and live art under the scope of audience participation, both theoretically and in practice (chapter 1-3), to identify a common contemporary tendency towards audience collaboration this thesis endeavours to illuminate, and suggest a new notion to describe this differentiated type of live participation (chapter 4). Following, the applied methods of qualitative research (*case study, participant observation* and *interview)* are briefly analyzed in general and thoroughly in the context of this research as appropriate tools to extract information regarding the personal experience of directors and audience members had of the three artworks under study.

Following, the **sixth chapter** contains the analysis of the three performances used as *case studies*, followed by the results of my personal *participant observation* and the *interviews* of both directors and audience members, regarding their experience at creating and participating at these events respectively. These three live participatory works are: *Fake Time @ Ariston Hotel* (Thessaloniki, 2011-2013) directed by Lela Ramoglou; *Katerini* (Athens, 2010) directed by the Blitz Company; and *Situation Rooms* (Athens, 2014) directed by the Rimini Protokoll. The results are presented structured in three axes. Initially in relation to the notion of *fusion* entailed in terms of the realities (integrating physical and mixed-reality, as well as fiction and reality), spaces (merging stage and hall, as well as performance place and social space), and roles (performers/artists and participants). Secondly, the sensual and emotional aspect of participating in these events is approached as enactive participation concentrates at the body as the sentient vehicle for sharing and interpreting human experiences in live socio-cultural and performance events. Lastly, the narrative structure and nature of each one of these artworks that embrace enactive participation is fundamentally differentiated from typical theatrical plays, as a rather fleeting and unforeseen is incorporated, human interaction. Indicatively, as Felix Barrett, director of *Punchdrunk,* states "the future of storytelling is placing the audience in the heart of the experience" (2013). As a result, the narrative structure acquires new features, like dynamic stability, framed action, and a different way to reach completion, to organise audience guided as well as emancipated participation. The derivative conclusions are further stated in **chapter seven** also associated with the research questions and objectives.

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Section A. Theoretical Framework

1. Converging design and performance

1.1 Introduction

The first chapter concerns the core of this thesis, involving the preservation of intangible culture through live events, as well as the organization of live events under the perspective of experience design and live art as a tool for inciting audience collaboration and participation.

1.2 Intangible culture: participating in events

Culture is an incessantly evolving framework of human encounter and interaction, interwoven out of social association and fermentation. Culture is moulded by community members, and inherited from one generation to another through communal practices, like language, art and religion, customs and traditions. The fields of art and design (like language and religion among others) serve as symbolic means of conveying cultural values between generations and communities. Culture is represented, reflected and created through art and design; two parallel social practices that apply common communication codes and symbols to express and translate meaning. The notions of society and culture are inextricably linked, although not identical, as the former is created and transmitted within the latter; in Kroeber & Kluckhohn words: "cultures are not the product of lone individuals" (1952), but along with tradition they are interwoven out of individuals' experiences (Glassie, 1995). While culture includes all complexes of learned behaviour patterns and perceptions, society contains groups of interacting organisms. Cultural practices and products are unbreakably tied to human activity and interactivity, as well as symbols that give meaning and value to their intercourse. No cultural product and behaviour can be understood and evaluated outside its historic, space-time and social context. For anthropologists and other social scientists, *culture*[1] involves the full spectrum of learned human behaviour as vehicle of passing ideas and images from one generation or/and social group to another (Haggett, 2001, p. 2006).

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[1] The term was coined by the English anthropologist Edward B. Tylor in his manuscript *Primitive Culture* published in 1871 (Tylor, 1871). He argued that culture is "that complex whole which includes knowledge, belief, art, law, morals, custom, and any other capabilities and habits acquired by man as a member of society."

Culture is a manifold, all-inclusive notion, developed and imprinted through human discourse, behaviour and interplay. According to a definition of UNESCO:

> "Culture may now be said to be the whole complex of distinctive spiritual, material, intellectual and emotional features that characterize a society or social group. It includes […] modes of life, […] value systems, traditions and beliefs" (UNESCO, 1982).

Cultural values, the founding principles of personal and social life, are interwoven out of social life and determine social life as well. The biologist Julian Huxley compared cultural and biological evolution and categorized human culture in three units: *artifacts, mentifacts,* and *sociofact* (Haggett, 2001, pp. 207-208): *Artifacts* are the material manifestations of culture, or as also named tangible culture, involving clothing, tools, technologies, furniture, among others. On the other hand, *mentifacts* are the central core of culture including ideas, ideals, and beliefs, which are fundamental to intergenerational transmission of culture, through language, religion, tradition and the arts among others. They refer to social members' conception and awareness which moulds and at the same time is moulded by cultural standards. *Sociofacts* are correlated to social behaviour, cohesion, and control through norms and institutions, like marriage, family, school and political systems; system of social control, wherein people learn how to shape their standards and behaviour. Both are aspects of the intangible culture, involving artistic practices as well as ordinary practices, everyday interactions of people within particular spatial, social and cultural contexts.

Culture is commonly classified – a practice that involves distinction, and even separation by itself – between tangible and intangible culture, between objects and concrete manifestations of human creativity and practice, to patterns of behaviour and conceptual schemes. The tangible culture can be described as the material, corporeal aspect of culture, and intangible the behavioural, interactive one, which may involve tangible media, agents and places. UNESCO defined the intangible cultural heritage as "the practices, representations, expressions, knowledge, skills – as well as the instruments, objects, artifacts and cultural spaces associated therewith – that communities, groups and, in some cases, individuals recognize as part of their cultural heritage", which is manifested among others in:

> "(a) oral traditions and expressions, including language as a vehicle of the intangible cultural heritage; (b) performing arts; (c) social practices, rituals and festive events; (d) knowledge and practices concerning nature and the universe; (e) traditional craftsmanship" (UNESCO, 2003).

Every culture, incorporating socially learned and transmitted patterns of behaviour, emerges out of the interaction between tangible and intangible elements. Nevertheless, there are essential differences among the two aspects due to their nature. A basic divergence lays in the fact that the tangible culture is easier to change in comparison to the intangible culture. The intangible culture encompasses ideas, norms, customs, values, beliefs, and ways of communication (both verbal and non-verbal), which in relation to dwelling, technologies, clothing, everyday utilitarian items, evolve slowly and gradually. The material aspect of culture develops more rapidly in correlation with the advances of technology, according to people's needs, which also develop and become progressively

demanding. Another difference between tangible and intangible culture is that the first is easily lost into the numerous cultural communities, while the intangible culture is not. Intangible culture refers to those learned behaviour patterns that are shared by all of humanity collectively. So, intangible culture is less flexible to change and more sustainable than the tangible, although fleeting and ephemeral by nature.

The initial essential fact is that tangible and intangible forms of culture remain detached. However, these notions are not entirely detached as the one embraces the other. For many scholars, this dichotomy is adverse, and therefore they strongly propose that a reconsideration of the matter is apparently needed. Bouchenaki emphasizes that intangible heritage is amalgamated out of *processes and practices.* In parallel, the *International Museum Expert Meeting* in Oegstgeest stated that "every artefact embodies intangible cultural heritage" (Heritage, 2004). As intangible values are central and inherent to sites, monuments and objects, intangible culture (events, oral tradition, ideas, customs, knowledge, and performing forms of art like dance inter alia) are bound to particular places and social groups (Kaufman, 2013). Mounir Bouchenaki argues about the "symbiotic relationship between the tangible and the intangible", adding that "the intangible heritage should be regarded as the larger framework within which tangible heritage takes on shape and significance" (Bouchenaki, 2003). The Council of Europe replaced the dichotomy of tangible and intangible culture with a general and vague concentration at people's interaction within certain environments, when defined in 2005 the entirety of cultural heritage as:

> "[...] a group of resources inherited from the past which people identify, independently of ownership, as a reflection and expression of their constantly evolving values, beliefs, knowledge and traditions. It includes all aspects of the environment resulting from the interaction between people and places through time" (Council_of_Europe, 2005).

In addition, Declaration of Meeting of the Ministers of Culture of Southeastern Europe Countries, organized by UNESCO in Konya in 17 December 2009, stresses that:

> "Intangible cultural heritage creates a sense of belonging and continuity among communities, and is therefore considered as one of the mainsprings of creativity and cultural creation. From this point of view, an all-encompassing approach to cultural heritage should prevail, taking into account the dynamic link between the tangible and intangible heritage and their close interaction" (Turkey, 2009-2010).

The second critical subject is that diluting this diastase requires the collaboration of scholars and non-specialists. A fertile dialogue is necessitated among people and experts on studying and documenting intangible culture as well as on creating it. Taking decisions over intangible culture is a process that should be everybody related; there are no experts and non-experts. People and experts are not supposed to be opposing forces, but collaborators in dialogue, sharing perspectives on such matters through democratic participation (Kaufman, 2013). According to the Article 15 of the Convention for the Safeguarding of the Intangible Cultural Heritage 2003, regarding conservation and promotion of intangible

culture, UNESCO focused in *participation of communities, groups and individuals* and the covenants to "ensure the widest possible participation of communities, groups and, where appropriate, individuals that create, maintain and transmit such heritage, and to involve them actively in its management" (UNESCO, 2003). This mutual reconciliation and partnership involves letting every voice be heard, every opinion expressed.

The third important subject is the fact that intangible culture is attached to narratives. Stories people tell reveal their relationship and bond with others and places. The endeavour to retain in memory and conscience aspects and practices of the intangible culture is associated with stories. There are various types of narrative. Usually individuals exchange experiences by telling stories or re-enacting them (Kaufman, 2013). Humans recall a memory (as well as events, experiences, oral and written tradition, etc.) by telling someone about it or acting it out. Each method has its advantages and disadvantages, depending on the objectives of the communication. Oral and written narration is the most common and familiar way of remembering and sharing; but acting a story gives people the opportunity to have a personal experience of it, meaning become engaged and contribute to the course of the event. And personal experience is a powerful method of apprehension and knowledge.

Research methods already adapted from sociology, anthropology, geography, and environment-behaviour studies in general, research the relationship and interactivity among social unities and places in time. Typically, the methodology of preserving intangible culture in museums and exhibition centres is unvaried and omits the very nature of it: the sense of becoming. Slices of time and space are amalgamating events and memories into texts, video and images. We collect relevant objects and equipment that people use, aggregate visual and acoustic recordings *of* their experiences, write texts and narrate stories *about* them. Technology, and especially mixed-reality media and environments, have undoubtedly contributed towards an interactive and multisensory relation of people with the exhibits. We conserve the immaterial (experiencing, becoming) through concrete evidence (a process, an experience, a becoming). We need concrete data to document, analyze, display, and promote the intangible. But the ephemeral will always slip away; the principal quality of emerging through people's relationship and interaction that evolve in time at a particular spatial and cultural context. An event can be only studied and conceived to a profounder extension when it is personally lived and *experienced.*

The sense of *becoming*, i.e. emerging on the fly for the first time every time, is the principal element of intangible culture, inherent in the notion of event, identity, experience and design, as further analyzed (see chapter 2.4). Cultural formats, both tangible and intangible, serve as a vehicle of identity formation in social and personal level. For Hall, cultural identity "is produced out of those historical experiences, those cultural traditions, those lost and marginal languages, those marginalized experiences, those people and histories that remain unwritten", emphasizing at the fact that identity is not a closed and complete scheme (idea, value, practice) that was configured in the past which we struggle to conserve as is (2001). Accordingly to identity formation, experience, as well as design and events are processes: they are "not in the past to be found but in the future to be constructed" (Hall, 2001). Every time intangible forms of culture and heritage are practiced, every time occurred through people interacting and sharing common experiences, they are re-created, evolved, changed somehow; they are not rediscovered, nor repeated; they are never the same. Time has passed, the place may be altered even though the same, people

are different, their experiences are different and objective, and their memories remain completely personal. Different people co-create different experiences, as they attribute events with subjective meanings and emotional attachments, different memories, different stories – each person is personally attached to a place, depending at his/her experience in it. People attribute different values to places according to their personal stories or knowledge. Intangible culture, although created out of certain cultural resources, is conserved though practice that encompasses change and alteration; it is constantly re-formed by personal and collective experiences and stories, always evolving.

Contemporary forms of art and design, among numerous other cultural products, have been relinquished static objects for more dynamic and abstract forms of interaction and participation among individuals and practitioners. A wide spectrum of artists in the 21st century (from dance, film and video, to performance, socio-political activism and the emerging languages of the digital age) has investigated the possibilities of the live event. The final outcome is configured throughout the whole creative process and not the main purpose of it. A work of art and design is no longer merely a materialized synthesis, but rather a composition that frequently pertains to the borderline between the virtual and the physical world. Current theory and practice of art and design is basically focused on people's experience and interaction rather than objects. Also, UNESCO also states that cultural heritage involves: "cultural groupings […] which demonstrate in spatial terms the social structures, ways of life, beliefs, systems of knowledge, and representations of different past and present cultures in the entire world" (1994, p. 2). Experience design offer an insight in organizing events and getting people personally involved as participants. Instead of using merely recording methods (sound, image, video, etc.) people are welcome to experience events in the frames of which such content is presented in a non-conventional way (unlike theatrical play, concert, narration, etc.) and become co-creators of the result. As fluidity, change, and becoming are immanent in contemporary design tendencies, experience design offer an insight at how to embrace this aspect through organizing live and participatory events.

The actual moulding of the project is of more importance than its stabilization into a final form. Life involves change and human experience, creativity and interactivity are components of this evolution. This transition derives from the liberation of the artwork from its materiality; art as process evolving in time, art as developing personal and cultural conception, art as a participatory procedure, not restricted to physical properties and qualities, but experienced and changed in the flow of time. Therefore, artists and designers are concerned with staging the overall experience for people involved in particular events that evolve in time; an endeavour enhanced by technology advancements and the integration of digital media in the service of mankind.

Safeguarding[2] the intangible culture and heritage comprises a demanding process that eventually is not adequate to conceive and express the variability and fragility of the content. Practitioners document a version, an instance, of these cultural products as

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[2] According to the *Convention for the Safeguarding of the Intangible Cultural Heritage 2003,* "*safeguarding* means measures aimed at ensuring the viability of the intangible cultural heritage, including the identification, documentation, research, preservation, protection, promotion, enhancement, transmission, particularly through formal and nonformal education, as well as the revitalization of the various aspects of such heritage" (UNESCO, 2003).

encountered and collected under certain circumstances and research objectives. A book, an online database, involve a single version of the cultural product, chosen among numerous ones, as it still evolves in time, as it has been evolving since its often unknown commencement. Intangible culture is more vulnerable and in flux by nature than material forms of social and artistic practice; it is inherently depended on factors that are constantly altered in time. During its presentation to an audience, people (who act), space and time are interwoven in a certain social and environmental context forming a live event (Bouchenaki, 2003). When, for example myths, fairy tales and/or legends are addressed to others, they are not merely reproduced but actually recreated at the moment of their transmission to others. *Therefore, it necessitates an alternative approach and methodology to encompass liveness and the ephemeral as intrinsic to any form of intangible culture, as well as tangible, although to a lesser degree.*

Intangible culture is profoundly associated with events for their existence, presentation, and preservation over other social groups and generations. For example, oral tradition (like stories, myths and legends) need to be narrated to people; rituals and ceremonies require to be realized and attended by individuals; customs and social mores can only be preserved by repeated human performances. In most forms of intangible culture, change prevails over matter – sense of becoming over stabilized shape and form – as live processes are organised for people by people; processes that evolve in time. For the purposes of this research, intangible culture is suggested to be preserved, studied and promoted through live events. It is proposed that displaying intangible forms of culture requires an approach and methodology that embraces people's participation, interactivities and performances, in a context that is open to the ephemeral, the unforeseen, deliberating human encounter from scripted activities and study alternative patterns of behaviour.

1.3 Designing for experiences and events to unfold

In the frames of digital age, design both as concept and practice has been altered. In the past, design concerned the synthesis of novel media and techniques, for desired and expedient objects to be attained. The creative process involved mainly the aggregation and configuration of appropriate materials moulded to perform certain functionalities. At present, design practices no longer focus merely in objects and services, but rather at experience, and specifically at aesthetics of experience, altering our perception regarding form and communication all in all. Contemporary notions on design, involve fruitful reflection on the impact of design outcomes (objects, services, environments, experiences, and more.) on people's life and interactivity. Designers and scholars have become more sensitized about the conditions and affordances of a particular environment for people to enter and interplay, rather than its production per se. Every design approach organizes the development of potential activities and events, coordinating the sequence, and probably the timing of particular available actions. Essentially, experience design puts emphasis on setting the context for meaningful and qualitative, personal and collective, experiences to evolve.

Designing experiences is an ancient practice. We daily organize our schedule, including our duties as well moments of pleasure and relaxation; sometimes we are minutely prepared, and others we spontaneously (re)act to particular circumstances. People have

been also organizing their social lives by staging rituals and rites on political, religious and cultural occasions. Creating experiences in collective level, have urged people to aggregate under a common purpose. Designing and constructing architectural environments, like temples, stadiums and theatres, can be considered an act of staging the presence, movement and activity of a group of people. Moreover, to organize trips and travelling experiences for those who wish to meet new cultures and get personally involved in the life and philosophy of other societies; to set an amusement park where people of every age can play, sense smells, tastes, and feel the speed and adrenaline like nowhere else; to decorate the city to be prepared for Christmas time. The core value is that sharing common experiences makes them more valuable; we are far more fulfilled when we share them with others. In that case, a sense of companionship and community has been fostered embracing people who share common values and interests (Crooke, 2011, pp. 172-174). Connected through common history and tradition, people maintain their social identity (Wan & Yu, 2014, pp. 69-71). In each case, humans, objects and environment(s) interact in physical, emotional and cognitive level, intertwining common experiences, which although designed, are determined by human participation.

Designers are concerned with setting the context for experiences to emerge among people and environment, as they become personally engaged and participate in particular events. They *stage* experiences integrated in space, which are essentially woven by both the designer and the participants. Designers are experience providers although they produce technology-based results. Contemporary strategies are mainly concerned with experiences people have while interacting with the design result and the consequences of this interplay. Designers are more oriented towards, for example, the communication experience and how they can fulfil individuals' profound needs, rather than the actual cell phone. They are more concerned about the ways of watching a film, and how these ways affect people's habits and lives, rather than the TV set. Design thought is less and less object-oriented; it is not only a matter of the proper balance of aesthetics vs. function that flourished in the recent past. Taking responsibility of delivering an experience in a certain (social, cultural, environmental, etc.) context involves more on reflecting on individuals' engagement with the world than designing for consumerism.

Research has proved that the feeling that I have managed something successfully by myself is far more gratifying than letting a mediator (machine, equipment, service, and more) do it for me. Even though ordering pizza after an exhausting day is much more convenient, preparing and enjoying our own dinner has been proven to be a much more satisfying experience. People participating in a process that feels natural, meaningful and easy-going seems to weigh more than watch something happening in front of their eyes (like a coffee machine). Comprehending and working for people's needs is more responsible than plainly delivering a design product to the public and afterwards ask their opinion about it (Buchanan, 2010, p. 26). Contemporary design strategies involve fruitful dialogue with the people, i.e. listening carefully to their experiences, needs and desires and design in relevance to this knowledge. Giving people the power to participate not only during the course of the event but also during the actual creative process is a key aspect of contemporary design thought and practice (extensively analysed in chapter 2).

Further studies have also indicated an increase in people putting more emphasis on the experience aspect of things over their materiality. Besides, scholars support that

experiential purchases (i.e., the acquisition of an event to live through, such as a concert, a dinner, a journey) make people happier than *material* purchases (i.e. the acquisition of tangible objects, such as clothing, jewels, stereo equipment) of the same value (Carter & Gilovich, 2010). Leaf van Boven and colleagues also uncovered stigmatizing stereotypes: individuals who participated in their research, characterized people with a material orientation as self-centred, insecure, or judgmental, and on the other hand, people with an experiential orientation were described as humorous, friendly, open-minded, intelligent, caring, or outgoing (Van Boven, Campbell, & Gilovich, 2010). Such views reveal a general tendency that meaningful experiences are not necessarily associated with material objects; it seems that in the context of contemporary world, experiencing interesting events beyond everyday life restrictions (for example, combining vacations with extreme sports, meditation, and artistic creativity) is a need people cannot balance with purchasing mere objects. Therefore, designers are more concerned about the interactivities which are enabled by the features of certain objects, due to their materials, rather than the stuff they were made of per se.

Designers are concerned with setting the context for experiences to emerge among people and environment, as they become personally engaged and participate in particular events. Experience Design is in accordance with this perspective. This contemporary, multi-disciplinary design field is so novel that its very definition is in flux, and is applied in a spectrum of domains that have not been formally defined yet. Experience design concentrates on the creation of products, processes, services, events, and environments, aiming to set the frame for meaningful and pleasurable experiences to take place, in physical and mixed forms of reality. Hassenzahl supports that:

> "Experience design puts experience before products, and acknowledges that all aspects of a product, its functionality, content, presentation and interaction, have to be in line with the experience to be designed" (2005, pp. 66-67).

Knight shares another view, defining Experience Design as "the intentional creation of a time-based activity that includes physical objects, agents and situations" (2006), while Marzano places focus on the quality of the user experience and culturally relevant solutions, and with less emphasis on increasing and improving functionality of the design (2003, p. 46). Focus is placed on individuals' personal and collective experience, rather than a design object per se.

Experience design is a fresh design approach that concerns the study and creation of products, processes, services, events, and environments with a focus placed on the quality of the individual experience and culturally relevant solutions. Experience design projects cover a wide spectrum of cultural practices that extend from technologically-mediated indoor and outdoor activities of everyday life, to creative fields of the arts, for entertaining, educational, and commercial purposes, among others. This innovative design field involves everyday life and artistic experience converge, the physical and the potential (i.e. virtual and imaginative), and concentrates on merging the gap between previously given discriminations: like spectator and creator, looking and participating, participant and artwork, performance stage and experiential space. Experience design embraces a holistic approach on the content and context where people's interactions and performances

emerge, by organizing the overall context and conditions for experiences and events to occur.

Experience design projects involve a spectrum of domains that extend from the commercial industry and technologically-mediated outdoor and indoor activities of everyday life, to the fields of creativity and arts. Experiences design projects involve a wide spectrum of applications: organization of exhibitions, public shows, theme parks, educational events (conferences, seminars, and more), projects of artistic content like exhibitions in museums and science centres, social events (weddings, meetings of any kind), commercial projects within outdoor environments with open and enclosed areas where brand experiences take place, sport activities, or even healthcare projects that contribute to improve patient recovery time among others. Specifically, advertising and marketing are among the fields experience design is applied, for instance, in stores and malls, appropriate decoration styles, lighting and sound effects, even scents, are used for particular occasions (Christmas time, birthdays, summer holidays, etc.). Specific stimuli are emitted to directly induce the limbic system, drawing the subject into a deeper, more immersive interactivity with the surroundings. Additionally, the noteworthy intensification of tourism over the last few decades, organizing an opportunity to escape from everyday routine and emptiness by choosing adventurous and exotic destinations, like in case of space tourism, where millions are paid for travelling outside earth. Moreover, computer-based games and outdoor activities tend to stimulate (all if possible) our senses, push the limits of our physical boundaries and perception of the world and experience the unknown, without limits; rock climbing, wind surfing, bungee jumping, along with the rise of extreme sports, aim at stimulating subjective intensity. In case of music performances and live shows, people attending are offered the opportunity for a multisensory experience, as intense lights, sounds, and projection screens are combined to create a visceral, memorable and even overwhelming, collective experience.

Experiences are designable. Since the time we played as kids, up to the anticipation and organization of our personal and social life as adults, our objectives are oriented towards our living meaningful and qualitative experiences. Art and design comprise a creative process filled with moments of inspiration, expression and communication between the creator and the audience. Specifically, Experience Design is a novel umbrella theory of designing products, processes, services, events, and environments with a focus placed on the quality of the user experience and culturally relevant solutions (Marzano, 2003, p. 46). This design strategy sets the frame where people share common experiences, and interact within a specific context and content. Designing contexts of interaction, involves creating 'moments' of engagement among the participants, optimizing the overall impression and creating positive memories. Mainly driven by organizing 'moments' of engagement between people and particular environments, this field studies their objectives, needs and behaviour, as well as their overall impression and memories, regarding these moments. Therefore, this innovative field links ideas and perspectives from diverse research disciplines, like marketing, psychology, entertainment, computer science, information systems and interaction design, as thorough cross-discipline perspective is required to develop a holistic consideration of people's experience (Paluch, 2006).

Every design approach is a process of setting the context for experiences to occur. Design is the process of making experiences (Shedroff, Nathan Shedroff, no date). However,

there is no such thing as design of experiences. We need to elucidate that experiences emerge from a variety of potentialities, a significant part of which cannot be organized and predetermined by the design procedure; the outcome is considerably depended on matters beyond its design. According to Sanders, it is impossible to shape experiences as they evolve in people's esoteric sphere; "we can design *for* experiences by realizing a field where people have possibilities for creating their personal experiences" (2002). Additionally, Forlizzi and Battarbee share the same view saying that designers can only design tools and situations that people can interact within (2004). Experience designers, like interaction designers, "design *for* the possibility of interaction" (Saffer, 2010). Experiences happen anyway, as long as there are conscious and intelligent beings, whether we plan them or not. When not intentionally designed, there's a much higher likelihood of the experience being poor. Norman investigating how experiences can be designed, he concludes that they can only be supported; in his words: "we can design in the affordances of experiences, but in the end it is up to the people who use our products to have the experiences (2011).

Although experiences are designable, designers cannot predetermine the participants' aesthetic experience. Experiences emerge from a variety of potentialities, a significant part of which cannot be organized and predetermined by the design procedure. The final result is considerably depended on matters beyond its design, like the personal way people mould their experiences. People involved create their personal experience, while participating within a physical or mixed reality environment. Their role has become central, as they contribute to the aesthetic outcome, not merely with their presence, but with their interaction and participation in the course of events, co-creating their experiences. As Crabtree et al. remark, interactive environments are not necessarily comprehended and used as designed (Crabtree, Hemmings, & Rodden, 2002); they are rather appropriated in use. By no means can design guarantee meaningful and aesthetically advanced experiences; such dimensions emerge while interacting within a particular environment. Aesthetics of experience is 'emerging in use' being "an integral part of the understanding of an interactive system, and its potential use" (Petersen, Iversen, Krogh, & Ludvigsen, 2004). Although designers try to situate themselves in the participants' place, they cannot afford to approach what the latter actually subjectively perceive and contemplate. As expressed by Shusterman, the designer cannot see through the eyes of another, feel what another feels or develop meaning as any other person would (Shusterman, 2000). After all, nobody can foresee how an experience will unfold and the value each person will assign to it. We design in accordance with the intention of inciting a particular kind of experience, by concentrating all our abilities and potentials. For Nyman experience design is about creating "a) a strong vision of intended experience and b) the necessary practices to maintain the intent" (2008). Subsequently, the contribution of both the designer and the participant(s) is essential to co-create meaningful and enjoyable experiences around on occasion of an event.

Human experience is regarded as the phenomenal unfolding of awareness in real time, including the course of emotions and thoughts, direct sensation, along with intuitive perception. Experience design comprises a holistic approach (see chapter 2) that focuses initially on studying and conceiving the way people feel and behave in particular circumstances, and secondly on the ambition to change, even to enrich, our experience within a particular physical, virtual or/and mixed reality environment. This type of design involves experiential projects applied in a wide range of industries including banking, health

care, retail, hospitality and tourism, transportation and traditional manufacturing. For Jones, the mission of experience design is "to persuade, stimulate, inform, envision, entertain and forecast events, influencing meaning and modifying behaviour" (2011); to stage experiences for people, and particularly to offer them an elevated tone of experience, in the frames of particular cultural, spatial and temporal frameworks.

Experience design is not emphasizing at products (services, interfaces, environments – generally, design outcome), but focuses in experiences people live through and time memories they make out of them. Therefore, weight is not put on how people may use a product (considered as users and/or consumers themselves). Experience Design centres at the moment-by-moment flow of interaction during meaningful experiences as well as the stories and memories people live through them and share. Hence, designers care more about experience than the design outcome. This transition reflects a broader shift from materialistic to a post-materialistic orientation in social level that influences art and design fields. A tendency that is more concerned at going through experiences than possessions themselves, i.e. at living through stories and moments instead of owing things. This transition does not certainly encourage less consumerism, but implies different shades of materialism. Researching ways to facilitate and inspire new ways of closeness and communication, for instance, is related but not restricted to designing interfaces and applications for mobile devices. It's more about designing ways of watching movies than designing a television set. The perspective is different, experience-oriented.

Experience design cares about why people act in certain ways, trying to understand their feelings, thoughts, values that lead to behave accordingly. Discovering people motivations is a critical part in delivering meaningful experiences to them. As later analyzed more extensively, although comprehending people needs has indicated we share common motivations (like safety, closeness, etc.), delivering worthwhile experiences that move people is still very difficult to achieve as different people are satisfied in different ways. Designers need to clarify and focus in what experience they want to deliver – they design for events and experiences to emerge (what), for a certain core of reasons (needs, values and desires - why) in a certain way (aesthetics of interaction - how).

Understanding the personal way people behave according to certain motivations, designers need not take for granted that they already know the answers and just converse with them to find out. As experience is more important than any product, designers are in dialogue with people to listen their narrations about their needs, desires and probably expectations. Discovering what we are designing for and making appropriate choices comprises a more holistic and responsible approach of design thought and practice on people's lives. As Hassenzal states, designers are not merely product creators any more, but suggest, like authors, better stories and situations that are likely to improve people's everyday life (2013). Designers that focus on the experiences they deliver want to make a meaningful change in people's lives based on a core of values and motivations that move people and meet their needs. Being in touch and dialogue with people turns them into partners of the entire creative process. Experience design is about creating *for* the people *with* the people.

Intangible culture is principally about events, narratives and experiences people share in the course of time. Intangible forms of culture (like ceremonies, myths, stories) are bond with live events for their existence, presentation, and preservation; they are narrated,

performed, and participated by people. Every time they are performed, they are re-created by those who live them through, practitioners/artists and audience. Experience design is an evolving design landscape where art, science, and technology meet to study, ideate and create meaningful interactions and experiences among those participating. Experience design emphasizes at experiences and stories/memories people make out of the events that have lived through, and less on the design outcome. Elements like change, experience and sense of becoming are inherent in experience design thought over products, functions and matter, offering a fresh and appropriate perspective on studying preserving and presenting immaterial culture forms and practices.

1.4 Performing in live art events

Performance is an art form of social interaction and expression that potentially lasts as long as the creative process continues to evolve, and vanishes the minute after. Live art is descendant of Performance and Performance Art, and incorporates performance as the medium to reconceptualise art not as object but as process and event. Particularly, live art, like experience design, set the overall context for events and experiences to occur, experimenting on different media of expression, and challenging the notion of change and presence, the role of the artwork in the contemporary digital culture, and the artist-audience relationship in the course of the event. Live art is procedural and moulded in the place where and the moment when interactions and performances among people and artists emerge. Therefore live art events cannot be entirely predetermined, only organized to a certain extent; they are configured on the fly.

Live art embraces various approaches on 'liveness' rooted in a wide spectrum of disciplines. Live art as elusive form of art is basically characterized by the presence and absence of events: of present interactivities linked with past occurrences, preserved in memory. As a term, *live art* does not comprise an art form or discipline per se, but a cultural strategy and practice "to include experimental processes and experiential practices that might otherwise be excluded from established curatorial, cultural and critical frameworks" (Live Art Development Agency, 2009). Covering a wide range of experimentation, it is essentially tentative, incorporating a diverse set of disciplines and artistic modes assemble in performance. The notion of live art is compound and vague. In Sofaer's words, "live art is the experience of the event and the subsequent contemplation thereof" (2012). Art live events involve interactive projects, bodily expression and performances, and entail social interactivity among artists, designers, production teams and the public, located both outdoors (galleries, museums, exhibition spaces) and indoors (social places).

Live art and its ancestor performance art both strongly resist categorization and definition, as well as condemn scientific endeavours on documentation and safeguarding to vanity (Phelan, 1993, p.146). The *Theatre Collection* of the University of Bristol gathered plentiful concepts, in an effort to delineate this contemporary art form, which define Live Art as: "a theatre without a script"; "a journey in experimentation"; "art, imitating life, imitating art"; "an improvisation that has no beginning and no end"; "an impossible term. It indicates activities which ask questions unapproachable in other art forms"; "it involves human interaction"; "live art is art just for the moment itself, for direct experiences and does not

leave any traces whatsoever" (Definitions of Live Art, no date). Art live events involve interactive projects, bodily expression and performances and entail social interactivity among artists, designers, production teams and the public, located both outdoors (galleries, museums, exhibition spaces) and indoors (social places). Principally, live art, like experience design, set the overall context for events and experiences to occur, experimenting on different media of expression, and challenging the notion of change and presence, the role of the artwork in the contemporary digital culture, and the artist - audience relationship in the course of the event.

It is critical to stress though that live art and performance art are not different approaches but artistic practices that historically succeed one the other. Performance art was introduced at the late 20th century in the artistic foreground as means of unsettling the dominant art establishment, and opening up new concepts of art as process and event. Artists experiment across forms, contexts and modes breeding innovative artistic practices and contemporary languages of expression, finding new ways of motivating audiences, and participating in public life. The term 'Live Art' arose in Europe and the U.S. in the 1960's and was coined in the UK in the mid-1980's, out of artists and critics' quandary to delineate these new art practices that surpassed, and could not identify with, any of the traditional art classifications. Performance art combined a multitude of activities including happenings, body art, actions, events, and non-matrix theatre. There have always been artists who have worked at the margins of their discipline, experimenting outside the established norms of what it means to be a sculptor, a dancer, an actor. Performance art first opposed to past conceptions on artwork as object, on markets, and applied the ephemeral. The artist's body as site and material is widely used, breaking the expectations of theatrical play and introducing spectators in the artistic practice. By creating a fleeting art experience that could not be captured or purchased, conventional art forms and cultural standards were disputed.

Live art is basically rooted in performance art among other fields. Hence analyzing the characteristics of the latter contributes to enlighten this ambiguous and widespread practice. Briefly, performance art is live (but mediated as well), experimental (it has no strict guidelines and rules), inherently ephemeral, and likely not to be finite. Performance art brings together visual arts, theatre, dance, music, video, poetry, and film with no preconceived ideas. It involves performer(s), space, time and audience, along with numerous physical and mixed-reality media (like, music, dialogue, lights, even fire). Performers challenged traditional art forms, as their art is not identical to an actor supporting a role. Performers act out before an audience a combination of movements, gestures, sounds and language, also offering occasionally people the opportunity to participate in the course of the event. Performance as work-event is not for sale, and as entertaining, amusing, or even shocking experience, it is meant to be *memorable*. According to the *Dictionary of the Theatre,* "rather than an actor playing a role, the performer is in turn a narrator, painter and dancer, and because of the emphasis on physical presence, a stage autobiographer who has a direct relationship with the objects and situation of enunciation" (Performance art, 1998). Performance artists often incited new and unconventional ways of thinking, disavowing conventions of traditional arts, and particularly ideas regarding 'what art is'. Since its commencement in the 1960s, performance art has evolved, from private, introspective investigations to ordinary routines of everyday life, site-specific environmental transformations, technically sophisticated multimedia productions, social events, and

generally experiences that involve audience in a collective encounter and interaction with performers and space.

A performance comprises an art structure both emergent (Bauman, 1977) and probably extensively thought. Essentially live art comprises live processes, cultural practices of change that embrace the ephemeral, an inherent feature of human presence and experience. Integrating the ephemeral in the artistic process requires vital changes regarding the form and the scenario of the final outcome. Contemporary art (and design) is moulded out of change, affecting both the creative practice process and the final form of the designed result (see chapter 2). Whereas plenty of cultural products and artistic forms are usually constrained to matter in terms of their capacities and standardized shapes (like computers, cinema, paintings), live art projects are live events, configured in accordance with constantly evolving developments in art, design and technology. In particular, the scenario of the event is modified to embrace the ephemeral, unlike the typical linear narration of a movie or theatrical play (see chapter 4). Similar to various types of drama, the whole activity performed by artists may range from fully scripted, to partly scripted, to fully improvised. Live art events usually unfold based on a narrative structure wherein the unforeseen is also given the possibility to raise and evolve. Live art is procedural and moulded in the place where and the moment when interactivities and performances among people and artists emerge. Therefore live art event shape and scenario cannot be predetermined (only organized to a certain extent) but accrue on the fly.

Moreover, live art and like performance art both concentrate on the physical body as site of interaction and its potentialities to communicate and interplay with others; a site that is often digitally enhanced by the integrated mixed-reality technologies. Incorporating the artist's (and occasionally the audience's) body, with traditional art forms and mixed-reality media, live art investigates new horizons, across and at the edge of traditional aesthetics. Concentrating on the human body, the artist is exploring the limits of his/her embodied self: the ones of the physical body as well as socially acceptable patterns of behaviour. The physical body is the essential vehicle to experience and interact with others and the environment, without necessarily 'performing', in the common theatrical sense meaning 'pretending to be someone else'. Live and performance art use body to body interaction; ever since the distance of the artist, the audience and the artwork was never smaller.

Performance projects defy traditional notions of the place where an artwork is created and/or presented in front of an audience as well as their duration. Regarding the live event space (like the performance space), the whole enactment may be sited at a stage, i.e. a place separated from the audience, or at a demarcated area wherein people are welcome to wonder around. Unlike theatrical plays, performance events, they may actually be located in a wide range of sites and circumstances; in exhibition spaces like galleries, theatres and museums, public spaces, both indoors and outdoors, in institutions and authorised cultural spheres or even in unpredicted areas. People may experience from one-to-one interplay, to social interaction and massive participation in the frames of events placed in both physical and virtual environments. Public space has become a stage for artistic creation and expression. Contemporary artists prefer unexpected sites to create and present their work. For Keidan, "live art is synonymous with […] practices and approaches that could be understood as being *placeless* simply because they do not necessarily fit, or often belong, in the received contexts and frameworks art is understood to occupy" (2004). This

placelessness though of live art already characterised performance art practices back in the seventies, as remarked by RoseLee Goldberg (1979), and is later inherit to live art projects. Additionally, in contrast to the anticipated duration of different modes of plays (movies, theatre, dance, concerts, etc.), a live art practice has a wide range of possible periods to cover, from a few seconds (like in case of Howard Matthew) to whole days period (like Lone Twin's 'Twentyfour Four') (Keidan, 2004). Hence, live events are of a more unforeseeable and indeterminate nature as they emerge from the interaction between artists, people and environments (social, physical, architectural, digital).

Challenging not only the form of the artwork, but the division between performers and spectators as well, is among the objectives of performance and live art. The rules and norms are redefined regarding who creates art, how art is created, and who artwork is addressed at. Live art contests expectations about the role of the audience during a live art event, defying the past distinction with the artist-performer. Like performance art, live art challenges the spectators' role by giving them the opportunity of self-expression as individuals and community. By bridging 'artificial binaries' like science and art, thinking and feeling (Blair, 2008), artistic experience and everyday life, self and others, artist's and spectator's role, new perspectives open up to explore how individuals and communities become engaged with and engaged by live art and performance events. Engaging individuals as participants in live art events and performance plays corroborates the social value of arts. In parallel, Rancière's *The Politics of Aesthetics* (2004) and Bourriaud's *Realational Aesthetics* (2002 [1998]) concentrate on audience experience and participation during art making, assigning art and life as relational and participatory practices and interplays. Therefore, an emphasis and turn has been put to spectatorship, concerning embodied engagement and experience as essential to making meaning and making art in all (Shaughnessy, 2012). Sofaer in an attempt to define Live Art stresses the immediate or mediated relation and interaction between artist and spectator:

> "What is live art? Well, at its most fundamental, Live Art is when an artist chooses to make work directly in front of the audience in space and time. So instead of making an object, or an environment (a painting for example) and leaving it for the audience to encounter in their own time, Live Art comes into being at the actual moment of encounter between artist and spectator" (2012).

Becoming participant involves switching roles during the work and therefore being at the border between presentation and representation, "balancing on the edge between presenting one self and representing another self" (Johannesen, 2003). Therefore, they are offered the opportunity to gain an enriched tinge of the whole artistic experience. Performative act requires a mental investment in the process that converts an individual into a stage performer, meaning somebody that "can be looked at in the round and at length without offense", retaining nonetheless the privilege to return to the "audience role" (Goffman, 1986, p. 124). Reid, quoting John Orrell supports that "the essence of theatre design is to bring players and audience together in a fruitful collaboration, never allowing the two elements to become remote from each other, nor yet so mingling them together that the audience loses its capacity for wonder" (Reid, 2006, p. 219). Boal extends this potentiality a step further supporting that as audience can become subjects of the whole

action, like performers, so performers must take the role of spectators, so that everyone involved have the same perspective on the course of the event (Boal, 2008, p. 135). Parr aptly claims that the Deleuzian concept of 'becoming' facilitates the comprehension of the way performance act altered the relationship among the artist, the audience and the artefact: regarding artistic creation as an 'on-linear dynamic process of change' and 'transformative experience' entails subject-object distinction bygone (Parr, 2010).

Live art challenges common concepts of the feasible and the admissible as artists are in moment-by-moment correlation and interaction with the general context, the environment and the audience. Therefore, the stories that unfold may range from totally fictional, or a combination of fantasy and reality from the audience's life, to events that come from memories of the past or expected events concerning the world of those participating. Looking at its origins, performance and all the performing arts are "arts of action" (Meyer, 2010) involving forms of staging, show, and presentation with roots and references back to everyday practices and routines. From commedia dell' arte during the Renaissance, tribal ceremonies, social and religious rituals, and storytelling activities, art and everyday life involve numerous practices fully or partly improvised. Actually, the make-believe play of children is the essential source of drama under a psychological viewpoint (Blatner & Wiener, 2007). In live art another life is created with reference to but different from the one lived; one engaged with the fantasy of otherness. Participants capture what cannot be captured, the ephemeral aura of magic.

All art fields play with the distinction between fantasy and everyday reality, between the physical and the artist's interpretation on things, between the potential and possible. Performing implies to expose the self, in Butler's words "to conceal, if not to disavow, what remains opaque, unconscious, unperformable" (Butler, 1993). Artaud conceived a theatre that "would revive or evoke the sunken, the forgotten and the lost"; a theatre that merges the dichotomy between the stage and the hall. For Toporišič, theatre is "not a 'transcription' of an already exact *logos* but rather a 'scription' of its own meanings" (2011, p. 17). Offering people an artistic context to speak and hear their voices is not only democratic but cathartic as well. During a live art event (like a performance play) a work of fantasy is dramatized, an aspect central to all representations and creativity processes.

Live art events opens up a new horizon in art concept and practice. Time-based, visual and performing art events encompass human presence and participation, embracing the ephemeral and challenging traditional perceptions of the arts. By integrating both physical aspects, traditional art forms and mixed-reality media, live art investigates, across and at the edge of traditional aesthetics, issues like: liveness; variability in terms of form, context and plot; presence and interaction; broadening common conceptions and potentialities on presence, encounter and self-expression. A live art event may cover spectrum of variables, involving: from fully memorized and scripted actions, to entirely improvised interplay; from the audience's passive participation, to their becoming co-creators of the whole event along with the artists; from the whole event being situated on a place detached from the spectators, i.e. a stage, to performing amidst the public; from totally fictional stories to narrations that refer to people's everyday life. In essence these binaries do not actually comprise distinct categories, but rather different qualities each event is invested with in a greater or lesser degree, in accordance with the artist's principal idea and purpose(s) served. Concentrating at live art events, offers a fresh perspective and profound overview in

presenting, conserving and promoting intangible forms of culture in correlation to experience design, by embracing people's encounter, participation, and interactivities.

1.5 Applying performance in education and social transformation

In the contemporary world, individuals have found challenging to escape from the role of passive receivers of pieces of information and stimuli, and get personally and collectively involved in public events (for example, religious ceremonies, festivals, and social rituals), especially through the potentials of digital culture. They are given the opportunity to participate and collaborate in social and cultural events by methods first applied in theatre and performance practices. In the context of this thesis, experience design and live art are conjoined by shared interests in audience enactive participation within cultural events, both researching and incorporating the social, scientific and educational value of applied performance practices. Due to its interactive qualities, applying performance methodologies for social and educational purposes generates contexts in which the participants are considered collaborators of the overall experience who "actively engage in the process of knowledge and identity production" (Shaughnessy, 2012, p. 32).

Specifically, the way we learn, conceive, interact and engage with the environment has been re-conceptualized, since past convictions discerning science from art, thinking from feeling, body from mind, and reason from emotion as independent schemes have gradually weakened, even abandoned. Indicatively, the history of educational technology involves four phases, each one developed based on its predecessor: 1) the age of instruction (cognitive-based design and research), 2) the age of message design (design and research of media and delivery), 3) the age of simulations (focus on simulations and interaction), and 4) the age of learning environments (Winn, 2002). This transition was accomplished in part due to performance and theatre methodologies applied in education as well as other cultural practices, as *plastic* and *open* enough to *embrace interdisciplinary* (Blair, 2008, p. 5). Scientists from neuro-science field confirmed that only learning theories which conjoin cognition with embodiment and take into account the self within a certain social context are realistic (Immordino-Yang, 2010, p. 101). Anthropologists, such as Turner, theorized performance as a process of transformation for the group as well as the individual (Kapchan, 1995). Emphasizing at process performance contributed a sense of agency that was difficult to find in structural ideas of culture. Additionally, cognitive science confirmed "learning always takes place in relation" associating processes of body and mind (Ellsworth, 2005, p. 55), whilst Shaughnessy notices that even form early age we "learn through the development of empathy and memory, engaged through social interaction" (2012, p. 10), referring to McConachie (2008) and especially to interactions based at the arts. Notions, like perception, emotion, empathy, memory, embodiment and relation – further analyzed on chapter 4 on enactive participation – configure a common ground between applied theatre and design resulting in a deeper understanding on audience engagement within designed cultural events. Benedetto underlines the potentials of theatrical methods to enduce knowledge and change to social groups:

"Recent scientific discoveries about brain function open up the possibility that we can think about the nature and value of theatrical practice by way of lived experience. Theatrical and other artistic creations capture the attention of the neural networks of the body and make real experiences that might not be accessible to our everyday interactions. Through art we are able of offer experience and knowledge that *change* the attendant at his or her core" (2010, p. 29).

Meanwhile, the value of applying performance in cultural management has already been acknowledged in relation to mechanisms of social interaction and memory. Since performances have been considered to integrate education and entertainment (Glassie, 1995), Denzin among other scholars asserts a "turn to a performance-based approach to culture, politics and pedagogy" (2003, p. 24). Performance practice is an agent of remembering and sharing common experiences; a participatory, live and socially engaged method, bounded with the ephemeral, the elusive, the present time, change and the presence in physical level. For Glassie artists that combine preservation and experimentation in their performance work facilitate the scientists (folklorists in his words) to deeply comprehend "tradition as a dimension within every creative act" (1995). Besides, Shaughnessy describes performance documentation as "a means of keeping the past in a continuous present, a refusal to accept the past as loss" (2012). As social encounters are developed among audience and performers in the performance space, a common ground is shaped literally and metaphorically, where shared experiences unfold and 'memory operates' (Denzin, 2003, pp. 36-37). As Fox further asserts the remedial effect of confiding to others affects everyone present, not only the teller. The value of sharing feelings and experiences is an inherent human need as our personal and cultural identity is strengthened this way. In addition, presenting past occupancies or imaginary tales, elements of intangible culture, through live events, affords participants for profound comprehension and overview of although familiar concepts (Blatner & Wiener, 2007, pp. 13-22). People and performers meet and contact, each from the perspective of their own past experiences, and share the opportunity to experience cultural events based at fictional scenarios and/or real narratives of the past.

The fields of theatre, performance and drama share common ground in focusing in a wide spectrum of social engagement and interaction, especially when applied in educational, social and community contexts (like schools, prisons, hospitals, and museums) with particular cultural groups. There is a broad spectrum of practices, forms, technologies, vocabularies and methodologies related to contemporary theatre and performance, like devising theatre, performance art, live art, etc. In the context of this thesis, the term performance is chosen, in accordance with Pearson's view, "to embrace the fullest range of practices originating in theatre and visual art and to demonstrate affiliations with the academic field of performance studies" (Pearson, 2010). In addition, Nickolson describes performance as "the distinctive place of community, educational and applied theatre within contemporary theatre making" (2006), whilst under his perspective *applied theatre* "relates to work which is orientated towards aspects of social change, personal development and community building through various forms of participation in drama, theatre and other performance practices" (Nicholson, 2005, p. 90). Respectively, *applied drama* and *applied*

theatre are terms often used 'flexibly and interchangeably' (Nicholson, 2005) in approximation with performance art and practice, "if 'drama' is understood as an activity or process involving the composition of scenarios, actions, and representation (generally associated with acting 'in role' and the production of scripts)" (Shaughnessy, 2012, p. 8). Although there are certain differences in the form and content between drama, theatre and performance that surpass the objectives of this research, we emphasize at the common ground and knowledge these parallel fields share, especially in terms of audience participation and social change. In Denzin's words:

> "Performance is an act of intervention, a method of resistance, a form of criticism, a way of revealing agency… performance becomes public pedagogy when it uses the aesthetics, the performative, to foreground the intersection of politics, institutional sites, and embodied experience… in this way performance is a form of agency, a way of bringing culture and the person into play" (2003, p. 9).

Schechner and Thompson define *applied* and *social theatre* as "performance(s) that can transform the practitioners, the participants, and the public's existing knowledge and experience", and further adds that applied theatre involves "an active engagement with its audience who are generally constituted as participants" (2004, p. 13). Audience's active engagement is pivotal to *applied drama, performance,* and *theatre* for their creation and philosophy, as "orientated towards aspects of social change, personal development and community building" (Nicholson, 2005, p. 90). In parallel, Shaughnessy states that applying performance involves in essence engaging artists with audiences as participants "in projects which seek, in various ways to challenge, intervene, liberate, change, transport or transform" (2012, p. 187). As aptly Lehmann expresses:

> "the turn to performance is… always a turn towards audience as well… performance has the power to question and destabilize the spectator's construction of identity and the other – more so than realist mimetic drama, which remains caught in representation and thus often reproduces prevailing ideologies" (2006, p. 24).

Specifically, drama is considered to serve various purposes, especially in interactive and improvisational form. Drama is considered: to be entertaining and educative, to inform and sensitize people on particular social matters, empower social communication and participation, support a sense of social and cultural identity through social interaction, and even have therapeutic potentials (hence used in psychotherapy) among other goals (Blatner & Wiener, 2007). And Sutton, in his unpublished PhD thesis*,* states that *drama* applied in "educational, social and community contexts involve participants as 'active producers'" (Sutton, 2005). Especially, interactive and improvisational drama methods empower people's spontaneity and imagination, and serves as a vehicle of social participation and change, as every field of art aspires. The areas of theatre, drama (thought, creation and practice) coincide with performance although different in several points that exceed the objectives of this thesis. The essential issue is their sharing objective of empowering the people to co-create events that involve change and learning.

Performances are considered 'framed activities' concerned with "giving meaning to experience" (Kapchan, 1995). This artistic, and in extension cultural practice, also comprise the means to study a specific cultural scheme and comprehend its inner structure and features. As an active agency of change, performance represents "the eye by which culture sees itself and the drawing board in which creative actors sketch out what they believe to be more apt or interesting 'designs of living'" (Turner, 1988, p. 24). For instance, anthropologists support the way culture members converse on their lives involves communicating performatively about their culture (Lamberth). Applied forms of drama, performance and theatre, contribute to social engagement by giving people the opportunity to become participants in the overall event and not mere spectators of a complete artwork and/or story, holding at the same time an educational role.

1.6 Audience participation

> *"Everyone, encountering any happening, participated.*
> *There is no audience, no actors, no exhibitionists, no spectators,*
> *everyone can change his behaviour any given moment.*
> *Everyone is responsible for his own borders and transformations"*
> (Lebel, 1965)

Intangible culture is mainly interwoven through experiences and memories of social groups in time. People share (personal and common) experiences and memories by narrating stories. Stories divulge the relationship (the history and bond) among individuals and communities with other people and places in time. Narrations are shared through various ways: oral and written discourse and re-enactment inter alia. Either way, every story, told or (re)enacted, like every form of intangible culture, is addressed and transmitted to an audience. This thesis provokes *participation* to exceed the anticipated scheme of merely attending (hearing and watching) a story, event and/or experience unfold. Audiences are urged to participate not plainly as spectators at an art work already completed, but contribute more actively to its performance and configuration, becoming in this way co-creators of the final outcome. Therefore, for the purposes of this thesis live events are designed to be educative, meaningful and gratifying as well, to attract satisfying social engagement and active participation.

During the *Convention for the Safeguarding of the Intangible Cultural Heritage* in 2003, UNESCO stressed individuals' and social groups' participation as essential for the preservation, documentation and promotion of intangible culture (in Article 15). Specifically, they encourage the *widest possible participation* of common people to "create, maintain and transmit such heritage, and to involve them actively in its management" (UNESCO, 2003). Therefore, democratic collaboration between people and practitioners is necessitated as there are no experts, but participants who support different roles in the creative process (Kaufman, 2013). Audiences and scholars are not considered opposing forces, but collaborators in dialogue, sharing perspectives on relevant matters. Taking decisions over documenting, preserving and promoting intangible culture necessitates a dialogue, a process that everybody is needed to be related. This mutual collaboration and participation involves letting every voice be heard, every opinion expressed.

In parallel, contemporary design fields, like performance studies and practice, are already oriented towards incorporating individuals in the creative process (as further analysed in chapters 2 and 3). Contemporary design thought and practice tend to incorporate collaboration among artistic and scientific fields, among art and design domains, and also incorporate individuals' contribution not only after the completion of the design process (meaning interact with the design result), but during the creative procedure as well, offering feedback in the middle development phases. Accordingly, in performance and theatre practices, spectators and performers are both equal members of a community that subjectively translate and participate in a collective event and experience. Whereas their equality resides in their same power within the process of the event, their individuality is also crucial to maintain and promote. In essence, this equality involves having the same power practiced in a personal way, enabling unpredictable events to unfold. Indicatively, as Shaughnessy supports "when theatre is applied *to* something" (his underline) exceeds the objective of producing an artwork to serve matters of *change* and *learning*. He further complements that actively engaging the audience and transforming them into participants is a core principle of the applied theatre (Shaughnessy, 2012, p. 7). Additionally, for Rancière spectator needs not be emancipated from any mode of passivity, but associate present with past and potential epxeriences. i.e. subjectively interpret what he/she witnesses and accordingly create his/her own reaction, story, experience out of it (2007). In essence, spectators are not turned into performers; they are the protagonists of their own story anyway. Both performer(s) and spectator(s) become equal participants collaborating from different positions and backgrounds for the co-creation of a live event.

Nevertheless, the main design objective is not audience's active participation as an end at itself, but most importantly setting the context for satisfactory experiences and social interactions to emerge. Csikszentmihalyi introduced the notion of *autotelic experience* (combined by the Greek terms *auto - self* and *telos - goal*) (Csikszentmihalyi, 1991) meaning an optimum state of flow, involving an activity that is so fulfilling that doing it is a reward; an experience as an end in itself. He suggests four essential preconditions for qualitative and gratifying experiences to fully engage participants. These preconditions include firstly improving skills while overcoming challenges that are high but manageable, secondly a clear set of goals to be set requiring a congruent response, thirdly immediate feedback, and finally the opportunity to have (even some) control of the event occurring. Regarding the latter, audiences in performance plays and live events are given alternatives and choices to make, and therefore a type of control to shape in a personal way their own experience and consequently impact the course of things. People are given choices and even the opportunity to improvise, forming each time different results. Therefore, live event is not a fixed, but an open art work. Given choices, equally and simultaneously possible to be made, are actually links of instances and experiences that compose meaningful personal and/or collective stories. In the contrary, when no alternatives are offered, like in case of movies, theatrical plays, and concerts, no choices are to be made, and things occur in a predetermined way; one thing/phase/piece leads sequentially to another. Nonetheless, every time live events unfold new sequence(s) of decisions are made, and different personal and collective experiences are co-moulded. Hence, audience plays an essential role in the progress of events with entertaining and educational purposes. Particularly in terms of experience design and performance practices, individuals are considered participants and

co-producers of the entire experience rather than users, viewers, consumers, and/or audience.

In parallel, Pine and Gilmore, in their book *The Experience Economy: Work is Theatre and Every Business a Stage,* assert that the audience may be engaged in different ways and levels, while sharing an experience. Their model encompasses four realms of experiences. Figure 1 illustrates audience's interrelation in the development of an event: horizontally, guest participation (ranging from passive to active), and vertically connection or environmental relationship (varying from absorption to immersion). On the horizontal axis, the audience consists merely of spectators and/or listeners, who do not interfere in the whole procedure, while an active participation requires personal involvement and interactivity among people and the environment in collective level; we influence its progress. On the other hand, even those who are passively attending an event are contributing with their presence and support the visual, aural and even emotional dimension of the event and become part of how others experience it. On the vertical axis, the outcome is depended on both the media used and the level of participation in the experience. In case of absorption, the audience's attention is oriented towards an event as external viewers, like when listening to a musical performance or watching a parade marching. Unlike, when we are immersed in a potential environment where we feel present and active, we are totally soaked in this experience, like in terms of virtual reality and role-playing games or when we play in that concert (Pine & Gilmore, 1999). According to these two dimensions, four realms of experiences are respectively formed. They are described as mutually compatible, meaning that an experience does not necessarily belong to only one of these categories. Besides, the boundaries between them are vague and an event may become far more satisfying and fulfilling if, more than one, aspects are combined to create a multidimensional experience. Depending on the objectives, design may exceed the limits of each one in order to create the appropriate balance in accordance with the desired outcome. Explicitly, the sphere of experience includes four domains:

- *Entertainment*. It is regarded as passive form of experience and spectators do not participate in any way; they rather attend everything that is occurring without contributing to the whole procedure. They passively perceive information and stimuli through their senses.

- *Educational*. Like entertainment, audience is consisted of people who are absorbed in the events, but on the other hand, their personal participation is required apart from their intentness of thought.

- *Aesthetic*. An experience attracts the visitors' interest, by inviting them to come, making them feel comfortable and urging them to act by being themselves. It terms of aesthetics, people are overwhelmed by what they see and feel but remain almost passive in terms of physical activity. They are emotionally and cognitively involved but they do not proceed to any activities. For example, visiting the Grand Canyon, being inside a car that is driven at a car rally, etc.

- *Escapist*. In this case visitors are prompted to actively partake in an immersive environment, forming an opposite condition to entertainment. The audience is fully immersed in an environment (physical or virtual) while at the

same time they are personally and physically involved in the development of the event. People do not watch others do something; they are contributing in the overall experience. Like, for example in case of participating in a walking parade in the frames of a carnival or strike, actually being the piano player in a music concert, or even dancing in a dance competition.

Although different, all domains perform complementary to each other. Specifically, *educational experience* is designed to stimulate those partaking and urge them to learn, *escapist experience* to take action, entertainment to feel, and finally in an aesthetic experience, participants "just want to be there" (Pine & Gilmore, 1999). Actually, an experience becomes more gratifying when all of these characteristics are combined. In a contemporary digital world people seek for more advanced and compound forms of events and experiences to become interested and totally engaged. As Murray and other researchers have pointed out, in case of highly structured multi-user online games and virtual environments, participants always push the limits of the system to enhance their sense of challenge and engagement (1999). Contemporary man seeks to partake in overwhelming experiences, and design such challenges has become a highly sophisticated procedure.

In the context of this thesis, emphasis is put on designing for *audience participation* to emerge. I suggest the term *enactive* to describe the particular mode of participation that preconditions and at the same time exceeds emotional and cognitive engagement as well as somatic involvement, constrained within the usual frames of audience response (i.e. laugh, applause, etc.) to the extent of audience collaboration in the live event. As further analysed in detail in chapter 4 on enactive participation, the notion is not opposing to the stereotypical or conventional mode of spectatorship, involving engagement in mental, emotional, and physical level, but transcends it to offer additional rights and opportunities to audiences to step into the stage literally and metaphorically, and contribute to the evolution of the event.

 My proposal is based on the juxtaposition of *cognitive science* (Varela, Thomson, & Rosch, 1993), as well as *Cognitive Psychology* and *Cognitive Learning Theory* in *Educational Psychology* (Bruner, 1990), applied in the fields of experience design and designed live events for artistic and cultural purposes. Under the perspective of cognitive sciences, Varela, Thompson and Rosch stressed the importance of embracing daily human experience with scientific research, arguing that Merleau-Ponty's phenomenology of lived experience and Husserl's orientation at 'the things themselves' were mainly theoretical and a more pragmatic approach is necessitated. They describe as *enactive* the *approach* focused in *embodied action* and *cognition* in cognitive sciences (Varela, Thomson, & Rosch, 1993), putting emphasis at the incorporeal experience in the lived world. Under this perspective, any system involves a network of multiple levels of interconnected sensimotors sub-networks that comprises a part of an ongoing existing world, or shapes a new one (Varela, Thomson, & Rosch, 1993, pp. 205-207)[3].

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[3] Specifically, this approach refers at the *structural coupling that brings forth a world*, in opposition to the *cognitive approach* (according to which any system can be described by focusing on its structure, perceiving and studying any system as a composition of subsystems), and the *coupling of forms* (focusing on behavioural interactions and consider each system as a unity) (Varela, et al., 1993).

Additionally, based on the developmental psychology of Jean Piaget, Bruner developed the *Constructivist Theory* and particularly the *Optimal Learning Process*[4]*.* He names *enactive* one of the *stages of knowledge* in the process of meaning-making (Bruner, 1990). Explicitly, the *Optimal Learning Process* comprises of three modes of learning: the iconic, the symbolic and the enactive. According to the *enactive mode* of learning, knowledge is passed over through motor responses, without using words or imagination. In contrast, the *iconic* and *symbolic mode* involves making connections between ideas and abstract attributes: the *iconic mode* uses mainly visual images that derive from an internal imagery where a set of images stands for the concept, and the *symbolic mode* involves abstract, discretionary and flexible thought. The *enactive mode* is centred at propositions rather than objects, gives ideas a hierarchical structure and considers possibilities in a combinational way (Spencer, 1991, pp. 185-187). For the purposes of this thesis, the notion of *enactive participation* is proposed to challenge audiences' passivity by firstly, involving corporeal, emotional, cognitive and experiential engagement with other individuals and practitioners and the surroundings, with emphasis at bodily interaction during the performance event, and secondly by giving them the opportunity to get personally involved in the course of the event.

Designing for the aesthesis of experience is a creative process which necessitates the conjunction of sensing and thinking through embodied experience. Regarding the aesthesis and perception through the body we will examine how in live performance practices aspire to make the intangible tangible (Machon, 2009, p. 2). In the frameworks of this thesis, individuals' involvement in the course of live events is organized around "a free association of themes rather than a linear narration" (Broadhurst, 1999, p. 65). When audience members are given the privilege and the right to collaborate in live events, and become co-creators of the entire collective experience, new horizons are opened up during the design process as well as the course of the live event.

Contemporary design theory and practice involve on opening into new horizons and perceptions for design as concept, process, and result. In this section we analyzed a number of shifts in design thinking that entailed respective reorientations in every field of design, and delineate the broad conceptual scheme in which experience design has been developed. In brief, contemporary objectives and technological advancements focus on design as: combination of art and science which perhaps can go further than either; creative process of transformation and dialogue within digital culture; process of contriving not individual objects, services or products, but entire systems/environments; as a participatory process among audience and practitioners; finally, as enactive participation, involving personal engagement evaluation during the actual design process and experiencing the final outcome.

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[4] See
http://web.stanford.edu/dept/SUSE/projects/ireport/articles/general/Educational%20Theories%20Summary.pdf (p.14)

2. Designing for experiences, participation in live events

2.1 Introduction

In the second chapter, design in a broader sense and experience design in particular is approached as participatory creative process, both practice and outcome. According to contemporary strategies, designers cooperate with scientists and artists, as well as non-specialists people to create the adequate contexts and conditions for desirable events and meaningful experiences to emerge. At this point, the theoretical basis is also set on the way live events, under the umbrella of experience design, have the potential to serve as method of safeguarding intangible culture, wherein people are incited to enactively participate in correlation to technology and media incorporated. Collaboration, dialogue and participation are crucial factors in design as participatory process. In the context of digital age and culture, design thought and practice not only tend to embrace collaboration among artistic and scientific fields, among domains of art and design, but also overcomes limits of the past and urges individuals contribution in the actualization of live events. Nowadays, people are not involved only in this final stage of the process, but are offered the opportunity to give their feedback during the creative procedure as well. Finally, the notion of change (becoming), although inherent in every creative process, is particularly evident in contemporary design strategies: firstly, the integrated mixed-reality technologies result in the construction of digitally-enhanced contexts (environments, systems) wherein the physical limitations are transcended; and secondly the nature of the final outcome embrace people's participation, meaning the ephemeral and the unexpected. Interactivity and participation is the creative vehicle as well as the common ground where art and design, the physical and the potential, materiality and information, practitioners and individuals meet.

2.2 Design as participatory creative process

2.2.1 Design as amalgamation of art & science

Design as notion and process is compound as many aspects are interwoven out of the amalgamation of related - though different - disciplines, like arts, anthropology, social sciences, informatics, and architecture, for the creation of products, systems or services (Engholm, 2010). Integrating interdisciplinary considerations of scientific and artistic fields, into design thought is challenging, as complementary approaches are combined to enlighten human experience and interaction, in order to set the frame for meaningful and engaged outcomes to occur. Contemporary conceptions of design involve redefinitions and reorientations regarding the creative process itself, as well as the nature and affordances of

the final result. According to Jones, design involves: 1) the process of devising not individual products but whole systems or environments (such as airports, transportation, hypermarkets, educational curricula, broadcasting schedules, and more); 2) *participation*, meaning the engagement of the public in the decision-making process; 3) *creativity*, potentially present in everyone; 4) the educational discipline that unites art and science and perhaps can go further than either; and finally 5) the idea of designing without a product, as process or way of living in itself (my emphasis) (1991, p. ix).

In the past, design as practice and conception comprised a totally different experience in terms of the designers and people the work is created for. Designers used to apply their personal knowledge and craftsmanship to form synthesis of materials and means, available within the particular cultural framework and era they belong. In this way, personal ideas are expressed and shared with other people through common code(s), the nature and type of which determines the design form. Briefly, before the Renaissance, craftsmen used to aggregate the required tools, and create their pieces through their personal experience and established design rules, organized in internships. This era was named 'craft evolution' and succeeded by 'design by drawing' (Hileman, 1998). From the Renaissance till 1950s, design involved practitioners who still had a vague conception for the whole creative procedure, since forms and objects are drawn without the designer being totally aware of the logic infused behind the process. In the middle 20th century, a systematic endeavour turned design into a more deliberate practice, including methods like brainstorming, synectics and Analysis of Interconnected Decision Areas (AIDA). This effect involved design by drawing to solve sub-problems. During 1950-1970's a convergence of multiple fields is initiated to be taken into account in social, cultural and economic level.

Meanwhile, a general need has been brought into attention, the convergence of natural science and art. Lord C.P. Snow describes in his famous speech *The Two Cultures and the Scientific Revolution*[5] (Vesna, 2000, pp. 7-12) the need to bridge the gap between humanities, science (natural science) and art (literary intellectuals). This speech was included in the book *The Two Cultures*, in the second edition (1963) of which he claims that a *third culture* is about to merge the gap between the intellectuals, humanists and scientists. Contemporary art and design combine the expertise of informatics, encompasses the knowledge of several scientific fields (like mathematics, physics and architecture) and is rooted in cultural theory and social sciences. In this way, a wide spectrum of disciplines, perspectives and concepts are associated to serve contemporary needs of everyday life.

Design is a professional and educational discipline that unites art and science, combining the knowledge and experience of both. Design, both as procedure and final outcome, comprises the conjunction of scientific skilfulness and artistic expression, seizing also the transcendental potentials of technologically-enhanced systems. Roy Ascott introduced the term *technoetics* (1997) to describe the orientation towards the convergence of art, conscience and technology, in the frames of virtual reality and cyberspace; in his words:

> "Technoetics is a convergent field of practice that seeks to explore
> consciousness and connectivity through digital, telematic, chemical or

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[5] Cambridge, May 1959.

spiritual means, embracing both interactive and psychoactive technologies, and the creative use of moistmedia" (Ascott, 1997).

Designers, along with digital artists, are necessitated to constantly develop their aesthetic criteria and expand their knowledge on informatics, and parallel filds of scientific fields. Actually, digital media are integrated in the actual design process and the final outcome to such an extent that a presumptive dissociation already seems infeasible. Therefore, in the future the term *digital* may no longer be required to define any creative procedure with incorporated technologies.

Design, in every domain and application of it, is a bridge of scientific knowledge, aesthetic values and artistic creativity. Embracing an interdisciplinary perspective, designers and researchers enrich their comprehension and ability to stage meaningful and qualitative experiences for people. Therefore, for a design project to be successfully completed, various specialties are vital to collaborate to enlighten the design process. Design is the ground where art and science meet.

2.2.2 Design, culture and dialectic

In essence, every creative process reflects the philosophy and erception of a specific cognitive, social, cultural and environmental system. Every creative language is inscribed in a cultural scheme and allows social interaction, expressing the imaginary (Pellegrino, 2006, p. 25). Design theory and practice pertains to a particular cultural scheme of era, reflecting people's values and aesthetics in space and time. In the framework of digital globalized culture, physical limitations have been exceeded to a significant extent, resulting in exchanging concepts and experiences through technologically-advanced systems of communication and creation. Like every cultural practice, design is an ongoing process, wherein the sense of becoming inheres. On the other hand, culture is not a fixed scheme. Ideological schemes are very difficult to gain consensus in global level, although the effects are expanded all over the world. As Buchanan aptly expressed, culture exists independently of the individuals, even they are all personally involved in the course of the social-culture context wherein they live. Culture is an evolutionary scheme that people individually practice and develop through their deliberate activities and projects (Buchanan, 2010, p. 26). Additionally, for Richard McKeon culture is not an entirely unified context as various sub-sets develop, interrelate and influence each other within (1969). There exists polyphony of different perspectives, a synthesis of achievements in every aspect of social-cultural life (science, philosophy, art, etc.) that together as an ensemble mould and establish common, interwoven and constantly evolving values.

Culture is intertwined through interactivity and communication. A principal form of interplay is dialogue. Cultural identity, like any other form of identity (personal, social, etc.), refers to the notion of cultivation and evolution. Therefore, *culture* and *identity* are not consistent states with invariable features, doctrines and ideologies. Activity, communication, progress and friction are inherent in both of them; an everlasting process of ordering, disordering and reordering (Buchanan, 2010) that evolves in accordance with the unfailing process of researching, setting and redefining the perspectives and values that shape this activity. This contemporary sense and conception of culture expresses an active process of

seeking new concepts, perspectives and expressions, based on existing values and contemporary needs. As Ascott states:

> "What both the art and technologies of cyberculture are able to show is that there is a radical shift in our perceived relationship with reality, where the emphasis has moved from appearance to apparition; that is, from the outward and visible look of things to the inward and emergent processes of becoming. In this culture, neither the precise state of art nor its cultural status can be fixed or defined; it is in a constant state of transformation. This is not a state of transition between two known and fixed definitions or destinations, rather, it is transformation itself as a defining characteristic, as intrinsic to the identity of inter-active art as the composed and finite object was to its classical predecessor. Interactive art is art in a state of endless becoming. It is art in flux. This is so at present both in stand-alone systems, whether hypermedia or multimedia in format, and in the Internet, with its global multiplicity of inputs and outputs" (2007, p. 280).

Unlike a culture centred on appearances, meaning on *certainties, uniformity, cultural consensus* and *definite descriptions of reality*, contemporary digital culture focuses on apparition, i.e. on construction of reality (Ascott, 2007, p. 280). This creative process involves sharing and conversing about perceptions, needs and objectives, to contexture *s*eparate realities. Mixed-reality environment is the place of apparition, where the virtual and the physical are interwoven "co-evolv[ing] in a cultural complexity" (Ascott, 2007, p. 280). *Appearance* is related to stasis, complete formation and concrete conception, while *apparition* is associated with the sense of becoming, transformation, new identity and emergence of potentialities, opening up to the unexpected and probably, in the frames of virtuality, the unfeasible. A significant transition has been made away from the surface, or standardized look of things, and towards evolution and creativity, through communication, interactivity and emergence. Since modern art and particularly Cezanne's work, dialogue has been initiated to induce personal engagement and involvement in the whole artistic experience. Since Cezanne opened up a horizon of possibilities and unfixed viewpoints, a new relationship has been developed between the artist, the artwork and the spectator. Artists are no longer observers and reproducers of the appearance of things, but creators interplaying with their work, and by extension with the participants. Nowadays designers and audience involved do not share identical views, but communicate and cooperate through live events and experiences.

Designers, as creators of hybrid environments wherein individuals enter to have certain types of experiences, have already initiated a dialogue to share viewpoints from different approaches. Meanwhile, thorough studies endeavour to enlighten the personal way people create meaning and interact within specific systems/environments, involving their perception and behaviour during interpersonal and collective transactions in specific cultural, social and spatiotemporal contexts. The way individuals organize their activities concerning particular tools and products is also reflected through dialogue among designers and people (Heath & Luff, 2000). Conversing involves both describing experiences and listening to them. Both roles are active, based on common conventions and personal

interpretations, unravelling particular conditions, decisions and consequences concerning particular experiences and design products.

Studying the core norms and values that govern and shape cultural, social and environmental systems give impetus to discover new forms of creativity, emergence and communication. Design as process overcomes potentially different and conflicting values and develops ideas to find mutually approved solutions. Therefore, design practice stands as example of overcoming contradictions and diverse approaches, through discourse and dialogue. The dialectic is a method of conversing through an anthropocentric perspective that develops within a particular ideology and interprets things in conformance to this ideology. Through conversation a variety of views is exposed and juxtaposed, to comprehend and deepen into the values, needs and motives that drive people's activity. This cultural practice involves construction, deconstruction and reconstruction of approaches through which knowledge is discovered, incorporating not only designers but also audience participating in this communication procedure. Hence, the future and development of design is determined by the qualities and philosophy of the entire social and cultural system developed within, constantly evolving in time.

2.2.3 Holistic approach, systemic integration

In the frames of digital age, design both as concept and practice has been altered. In the past, design concerned the synthesis of novel media and techniques, for desired and expedient objects to be attained. The creative process involved mainly the aggregation and configuration of appropriate materials moulded to perform certain functionalities. Buchanan stresses human "unsurpassed ability to avoid questioning themselves and objectively examining the consequences of their beliefs and actions on others" (2010). At present, design practices no longer focus merely on creating objects and services, but rather on experience, and specifically on aesthetics of experience, altering our perception regarding form and communication all in all. Contemporary notions on design, involve fruitful reflection on the impact design outcomes (objects, services, environments, experiences, etc.) have on people's life and interactivity. Designers and scholars concentrate on the conditions and affordances of the general context wherein people enter and interplay. Every design approach organizes the development of potential activities and events, coordinating the sequence and probably the timing of particular available actions. Essentially, experience design puts emphasis on setting the context for meaningful and qualitative experiences to evolve.

Contemporary design approaches focus in experiences, accounted as complex procedures. Human experience is the core of design thought, and particularly how we can deliver occasions for meaningful, memorable and influencing experiences in people's lives, underlying the subjective way humans perceive and behave within the world. For instance, even shopping involves more than we realize: it starts before we actually need to buy a product and ends no earlier than when we throw or replace the product. Apart from routine and necessary procedure, shopping is also a rewarding and satisfying experience on many levels. Designing for experiences to emerge requires thorough study and deep comprehension of the multiple aspects that have a strong impact on our life and behaviour. Hence, holistic view is required in terms of the designers to comprehend the reasons why

people feel motivation in emotional, physical, and cognitive level and by extension gratification, while participating in any kind of activity. And scientific thought and artistic expression contribute to form a multifaceted view when combined to enlighten the complexity of human experiences.

This transition from images and objects to a holistic approach of people's experiences actually encompasses the development in designers' approach in time, from the industrialized period to nowadays. Buchanan made a thorough study and analysis of this progress in design perception and practice, which is summed up in *Four Orders of Things* (Buchanan, 1998) (Buchanan, 2001) (Buchanan, 2008) (figure 2). These four orders should not be considered as discrete design fields with particular practice and specific outcomes (e.g. like graphic design and product design), but as four open areas of design thinking, shared by every design discipline. According to his matrix, the four orders involve:

> **{First order} Signs, symbols and images.** This step includes visualization and presentation of information. *First Shift:* Designers discuss about the results of their work and ponder over a sense of community. They are interested in how these conversations stem out and contribute to mould a form of community.
>
> **{Second order} Physical objects.** During this stage tangible artefacts are created, unique pieces as well as mass production, and designers are merely concerned with customers' physical experience. The first and second order together involve a period from 1750 till 1950, when local competition and stable market were established and designers considered form, appearance, and functionality, as the main objectives of their craft. They were more thought of as stylists by then. *Second Shift:* Artefacts are considered to influence people's lives and are studied within a particular context. This shift in thought and practice is related to the reorientation of focus towards the use of an artefact in addition to the people's role (in terms of perception, activity, behaviour, etc.) in forming their personal and/or collective experiences. This different perspective entails that, for example, a knife is not only a thing, but a medium to perform more than one activities; a conceptual modification that was crossed to consider a product as an occasion of activity.
>
> **{Third order} Activities, services and processes.** Human interactivity within particular environments, organizations, and systems is the core of this order. The notions of organization, system and environment are studied and interrelated. As a design phase it commenced at the end of World War II and focuses on external evaluation and action plans. Indicatively, the term *strategy* first appeared in 1950s. *Third Shift:* While studying and designing about human interaction, specific questions emerged regarding people's interaction and participation in the frame of a general (social, cultural, spatial, etc.) context. The issues that were raised required for a broader analysis, embracing a holistic perspective, according to which people interact in a specific *whole*.
>
> **{Fourth order} Systems, environments, ideas and values.** This stage includes designers' ability to envision and comprehend the *whole*. Every design approach affects people through effective, meaningful communication. The fourth order of design involves the way we design the overall context within which interactions take place (Buchanan, 2007).

Although Buchanan's matrix does not refer at the Bauhaus as social approach at design (1919-1931), the four orders of things - symbol, object, action, and thought - correlate to four major design areas: graphic design, industrial design, interaction design and system design, respectively, as they have been progressively developed in the 20th and 21st century (Buchanan, 2007):

- *Graphic design* concentrates on visual symbols (images, typography, layout) and aims at communication in words and systems. The purpose is to get people to think by making a convincing argument, either to explain (user-oriented) or to persuade (consumer-oriented).

- *Industrial design* focuses on the creation of tangible products, and additionally the embodiment of technology. In this case, artefacts are made to match with particular people's performances and activities. This approach goes beyond the surface (interface) of things and deepens into further problematizations.

- *Interaction design* is concerned with how humans interrelate and interplay with products, services and environments in daily life.

- *System design* is the fourth order of design, centred at systems and environments. At this point, systems involve humans, not material things, who experience only a part of the system, their personal pathway through, rather than the whole system (Body, 2008).

Regarding the fourth order design, each part of the system is not studied and designed separately, but as a component that is interrelated with every other one into coherent whole[6]. In terms of marketing, the end-user plays an essential role; there is no detachment between the design team, the company and the user. Moreover, further competence is required on behalf of the designer, including not simply practical skills and project management as well, for holistic approach and comprehension of the aggregate of relative matters that influence people's experience. As Margolin & Buchanan note:

> "Design in the fourth order moves from a consideration of the object and the design management process, to the psychological and cultural contexts that give meaning and value to designs and the various disciplines of design" (1995).

Golsby-Smith's viewpoint (figure 3) based on Buchanan's matrix, exceedes to juxtapose the four orders of design, which do not substitute each other, but are rather jointly configured, co-moulded by each other (Golsby-Smith, 1996). Hence, each design domain is not regarded independently, but in correlation with each other. The knowledge

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[6] In terms of information design – or rather, how the focus shifts in terms of scope:
- *First order,* typography and layout.
- *Second order*, document structure and usability.
- *Third order,* the system or process in which the document sits e.g. the organizational planning system, the application process for an insurance product.
- Fourth order – the structures, values and cultural elements of the organizational environment that impact upon how the way that system or process is designed or implemented

gained in the context of every order is the base for the next one to build on and configure a holistic perspective. Consequently, the categorization of design in four orders could be considered a unified design thinking and practice, appropriated and adjusted every time to the objectives of each design project.

In accordance with the perspective of Margolin & Buchanan regarding the significance of including cultural studies in the desigh thinking, *cultural ecology* has also been developed in the framework of cultural anthropology. This field studies inter alia the symbiotic relationship between humans within their surrounding environment (Bell, 1999). Cultural ecology concentrates on studying the (physical, cultural, architectural) environment as a catalyst of human behaviour on one hand, and comprehending the way people perceive, adapt to and interact within their surroundings, in conformance to their needs and desires. This interrelationship between human and environment is the backbone for the analysis of people's history, philosophy and culture (Netting, 1986). Extensive multidisciplinary research has been made in this direction juxtaposing views from relative scientific fields. Indicatively, Harris centred at material culture and approached human behaviour within specific environments, on occasion of particular products, services, and interactions (1979). Moreover, Bell also employs the notion of *ecology* but exceeds the meaning of *environment* to encompass not only physical and biological aspects, but every aspect of human experience as well. The domain of cultural studies, like in case of anthropology, enlightens aspects of human symbiosis and interactivity and provides designers with an insight of their behaviour and motivations within a particular (environmental, social, cultural, and more.) context. For Bell, *cultural ecologies* contribute in addition with ethnographic research to:

> "[…] convey an experience, a sense, a glimpse, or a window into another world... a way of talking about deep cultural patterns that implicate everything we do. Knowing these stories, interests, and patterns makes it possible to design and develop products and services that fit (intuitively) into people's lives" (1999).

Bell's perspective offers an insight considering designer's knowledge and ability to set the frame for qualitative experiences to emerge for those participating. His work enriches design thinking by including all aspects that comprise a personal experience.

Concerning the fourth order of design and system design, Ho also offers a significant standpoint from her critical views on genetic engineering comparing systems with organisms interdependent from the environment where contained. She also discerns a *mechanical* from an *organic system.* The former is an object *in space and time* and gained stability in closed equilibrium, governed by controllers and external factors. A *mechanical system* consists of elements that can be separated and still exist independently of one another. Nevertheless, an *organic system* consists essentially *of space and time*, meaning all its components are self-reactive and interact creating a single unit, while retaining their identity. Ho describes the former as definitely non-democratic institution, with particular hierarchy of control. In contrast, an organism emerges out of *dynamic stability*, a characteristic of open systems, and is fundamentally democratic, in her words: "everyone participates in making decisions and in working by intercommunication and mutual responsiveness" (Ho, 1997). Therefore, a mechanical system is consisted of separate, dividable parts, combined together for a specific functionality. Whereas an organic system is

an undiminished whole; every component comprises an indispensable part of the whole, regardless of the reference scale (globe, nation, society, organism, molecule, atom), as global and local are 'mutually implicated' (Ho, 1997) (figure 4). Explicitly, Ho analyzes the difference between *mechanical* and *organic stability*: *mechanical stability* involves "a closed, static equilibrium, maintained by the action of controllers, buffers or buttresses designed to return the system to set points" (1997), whereas *organic stability* is an open system with dynamic balance "without controllers or set points, but by means of intercommunication and mutual responsiveness" (1997). She further adds that:

> "The stability of organisms depends on *all* parts of the system being informed, participating and acting appropriately in order to maintain the whole. Organic stability is therefore delocalized throughout the system, via symmetrically commuting parts, each of which changes in response to all the others and to the environment [...] Organic stability is in the *dynamic integrity* of the whole" (Ho, 1997).

This approach focuses on a system's behaviour and internal structure and certifies the future cannot be predestined (Jencks, 1997). Under this perspective, we witness a transition from determinism to design process without fixed outcomes (Jencks, 1997). Since multiple invariable parameters are taken into consider during the design process, like for example the subjective way people experience the world under certain circumstances, becomes evident that any precognition is speculative. Besides, the notions of ecology, technology and interaction are blended by Nardi and O'Day into *information ecology* to define the interactive system of human, practices, values and technologies, in a specific environmental context. In their words: "information ecology is used to situate new technologies ethically and responsibly, and to understand technology as a catalyst for change" (Nardi & O'Day, 1999). Cultural anthropology and genetic engineering have opened up new horizons to designers by borrowing their compound viewpoint on systems as organisms interdependent from the surrounding environment.

The fourth order of design provides a holistic theoretical approach concentrating at human-environment interrelation. System design includes designers' ability to envision and comprehend the *whole* within which people mould their personal and collective experiences. Cultural studies and genetics provide designers with an insight of human interactivity and behaviour as regards with their objectives under certain (environmental, social, cultural, etc.) circumstances. Cultural ecologies study the mutually dependent scheme of people and (cultural, social, physical, etc.) environment they live in. Besides, an organic system, i.e. an organism, expresses the notion of an inseparable whole that emerges out of a dynamic stability, a characteristic of open systems, implying its interrelation with the environment. Design embraces these shifts and reorientations to deepen into human experience and interaction within particular systems.

2.2.4 Design as participation

The design process and result is a cooperative experience consisted of two communicators, i.e. designers and people; a form of dialogue affected by the personal way both parts perceive and experience life. The collaboration of designers and people has

constantly been mutating, in conformance with technological advancement and relevant developments in contemporary design strategies and methodologies. Respectively, in live art events audience may also have the opportunity to participate in a live event and make their personal aesthetic experience out of it. For the objectives of this thesis, emphasis is put on experience design and particularly on participants' collaboration as the basis, the occasion, and the incentive of live events, actions and circumstances to develop. Designing for live events and collective experiences to occur considers any action or situation as opportunity for contact and interaction. After all, the most enjoyable and meaningful circumstances are not those imposed to others, but those that embrace people's random response, i.e. which adapts to the unforeseen.

Audience participation is regarded essential for events and experiences to develop. Emphasis is put on everyday people and their role in the design process, under a human-centred approach. Various scholars have worked towards this orientation. Walter Benjamin urges, in his work *The Author as Producer,* designers and developers of new technologies to choose media that turn users and viewers into participants and collaborators (1986). He claims the distinction is diffused between designers/artists and participants, and emphasizes on the role of participants who contribute as personal agents during the course of events. Also Fiore et al. coined the term *creative act* to describe the collaboration of people and designers (2005). Pine and Gilmore state that "staging experiences is not about entertaining customers, it's about *engaging* them" (1999, p. 17). In this way, people have personally and actively been involved, in physical, emotional and cognitive level, making critical decisions concerning the design result.

In opposition to past art theories, according to which artist's concepts were principally materialized into objects, contemporary theory and practice of art and design is basically focused on experience: "a shift from art as object to art as process, from art as a *thing* to be addressed, to art as something which occurs in the encounter between the onlooker and a set of stimuli" (Archer, DeOliveira, Oxley, & Petry, 1996). Even in 1975 Margolis quoted that artworks comprise more than physical aspects and structures. Although works of contemporary art and design have a short of material embodiment, they comprise *emergent entities,* meaning their properties are not attributed to their materiality (1975). Designing and conditions in the context of which an event unfolds gains more importance than materializing an initial concept into a final form.

Contemporary notions on art and design consider audience (non-specialists) an essential aspect in the course of live events. For example, Lugosi refers to 'consumer participation' describing the guest's role in creating a pleasurable hospitality experience (Lugosi, 2007). This concept is not new though. The performing arts (for example, music concerts, dance, theatre, performances) are entirely depended on the existence of audience, creating a collective experience for the artists, the artwork and the active role and interaction of people attending. Audiences have always been a vital component for the arts, as well as in social gatherings, and social events. In the context of interaction design, people attending mixed-reality environments and applications are not regarded a mass of people, but rather individuals with personal way of interpreting reality, personal desires and needs. Subjectivity is under study in scientific and artistic fields, to comprehend the way people are urged to participate in common activities and events despite their differences. The conception of an audience, which passively absorbs audiovisual stimuli, is surpassed. People

are considered participants, and contemporary design strategies endeavour to incite active participation in real time events, since personal participation makes experience more meaningful.

Being personally engagement elevates interest, in contrast to passivity, and expresses our need to be creative while communicating and interacting with others. The last couple of centuries, people have increasingly become active members of the arts industry. Cultural practices are effective democratic vehicle for social development. Since the 19th century, culture has gradually embraced art in shaping and maintaining social cohesion and values, opposing in this way to anonymity and promoting civilians' standpoint on social matters. Nowadays, an increased interest at culture has been noticed, not only from art experts, but educated public with well-informed opinion. Many people regularly attend and appraise art exhibitions, theatrical plays, music concerts, lectures, etc. In addition, cultural institutions (museums and exhibition places inter alia) have become places of leisure, sociability and community, like in case of Tate Modern in London. Besides, personal and collective viewpoints have the opportunity to be published and promoted globally through social media, due to the affordances of integrated technologies in human communication and expression. Cultural practices have been shared world-widely, sharing constant and intensive incentives and influencing common conception, interaction and creativity.

People nowadays are more willing to be collaborators of the artistic process, developing personal contact with the artwork and contributing in the democratization of art. Specifically, in art events, participants are incited to become an ensemble, with internal agreements and differentiations though, but principally with respect at the equality of its members. A spectrum of participative actions has sprung in the fields of art and design, enabling the public to be present and get engaged with the creative process the moment it unfolds. Potentially, getting involved within the aesthetic experience offers audience the opportunity to do things they don't usually do in their everyday lives, due social conventions and acceptable patterns of appropriate behaviour. As in aesthetic experiences social status and restrictions are weakened, people are given the chance to transcend the rules, to surrender and go with flow of a special condition which necessitates their contribution for enjoyable interactions and memorable experiences to emerge.

Design as participation is among the main characteristics of contemporary design practice, concerning the involvement of the public in the decision-making process. For example, as analyzed earlier, the core of User-Centred Design involves people's participation throughout the whole design process, not only their evaluation of the final design outcome. Participants involve individuals collaborating together under a common goal, and form a short of crowd, which like any other has four primary attributes: it always wants to grow; loves density; within the crowd there is equality, and primarily needs direction (Canetti, 1984, p. 29). This direction is guided by designers in co-creating collective experiences. Under this perspective, Sanders suggests that design theory and practice should embrace not merely present (personal and collective) experiences, occurring at the moment of communication and interaction with people; past and future experiences also consist valuable material to comprehend individuals' perception and behaviour, as their memories dreams, objectives, and needs are revealed inter alia (2001). In addition, Sanders urges designers to take into consideration not only what people think, expressed in words *(explicit knowledge)* or what they do while interacting with a system/environment/object

(observable knowledge), but also their feelings in order to empathize with them *(tacit knowledge)* as well as their dreams of change in the *future (latent knowledge)* (Sander & Dandavate, 1999). In order to guide effectively individuals' interaction and participation within live events, designers need to comprehend participants' feelings and exchange viewpoints regarding current improvements and future innovations.

Specifically, Participatory Design (also known as Cooperative Design) puts emphasis on individuals' participation through exploratory, experience-driven design techniques[7] (Schwartzbach, 2005). Participatory Design (PD) does not comprise a particular design style but focuses, like an umbrella perspective, on the design process. This contemporary design approach aims at actively engaging users/customers and stakeholders in the design process to ensure the final outcome meets the design needs and objectives. A set of theories, practices, and studies regard end-users as full participants in activities leading to software and hardware computer products and computer-based activities (Muller, 2003). Participatory Design is particularly diverse, encompassing a multiplicity of design fields (like software design, urban design, architecture, landscape architecture, product design, sustainability, graphic design), as well as relative scientific disciplines (like psychology, anthropology, sociology, labour studies, communication studies, and political science) (Gregory, 2003), to create environments that are responsive and appropriate to participants' cultural, emotional, and practical needs. Principally, Participatory Design promotes multivoicedness by putting emphasis at creating a common ground where participants and designers meet and cooperate at co-creating the new (Bødker & Buur, 2002). Muller also suggests 'polyvocal policy' during design practice (1997); while for Merkel et al. this method of working with groups entails an innovative spectrum of 'skills and competencies' that transcends 'technical design skills' (2004, pp. 7-8). By setting conditions to incite collaboration and active reflection during the design process, past roles of users and designers need to be relinquished.

In Participatory Design, people are evoked to cooperate with designers, not merely during the final evaluation stage, but during the initial exploration and problem definition as well, by providing feedback and/ or suggesting alternative solutions (Muller, 2003). Scholars foresee a political aspect in combining diverse perspectives for better results; they discern a potential for participants' empowerment and democratization, of strengthening for example the voice of disempowered groups (workers, children, older adults, etc.) (Beyer & Holtzblatt, 1998) (Béguin, 2003). For others, Participatory Design is perceived a method of sharing designers' responsibility and innovation with stakeholders (Participatory Design, 2012), as more parties contribute to reach solutions (Ehn & Kyng, 1987). According to Computer Professionals for Social Responsibility, Participatory Design (PD) has the following features and standpoints inter alia: every participant is considered specialist in the given task and his/her opinion is welcome to be heard; design ideas and results emerge in association with participants from dissimilar backgrounds, and technology is a means to solve potential problems; systems are presumed more than the aggregation of their software and hardware contained elements - they are rather considered "networks of people, practices, and technology embedded in particular organizational contexts"; and finally deep

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[7] Participatory Design traces its roots to Scandinavian work with trade unions in the 60's and 70's, but its ancestry also includes Action Research and Socio-technical Design.

comprehension of the subject is required in terms of those directly related with it, and inner perspective on things. For this reason, Participatory Design practitioners choose to study people in the places where they live and work, than in laboratories (CPRS, 2005). Thence, Participatory Design comprises a set of theories, practices, and studies, allowing multiple voices to be heard and engaged in the design process.

Hence, the role of people involved has become central, contributing at the designed outcome with their presence, and mainly with their interaction and enactive participation in the course of events, co-creating their experiences. This approach though is not new, even apart from the performance art practices. Since the early '70s, McLuhan foresaw 'the user is the content; (1971), and again states in his work *Understanding Media: the Extensions of Man* that "the consumer becomes producer in the automation circuit" (1999, p. 349). In contrast to television, which turns viewers into passive receivers of information, desensitized by commercial advertisements and indifferent messages, people bring their own experience to the medium and transform the content according to their needs. In addition, about a decade ago, Abbe Don coined the term *co-creative technologies* to describe incorporated technology affordances that offer assistance and/or actually participate in the design process, by making some of the decisions and handling a part of the details (Shedroff, 2001, p. 166). For example, the anxiety many people experience when using tools or techniques they are not familiar with can be lessened through co-creative techniques, like recommendations, guidelines, advice, or actually performing operations for users. Digital media assist people to become co-editors / producers of the content they interact with.

However, the expedience of involving manifold voices in design procedure has also been questioned. Reyman et al. support that "designers have their own expertise" and argue that people's involvement is rather ambiguous rather than is fruitful and suitable (Reymen, Whyte, & Dorst, 2005). Yamauchi proposed that participants' congruent role is the one of 'peripheral designers', meaning that working with assigned detailed problems is more effective than designing entire systems and projects (2009). Finally, Light and Luckin, although acknowledge that "the potential of everyone to design is more egalitarian than believing in exclusive talents and specialised roles", they doubt the suitability of involving everyone in design projects without an appropriate methodology to enfranchise diverse participants (2008, p. 16). Scholars suggest involving people in the design procedure may induce certain problematizations. Nevertheless, design is addressed not to those who create it, neither to familiar individuals, but to unknown people. These unknown others have different experiences, concepts, abilities, objectives and preferences; they come from different social cultural and probably environmental backgrounds. On the other hand, despite the distance or any given differences people also share common information, viewpoints, desires, and objectives - even collective experiences in the context of technology-enhanced communication and interactivity. People from different societies and backgrounds are highly likely to share common ground in multiple ways. Designers need to comprehend people's behaviour and motivations, by observing their expressions and attitude, and empathize with them.

The notion of *empathic* in relation to design was coined in the late 1990s (Battarbee & Koskinen, 2005). Empathy offers broader insight to the design process as design thinking ranges 'from rational and practical issues to personal experiences and private contexts'

(Mattelmäki & Battarbee, 2002). For many scholars, empathy is a qualitative value involving designers immersed in people's lives and experiences to comprehend their needs and desires (Battarbee, 2004), by getting bodily, cognitively and/or emotionally in their position (Koskinen & Battarbee, 2003). Empathy exceeds mental knowledge to encompass emotional connection with people, avoiding any criticism on what and why people regard certain experience meaningful and qualitative (Kouprie & Sleeswijk Visser, 2009). This design approach has also been described as *design empathy* (Fulton Suri, 2003)*.* By 'empathic design', designers attempt to get closer to the behaviour and experiences of (putative, potential or future) users, in order to increase the likelihood the designed product or service meets their needs (Koskinen, Battarbee, & Mattelmäki, 2003). By studying participants' objectives and feelings, designers enhance their perception on their motivations and goals, configuring and designing in this way for this *otherness* to partake in noteworthy experiences.

 Experience Design is a novel field that conjures art, science, and technology to study, ideate and create meaningful, substantial and memorable experiences for the participants. This contemporary design practice focuses in inciting immediate sensations, visceral emotions and personal engagement and collective participatory events. Designers are no longer concerned merely with creating and communicating a specific content; they rather design the overall context, wherein participants are invited as collaborators. Hence, experience design as artistic and cultural practice contributes to the contexture of aesthetic experiences and live events centred at interactivity, interconnectivity and emergence. Design as participation has given people the privilege to influence the occurrence of potential interactivities and events. People have voice and express their own concepts; they have become co-creators of the whole experience. Designers study participants' actual needs, motivations and feelings and invite them to get personally engaged during the design process as well to experience the final result. Experience design under a participatory perspective involves designing *with* the people *for* the people.

2.3 Experience design and participation

2.3.1 Experiencing & experiences

> *"Experience is not what happens to you,*
> *it is what you make of what happens to you"*
> Aldous Huxley (1972)

 Experience design places emphasis on experience rather than constructing design products per se. To concentrate on organizing emergent experiences rather than the result and/or medium challenges past design perceptions, especially as designers endeavour to retain this objective unrevealed – as Hassenzahl expresses "to make certain types of experiences more likely, but in an unobtrusive, natural way" (2010, p. 40). Beyond experience design, a general reorientation of design thought and practice has been remarked towards experience. Specifically, Forlizzi and Battarbee discerned three models, three different perspectives, on studying and designing individuals' experiences with

particular objects: first, the *product-centred model* focuses on the creation of objects which induce compelling experiences to people; the *user-centred model* concentrates on the people a product is addressed at to use, and offer a set of approaches that analyse human activity; finally *experience-centred model* combines various fields of knowledge and emphasizes at the role of products in bridging the distance between the designer(s) and people – considered as users in their case (2004). In the context of experience design, personal and collective experiences are significantly taken into consideration, endeavouring to shape holistic perspective regarding their compound and subjective nature.

Experience is a stream of separate but interconnected moments interwoven to a whole, meaning a continuously evolving flow of occurrences involving: memories, learning (i.e. develop new skills), knowledge (i.e. combined in meaningful ways), life experience (i.e. experience accumulated in time), connected and disconnected moments, emotions, and being creative (triggering the mind). Experience is directly associated with interactivity and sharing in somatic, cognitive and emotional level. Our experiences emerge from our incorporation and interaction with the surrounding world in space and time, comprising a spectrum of associations between people and objects: from esoteric processes (i.e. dream, inner stream of thought) and interpersonal encounters (i.e. conversation), to social events (i.e. go to the movies). An experience includes human sensations, emotions and thoughts, as well as memories and associations of occurrences in the course of life and thence conveys multidimensional notions depending on the (scientific, artistic) field and perspective of approach. For example, the German expression *erfahren,* as well as the Greek term *εμπειρία (empeiria),* append a sense of learning, while in English the word partakes of a common root *-per-* with *experiment* and *perilous,* denoting the surpassing to the realms of the new and unknown (Ortega y Gasset, 1963, pp. 158-159).

Particularly, the term *experience* expresses a notion of evolution with twofold import as both noun and verb. *Experiencing* refers at a present situation, one that is developing right *now*. While experiencing a situation we are immersed within the flow of a process en route. *Experiencing* is evolving right now; hence it cannot be described or communicated. *Experiencing* is not transferable or conveyed to anyone. Experiencing an event means 'subjectively living through' (Mansfeldt, Vestager, & Iversen, 2008). It is anchored to the present stretched over in space and time, embracing a sense of becoming. *Experiencing* as continuous ongoing process is site-situated and time-related, but not restricted in particular fragments of space and time, as - consciously or not - preserved as an experience. Its dynamic character involves three matters that change in time, reflecting the fact that participants constantly change their evaluation of their experiences throughout the duration and evolution of the process:

- *Anticipation of the event.* The subjective interpretation of the outcome may or may not meet the participants' expectations, formed before its actualization, in conformance with the stimuli perceived from the surrounding environment and further analyzed.

- *Physical, emotional, and cognitive response.* During the evolution of the event, the participants' conception is continually changing, as their interaction with the surroundings in somatic, affecting and cognitive level is not complete yet.

- *Memories*. After the end of the event, memories are subjectively moulded out of the participant's personal experience, which are also transformative in time. Our recall of the past is not identical, but is redefined as our awareness is also evolving in time.

Respectively, *an experience* is a holistic assessment concerning one or more changes and events occurred within the surroundings and/or the individual's esoteric world. An experience comprises a sequence of interactions with another (person, group, environment, and system), as well as an esoteric psychic process, inter alia our subjective interpretation of the present state of affairs. An experience has multiple levels of analysis, as moulded out of relations interwoven among miscellaneous aspects and elements (objects, expectations, feelings, thoughts, interactivities, inter alia), emphasizing though at moments of personal significance, as well as the final ending and the overall impression of the occurrence (Khosrow-Pour, 2007). An experience concerns a whole story, a complete event, a narrative - all accompanied with the article *a* implying something finished - usually with a definite beginning and ending. It describes a course of affairs, which was realized (past) or may be realized in the future or the imaginary. According to Forlizzi and Battarbee, an experience comprises 'a constant stream of self-talk' (2004, pp. 261-268), indicating our awareness of our attachment to the course of life. Each moment, an activity is completed and another one is evolving. Our perception involves a spectrum of stimuli just perceived in the immediate past, as well as following plans and movements organized to be performed within the flow of time. Experience as noun indicates an organized event, a complete narrative with beginning, body and ending, we communicate (share, describe) to another person and in terms of experience design, organize for somebody.

An experience is delimited in space and time; every potentiality has already been solved and realised (in the past or cognitively) into specific sequences of events. As every potentiality is decided and determined, an experience pertains to the sense of *being*. When I describe an occurrence I heard or have actually participated in, I am not currently engaged in the course of things, as I speak about them. Therefore, I am in position to absorb and widely appreciate what occurred (feelings, actions, thoughts) in personal and collective level, and following express my view to others. An experience is an array of moments in life, a slice of time when particular events are bound up with people, places, actions, feelings, and thoughts (Mansfeldt, Vestager, & Iversen, 2008). Experiences are preserved in memory, recalled in inner processes, and shared with others in forms of stories. Meanwhile, Hassenzahl described four attributes of experience (2010, pp. 9-31):

- *Subjective*. Although people share common ground, literally and metaphorically, their individual perspectives constitute a sole totality, depended on the self; a self interdefined and interrelated with the surrounding world. Therefore, an experience is moulded through stories about people interacting with objects, in space, time and particular conditions; stories coloured by the experientor's subjective perspective. For instance, even perception of time passing by varies for someone absorbed and occupied with a task, compared to another person waiting impatiently something to happen.

- *Holistic*. Designers formulate a holistic approach about designing an experience, by taking into consideration people's goals and motivations behind their actual actions and the way these actions are performed. Moreover, experience, like interaction, are both perceived and generated in somatic, emotion and cognitive level. Our embodied self participates in this world with our senses, feelings and thoughts – a viewpoint alleged by contemporary aesthetics, as further analysed in chapter 4. Hence, for Hassenzahl holistic perspective entails both individuals' objectives, needs and behaviour, as well as the compound way human are engaged within certain circumstances.

- *Situated*. Experiences are space- and time-related. As Merleau-Ponty argues, "being is synonymous with being situated" (2005 [1962], p. 294), emerging from human interaction in physical, emotional and cognitive level with the surrounding world. Our experiences are unbreakably attached to space and time, for our awareness and interaction is space and time specified, in the context of physical or mixed-reality four-dimensional environment.

- *Dynamic*. Our experiences are not static, or fragments of space and time, like photographs; they evolve in the flow of time. Actions and events (like identity, awareness and even culture) are attached to a section of space-time but dynamic in nature. Experiences develop in the course of things and in our memory process as well, recalling our own experiences of specific occurrences.

Our experience of the world involve every incident we remember (past occurrences), or imagine that could happen (future and potential plans), filtered by our subjective way of conceiving and creating the world. Experience is not fragmented, but follows the course of life, keeping a peripheral vision in the past and the future. Our memory and life experience mould our identity as individuals, societies and nations; "we are what we have experienced" as Hassenzahl aptly states (2003, p. 33). Without experiences, our identity is jeopardized[8]. They are the gist of the self. Memories, fiction and experience share common ground in the frames of personal experiences, but never collide. Each person experiences physical reality subjectively and no personal reflection can ever provide an objective version of what happened. Consequently, experiences are characterized by relativity; nobody can predict the outcome as affected by numerous factors (personal, social, environmental, cultural, etc.). Experience design in essence suggests strings of interaction in space and time, and participants are incited to decide which bundles of potentialities will be realized. No design approach can predetermine people's experiences, but practitioners can be prepared and organize the conditions for certain types of experiences to occur.

In the context of experience design strategy, designers endeavour to set the frame for experiences to emerge among people and environments, in personal and collective level. Experience conveys a compound notion, comprising an esoteric process, as well as a string of common threads of interaction that people share and connect. As people's participation

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[8] Schacter refers to GR, an artist (poet, painter, art-reviewer) with amnesia who could not create during his memory loss, as in his words: "he had no self to express" (1996, p. 32).

has become central in the design thought and practice, a holistic approach is necessitated to be developed on people's personal and collective experience. We design *for* becoming; we propose an aggregate of potentialities to be actualized in space and time. The roles of designer and participant are more cooperative than ever.

2.3.2 Interaction and design

Experience design embraces a cross-disciplinary perspective to develop holistic overview regarding human experience, and hence exchange knowledge with relevant research (marketing, psychology, computer science, information systems) and design fields. Although an official definition of Experience Design is elusive and not complete yet, associating common views and divergent perspectives with relevant fields of art and design contributes to clarify the main characteristics of this innovative field. Particularly, a precursor that approached and analysed interactivity between humans and systems was *ISO 13407: Human-Centred Design Process for Interactive Systems*. ISO 13407:1999 sets the frame and supports four essential standards to Human-Centred Design: active involvement of users; appropriate allocation of function to system and to user; iteration of design solutions, and multi-disciplinary design (ISO). Under this perspective, the users gain central role during planning, designing and developing design projects. ISO 13407:1999 also defined Human-Centred Design (UCD) as "an approach to interactive system development that focuses specifically on making systems usable. It is a multi-disciplinary activity" (ISO 13407: 1999. Human-Centred Design Process for Interactive Systems). User-Centred Design concentrates at human-technology relationship and especially at the indispensable role of users involved, to comprehend their needs and behaviour (UPA, 2005-2010). Their contribution is incessant throughout the whole design process, instead of running evaluation tests only at the end of the procedure.

Following, ISO 9241-210 formed in 2010 is the new standard which provides guidance on human-system interaction, throughout the life cycle of interactive systems. ISO 9241-210 revokes and replaces ISO 13407:1999, supporting six key principles for user-centred design: 1) design entails intensive study and comprehension of the users' desires and objectives, as well as the environment wherein their interactivity with the design products takes place; 2) users participate in active way throughout the whole design procedure as personally involved in the process, and not mere viewers of its whole development; 3) users are incited to evaluate the results (usability tests) of every design and production stage, and not only at the end; 4) the design process is iterative, in order to identify people's needs and desires of a certain interactive system – clearly not easy to clarify – and improve through repetition each phase of the process; 5) the design strategy concentrates to the entire experience of user, involving not only matters of usability, but including perceptual and emotional aspects of user experience as well; finally, 6) the design team is urged to incorporate not merely graphic designers and developers, but relevant specialists that combine multidisciplinary skills and perspectives, like accessibility experts, marketing, end users, inter alia.

Both Human-Centred and User-Centred Design share common ground with the objectives of Experience Design as emphasis is put at people engaged. Moreover, they have a multi-disciplinary approach regarding design thinking and process, encompassing emotional, physical and cognitive matters in their study of human perception and

interactivity. Moreover, multiple evaluations are repeatedly made throughout the design process by users and experts to adjust on people's opinions and objectives. On the other hand, although User-Experience design focuses on users, for Experience Design people involved are not regarded merely as users of a technologically-based product, but rather participants in collective experiences within physical or digitally-enhanced context. This differentiation is analysed more extensively further in this chapter.

Additionally, Experience Design pertains to *Interaction Design (ID)* a broader design field which defines the structure and content of interplay among *beings*, studying and suggesting forms of communication and interaction in human life (Sharp, Rodgers, & Preece, 2007, p. 8). In its core Interaction Design is oriented towards "the theory, research, and practice of designing user experiences for all manner of technologies, systems, and products" (Sharp, Rodgers, & Preece, 2007, p. 8). From another perspective, Interaction Design organises a dialogue among humans and systems, both corporeal and emotional, "manifested in the interplay between form, function, and technology as experienced over time" (Kolko, 2011, p. 15). Interaction Design, like Experience Design, is an umbrella term for many types of designs (like web, software, product, experience, and interface design) but does not comprise a particular design methodology. Interaction Design aggregates knowledge from multiple academic disciplines and design practices, as well as interdisciplinary fields, as displayed in figure 5. Therefore, Interaction Design is a compound creative practice and involves - but is not restricted to - the area of Human-Computer Interaction (HCI) "concerned with the design, evaluation, and implementation of interactive computing systems for human use and with the study of major phenomena surrounding them" (Hewett, et al., 1996, p. 6). Interaction Design exceeds the limits of the computer environment to study and embrace human interaction and behaviour in every kind of physical and mixed-reality environment. According to Saffer, three major schools of thought define Interaction Design: *technology-centred view* concentrates on making digital technology useful, usable, and pleasurable to use; *behaviourist view* supports interaction design is centred at delineating the behaviour of artefacts, environments, and systems (Forlizzi & Reinmann, 2001) and focuses on functionality and feedback; and *social interaction design view*, the broadest one, concentrates at studying and assisting communication between humans through products, environments, and systems in one-one, one-many, many-many interactions. (2010, pp. 4-5). This particular design field concerns with users' needs, concerns and goals and also adapts a user-centred approach.

The notions of experience and interaction are closely interwoven. Humans interact with their surroundings and all of their communicative processes (verbal or not) are interactive. Experience involves interacting through all our senses, emotions and cognition. For Saffer *interaction* is 'a transaction between two entities', typically an exchange of information, goods or services (Saffer, 2010, pp. 3-4). Besides, Shedroff from a similar perspective states interaction involves two interactive partners (actor and reactor) "engaged in a mutually affecting experience" (no date). Hence, designers that centre at experience are concerned, like architects and movie directors, to set the frame for people to interact with each other and the surrounding environment, forming sequences of action and reaction. Practitioners of experience design are, like architects, in Kolko's words '*shapers of behaviour*' (2011, p. 15). They define the structure, context and content of interplay among humans and systems or services. Interaction design is mainly centred at human's behaviour

interacting with products. For Saffer interaction design focuses on the behaviour of both people and products, as interact in response to one another (2006). He further adds that "all behaviour is, in fact, motion: motion coloured by attitude, culture, personality, and context" (Saffer, 2006). Every kind of behaviour and interaction is related to a sort of movement, even this involves merely eye-blinking, or vocal cords, which vibrate as we speak. Even if designers are concerned with interaction with products (interaction design), or with the overall experience (experience design), human behaviour comprises a fundamental aspect, shaped only to a certain extent.

Every type of experience, interaction and movement occur in space, even if spatial boundaries are indistinguishable. Borrowing Eisenman's remark on architecture, Interaction Design – like every design field associated to interaction, like Experience Design – is also place-bounded, linked to a condition of experience (2007, pp. 12-18). Interaction design and According to AIGA 2002, design is now about creating relationships with individuals, products and environments; it is about "creating an environment that connects on an emotional or value level" (Hassenzahl, 2010). In addition, experience is not only place-bounded but time-related as well; it is attached to a certain form of space and evolves in time. Consequently, designers focus on the creation of results that are time-based. Designers organize the time (i.e. speed and rhythm) required to complete an action in mixed-reality worlds, or in activities that involve the use of digital media. As aptly expressed by Gitta Salomon Interaction Design involves "the design of products that reveal themselves over time" (Sharp, Rodgers, & Preece, 2007), while Knight defines Experience Design as "the intentional creation of a time-based activity that includes physical objects, agents and situations" (2006). Space and time comprise essential factors of experiences and interactions. In digitally-enhanced environments, the duration of an activity is not identical to the one required in physical world; time flows differently, in an artificial rhythm. Changes are not happening in real time, but are intensively affected by digital media affordances.

Every design approach mediates to shape personally meaningful experiences. Designing interactivities and experiences entails planning for meaningful results that stimulate people mentally, emotionally and physically. Interaction designers strive to create meaningful relationships between people, products, services[9] and environments, aiming at enhancing and augmenting our communication and interaction. As Saffer asserts, interaction design "is largely about the meaning that people assign to things and events, and how people try to express meanings" (2010, p. 19). Fiore et al. stress that meaning accrues from the design result and particular its qualities, suggesting "the potential for action and construction of meaning" (2005). Contemporary designers concentrate on designing *for the possibility of interaction* (Saffer, 2010).

Nevertheless meaning is not a fixed condition or scheme, but an ever-lasting evolving and therefore time-related process. The design result is the occasion for people to make new stories and sequences of events; a bond with each person making, a unique story. It has a past and future of its own, as its usage and meaning are transformed in time and space, playing a different role in personal and interpersonal experiences. Therefore, the meaning each person ascribes to objects, systems and events may vary, according to personal and

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[9] "A service is a chain of sequential, parallel, or nonlinear activities or events that form a process and have value for the end user" (Saffer, 2010).

social developments, so that "an object is always an abstraction", as Jackson explains: "it is like a sketch of the thing itself, a sketch in which certain features are highlighted and others overlooked" (1998, p. 25). Meaning is altered in time as human perception evolves within particular social, cultural and philosophical schemes that mould awareness. Hence, meaning implies a sense of becoming, as we will analyse further in this chapter.

Abstraction is regarded a principal feature of contemporary design, as emphasis is put on transformation and change itself, whereas form and shape of design elements (objects, environments, products) are less significant. More dynamic patterns of communication and expression have been generated, exploiting *interactivity as medium* (Cham, 2007). In terms of designing abstractive forms, like interactivity and experience, the material dealt is not concrete, like those involved in traditional design fields (wood, plastic, metal, and more), but rather "flexible, ungraspable, and phenomenal" (Youn-kyung, Stolterman, Jung, & Donaldson, 2007). Therefore, a general shift has been stated from materiality to abstraction, utilizing interactivity among people objects and environments as the medium to interweave meaningful and satisfactory experiences.

In its core, Experience Design is oriented towards creating meaningful experiences. In parallel, Information Architecture (IA) is the art and science of structuring knowledge (technically data), and defining user interactions: how to best organize content for human interaction to emerge unambiguously and comfortably. This design field shares common ground with Experience Design and Interaction Design. For UPA Information Architecture is a "process of organizing information including the structure, design, layout and navigation in a way that is easy for people to find, understand and manage the information" (2005-2010). It is concerned with three basic aspects: people involved (users, participants), certain content (products, services and environments used), and significantly, the context in which people will interact with products (place, time, purpose, particular condition, and more) (figure 6). According to Morville and Rosenfeld's analytical definition, Information Architecture also entails: the structural design of shared information environments; the art and science of shaping information products and experiences to support usability and fundability; an emerging discipline and community of practice focused on bringing principles of design and architecture to the digital landscape (2007, pp. 4-5). It aims to create intuitive and pleasing information systems by organizing information (2007, pp. 4-5)[10] in meaningful and comprehensible way. Information Architecture involves taxonomy and organization of data, to improve their accessibility and thus enhance the overall usability, which in turn reflects positively on the user's experience.

Additionally, User Experience (UX) is a respective umbrella perspective on the broad sense of design practice, centred on people's "perceptions and responses that result from the use or anticipated use of a product, system or service", according to ISO 9241-210: Human-Centred Design for Interactive Systems. Various definitions have been introduced regarding the subject and goals of User Experience approach. Most of them focus on the quality of experience individuals have, while interacting with a particular system (object,

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[10] Discern information from data and knowledge: "Data is facts and figures. Relational databases are highly structured and produce specific answers to specific questions. Knowledge is the stuff in people's heads. Knowledge managers develop tools, processes, and incentives to encourage people to share stuff. Information exists in the messy middle. With information systems, there's often no single 'right' answer to a given question."

product, service, and environment). Indicatively, Sutcliffe define User Experience as the synthesis of user's internal state (predispositions, expectations, needs, motivations, mood, etc.) and the affordances of the designed system, within a context where interaction emerges among people and the surrounding environment (2010). The Usability Professional's Association also focuses on user's interaction with a designed system (product, service, etc.) and defines User Experience design as the field "concerned with all the elements that together make up that interface, including layout, visual design, text, brand, sound, and interaction" (UPA, 2005-2010). Finally, Wikipedia is in agreement with the previous statements and explains that User Experience "also includes a person's perceptions of the practical aspects such as utility, ease of use and efficiency of the system" (User_experience, 2012). In conformance with ISO 9241-210[11], User Experience is defined as "a person's perceptions and responses that result from the use or anticipated use of a product, system or service". Additional notes to ISO definition describe that User Experience includes:

> "[…] all the users' emotions, beliefs, preferences, perceptions, physical and psychological responses, behaviours and accomplishments that occur before, during and after use. The notes also list the three factors that influence user experience: system, user and the context of use" (User_experience, 2012).

Therefore, User Experience is a subjective matter and focuses on the use. Respectively, User-Experience (UXD) Design[12] is a design field that encompasses relative areas, like interaction design, information architecture, branding, usability, ethnography, and more (figure 7). User-Experience Design is centred on the people that use/experience the designed, interactive products. The above principles on User Experience are associated to Experience Design as well, under a slight different perspective. These fields indisputably share common ground, as they both centre on people's needs, feelings, thoughts, and objectives in specific situations. In the end, Experience design and User Experience design entail more than technology and interfaces; they are about staging meaningful experiences for people. Nonetheless, whereas both Experience and User Experience Design deepen into the study and creation of experiences, their objectives are differentiated, even though their boundaries are hard to discern:

Firstly, User Experience Design mainly regards people as users of interactive systems and products. User-Experience Design concentrates on the overall experience users have when interplaying with people or systems (Unger & Chandler, 2009). For Hassenzahl though, a distinction between *User Experience* and *Experience* is not necessary, as focus is placed on creating meaningful experiences with interactive products (2011). He supports that User Experience is just a sub-category of Experience, which emphasizes on interactivity among people and products. However, Reiss detaches User Experience from the necessity of a device, opens up a broader perspective supporting: it refers to the conscious act of directing

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[11] ISO FDIS 9241-210:2009. Ergonomics of human system interaction - Part 210: Human-centered design for interactive systems (formerly known as 13407). International Organization for Standardization (ISO). Switzerland.

[12] See http://www.usabilitynet.org/trump/resources/standards.htm, http://www.allaboutux.org/ux-definitions, http://www.userfocus.co.uk/resources/guidelines.html

interactions that are controllable (like choosing the place for dinner, dance together as a couple, teach students over an academic year); identify those that are beyond our control (like heavy rain during a festival, children's reaction in case of emergency, somebody feeling sick over a journey); finally, try to minimize the unpleasant or negative ones (for example provide people with specific instructions to avoid mistakes and confusion, offer people refreshments on a very hot day in an outdoor event) (Reiss, 2011). Lastly, Sanders suggests:

> "*Consumers* shop. *Customers* purchase. *Users* use products and services. By putting people in narrow categories, we limit their ability to contribute creatively. And we forget that they are real people, who play many different roles every day" (2001).

By disengaging the meaning of device from a material or digital object, and substitute it with a rather device-centric perspective, according to which a short of interface emerges, the divergence between the two fields seem to be decreased.

Experience Design focuses on deliberately staging experiences for people to enactively participate, within particular social, cultural schemes, and involves the creation of products, processes, services, events, environments, and systems. This novel design approach concentrates on the interaction of people with objects and systems/environments, as well as the personal and collective experiences that are interwoven in physical, emotional, and cognitive level (Forlizzi & Battarbee, 2004). Under this perspective, designers encompass a wide spectrum of knowledge that derives from relevant design fields and theories to enrich their perception and methodology of setting the place, the framework, experiences to occur among people and systems.

2.3.3 Design and participation in mixed-reality events

> *"The computer as theatre, as writer of love letters, as world, a place for revolution; art as executable [...] Code is a medium. Whether it is used to formulate instructions for a machine, ideas for people or both"*
> (chmod +x art, 2012)

> *Technologies are not simply inventions which people employ but are the means by which people are re-invented*
> (McLuhan, 1962)

Events and experiences are space situated and time related. Nevertheless, in mixed-reality environments, space and time are digitally generated and associated with participant's action, potentially in dialogue with the physical world. In virtual environments space is immaterial vague and distant, and time is no longer continuous and linear. Distance in terms of both time and space is reconceptualised. People are globally connected (for example via the internet) and notions of the past and the present are illusive. Mixed-reality technologies offer the ability to link the past with the present, by offering means of recovering, documenting and preserving past events and stories. Unlike the physical environment, mixed-reality worlds are human constructions controlled by practitioners (designers, developers, and more specialties) due to the incorporated technologies. Designers and scientists endeavour to simulate - and ambitiously enhance - physical reality,

when creating the context for events open to audience participation. Digital media contribute to this endeavour by affording the context for meaningful experiences to occur.

In the context of digital culture, mixed-reality technologies are integrated to everyday life, contributing to the creation of environments, where physical space and virtual space coexist in real time processes. Mixed-reality worlds comprise the spatial as well as the cultural framework, where experiences take place. By blurring and surpassing the line between the physical and the virtual, mixed reality environments cover a whole spectrum extended from physical to virtual environments, including intermediate forms, like augmented virtuality and augmented reality (figure 8). *Augmentation* involves technologies that enhance the physical environment affordances, "layer[ing] new control systems and information onto our perception" (Smart, et al., 2007). Augmented virtuality refers to the practice of merging real objects in virtual worlds, and the latter includes real environments whose elements are augmented by computer-generated sensory input, shaping a computer-modified reality. In case of *augmented reality,* technology enhances the surrounding physical environment for the individual through interactive applications and systems. The notion of reality in mixed reality environments is driven to realms beyond the physical restrictions of nature. Experience in this framework, exceed human capacities, as digital media are introduced to enhance our sensation and perception beyond anticipation.

Mixed-reality technologies enable contemporary and enhanced modes of communication and artistic expression to emerge. Computer sciences have long been oriented towards transferring human-computer interaction beyond the desktop, or the screen, and enter a mixed-reality world that coincides with everyday life and experience. Technological achievements have immensely become an essential tool and agent of performance act as well, and since their application in performance creation new generic forms have been ensued. For Stone "computers are arenas for social experience and dramatic interaction, a type of media more like public theatre, and their output is used for qualitative interaction, dialogue and conversation" (1996, p. 16). From geometrical transformations to creation of systems and environments as places wherein interactivity and events emerge, mixed reality technologies are the medium that produces sequences of real-time events; a field that both performance studies and experience design research, yet from a different perspective.

Virtual, physical and mixed-reality environments are spatiotemporal systems, which afford contact, communication and interaction in physical, emotional and cognitive level, while they comprise the material and the locus for creative and artistic expression. Four-dimensional environments denote a sense of *becoming* as they are dynamic fields, where processes, experiences, and interactivities are integrated; where stories are intertwined among people, places, time and events. They are never static, nor fixed. For Ascott:

> "(...) cyberspace is the very stuff of transformation; it embodies being-in-flux, constituting a kind of artificial becoming. But its primary importance is that it stimulates change in ourselves, transforming aspects of mind and behaviour, bringing forth cyberception, telepresence, altering the ration of the senses" (2000).

Mixed-reality environments are products of constantly evolving relations; relations that compose the environment itself as a field of interaction, as well as relations that emerge between people and their surroundings. Interactive physical and MR environments comprise *relational spaces*, meaning products of processes, events and interactions. The notion of *relational* is described from Massumi as "intensively cross-referencing disparate planes of experience" (2002), whereas Michel de Certeau refers to relationships of coexistence among elements instantly configured in certain positions (1984, p. 117). *Relational space* is interwoven out of relationships and materially embedded practices between people, environment and technology. Birringer conceptualizes interaction as "spatial and architectural concept of performance" located within fluid, projected, and transformative space that enables collective creativity via interconnected participants (2003-2004). In this case, space comprises a linkage of linked spatial entities that are not physically attached or contiguous.

The notion of *becoming* expresses displacement, change and evolution in somatic, emotional and perceptive experience, and is reflected at the flow of human existence and interaction as individuals and societies. Harvey, associates the process of *being* with the notion of *space,* and *time* with the process of *becoming,* and rejects the first as contrary to the latter's account (Harvey, 1989). In his perspective, space is associated with stability, i.e. outside the realms of time, while time reflects growth and decay, i.e. the evolution of life. Four-dimensional virtual environments have specific features, which distinguish them from the sense of being, and therefore, as we will analyze further on, they pertain to the sense of becoming. Virtual, physical and mixed reality environments are media which potentially provide dynamic forms of expression and communication, although they share similarities, as well as differences, in the context of design and art practices.

In mixed-reality worlds, four-dimensional space is a non-linear relational place, which lies among the realms of reality, imagination, memory and potentiality. It is a place beyond the feasible where people mould their personal experiences and participate actively in the course of events. Digitally enhanced interactive environments provide designers with the opportunity to create and link together fragments of space and time, and thus to design in turn bundles of potentialities that surpass the physical restrictions of becoming. In the frames of art and design in general and experience design in particular, space has been transformed, becoming itself a scheme that accommodates experience and interaction - a place as process of becoming.

Time inherently denotes process, change; the sense of perpetual becoming. Einstein's *Special Theory of Relativity* deliberated our concept about time as absolute and one-dimensional aspect. Meanwhile, futurism and cubism contributed to the conceptual collapse of interval among distant moments, aspects and places, as artists in the frames of these movements created artworks illustrating the present should not be thought of as a mediated stage between past and future, but *rather contains past and future*. Science and art support from analogous perspectives that time is fragmented, not linear. The concept and aesthesis of '*now'* have since been transformed since time is moulded out of self-contained detached sequences, of series of starts and completions, of synchronized constructions and deconstructions, resulting in the synthesis of stories and events.

Respectively, in virtual environments, time exists only through change (sense of becoming). Time in mixed-reality worlds may be conceptualized as composition of detached,

simultaneous potential states (*becoming*). Moments in time no longer follow a chronological sequence; they are rather transformed into potential equivalent presents, ready to co-exist simultaneously. Experiencing an incident (a story) in artificial conditions turns the rest of the available alternatives into potential future choices, making different arrays of events and moments. Respectively, space is not concrete but fluid consisted out of 'nonlocalizable relations', as various and detached spatial unities are interconnected; it is *metastable* affording 'a plurality of ways of being in the world' (Smith D. , 1998, p. xxvii). Therefore, in mixed-reality worlds an individual element (entity, moment, place, identity, etc.) may be connected and associated with multiple others, in an infinite number of ways necessitating to reconceptualise human presence and interactivity – a conception expressed by Deleuze and Guattari's *rhizome* (1996). Therefore, time and space are experienced as strings of alterations and choices, involving evolution and flow of states, interwoven into a coherent whole (into a becoming).

Digital media enable designers to intersect places and stimuli beyond the limitations of physical space and time, whereas bioscience endeavours to offer our bodies the opportunity to overcome decay and pain and touch incorruptibility. Gradually during the last decades, "we are all becoming, to a greater or lesser extent, bionic" (Moravec, 1998), whilst ubiquitous computing manages to transform "our whole world into a computer interface" (Bolter & Grusin, 2000). The disjunctive line between the physical and the artificial has become indistinct and scholars emphasize the evolving connectedness and interdependency between them (Sampanikou, 2010). Norman, comparing technology development with human life, notes that in younger age digital media were more evidently present in our lives, but ever since the more sophisticated they become the more discrete is their contribution in our everyday needs and interactivities[13] (2011). Additionally, McLuhan states that our experience on things exceeds our perception on them, adding that experience influences behaviour rather than understanding[14] (McLuhan, 1964). In mixed reality environments, physical space and virtual space coexist in real time processes, by using tracking techniques (to attain precise overlay of virtual imagery on physical environment), display technologies (involving head mounted, handheld, and projection displays), and/or mobile augmented reality (where mobile computers are applied to develop AR applications for outdoor activities) (Haller, Billinghurst, & Thomas, 2007, p. vii).

In the context of such worlds, inter-action and information are generated within hybrid forms of space: where the physical limitations of space and time are surpassed, and mixed reality turns into mixing realities (Sareika & Schmalstieg, 2008). For Dyson the integration of new technologies involves a state of 'being in', in contrast to traditional media (like radio, television, and cinema) which are mainly associated with 'looking at' (Dyson,

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[13] "In early childhood, their very existence is a marvel, even as people wonder what can be made of it. In early adolescence, they become more and more able to perform useful functions for us, and for a while, they are judged primarily on their ability to do more and more, better and better. It is the quality of the experience provided by these technologies that matter. Adolescents thrust their technological underpinnings into our consciousness, even as we resisted. But once the technology becomes mature, it recedes into the background, supportive of the total experience it provides".

[14] "Everybody experiences far more than he understands. Yet it is experience rather than understanding that influences behaviour, especially in collective matters of media and technology, where the individual is almost inevitably unaware of their effect upon him".

2005). In mixed-reality worlds people are incited to participate in the course of things, merging the boundaries between the *real* self and the *digital* self. Hence, the observer is encouraged through interactivity to become creative and contribute to the given content. Technology is introduced as medium of interaction, and mixed-reality worlds constitute the place where art and design develop. In Pine and Gilmore's words:

> "While architects may lead, it really falls to everyone involved in the staging of aesthetic experiences to connect individuals and the (immersive) reality they directly (albeit passively) experience, even when the environment seems less than 'real' […] To stage compelling aesthetic experiences, designers must acknowledge that any environment designed to create an experience is not real. They should not try to fool their guests into believing it's something it is not" (1999, pp. 36-37).

Since modern art, technology has gradually been inserted in artistic practice and expression as source of inspiration opening up horizons beyond the physical world. Bauhaus, Constructivism and Dada credited the contribution of technology in art, while the Futurists admired speed, technology, youth and violence, the machine and the industrial, admiring the technological triumph of humanity over nature. In the dawn of an era when photography, cinematography, sound recording, the telephone, the motor car and the airplane introduced new ways of seeing and perceiving the world, the boundaries of contact, art and expression were also extended, and technology played a crucial role: Malevich and Léger created figures that represented modern forms of robot, and Picabia discerns a "certain merging of interests and physical characteristics between machines and future human beings" (Burnham, 1968, p. 211). Duchamp, Man Ray, Tatlin, Calder and Tinguely also experimented by integrating technological means in art process, while John Cage, Merce Cunningham, Rober Rauschenberg, Pop Art and Andy Warhol embraced technological achievements in their artistic projects, suggesting new ways to create and perceive artworks. Significantly, Brecht, like director Erwin Piscator, foresaw the benefits of employing film and radio within theatre. He studied and experimented on ways digital media cab induce audiences different modes of reception, ranging from passive he abstained, to active and participatory he favoured and encouraged. Throughout most fields of art, technological achievements offered new forms of association, and essentially of art-making and meaning-making.

In the frames of the art and design, artworks (materialized and virtual ones) belong to a *third place* lying among reality, subjective perception, memory and imagination; a place that keeps references from the physical world, but extends its boundaries to include the realms of creativity. According to Aristotle, this concept was expressed by the term *chora*, meaning the fantasy world where physical constraints are surpassed. Every design approach belongs to a third place between reality, potentiality and imagination. In Negrotti's words:

> "The realm of the artificial truly consists in a 'third' reality that lies between nature and conventional technology. It cannot but swing between these two realities, since it can overlap neither the former nor the later unless it loses its peculiarity" (2010, pp. 28-36).

By surpassing the physical restrictions of space and time, virtual reality affords a place of art, design, of the infeasible, where all potentialities are open to numerous creations and infinite forms, and thus inheres in the process of becoming.

Meanwhile, in case of mixed-reality, space is discontinuous as well (Charitos, 1998). By navigating via active points (like links and teleports), or by using equipment that augment his/her experience (like Head Mounted Display), the user has the option to be transferred to another place, or even to another form of reality. In digitally-enhanced worlds, two or more environments (or spatial entities) can be connected, without their linkage to entail spatial proximity as in case of the natural environment. Space has lost its continuity, as fragmented parts are linked together without actually being physically contiguous, and hybrid places of interaction are created. Participants can navigate among disjoint immaterialized places giving the impression space is back folding to itself. Our experiences in this kind of environments are located in spaces with potentials that are enhanced in conformance with the technology advancement; places that are not restricted to the physical constraints of space-time. The space is becoming a relational field, which is continuously altered in the frames of digital age, to provide participants with experiences that surpass the feasible. For example, Rafael Lozano-Hemmer, an electronic artist who develops large-scale interactive installations in public space, has created a series of projects named *Relational Architecture*, emphasizing not only on topology but also on associating people with artworks and spaces in a configured relationship (De Kerckhove, 2001, p. 68). In his words:

> "I like to call my work 'relation-specific' in the sense that the emphasis is not on the essential or even 'important' characteristics of a site, or on the narratives that power elites may bestow them, but rather on the micro-politics of new temporary relationships that may arise from alien interventions" (Ranzenbacher, 2001, p. 243).

He usually applies new technologies and custom-made physical interfaces to provide 'temporary anti-monuments'. In the context of *Relational Architecture 14*, *Pulse Park* (2008) involves a matrix of light beams located at the central oval field of Madison Square Park (figure 9). Their intensity is entirely regulated by a sensor sculpture installed at the North end of the Oval Lawn that measures the heart rate of participants. These inner, personal rhythms are conveyed as pulses of light generated by strings of spotlights and placed along the perimeter of the lawn as each participant makes contact with the sensor. "The result is a poetic expression of our vital signs, transforming the public space into a fleeting architecture of light and movement" (Lozano-Hemmer). In this project, Lozano-Hemmer translates people's pulse into light, which vibrate the park with visual stimuli, and creates a space where the participants' inner world and public space coincide. Public participation is an integral part in his work.

In addition, *Blur Building* is an essential component of *Braincoat*, a semi-realized project made by Diller and Scofidio (2002) in the frames of Swiss Expo (figure 10). Situated at Lake Neuchatel, the concept involved a wearable WiFi person-detection and identification system given to each participant. Before entering the area, visitors complete a detailed questionnaire, and their information is provided at corresponding computer systems. In advance, a wearable electronic wireless device alert individuals regarding the proximity of other visitors their personalities and tastes might be compatible with. While moving around

a place blurred of fog, individuals try to find others with common interests moving towards or away from them through the mist, through vibrating pads and a wearable electronic wireless device implanted in their plastic raincoat. As participants are walking towards the building via a particular pathway, visual and acoustical signals are gradually fading away, until the environment is entirely vanished into fog and the sound of waves of the surrounding lake. Hence, focused vision is not achievable, raising issues on our dependence on it, and inviting participants to explore this disoriented scenery. A field without depth and mass, out of any social contentions is configured, where sense of scale disappears, and space becomes a third, inconceivable place.

However, space, in the context of digitally-enhanced interactive environments, is differentiated from the physical world. For the objectives of this thesis, mixed-reality provides participants with more bundles of potentialities to experience, opening up new dimensions of becoming. Mixed-reality worlds are based on both temporal structures and spatial manifestations, but they afford a locus for creative expression beyond the physical restrictions of space and time. Time is not necessarily experienced as linear and continuous, like in physical reality; it is rather fragmented, like in case of a movie plot, as incidents are presented in random array. In mixed-reality worlds, participants are able to navigate from one spatial unit to another, via for example telepresence and links, disrupting in this way the continuity of space and time. While navigating, in virtual immersed environments, participants are not imposed to follow a particular array of choices; their experiences forms sequences of past, present and future incidents according to the decisions and actions they make. Moreover, participants are able to experience moments and situations distant to the present - in the realms of the past and even a potential. Digital media offer the opportunity to transfer in time, like never before, changing participants' perception of the feasible and contribyting at designer's artistic language.

In addition, the duration of actions and events can also be adjusted depending on participants' needs and those of the application, independently of limitations of physical time. The time needed to accomplish an action in mixed reality environments is not equal to the time participants would need within physical reality. The fact that designers and participants can appropriate the time needed to complete an activity is introduced, in cases like the notion of 'slow technology' (Hallnäs & Redström, 2001), which emphasizes on slow movement and transition, while interacting in digital worlds, in order to give participants time for reflection and contribute in this way to the aesthetics of experience. Hence, mixed-reality worlds alter the notion of time, as time is not restricted to the linear flow of life.

For example, *under scan* is a large-scale public art project of Rafael Lozano-Hemmer in the context of *Relational Architecture 11*, where spatial entities are associated in order to assimilate people with the shadows of others, and raise issues of identity and embodiment (figure 11). Specifically, as various people walk around a particular area (like Trafalgar Square), their shadows are cast by digitally enhanced systems. But, instead of having their own shadow lying on the floor, the dark reflection of their own body and posture, video-portraits of different individuals are revealed instead in their place. These portraits are in motion, comprising an occasion for interesting and potential interactions. For their production, volunteers are invited to represent themselves in any way they please, and their actions are shot from above, capturing a wide range of performances. In this way, the volunteer's body and place becomes the shadow of another individual on the public floor.

Hence, two fragmented moments, two different places are united in a person's single position, blurring the somatic and spatial boundaries between them.

The notion of change and becoming, although inherent in every creative process, is particularly evident in experience design projects: firstly, as integrating mixed-reality technologies in the design process results in creating digitally enhanced contexts (environments, systems) for experiences to occur, and secondly because the nature of the final outcome embrace people's participation, i.e. the ephemeral and the unexpected. Interactivity and participation is the creative vehicle as well as the common ground where art and design, the physical and the potential, materiality and information, practitioners and individuals meet.

Performances and experience design projects are physically driven human productions and pertain to the conceptual art field. As artificial productions, they do not have any kind of existence on their own. Creators along with participants are the ones who propose and make changes, co-directing in this way the course of things, otherwise there are not going to be any. Unlike artistic forms that flow on a sequential trajectory (e.g. movies), live events happening in physical and mixed-reality environments (as subjects to past occurrences, as well as laws of cause and effect) are now conceived and designed as the incessant synthesis and destruction of indeterminate, unforeseeable moments. As the notion of space and time are redefined in the context of mixed-reality environments, offering new potentials of interaction and experience, the role not only of the designer but of those participating as well as has been reoriented, both collaborating at creating live events.

2.4 Design, experience, event and change

2.4.1 Design & experience, being & becoming

> *"What is the smallest change that will alter the world?"*
> (Jones R. , 2004, p. 127)

> *"There is a choice between: letting something to transform/develop*
> *in its own time, and making a change to avoid the rut of the familiar.*
> *Both strategies are necessary at different time."*
> (Jones R. , 2004, p. 89)

Design, as applied artistic field, studies the core thinking and values that govern and shape a cultural system, and gives impetus to discover new and more affective modes of communication and expression within society. Principally, design conveys the need for change, for transition from present facts to future potentialities. Creativity always seeks for development to reach the infeasible, the inaccessible; every design practice makes the actualization of an intention possible. Within the spheres of the potential, activities, events and scenarios prevail over static and stable entities: form and materiality are destabilized, elements are animated and embedded with intelligence, and people not only interact but are actually participate in the course of events. Experience design comprises a creative process of organizing the general context for experience(s) and event(s) to unfold at

specified place and time. Therefore a sense of *becoming* is inherent. An experience designer actually suggests strings of interaction in space and time, proposing a bundle of potentialities for the participant to decide which ones will come into existence. The designer cannot in effect predetermine the participants' experience, as dependent on variables, like people's subjective perception and interaction with the environment. As every experience is moulded out of subjectivity and the unexpected, nobody can actually decide or predict the outcome. Like every step on the way in our everyday life, experience is affected by numerous factors (personal, social, environmental, cultural, inter alia). In the frames of this field, designers set the context for potentialities to be effectuated, and people actually decide and realize the overall *becoming*, i.e. the course of events, while shaping their personal and collective experiences.

During the last decades, technological achievements are considered essential means, even partners, for designers and artists, as they open up new possibilities of experiences to occur beyond the boundaries of the physical world. Digital technologies have been significantly developed (sensors, software, head-mounted display, etc.) affording new potentials for creating digitally enhanced worlds (environments and interfaces), which by extent offer people new ways and possibilities of participation. Mixed-reality media constitute spatial and temporal contexts, for events and actions to emerge, surpassing the limitations of physical space and time. Mixed-reality technologies offer designers the opportunity to create new kind of interactive and participatory environments; hybrid contexts wherein physical and virtual pieces of information are juxtaposed. Hence participants and creators are given the opportunity to meet, communicate and co-create their personal and collective experiences.

In addition, the sense of *becoming* inherent to contemporary forms of design connotes multiple outcomes. Potentially there is no phase of completion, as emphasis is put on the creative process and not on the final product and/or state, due to to mixed-reality affordances. Scientific knowledge and technological advancement have both been integrated in the creative procedure - as interior operation apparatus in artefacts, and as context of interaction in case of user interfaces, resulting in the development of design as emergent process. Digital technology provides designers with tools to create less systematized spaces and models that respond in less predictable ways. Especially in mixed-reality environments, fields of non-visible and non-material forces and time-based techniques (like animation) are applied that afford the ongoing transformation of the design elements; a transformation process that is dynamic and creative enough to actually produce various final outcomes. In such projects, there is no fixed ending; there is rather a certain point when the whole event reaches completion, resulting every time at different outcomes.

Particularly, the notions of *being* and *becoming* have been fundamental since various scientific issues and philosophical problematizations have been raised concerning their essence. In the context of Greek philosophy[15], *being* (in Greek *einai, ousia*) indicates a "single, permanent, unchanging, fundamental reality, to which is habitually opposed the

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[15] Plato also adopts the abstract noun built on the same participle, *ousia,* the stem *ont* -- plus the abstract noun ending -- *sia.* In ordinary Greek, this word must have some of the resonance that "existence" has in ordinary English, *ousia* is typically translated "substance" or "entity". Thus, in those of Plato's dialogues where the forms play a role the distinction between being and becoming is equivalent to the distinction between forms and phenomena *(phainomena),* or between Object of knowledge *(epistemë)* and object of opinion *(doxa).*

inconstant flux and variety of visible things" [16] [17] (Dillon, 2000, p. 51). Heraclitus, around 500 BC, asserts that things find restfulness in change, supporting that "everything flows and nothing abides; everything gives way and nothing stays fixed"[18]. Additionally, Marcus Aurelius claims that "all things take place by change", as "the nature of the universe loves nothing so much as to change the things which are and to make new things like them" (Murray J. , 2002, p. 247). This notion denotes reality is associated with features like unity, eternity (meaning ultimately timelessness), and incorporeality. Hence, *being* (i.e. permanence) comprises the adverse meaning of our experience within the surrounding world, named as *becoming (genesis, gignesthai* in Greek); i.e. the realization of a potentiality among others. *Becoming* indicates a dynamic process, involving embedded practices and events which evolve in space and time, expressing the human interaction and interrelation within a given physical, social and cultural environment.

Namely, *being* is denoted as static process, implying rest; a fixed situation, a completed story. It indicates presence and continuous conscious awareness of the world. For Parmenides, *being* is one, timeless and changeless (Preus, 2007, pp. 67-68), compared to inertia energy; no change is made and no potentiality is actualized. Conversely, *becoming* implies change and time in motion: evolution in multiple levels, kinetic energy and velocity (motion by energy), transformation of energy from one kind to another, displacement in space, time flow, the causal order of happenings (cause - effect), growth-decay of organisms; eventually the course of life. Accordingly, Heraclitus conceived how "everything flows and nothing abides; everything gives way and nothing stays fixed", by setting an example: "You cannot step twice into the same river, for other waters and yet others go flowing on". *Becoming* entails a bundle of potentialities that emerge while interacting and experiencing within the world, as well as the actualization and development of a potentiality.

In particular, Aristotle defined *being* and *becoming* as the principal qualities that comprise reality (Holl, Pallasmaa, & Pérez-Gómez, 2006): the first is associated with the essence, cognition and idea of reality, while the latter refers to the actual, perceived through the senses, and constantly in motion aspect of the real, expressing the notion of time and ceaseless evolution in life. Thus, he associated the notion of *being* with form (appearance of things) and *becoming* with matter (transformations that occur in time). The concept of *form* involves a sense of *purpose*. Form is *entelecheia*, meaning a sense of continuity and duration, as well as assidluity and sedulity. *Matter* and *form* are two essential factors, the unification of which entails *becoming*. *Matter* is the possibility of formation of substance (being) and comprises the *potential being*. In contrast, *form* is the *active being*. *Matter* and

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[16] "In the context of Greek thought, *being* […] denotes sonic single, permanent, unchanging, fundamental reality, to which is habitually opposed the inconstant flux and variety of visible things. This reality is initially seen simply as a sort of substratum out of which the multiplicity of appearances may evolve, but progressively there come to be added to it other features, such as absolute unity (or, conversely, infinite multiplicity), eternity (ultimately timelessness), incorporeality (for, conversely, basic corporeality), and rationality (or, conversely, blind necessity). In short, *being* (on, or ousia) becomes in Greek philosophy the repository of all the concepts that can be thought up to characterize the idealized opposite of what we see around us -- its counterpart, which comprises all aspects of the everyday physical world, being termed *becoming (genesis)*" [my underline].

[17] For Parmenides, *being* is one, timeless and changeless, and it was equated with *truth;* all talk about plurality and change is opinion (doxa), and not the truth about *being.*

[18] Also "you cannot step twice into the same river, for other waters and yet others, go flowing on."

form are not separated. Every generation is a transition from potentiality to action, from *potential being* to *active being*, from the possible, the germinal predisposition to full development and realization. This transition is defined by Aristotle as *motion*[19] (Tsanaktidou, 2010).

Respectively, design and experience are terms with twofold meanings, used both as verbs and nouns. Each is offering an insight of the depth of their meaning, as well as an implication of their association with the sense of becoming. *A design*, like *an experience*, denotes a complete process, a concept that belongs to the past, the future or resides in the realms of imagination. In contrast, *designing*[20] underlines the evolution of a situation or a procedure; the course of an event. It defines the process of creating material or virtual objects. Design as noun, refers to the artefacts that derive from a deliberate creative process; the result of a creative procedure, involving products, processes, events and environments. *A design* indicates a static form or shape, involves the modulation of a delimited place (Mansfeldt, Vestager, & Iversen, 2008), and therefore pertains to the sense of being. Alternatively, design as verb reflects the creative procedure, the opening of all potentialities, in order to organize the demarcation of space, and pertains to the sense of becoming; on open process that has not reached completion. The noun expresses the outcome of the action described by the verb, the result of an evolving process, event and interaction.

Furthermore, the notion of *becoming* is inherent in *designing* as creative process, motivated by will for change surpassing current limitations (Löwgren & Stolterman, 2004). Creativity entails selection among an aggregate of alternative solutions (ideas, emotions, stimuli, and more). Design also involves an array of decisions in order not to reproduce something already existent, but rather to create something new; 'becoming is never imitating' (Deleuze & Guattari, 1996, p. 305). Jones' state that art dreams on realization of the impossible (2004, p. 19), can be extended to embrace every design field. Like any creative procedure, design is oriented towards the future, anything new and innovative. Design entails change and targets on evolution in personal and collective level. In the context of artistic expression as well as in everyday practices, imagination and creation are visions of change in an endeavour to make progress towards a better future. Deleuze[21] and

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[19] In order to adequately understand Aristotle's definition of motion it is necessary to understand what he means by actuality and potentiality. Aristotle uses the words *energeia* and *entelecheia* interchangeably to describe a kind of *action*. A linguistic analysis shows that, by actuality, Aristotle means both *energeia*, which means being-at-work, and *entelecheia*, which means being-at-an-end. These two words, although they have different meanings, function as synonyms in Aristotle's scheme. For Aristotle, to be a thing in the world is to be at work, to belong to a particular species, to act for an end and to form material into enduring organized wholes. Actuality, for Aristotle, is therefore close in meaning to what it is to be alive, except it does not carry the implication of mortality.

[20] The verb is used in gerund rather than the infinitive clause, as the infinitive of the verb expresses "an abbreviation for *modus infinitivus*, the mode of unlimitedness, of indeterminateness, namely in the manner in which a verb accomplishes and indicates its significative function and meaning", according to Heidegger (Heidegger, 2000, pp. 55-60).

[21] Specifically, Deleuze uses the term 'becoming' (devenir), previously coined from Friedrich Nietzsche, to describe the continual emergence of change that results in the constitution of events. The Deleuzian view on becoming has a dual perspective: initially, in the frames of the physical reality, every aspect of social and personal life is in constant state of flux or differentiation. Differentiation in this case, does not refer to divergences between entities and/or individuals, but rather describes the continuous condition of human and nature

Guattari have expressed this need as *involution*, saying that "becoming is involutionary, involution is creative" (1996, pp. 239-240). Art and design are associated with the sense of becoming, as both create aesthetic experiences, and generate potentialities for future interactions located in time and space. And this potential aspect of creation is their magic; as conveyed in their work *A Thousand Plateaus:* "if the writer is a sorcerer, it is because writing is a becoming" (Deleuze & Guattari, 1996).

Design practices as well as the final result have both been significantly influenced by the incessantly developing digital affordances. Mixed-reality environments set the spatial and temporal frame for events and actions to occur; potential fields beyond the limitations of the physical environment, where participants and creators meet, communicate and co-create their experiences. Digital technologies have been significantly developed (sensors, software, head-mounted display, etc.) affording new potentials to designers for creating digitally-enhanced environments and interfaces, and therefore set the frame for people's enactive participation in collective experiences. Secondly, emancipation has prevailed over representation. Explicitly, emphasis is put on the relations among the constituent parts of the design project (object, product, service, environment, event, etc.) instead of its form and appearance. Therefore, a holistic approach is developed concerning the interconnection and interdependence of the integral components.

Meanwhile, the final outcome can equally be stabilized into a singular, defined shape, and/or evolve within a series of variations. Thirdly, transformation animates graphic elements, involving processes like animation, customization and structural relationships, which provide geometrical and visual features with behaviour. The emergent processes of the design process and the affordances of digital media incorporated are potent to become generative processes. Finally, the transformative design process is realized via non-visible and non-material time-based techniques. The outcome itself is regarded and treated as *field* of powers, flows, functionalities, and development liberated from gravity, corruption, inertia and materiality of form, unlike the physical world. Therefore, various outcomes *emerge*, with the Deleuzian meaning of the term, i.e. continuous becoming (Deleuze, 1995). Digital phenomena simulate real ones; they are not static, but emerging, always changing, always becoming something new, expressing "the incessant movement of life, the always present, changing, becoming now" (Bergson, 1986 [1907]).

Experience Design organizes experiences and events located in place and time, and a sense of *becoming* is inherent in its thought and practice. Creativity always seeks for development, to reach the infeasible, the inaccessible. Additionally, a design, a complete outcome, although associated with the sense of *being*, endeavours to generate static forms of communication and interaction (for example in graphic design) or dynamic forms (like in interaction design). As every experience is governed by the unexpected, nobody can predict the outcome, as affected by numerous factors (personal, social, environmental, cultural,

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existence: the transition from one situation, form, condition to another, regardless of the pace of mutation. Furthermore, he underlines the notion of becoming that inheres in every creative process, merging various states of being into an emergent sequence of becoming. This notion underlines the dynamism of evolution between succeeding situations, tending towards no particular goal or end-state. In brief, Deleuze supports that becoming involves that: firstly form is never stable but changes in time, secondly the relation between the instances of the form is compound, and thirdly this shifting process develops within a continuously changing context.

etc.), like every step on the way in our everyday life. An experience designer actually suggests strings of interaction in space and time; designers propose bundles of potentialities for the participant to decide which ones will come into existence.

In the following sections, the notion of *becoming* is being analyzed in particular design factors: as potentiality inspired by people's (designers' and participants') creativity, aesthetics and imagination, and enabled by the affordances of provided by mixed-reality technologies; as emergent dynamic and process, shaping the form of physical as well as virtual elements; as combination of matter and information embedded in intelligent materials, and at the same time as liberation of information from materiality; as the capacity provided by digital media to create multiple variations and results out of a design model; the design process has since numerous endings. Consequently, becoming as event, the basic creative dynamic for designs to be moulded and experienced; design as sequence of events.

2.4.2 The virtual and the potential

"Dreams are the stuff the future is made of."
(Jensen, 1999)

In the contemporary world, our experiences take place in an amalgamation of physical and virtual places, where technology is incorporated to tactile materials and hybrid forms of reality are configured. Combining virtual and physical elements for staging experiences provides designers with the necessary tools and media to overcome physical boundaries. This synthesis of mixed realities comprises a fountain of inspiration about possibilities the designers manage according to their aesthetics and objectives. The core of art and design is no longer about the composition of a 'message', an object, a specific content, i.e. a design, but in coining the adequate conditions for participation and interactivity to spring (i.e. designing). A new type of designer/artist is introduced, a designer of worlds where millions of stories may impend, not a single one. According to this contemporary conception, designers directly carve the potential (Lévy, 2001, pp. 189-190).

Returning to the roots, the term *virtual* actually derives from the Latin *virtus,* meaning potential, or force. The virtual comprises "the power that something has of becoming something" (Lévy, 1999), like a baby chicken is virtually present in an egg. In case of virtual reality, the notion is associated with simulation but does not identified with fake or fiction (Bryant & Pollock, 2010). It refers to elements (worlds, objects, conditions, etc.) that may be experienced *as if* they were real, although they lack any form of physical substance. Although the materiality of virtual entities is intangible, its function (even behaviour) can be persuasive enough to be perceived and used *as* real. Respectively, the *potential* implies a more philosophical aspect, involving bundles of opportunities and/or outcomes that equally tend to be activated (Levy, 2001, pp. 21-23). The *potential* lies beyond the realms of reality and includes a complex of trends and powers that preserve an ever-evolving condition, never transformed into static or coherent form. The two notions coincide, as the *potential* inheres the *virtual* as potency of unpredicted and incomplete realizations. They both are open systems, i.e. their results are not foreseen – participants must take all the way and make choices about their actualization to see it (Rajchman, 1998, p. 115). In this way, the *virtual* and the *potential* are differentiated from the *possible* which is of no need of

engrossment, decision or discussion to be made; it is already decided and complete and waits to become real, to occur, to be realized or materialized.

Additionally, Deleuze, based on Bergson, commenting on the distinction between the *virtual* and the *possible*, analyzed the difference between the *realization of the possible* and the *actualization of the virtual* (Deleuze, 1988, pp. 96-103): in the first case, the possible unfolds in static frames, subsequent in time; like a movie, already completed by the director, played with no change, no surprise, frame by frame, every time. In no case may the plot be mutated – time is an extraneous factor. In the second case though, realization is unfolding in time; the plot of the movie is an open system that can be co-designed by people attending, influenced by parallel events that take place, and particular environmental conditions, among other factors. Meanwhile, the transition of the *potential* into the *real* is called *activation[22],* preconditioning a desired combination of decisions to be made. This process transforms ideas and energy into a specific form in conformance to the objectives that have been set in advance. The opposite direction is called *potentialization[23]* (or *virtualisation* for Lévy (1999)) and includes the conversion of a fixed reality into a state of contemplation and decision making; the transition of a predetermined state into a new conception and eventually a new form. This changing creative process exalts the possibilities beyond our physical world and its affordances[24].

Since the ancient times, imagination, memory, religion and the arts have been the main vehicles for people to create *their own* world. In need to escape from the hardness of everyday reality, personal interpretations and alternative meanings on life and its mysteries are conveyed through artistic expression. Lévy further adds the factor of language, a means of communication only humans have developed. Language enabled human perception and encounter to transcend the present, this continuous state of *here* and *now,* and involve moments and stories from the past and the future. As a means of awareness, communication and creativity, a sense of potentialization (virtualization) is inherent in any form of discourse. For Lévy, language is a tool of the virtual, as human transcends space and time through oral and written forms of dialogue to reach moments of the past, the future and fiction, beyond daily life. Consequently, various cultural practices develop in time, by expressing our inner world and letting external narratives and social factors to influence this esoteric part of ours (Mansfield, 1999). Language, like art, enables this transcendence not only beyond space and time, but by associating the internal with the external and vice versa.

In the broader field of design, a magic thread interweaves potentiality, imagination and creativity. For Bryant and Pollock "virtuality is a potential actuality; ... an expandable reality full of promise that indicates the constant movement of *becoming*, of transformative potentiality in the world" (2010, p. 15). They further view art as a form of virtuality: "a *poiesis* that draws into the realm of the knowable what is new and hence generates genuine difference in contrast to seemingly varied versions of socially limited 'reality'" (2010, p. 15); a concept that involves the broader fields of design as well. Picon refers to the potential

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[22] *Ενεργοποίηση* in Greek.

[23] *Δυνητικοποίηση* in Greek.

[24] *Affordance*, is an attribute of an object helping people to learn how to use it. For Norman (Norman D. , 1988) to afford means "to give a clue" so "when the affordances of a physical object are perceptually obvious it is easy to know how to interact with it." In case of web design for example, it involves how to make graphical elements (buttons, scrollbars, icons…) appear obvious how they should be used.

reality of the virtual worlds as indefinite series of potencies, tensions, and folds inhere within. Focusing on architectural design, he also states that design as thought and practice contributes to the realization of an intention, making a prospect possible, and expressing "the creative potential of the existing world" (2003). By integrating digital media, designers have managed to reach spheres that used to be inaccessible in the past, by creating places that lie in the intersection of the real, the virtual, the imaginative and the potential.

Experience design is a multifaceted synthesis of the terms *experience* and *design*; two notions the potential inheres. It comprises a complete study and proposal of potential interactions and events open to participation and change, located at particular time and place, and therefore *a design*. Dan Brown, co-founder and principal at EightShapes (2011) notes:

> "Most [clients] expect experience design to be a discrete activity, solving all their problems with a single functional specification or a single research study. It must be an ongoing effort, a process of continually learning about users, responding to their behaviours, and evolving the product or service" (Hess, 2011).

An experience designer actually suggests strings of interaction, bundles of potentialities, and offers the participants the opportunity to decide which ones will be actualized. Nobody can predetermine becoming, as constantly evolving in time, but designers can be prepared and organize the context for substantial experiences to emerge. We design *for* becoming.

2.4.3 Art and design as process

Design is a communicative process and creative experience that evolves among the designer(s), the work and the people who interact with it. It is not about incorporating a set of values in the design work, but passing from static objects to more dynamic and abstract forms of interaction and participation. The overall artistic experience involves the designer's expression and ability as well as people's participation – not the stabilization of the design work into a certain materiality, form, and potentially function per se. A work of art and design is no longer considered an object, but rather a dynamic synthesis of physical environment and virtual worlds, and principally an occasion for dialogue and interaction. According to contemporary tendencies in art and design, a procedural and participatory perspective has been embraced, both during the design process and the interplay with the public. Contemporary design strategies embrace a holistic, systemic approach in creating positive and valuable experiences for people. Design concentrates on offering qualitative impact to individuals' lives through a sincere attempt to stage meaningful participation in the course of events. Contemporary design approaches are no longer object-oriented but rather interaction- and experience-oriented. Hence, contemporary design focuses on directing events and staging experiences, rather than moulding stable artefacts.

In opposition to past art theories, according to which artist's concepts were principally materialized into objects, contemporary theory and practice of art and design is basically focused on experience: "a shift from art as object to art as process, from art as a *thing* to be

addressed, to art as something which occurs in the encounter between the onlooker and a set of stimuli" (Archer, DeOliveira, Oxley, & Petry, 1996). Even in 1975 Margolis quoted that an artwork cannot be entirely associated to the physical aspects and structures where embodied. Although contemporary art and design works have a short of material embodiment they comprise *emergent entities,* not attributed to properties of the constituted matter (1975). Therefore, designers are concerned with staging the overall experience for people involved in particular events that evolve in time. Design is conceived and practiced as process sensible and interwoven by personalities, interactivity, experience, and culture practice within place (physical and virtual environments) and time.

In parallel, a relevant shift has been made on aesthetics, and particularly on the way people experience their surrounding (physical and/or virtual) world; how they encounter and interact, within specific environmental, cultural and social context. As Binkley states "art treats aesthetic experience, not art" (1987, p. 97). Actually, the term *aesthetics* derives from the Greek term *aesthisis (αίσϑηση)*[25] that expresses the perspective of how we perceive and interact with the world via our senses (Binkley, 1987, p. 83). In his classic literary piece, *The Work of Art in the Age of Mechanical Reproduction* (1936), Walter Benjamin describes the aura of an art work in its "presence in space and time", meaning its distinctive existence at a specific place. When digitized, the nature of artworks has been altered. This phenomenon induces significant issues regarding human perception and relation with materiality. Among other reorientations, virtual reality has introduced new conceptions and perspectives on matters of presence, experience, materiality and perception, and therefore on design thinking and practice.

Additionally, the actual design procedure, as well as the final outcome, has been altered in conformity with the features of the digital and analogue media used; their potentialities are essential to the type and quality of experience designed. Each medium affords a different type of sensory experience, contributing respectively to communication, research, entertainment, education, and more. The integration of mixed-reality technologies contributes to the creation of digitally enhanced environments, afforded to adapt to people's needs, offering the opportunity to mould multisensory experience. In advance, hybrid models of expression are developed that condition the creative procedure, along with the final result in the fields of art and design. Hence, contemporary artistic and design patterns reject traditional conceptions of structure, materiality and form.

This transition is increasingly becoming essential in case of business and market strategies, too. Wolf, media industry analyst, argues that all businesses need to provide an entertaining aspect in order to thrive (1999). According to Wolf, business is becoming synonymous with amusement and this trend is exploding due to the Internet and digital media. Entertainment dimension offers an added value as, according to Murray, "audiences are not satisfied by intense sensation alone […] they want more than a roller-coaster ride; they want a story"; and further underlines that the audience is given "more freedom to direct the ride and more opportunity to affect the unfolding story" (1999, p. 50). Consequently this transition raises a general concern regarding the designer's responsibility towards society, as he moulds modes of contact and communication among people, in the context of particular social platforms and environments.

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[25] First coined by Alexander Gottlieb Baumgarten in 1750 in his *Aesthetica* (Baumgarten, 2007).

Pine & Gilmore made a model presenting three main shifts in the form and features of the economic system resulting in three stages regarding the products and elements traded in the market (1999) (figure 12). The first shift concerns a transition from extracting commodities to the production of goods, while the second shift led to the development of delivering services, presented as action-oriented design. The new competitive landscape in design comprised a reorientation towards *strategic planning,* in opposition to the creation of invariable images and objects of the past. In effect this planning involves *staging* people's interactivity with the surrounding environment. Decision-making involves the appropriate conditions under which people meet concerning the objectives of their interrelation. In this case, design comprises a study of creation and communication, considering inter-activity as the medium, in interpersonal and public level.

In the contemporary era, Pine & Gilmore theorize that we have moved from a service economy to an experience economy in which the event is the offering. The experience component of the economy is growing rapidly, outstripping the service sector, just as the service economy outgrew the industrial economy previously (figure 13). According to their book *Experience Economy,* the difference lays in the fact that "when a person buys a service, he purchases a set of intangible activities carried out on his behalf. But when he buys an experience, he pays to spend time enjoying a series of memorable events that a company stages - as in a theatrical play - to engage him in a personal way" (Pine & Gilmore, 1999, p. 2). In this case, experiences are the basis for the future economic growth within this new and rapidly expanding sector of the economy. Moreover, Rolf Jensen, a Danish futurist, has articulated a model similar to the experience economy that he refers to as "the Dream Society" (1999). In the emerging *Dream Society*, experiences have gradually become essential in all sectors of our lives, and focus will be given on six key markets that are directed to human needs for: adventure, togetherness, to care and be cared for, to define ourselves, to feel safe and secure, and to demonstrate our convictions. The field of designing experiences, demands a panoramic perspective on our perception, interpretation and creation of the world.

In the commercial industry in particular, companies and brands now concentrate their strategies on designing experiences and not mere products or services for customers. As Charlie Hughes and William Jeanesco write in *Branding Iron*, "a brand is a promise wrapped in an experience - a consistent promise wrapped in a consistent experience" (2009-2011). A great example is the endeavour of P&G this summer: P&G as a Worldwide Partner of the London 2012 Olympic Games organized an immense campaign promoting their products and sponsoring programs as contributors of the biggest supporters of the Olympian athletes, their moms. Under the motto 'P&G is not in the business of helping athletes, P&G is in the business of helping Moms' an intense emotional connection with the customer was built, as a compound set of experiences was prepared specifically for the athletes and their families, as well for customers in global level. Regarding the first, P&G sponsored more than 120 moms to travel and accommodate in London, while also given the opportunity to be present in more than 600 events where their children participated. In P&G Athlete's Village and Family Home, athletes and their mothers apart from a warm hospitality also found a place to contact with other families, be entertained and receive beauty treatments with the company's products. In this way, an entire experience was designed for the athletes and their families, creating enjoyable memories to all of them, while strengthening the

company's status. Meanwhile, via social media contact (like facebook and twitter), videos, TV commercials, games, and prints among other means, their message appealed to everyone, and not just the athletes, inciting people to feel and express their gratitude to their mother for her unselfish love, devotion, tenderness and endless support throughout their lives. Especially, through the social media, people had the opportunity to share stories and show appreciation to those who support and comfort our everyday struggles. Consequently, "Thank you Mom" was an immensely large campaign, successfully promoting the company's objectives by creating emotional engagement and memorable experiences for their customers on occasion of a world-famous event, the Olympic Games.

The reorientation of design from making commodities to staging individuals' experiences is a vast shift in people's economic and social system. The designers' role is more about inducing encounter and interaction among people, design result and surroundings, rather than producing stabilized design outcomes per se. The result of contemporary design procedure emerges out of the designer's concept and practice while people's participation is necessitated. Design strategies, in accordance with contemporary tendencies in art, involve the liberation of the process and the final result from the static physical features of materiality. Instead, the design outcome is conceptualized and created on the fly out of participants' experience. Design as process and result is interwoven by both practitioners and individuals within specific cultural context, place (physical and virtual environments) and time.

2.4.4 Form as emergent process

Contemporary design policy is not restricted to the creation of products (objects, services, environments, etc.) but also studies their laws of change and sets the framework for numerous events to eventuate under certain conditions. Becoming is expressed by Burgess, as "a continual *metamorphosis of being and becoming*" involving not only the (architectural in his case) design but our entire lives in a continuous "journey of destruction and creation – a joyful dance between polarities and paradoxes; a way of transformation and understanding" (Pearson, 2001, p. 12) (my underline). Significantly, emphasis is put on transformation as emergent process that affects form and shape (the aggregate of visual and geometrical features) over the value of appearance. Hence, a transformative process, involving structural relationships, topology, animation, customization, among other parameters, eventually moulds the shape of things. During this conversion, multiple variations of form are activated, a process that can endlessly be continued until the designer decides to finalize it. Form has gradually been prevailed by formation.

It is not the first time in the history of art and design that artistic form is not materialized into a final, concrete figure, but is evolved and woven with the confluence of designers/artists and those participating in a cooperative creative process. For instance, the Fluxus movement (a name taken the Latin meaning 'to flow') roused their audience to action (Arnason & Prather, 1998, p. 641). Aiming to open the artistic expression narrowed down to 'the artists' to the masses, the Fluxus artists gave participants the opportunity to produce art. Their constant objective was to erase any boundary between art and life, as well as associate visual art fields and forms. Fluxus art involved audience as participants, depending usually on chance and personal involvement to shape the ultimate outcome of the art work.

Particularly, George Maciunas was the main instigator who envisioned art as social process, stating in the *Fluxus Manifesto* (1963) that all are able of making art and every aspect of life is art. Fluxus movement is also profoundly influenced by John Cage's view that a piece is created without having a concrete conception of the eventual result. For him also, the actual creative process is vital, not the finished product. Innovative artworks were created under this perspective celebrating collaboration and the ephemeral, reflecting a touch of playful anarchy.

The use of change and participation is also employed by Dada, Marcel Duchamp, and other performance practitioners of the time, such as Happenings. Fluxus artists worked together to blend different artistic genres (visual, literary and musical) into a number of 'events', involving installation art, conceptualism, happenings and various types of performative art. *Happening* as term was first coined by Allan Kaprow in 1957 meaning performance, event or situation. Briefly, happenings can be located in any place, they do not follow a linear scenario, are often multi-disciplinary, and audience active participation is necessitated. The main elements of happenings are already set, but the artists' as well the audience improvisation actually shape the final outcome, eliminating the boundaries between them. Henceforth, interactions between artists, audience and artwork are essential for the performance to gain content and form. Given its Dadaist style of impermanence, happening was initially conceived as a radical alternative to traditional principles of craftsmanship, and the 'permanent art object'. At any rate, performance art, a combination of drama and visual art, both invites and elicits audience response.

Specifically, Duchamp is the precursor of postmodernism and experience design as introduces the sense of art as practice. Since then, an artwork was materialized in a certain type of medium. Duchamp revealed this convention by converting a number of objects into art, simply by changing the cultural content they were experienced within. By changing the context within which things are experienced and interpreted, their meaning and use is altered. Artistic expression involves human-created conception and discourse articulated in a medium, but materiality does not confine the meaning each artwork conveys; it is rather the manifold experience of people within a particular socio-cultural context that determines the overall aesthetic experience.

Furthermore, the Futurist movement is among the first aesthetic manifestations that introduces the concept of event as form. The *Foundation Manifesto* by Filippo Tommaso Marinetti opens up new horizons in the arts praising speed, mobility, and the future, while depreciating stasis, deliberation, and the past. Observation on past concepts and contexts is substituted by progress and immediacy with the evolving surroundings of the present. Hence, futurism contributes to reorient common perception to diminish the distance between space, time and object as well as between past, future and present time. Unfortunately, the evolution of this movement ends up into sharing fascist ideology - becomes 'a pillar of Italian fascism' (Arnason & Prather, 1998, p. 217) - excluding in several ways the futurist artists from sharing the principles of both modern and postmodern art, concerning visions on human experience and participation. *Plastic dynamism* expresses that actual and potential motion can be considered both intrinsic and related to its environment. *Dynamism* embraces the notion of action-object involving a series of morphogenesis – an array of present and future movements, forms and/or states – contained within a rather static object. These changes comprise synthesis of absolute (regarding the object itself) and

relative (regarding environmental response) actions and transitions that consider the object and the world an organic whole. According to Umberto Boccioni:

> "Dynamism is the lyrical conception of forms, interpreted in the infinite manifestations of the relativity between absolute motion and relative motion, between the environment and the object which come together to form the appearance of a whole: environment + object. It is the creation of a new form which expresses the relativity between weight and expansion, between rotation and revolution; here, in fact, we have life itself caught in a form which life has created in its infinite succession of events".

In case on technological-based design, digital media have enabled multiple transformations via the affordances and features of four-dimensional virtual worlds. Comparing to stabilized forms of design and creation (like photography, typography and graphic design), an opportunity is given to contemporary designers and artists to organize events and changes to previous stable forms of expression. Picon describes, from an architectural standpoint, this 'destabilization of form' and acknowledges the role of technology as creative medium in the design process (2003). The results are unexpected, undetermined, and seize to overcome the boundaries of the feasible and physical in every functional or formal aspect. Hence, emphasis is put on the connections and potentials that emerge between the component parts of the design, rather than their appearance. Rajchman used the example of a virtual house to analyze a new perspective concerning the way form emerges within potential worlds:

> "[The virtual house] is the one which, through its plan, space, construction, and intelligence, generates the most new connections, the one so arranged or disposed so as to permit the greatest power for unforeseen relations […] understand the notion of potential outside the given identities of form, function, and place" (1998, p. 115).

The integration of virtual (potential) elements and environments responds to a quest for continuity in motion and form which has been studied and developed with fascinating results.

In the past, traditional conceptions about aesthetics and design principles used to determine the design result. For instance, Alberti's famous maxim "beauty is the consonance of the parts such that nothing can be added or taken away" is no longer dominant in contemporary aesthetic values. Fixed and unquestioned rules regarding, for example focal length, symmetry or formal sequence, that used to govern the organization of the whole synthesis, are no longer adequate to organize the functionality, behaviour and appearance of interactive material. Form is unconfined from traditional theories of beauty and balance, "released from 'classical' determination within a field or ground" as Rajchman quotes, and transformed into *operative form* (1998, p. 103). Design used to be centred at form: "design was synonymous with the quest for the necessary form. Order and proportion, structure, and, above all, space were supposed to be essential and thus imparted with an internal necessity" (Picon, 2003). Saffer compares the previous dependency of form on functionality with digital morphing, 'fluidity and ambiguity' an interaction designer has to take into

consideration (2010, pp. 170-171). In addition, Eisenman underlines the emancipation of form from representation and reproduction of reality:

> "[…] this notion of forms that can change, morph and move: a new category of objects defined not by what they are, but by the way they change and by the laws that describe their continuous variations […] destined to obliterate the Benjaminan distinction of original and reproduction" (2007, p. 9).

While digital technologies afford the medium as well as the opportunity to disengage design process from the traditionally dominant notions of form and representation, *organic design*, offers a contemporary perspective that highlights the procedural nature of design. Applied mainly in architecture, it affects the broader field of art as well. The notion of *organic* refers to entities and forms sustained by their interrelationship with the environment embedded in. Particularly, as Ho explains "whereas a mechanical form is located *in* space and persists (or not) in time, an organic form, by contrast, *is* a space-time structure; to be exact, a coherent space-time structure" (Ho, 1997). As Bornstein explains:

> "Organic creation in art and architecture is not a style but a principle. No single style could possibly encompass the organic principle. It is a limitless paradigm" (1995-1996).

Organic design is also defined by Pearson as:

> "[…] a continuous process, never finished, always in a state of change. For Bruce Goff it meant 'beginning again and again', existing rather like an old Zen master, in a state of the 'continuous present'" (2001, p. 12).

Organic design encompasses a particular perspective on design and art, supporting creativity as procedural concept and practice. Practically, architects and designers are inspired by nature's laws, functional clues and aesthetic forms and characteristically free-flowing curves, asymmetrical lines and expressive forms are preferred in their works. In this context 'form follows flow'. The essence of organic, i.e. the capability of organisms to evolve in time was also introduced in architectiral practice through *organic architecture*, and from this perspective we also remark the general tendency towards 'design from within' (Pearson, 2001, p. 10). Organic design inflects the rhythm and infinite evolution centring on procedural forms of design. *Organic architecture* concentrates on nature and living organisms (like humans) as interdependent scheme, where numerous metamorphosis (i.e. growth and change) stem out of this bound relationship. Under the notion of organic, indivisible whole, design thought evolves from a key concept and is developed outwardly.

Furthermore, parametric design is a tool for designers, architects and artists involving the creation of objects and environments with digital media, controlled by constraints and parameters. In the context of this design methodology, geometrical relationships are configured instead of fixed shapes and characteristics, giving the designer the opportunity to endlessly adjust his/her models. As Kolarevic states, "it is the parameters of a particular design that are declared, not its shape" (2001). Hence a system of changeable variables and interconnected parts is formed, providing the ability to change and control each component

and consequently affect the entire synthesis[26] (Male-Alemany & Sousa). In essence, this method stimulates creativity as the final outcome is moulded by the designer's aesthetics along with the affordances of the digital medium used; multiple potentialities are open for the designer to exploit, giving the opportunity to create various results based on a basic form, predictable and unexpected ones. Numerous variables may be produced, due to the capacity of parametric design to enable change. Each model emerges during the creative process as organism capable of being mutated due to the fact that different parts are related and interconnected.

Every creative procedure is open to numerous becomings; the final outcome cannot be predicted in advance. Hence, integrating digital technologies in the design process enables the emergence of numerous shapes, characteristics and affordances through mutation and configuration. Lynn, in his text *Architectural Curvilinearity: The Folded, the Pliant, and the Supple,* refers to 'smooth transformations', which imply a sense of ductility, and also involve:

> "[…] the intensive integration of differences within a continuous yet heterogeneous system. Smooth mixtures are made up of disparate elements which maintain their integrity while being blended within a continuous field of the free elements" (2004).

Lynn emphasizes at the numerous possible variations of design elements, by changing their features and giving fluidity to shape, and forming multiple instances until the final form is decided. Pliancy involves plasticity of disparate elements, jointly transformed in virtual environments to produce alternative results. Nonetheless, differentiation is a critical part of repetition. But repetition in this case does not involve replication of the same, but creation of otherness; an ongoing reiteration as driving force in any design field. Lynn also described that this sense of 'smoothness', of pliancy, is characterized by vicissitude, meaning:

> "[…] a quality of being mutable or changeable in response to both favourable situations that occur by chance. Vicissitudinous events result from events that are neither arbitrary nor predictable but seem to be accidental. These events are made possible by a collision of internal motivations with external forces" (2004).

Therefore designers initiate a process without being able to predict the final result. They direct the whole process by setting the framework – dynamic field, conditions, parameters, and more – within which these smooth transformations can take place, enabling multiple potential endings to occur. From another perspective, Ingeborg Rocker introduces the term *versioning* in architecture design and practice, a technique that derives from the software development industry and links Software Configuration Management (SCM) and Engineering Data Management (EDM). In essence, *versioning* suggests:

> "[…] architecture as a processual data-design, as a continuous processing reciprocal convergence of projection and production, […] an evolving and

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[26] "Acting as a kind of organism, the parametric model is a whole that has the capacity to react to specific changes occurring in its parts".

dissolving differential data-design that no longer simply 'exists' but rather 'becomes', as it becomes informed in and through the process's differentiation" (Rocker, 2002, p. 11).

As Brams-Miller explains, *versioning* is essentially "a technique where the continual changeability of a form designed in a digital medium can essentially be shown in the form, whether in surface construction or in structural makeup" (Brams-Miller, 2005). Rocker and Lange's project *Cross Scalar Variation Studies II - Versioning: Parametric Prototypes* (figure 14) comprises an approach that reflects "a shift from an architecture of modularity towards an architecture of seriality", meaning towards a structure that evolves in time (Cross Scalar Variation II, 2011). Actually, the very essence of versioning surpasses the controlled iteration of productive process, and influences the structure as well as the aesthetics of designing with digital media, introducing issues of parametric techniques in design.

The potentiality of form being shaped in time, possibly through interaction with the people is also evident in several projects of the ART+COM Company. This design studio was founded by an interdisciplinary group of designers, architects and artists, in Germany in the mid-1980s, and since 1998 is a company owned mainly by its employees. In case for example of the *Kinetic Sculpture* (figure 15), created for the BMW Museum (Munich) in 2008, several hundred metal spheres, hanging from thin steel wires attached to individually-controlled stepper motors, animate a seven minute long narrative. Therefore, the process of form-finding in art and design is indicated, as different variations of form are configured every time, evolving into a new narrative. Besides, the *Grasp Pendulum* (Medical Technology Science Centre, Berlin, 2010) (figure 16) visualises the quality and complexity of grasping. Three pendulum arms are suspended in parallel, each including 12 inward and outward-facing screens, showing virtual hands which interact with each other from one screen to another. Virtual movement is transformed into real movement as the pendulums begin to swing and balls roll through the screens. The swinging movements increase as the hands pull handles to draw colour areas into the monitors. When one monitor crosses another, the colours are blended. Visitors are also invited to interact with the installation: sensors transfer the movement of the visitor's hands onto the pendulum monitors in freeze frames until all the monitors are filled with gestures. In this way, real-time control of the motors is achieved as visitors movements are directly converted into real pendulum movements, making them synchronous.

Becoming as transformation, as dynamic emergent process, affects the shape and form of the designed result. In the context of the physical world, form is influenced by laws and forces ranging in scale from the molecular to the environmental level. In case of mixed-reality environments, although these forces are simulated in order to produce natural conditions and constraints, they are not considered limitations, but rather opportunities for multiple variations. Digital media provide designers with the opportunity to control the conditions and forces that modify transformations; "form comes from growth, or from the way forces affect materials" (Jormakka, 2002). Parametric design and organic design express this notion of 'design from within' in art and design, supporting creativity as a procedural concept and practice. The idea of design as *metamorphosis*, the process of growth and change, has been developed, a dynamic that sets the general context for form to emerge.

2.4.5 Multiple outcomes

Contemporary design strategies concentrate on the study and realization of stings of interaction among people and systems (objects and environments). Embedded technologies contribute to the creation of abstract mechanisms and dynamic models, enabled to respond and adapt to human presence and interaction in space and time. Digital media and intelligent systems offer designers and artists the opportunity to experiment beyond the limitations of physical reality. Specifically, the design outcome accrue is not unique since random closures can be made during an incessant transformative process; various states, forms, and/or snapshots retained out of the modification flow (Picon, 2003), named as 'animation' by Lynn (1998). The transformative process in design resembles the common notion of flow as objects keep being metamorphosed (i.e. their shape and features are changed in time) until the creator decides to stop the development at an adequate state of completion.

The created synthesis has no final result, no definite form - it is the creative process that matters. *Scattered Light,* created by Jim Canpbell and situated at Madison Square Park Conservancy (2010-11) (figure 17), has an enormous structure supported over 1,600 light bulbs of LEDs, programmed to display a low-resolution, moving image as individual pixels. The LED bulbs created the illusion of figurative images that detected human presence and movement in the specific area and projected relevant giant human shadows crossing a floating 3dimensional matrix of light. Hence, once a person walks through the art place, the light figures imitate human activity, altering human figure into an abstract image. Human bodies and bulb field interact blurring the boundaries between image and object, inducing into numerous and unique visual results. In addition, *Animate Field* by Justin Lui (2009) (figure 18) comprises a cloud of low-hanging fibre-optic filaments, which create a volumetric mass for participants to directly engage in by physically occupying and moving through it. People's positions and movements in the cloud trigger the red lit endpoints of the filaments, creates trails of yellow light in the field. Participants' interaction with the cloud field causes ripples and waves of movement throughout the mass and leaves a ghostly memory of their presence and their travelled paths. In both cases, different interactivities of individuals result in numerous dissimilar results, transforming their interplay into a unique piece of artwork. Designers and artists are no longer concerned with the final form of the project as much as the journey individuals are taken into, as participants experience animates and gives shape to the artwork.

Particularly, in case of experience design, the role of people attending is essential of design as emergent process. The designer cannot in effect predetermine the experience of those participating, as the final outcome is co-dependent on their subjective perception and behaviour. Hence, as designers collaborate with the people attending, the overall work-event evolves and emerges gradually into different results each time performed. Every time experienced and performed such live work different results emerge out of participants' experience. Although the frame is set for *'sequence[s] of events'* (Allen, 1997) to take place, different people adapt dissimilar behaviours, chose to interact differently, succeeding in multiple results.

Like in case of *generative art*, which is not a concrete art-movement or ideology, but rather a method of making art, emphasizing on the way art is made, and not on the content,

meanings or values the artwork conveys. Numerous results can also be produced out of a single creative process, alternatives of the same matrix or pattern. Each generative process results in endless variations initiated from the same idea and media, with even minor differentiations. Instead of beauty and appearance, designers are concerned about initiating events, evoking instability, unpredictability and change and invite participants to become creatively involved in personal and collective experiences.

The notions of change, transformation, and the unexpected, inhere in the design of experiences. Designers cannot predetermine individuals' experiences by designing them; they merely set the frame for them to unfold. Hence, the role of the designer, similar to the one of the architect, is to instigate interactivity, experiences and events, not to concentrate at the form of objects, products, and places. The media used, mainly digital, determine the design procedure as well as the final outcome, with their features and potentialities. The whole process may continue as long as the derivative products reach the creators' standards and criteria. Therefore, various outcomes may *emerge*, using the Deleuzian meaning of the term, i.e. continuous becoming. Digital phenomena simulate real ones, in the fact that under designed circumstances, they are not static, but always emerging, always changing, always becoming something new; expressing "the incessant movement of life, the always present, changing, becoming now" (Bergson, 1986 [1907]).

2.4.6 Event as constructive dynamic

Experience design is about setting the frame for experiences and events to emerge. Actually, the notions of work as event, design as event, and object-event are rooted back at information conceived as production of events (Picon, 2003) (Wigley, 1997). This concept in turn derives from Claude E. Shannon's *Mathematical Theory of Communication* (among other sources), stating that "the actual message is one *selected from a set* of possible messages" (1948). Recently, scholars from relevant fields have also approached this transition. In architecture, for example, Eisenman suggested in 1991 that architecture needs to be emancipated from the "static conditions of space and place, here and there" and "must now deal with the problem of the event" (2007). Design thinking has been detached long ago from the Cartesian and perspectival grids of the classical tradition, and now benefits from the opportunities of digital media in morphing, as well as setting the conditions for potential interactions and behaviour to occur. Design as open undetermined process is conceptualized and developed; design *of* and as *sequence of events*.

Experience design projects, probably involving objects, interfaces, services, environments and/or systems, also emerge in time out of human presence, participation and interaction within work-events. Concerning this particular nature of works, Deleuze in his book *The Fold: Leibniz and the Baroque,* introduces the notion of *objectile,* i.e. object that emerges in time and use and therefore entails continuity and evolution. This new object generated with digital media becomes an event, in Deleuze's words:

> "The new status of the object no longer refers its conditions to a spatial mould – in other words, to a relation of form-matter – but to a temporal modulation that implies as much the beginnings of a continuous variation of matter as a continuous development of form" (1995, p. 19).

For Carpo *objectile* is an entity with embedded functions and objects, in potentially multiple variations (of matter, form, and more) (2004). Additionally, the notions of *fold* and *object-event* express the idea of continual process rather than a materialized product; of progress and not necessarily of actual visual or tactile folds. The aggregate of these terms, like objectile, implies a sense of motion from *continual variation*, *perpetual development* and *form 'becoming'* (Eisenman, 2004, pp. 44-45). By extension, a design work that is also modulated in time, moulded out of human interaction and participation, can be named work-event.

Furthermore, the notion of *folding* entails synthesis, pliant complex of "compositional practices of weaving, folding, and joining" (Lynn, 2004, p. 10). In this sense, the function of an object-event resembles the way a flock is organized and behaves within the surrounding environment. Field conditions are opposed to conventional modes of composition and analogue methods of (re)production, according to which images are imprinted and respectively objects are moulded, maintaining their appearance only adjusted in various scales and qualities. Conversely, designing in digital worlds involves the substitution of material elements by ciphers and virtual links, interconnected within hierarchies that configure and control the overall shape and behaviour. Each part is interrelated to the whole, which in turn is not fixed, but rather comprises "the cumulative result of localized behaviour patterns" (Allen, 2000, p. 158). Flock is a field phenomenon, extended in three-dimensional space, embedded with a kind of behaviour apt to relevant configurations. The entire system is shaped out of multiple local conditions that co-evolve. Possible mutations caused from the environment affect the rules and conditions not only locally, but to every extent of the flock, and respectively the system responds through fluid adjustment. According to Allen:

> "A field condition would be any formal or spatial matrix capable of unifying diverse elements while respecting the identity of each. Field configurations are loosely bounded aggregates characterized by porosity and local interconnectivity. The internal regulations of the parts are decisive; overall shape and extent are highly fluid. Field conditions are bottom-up phenomena: defined not by overarching geometrical schemas but by intricate local connections. Form matters, but not so much the form of things as the forms between things" (1997, pp. 24-31).

The notion of folding inherent in object-event entails certain characteristics: *heterogeneity* and *intricacy*. Concerning the first, the object-event as a whole continuous system, involves the incorporation of disparate elements. For Deleuze, the *fold* is a synthesis of different segments and planes merged in unremitting lines and volumes (1995, p. 9), whereas for Lynn the integration of dissimilarities is the very manifestation of fold (2004). Nonetheless, this otherness is not negated in order for a unified pattern to occur and sustain; different identities are maintained within the network of disparate elements and joints. Furthermore, *intricacy* involves that there is actually no sense of scale. In case of micro-scale and macro-scale of components, structure, form and characteristics are identical and interwoven. This notion of intricacy and compositional complexity concerns the combination of incongruent elements into continuity; in Lynn's words "the becoming whole of components that retain their status as pieces in a larger composition" (2004). He also

states that intricacy involves a variation of aspects that is not diminishable to the structure of the whole[27]. Therefore, an object-event is an organic whole consisted of different elements incorporated together in a complexity where each part conserves its features and functionality and respectively collaborated with the others, independently of the scale of observation.

In case of work-events emphasis is placed on the joints and conditions that determine the behaviour of component elements. The overall form consists of densifications and dilutions, points of bends and cavities, preserving at the same time the identity of each interconnected element. The core of this synthesis is based on local variations and micro-changes. A system is animated in this way. A set of dynamic behaviours and formations is set in motion, which derives from and is modified by self-organization and self-motivated members, causing unforeseen events. Therefore, "the joint is not an occasion to articulate the intersection of two materials" (Allen, 1997). It is rather the *locus,* the dynamic node that links together particular models/elements, pieces of information and forces into a balanced whole, conditioning its form and behaviour in a particular environment. These joints bind together energies, basically within the structure of the system, but they also control its integration and interactivity within a particular physical or virtual environment.

According to a holistic approach designers are not concerned only with physical forces and natural laws (gravity, decay, etc.) that mould objects and systems; they also consider social and cultural schemes that influence their preservation and behaviour (Lynn, 2004). Therefore, in the digital image the surrounding space, even blank, is not empty. Information regarded the background must be as densely coded as the object/event included in order for their co-existence to evolve. Consequently, opposed to classical composition standard of differentiating *'figure and ground'*, or even the interplay between *'figure against figure'*, contemporary design thinking concentrates on *'field-to-field relation'*. This shift in design concept and practice from *object to field* is parallel to the shift from *analogue to digital* field. Space, like form, is also restructured to include the philosophies of Deleuze on the definition of space and matter. The new space is "alive, activated, inter-activated, *trans-activated*. Space is no longer a 'mute vacuum' but an 'intellectual and vocal plenum'" (Novak, 2001, p. 248). The notions of space, culture and design change respectively.

Moreover, *kerning* and *culvilinearity* are two additional characteristics related to the notion of folding in the synthesis of spatial entities in mixed-reality worlds (Lynn, 2004). Regarding the first, people are able to meet and interact beyond physical restrictions in space and time, in actually very high speeds of transfer and communication. In case for example of the Internet, distant areas and moments, disparate units of time and space are jointed together, offering the opportunity to navigate detached pieces of information, connected together in non-linear narrations. The sense of contiguity (in space) or linearity

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[27] Additionally, "detail need not be the reduction or concentration of architectural design into a discrete moment. In an intricate network, there are no details per se. Detail is everywhere, ubiquitously distributed and continuously variegated in collaboration with formal and spatial effects. [...] A multi-faceted approach towards detail, structure and form, relying on slippages between complex interconnectedness and singularity, between homogeneity at a distance and near formal incoherence in detail, between disparate interacting systems and monolithic wholes, and finally between mechanical components and voluptuous organic surfaces, is all part and parcel of the shift from whole number and fractional dimensions to formal and material sensibilities of the infinitesimal [...] The drift from monolithic objects to infinitesimally scaled components" (Lynn, 2004).

(in time) is replaced by interconnectedness. Besides, the notion of folding is developed within a geometry that surpasses the Euclidean norms and becomes pliable, meaning that form and shape is generated in an infinite sequence of folds, changing in time. Hence the space of folding is comprised of curved or curvilinear surfaces. A trend towards curvilinearity has been remarked that succeeds the former trend towards angularity; a reorientation from the angular to the curvilinear, from 'parataxis to syntax' for Carpo, also stating that "curvilinear folds were and still are often seen as the archetypal and foundational figure of architecture in the age of digital pliancy" (2004). Geometry and mathematics in conjunction with architecture are moving away from conception of void and matter in a Euclidean sense, and moving towards the concept of space as something supple and flexible.

In the realms of art and design, event as creative dynamic evolves in space and time. In 2009, GaiaNova and OMA International were commissioned by the Illuminating York Festival to produce the *Wall of Light* (figure 19); an open source live project of digital painting and animation performances. Five international artists and animators were invited to create visual synthesis that illuminated the ruins of Multangular Tower in York. In addition, people attending the event were also welcome to use a very simple set of controls to create their own projected artworks, lessening the distance between them and the artists. Besides, in *Night Lights* (figure 20) YesYesNo managed to transform the Auckland Ferry Building into an interactive playground. By using 3 different types of interaction (body interaction on two stages, hand interaction above a light table, and phone interaction with the tracking of waving phones) the creative team envisioned to turns viewers into performers, projecting their shadows and movements on the building. In this way, participants could interact with the project on three levels (whole body, just hands and through mobile phones) and create improvised visual kinesiology.

Rafael Lozano-Hemmer develops large-scale interactive installations in public space, applying new technologies and custom-made physical interfaces to provide "temporary anti-monuments". Among his recent projects, *Sandbox* (2010) (figure 21) is a large-scale interactive installation created for *Glow* Santa Monica. It consists of two spatial unities: an actual beach and a sandbox where people could play and interact with the sand. People walking on the beach where projected on the sandbox as tiny figures and people there could reach out to touch (visually if not physically) these small virtual ghosts. A camera detects their hand movements and projects them back to the over 8,000 square feet beach. This was accomplished using infrared surveillance equipment to film the people at the beach, while at the same time, digital cinema projectors depicted the actions of the people interacting with the sandbox. In this way people share a collective experience in three scales: "the tiny sandbox images, the real human scale and the monstrous scale of special effects" as described in Lozano-Hemmer's website. Moreover, as the images of those walking on the beach were projected on the sandbox and vice versa, all participants achieved to overcome the boundaries of their physical presence in the context of a specific place. People walking on the sand and people playing with the formers' representations in the sandbox are interconnected and interact with each other, while sharing the opportunity to intertwine their narrations and co-create their experiences.

For instance, Scott Sona Snibbe, a research artist and computer scientist, has focused on shadows as material for creative expression. In his project, *Make Like a Tree* (2006) (figure 22), as participants walk in front of a wall with a forest trees projected on it. Their

shadows are recorded and integrated on the same misty place, moving between tress in several levels of the foreground and background. Shadows in motion return randomly on the landscape, in various combinations among them, to fade out and disappear again. Moments in time are folded and experiences are associated, forming random narrations of this collective experience. According to Snibbe "my artistic vocabulary relies on subtle changes in timing that unfold as projections or mechanical objects reacting to viewers" (Bullivant, 2007, p. 69); information regarding the past is integrated in places of the present. In this potential place of art and design, the notion of time, like space, is also mutated, as our experience in imaginative virtual worlds overtakes the feasible. Our perception of time is altered to embrace feelings and concepts that surpass the present and embrace realms of time beyond the present, and our conscious; in Harvey's words "a beautiful object is to link time and eternity in such a way as to redeem us from time's tyranny" (Harvey, 1989).

Design as thought and practice comprise a systematic search for potential perspectives and new objectives. Creators envision and work for a better future world, so the sense of becoming is inherent in every design approach. Designers no longer endeavour to merely convey a concrete content to the public, but to stage the context for people to communicate and interact on occasion of a project, formed through a sequence of events, with unexpected results. The establishment of a new relationship between designers and participants is remarked. As Ascott states although contemporary artworks may seem "devoid of content and the artist to have anything to say" their actual content is "the modern means of communication, of feedback and viable interplay" (2007, p. 114). He further adds that the artist's role is to incorporate artistic expression and creative behaviour in everyday experience. Interactivity and participation is at the same time the creative medium and the common ground where art and design, the physical and the potential, materiality and information, designer and non-specialists meet.

2.5 Events and the Aristotelian Four Causes

In the context of this research, *enactive participation* is a critical axis of approaching experience design, performance and live art. As defined in previous chapter (1), *enactive participation* involves spectators' personal involvement in the course of the event, especially in corporeal level, turning them into embodied interfaces and co-creators of the event, along with practitioners involved (performers and designers among others). The affordances of mixed-reality technologies integrated in work-events, along with the development of design thought and practice to actually include people their work is addressed to as collaborators, are two essential factors that offer non-specialists the opportunity to get involved in enactive way and collaborate in the event. Consequently, enactive participation challenges traditional forms of scenario, form and materiality of the work-event (or simply event), as well as the participants' role, presence and interaction within the scene; aspects that become even more enhanced and complicated in case of immersive experiences in mixed-reality environments.

Comparing two characteristic paradigms of fixed/closed works - classic theatrical plays (a traditional art form) and Human-Computer Interaction (a past domain of design thought and practice) - with live events (organized in the frames of performance and design

practice), meaning open works concentrated on individuals' participation can offer an insight at the features and objectives of work-events. Theatrical plays and multimedia applications both share common ground with live art (as well as performance practice) and experience design projects, as addressed at individuals to be personally engaged. By participation I refer to people's attendance and interaction on the fly with the play, the agents (digital and physical) and the surroundings (scene, virtual environment, interfaces). In all cases, people's participation is necessitated for the purposes/goals of the event to be achieved. Every theatrical play (at least in its traditional form) and every live event are doomed to exist only when acted out repeatedly in front of an audience. Respectively, Human-Computer Interaction as concept and practice also necessitates users' personal involvement and physical activity to serve its purpose. Nonetheless, unlike traditional art forms, live art events and experience design projects have not been solely concentrated on fixed forms of artwork (like theatrical plays and objects) but at people's experiences and states, as well as social and cultural events. As live processes, live events are characterized by plasticity and openness to people's participation.

For this comparison I am borrowing a method from the ancient past of Greek philosophy, and particularly the *Four Causes* of Aristotle who in a causal investigation of the surrounding world analysed them in *Physics II 3* and *Metaphysics V 2*. Aristotelian *causes* express four subjects of change, four ways of explaining what is responsible for something else, four ways of explaining the changes by which something was created in a certain way. They are: *material cause, formal cause, efficient cause* and *final cause*, and were applied by Aristotle in every aspect of everyday life and artistic process. By extension, applying the four Aristotelian explanatory factors at the compared closed works (classic theatrical plays and Human-Computer Interaction) and open works (live events and performance practices) may enlighten their differences and elucidate the nature and form of the event.

Explicitly, the *material cause* refers to the substance as its name indicates, 'that out of which' something is made (created, formed). This cause implies potency towards a new determination, an action of an efficient source that will reach, result in, a new actualization. Matter is the principle of change, the real potency of every material thing to undergo an infinite amount of changes. The *material cause* denotes creation through change, and symbolizes mere potentiality, the potency of matter in any change, in limitless change; there is no definition for it. The *formal cause* concerns change as imposition of form on chaotic matter, and form connotes shape and configuration. The *formal cause* involves the essence, the look of things, and answers to 'what sort of thing it is and why', as well as 'why are things arranged in a certain way'. For Aristotle, the substantial form is the reason why something belongs to a particular species and/or category, and therefore has specific features. In extension, the notion of *form* can be extended to the way people behave and interact, how individuals and communities are organized to co-exist and cooperate, and what do members of the same group have in common. As matter is the principle of potentiality (of becoming another), form is the principle of actuality (of being something).

Following, the *efficient cause* encompasses the creator's (artist's, designer's, and more) idea - specifically involves the original conception and inspiration, along with the actual synthesis (design, direction, moulding, and so on) of form and material. Aristotle refers to *efficient cause* as 'the primary source of things' that pertains to the creator's mental vision and experience in directing a production, *not* the workers' experience and

craftsmanship. Lastly, the *final cause* stands for the reason why something is created, i.e. 'that for the sake of which' it reached a final state. For example, in case of a classic theatrical play *catharsis* is the main purpose. For experience design projects, a principle goal is to set the frame for satisfactory and enjoyable experiences to unfold, meaning to concentrate on people's needs and desires, in accordance with the project's character (educational, entertaining, etc.). Whilst the *material cause* and *formal cause* explain how something *is* – setting matters on constitution and function - the *efficient cause* and *final cause* explain how something *becomes* - how it unfolds as well why it is created.

Applying the Aristotelian *four causes* at theatrical plays, we notice that, initially, the *material cause* involves the actors' enactment of the script in front of an audience. The actors' discourse and kinesiology within the theatrical space animates the characters and the story unfolds. The *formal cause* refers to the form and plot of the play that structures the heroes' (inter)activity in time. Traditionally, the theatrical plot follows a linear narration including exposition, climax, and resolution. The final form of the theatrical play is predetermined, therefore comprises a close artwork, conceived and decided in advanced. Furthermore, the whole set of actors and practitioners involved (director, scenographer, sound manager, and more), along with their skills and media used, comprise the *efficient cause*. The principal goal is the direction of a live performance addressed at people with a standard closure. In the end, catharsis pertains to the *end cause*, i.e. the adventure, purification, problematization and sensitization over social and universal issues, and pleasure of the audience as identifies with the actors.

Accordingly, Brenda Laurel, in her book *Computers as Theatre*, applied the Aristotelian *four causes* to Human-Computer Interaction (1991). In brief, Laurel associated the *material cause* with users' interaction via mainly digital means (and lesser physical material) incorporated to incite Human-Computer Interaction. Primarily, people's interactivity emerges via different types of interfaces, involving (about 25 years ago) mainly text, symbols, animation, graphics, and sound. The *formal cause* was related to both the alternative scenarios given to users, while interacting and navigating within the content, as well as the form of the entire project. These aspects both mould the "representation of actions with agents that may be either human, computer-based, or a combination of both" (1991, p. 47). In this case, unlike the theatrical play, there is more than one ending, but similar to a theatrical play, the final result(s) is more or less organized and fixed. Users' actions (motivated by cognition, emotion, reason and intention) are tightly limited to given choices and hence only possible, predetermined scenarios are realized. Moreover, the *efficient cause* involves the designers, artists and practitioners who contribute to the creative process, as well as the media and tools used. Finally, the development team who aspires to accomplish certain scopes of the entire project (educative, informative, entertaining, etc.), forms the *end cause*, involving issues of usability and functionality that offer users' the opportunity to shape meaningful and pleasurable experiences.

By extension, a fresh perspective is required to link the nature and features of an event with Aristotle's causal investigation, and relate these contemporary (art and design) practices with the *Four Causes.* Initially, in case of an object-event (or work-event, or simply event) (Deleuze, 1995) (Carpo, 2004) (Eisenman, 2007), artists and designers organize adequate means and material to incite people's interaction and participation in the context of a particular scene. They set the general frame for personal and collective experiences to

unfold in time, at places where environmental aspects, objects, people, and technology are included. People's participation involves interacting not only with the surroundings but with other individuals and potentially with performers as well. Hence for the purpose of this thesis, individuals' *enactive* participation within a particular physical and/or mixed-reality environment comprises the *material cause* of events.

Furthermore, the *formal cause* of an event, meaning its form and scenario, differs from those of a traditional theatrical play and Human-Computer Interaction. Firstly, events are live processes, synthesis of experiences, interactivities and events, and therefore characterised by fluidity and variability. Live events are never stabilized during the design/making phase. As open artworks, live events are rather uniquely moulded each time performed, resulting in a different outcome. Secondly, unlike the linear narration of movies and theatrical plays, the plot of an event involves manifold stories realized simultaneously or sequentially. A work-event has a plot that does not unfold through episodes or instances of a single, linear narration, but rather through multiple stories/incidences that evolve either concurrently or within the same time period. In addition, alternative scenarios are organized and offered to the audience to discover and choose how the event unfolds. Above all, the ultimate challenge is when spectators are given the opportunity to behave beyond the expected directing lines, and improvise, opening the work to unpredicted spheres. Therefore, as there is no fixed predetermined final ending, catharsis is not necessitated too. There is rather a certain point when the whole event reaches completion, providing every time people with different experiences. In this case, the scenario meets no resolution, but an appropriate ending. Emphasis hence is put on the entire journey, on the actual experience, not on a particular destination; on the every-time-unique journey moulded out of people's enactive participation.

Contemporary concepts and strategies on art and design are extended to cover not merely objects, scenes and environments, but events, experiences and states as well. Designing live (art) events, as analysed earlier, resembles more as thought and practice to directing performance practices and live art events. Respectively, the *efficient cause* of events involves a synthesis (or *mise-en-scène* as later analyzed extensively in chapter 3) wherein individuals' experience and interaction emerge. In brief, designing for audience experience extends staging a play (like in case of the scenic arts: theatre, dance, film, and performance) to include the organization of events (happenings), i.e. (inter)activities, developed among the participants and the environment in physical, mental and emotional level. As events comprise sequences of events, experience design goes beyond the realms of theatre and Human-Computer Interaction to integrate 'figures of staging', meaning the arrangement of static and dynamic aspects in space. Lastly, concerning the *end cause*, both experience design and live art offer people opportunities of participation, communication and expression among individuals and practitioners via an artistic framework. Therefore, audience are offered the chance to have a voice, get emancipated from their inactive role and *participate by will and not merely by guidance*.

Designers, like directors and performers, set the context (space, activity, circumstances, content, etc.) wherein people are welcome to feel free to participate and intervene in events, not just be spectators of a story unfolding in front of their eyes. Usually people find difficult to let themselves go in an empty box, so proper scenery and motivation is required for participation to emerge. A frame is necessitated to embrace spontaneous

response in a balance between liberation and chaos. Experience design and live art may comprise a means to challenge norms and restrictions, to break the role of spectator into participant of the whole event, to create full (sensory, emotional and cognitive) immersion within mixed-reality worlds, to shock common perception, to break apart traditions of representation, and open up different kinds of meaningful and pleasurable engagement.

2.6 Basic keypoints of experience design

Concerning the key points of the second chapter, principally design is a creative and educational field where art, science and everyday life meet. People, designers and practitioners collaborate and co-create not merely products but whole systems and environments wherein events and experiences unfold. Designing experiences requires thorough study of the multiple aspects that impact individuals' life and behaviour. Hence, a holistic view is required to comprehend and envision the whole wherein mould their personal and collective experiences. Contemporary design strategies manage to combine the expertise of informatics with the knowledge of several scientific fields (like mathematics, physics and architecture) while rooted in cultural theory and social sciences. As a result, a wide spectrum of disciplines, perspectives and concepts are bonded to serve particular needs of contemporary life.

Additionally, culture is not an entirely unified context as heterogeneous sub-sets are in interrelation, influencing each other. Therefore, polyphony, diversity and variability are characteristic features of any cultural scheme. People collaborating together as ensemble mould and establish common, interwoven and constantly evolving values. The notions of culture, like experience and design, are not actually consistent frameworks or practices, with invariable features, doctrines and ideologies, as interactivity, communication, sharing, and evolution inhere within. Dialectic is about conversing through an anthropocentric perspective. And design is a dialectic process that develops ideas beyond different and conflicting values, in order to find solutions and overcome contradictions and different approaches.

Design is more than the production of a closed object/project, but rather an ongoing creative process involving both designers and participants. Artists are no longer carvers of the appearance of things, and individuals are no longer receivers and spectators; they both communicate and collaborate to generate events and experiences. In addition designers endeavour to study and comprehend people's actual needs and feelings by inviting them to participate during the design process, not only to interact with the final result. Experience design embraces a participatory and democratic perspective when designing with the people for the people.

Like every daily incident, every experience is characterized by a rate of relativity, as affected by numerous variable factors (personal, social, environmental, and cultural, inter alia). Nobody can predict the outcome. Designers actually suggest prospective strings of interaction in space and time, i.e. bundles of potentialities, and participants decide how their experiences unfold. Neither designers, nor participants can predetermine the final result, as things constantly evolve on the fly, but the former can be prepared and organize those factors and conditions that may deliver desirable actualizations. We design for

becoming; we propose an aggregate of potentialities to be actualized in space and time, and participants respond and interact respectively. The role of the designer and the participant are not as distinct and fixed as they used to be.

Meanwhile, the notion of experience has a twofold import, as being both noun and verb and expresses a notion of evolution. As a verb, *experiencing* involves a present ongoing situation, something that is developing right now, and expresses a sense of becoming. As experiencing is evolving right now, it cannot be described, nor communicated, therefore it is non-transferable to anyone. On the other hand, *an experience* as noun indicates a static entity, an organized event, a complete narrative with beginning, body and ending, which humans communicate, describe to each other and/or design, meaning organize for others. An experience is space-situated and time-related. Every potentiality has already been (or may be) transformed (literally or metaphorically) into specific events distant from the present condition, and therefore it pertains to the sense of being. Similarly, design also has a twofold meaning, used both as verb and noun. A design, like an experience, denotes a complete process, a concept that belongs to the past, the future or resides in the realms of imagination. In contrast, designing underlines the evolution of a situation, a creative procedure, the course of an event. Design as noun, refers to the artefacts that derive from a deliberate creative process; the result of a creative procedure, involving products, processes, events and environments (sense of being). Alternatively, design as verb reflects the creative procedure itself, the opening of all potentialities, in order to organize the demarcation of space, and pertains to the sense of becoming; on open process that has not reached completion yet.

Contemporary design strategies strive to create meaningful relationships between people, products, services and environments, aiming at enhancing and augmenting our communication and interaction. Experience design focuses on staging experiences for people to participate enactively, within particular social, cultural schemes, and involves the creation of products, processes, services, events, environments, and systems. Experience design practitioners are shapers of behaviour by defining the structure, context and content of interplay among humans and products or services. This particular field (like interaction design, user-centred design and user experience design) is mainly centred on peoples' behaviour and overall experience, while interacting with design results. Designing interactivities and experiences entails planning of meaningful results that excite people mentally, emotionally and physically.

Mixed-reality environments set the spatial and temporal frame for events and actions to occur; potential fields beyond the limitations of the physical environment, where participants and creators may meet, communicate and co-create their experiences. Digital technologies set the frame for people's enactive participation in collective experiences. Digital media provide designers with the opportunity to control physical conditions and forces that result in certain transformations and let form emerge beyond preconceived shapes and capacities. Design results comprise amalgamations of matter and information, capable of interacting with the surrounding environment and adjusting themselves to current conditions. Form is conceived and designed as procedural scheme that emerges in time out of numerous variations and results. Hence, design is regarded an open-ended process, creating forms capable of continuous variation; forms that develop in time. Hence, design is conceived and practiced as process sensible and interwoven by personalities,

interactivity, experience, and culture practice within place (physical and virtual environments) and time.

Art and design are conceptualized and organized as events. Experience design is about setting the frame for experiences and events to emerge. Since information is conceived as a production of events, the notions of artwork, design, and object-event are relatively considered as events. More recently, scholars from relevant fields have also approached this transition. Design thinking has been detached long ago from the Cartesian and perspectival grids of the classical tradition, and now benefits from the opportunities of the digital media in morphing, as well as setting the conditions for potential interactions and behaviour to occur. Design as open, undetermined process is conceptualized and developed; design as *sequence of events*.

Finally, design strategies, in accordance with contemporary tendencies in art, involve the liberation of the process and the final result from the static physical features of materiality. Instead, the design outcome is conceptualized and created to emerge while experienced by people on the fly; its procedural character is conceived to be interwoven by individuals. As emphasis is put on transformation and change itself, form and shape is of less significance. Abstraction is regarded a principal feature of contemporary design and more dynamic patterns of communication and expression have been generated, exploiting interactivity as medium. In terms of designing abstract notions, like interactivity and experience, the design result is not concrete but rather flexible, ungraspable, and phenomenal. Therefore, a general shift has been stated from materiality to abstraction, utilizing interactivity among people objects and environments as the medium to interweave meaningful and satisfactory experiences.

3. Design & performance: stage for experiencing

3.1 Introduction

In the first chapter, the core of this thesis is approached, suggesting live events as method of presenting and safeguarding intangible culture, with emphasis placed at audience participation and collaboration. Experience design and live art are studied together as fields that organize live events from different perspectives, involving possibly mixed-reality technologies and audience enactive participation, meaning beyond the boundaries of spectatorship. For the context of this thesis live art is the contemporary context, while performance method and studies comprise the established method and theoretical base for art live events to emerge and audiences to engage as participants. Following, the second chapter concentrated on design in a broader sense, and experience design in particular, as dialectic participatory process art, design, and science meet and people participation is incited to contribute and evaluate the design product during the creative stages.

The following third chapter explores the common ground two seemingly distant fields share: experience design and performance art (and studies). These two contemporary creative disciplines share common perspectives on organizing people's interactivities and live events with artistic content, in physical and mixed-reality environments. In the first part, performance as artistic practice is analyzed among relevant artistic forms, on the borderline between everyday life and artistic experience, with reference to: 1) human encounter and interactivity within cultural-social framework; 2) the integration of digitally-enhanced elements and environments; 3) the contribution of performance studies (and especially the performative turn) in the study of human experience and interactivity; 4) finally, the influence of poststructuralism and posthumanism in conceptualizing human presence and interaction within technologically advanced systems. The second part of the third chapter focuses on mixed-reality technologies as essential factor of performance practice. Embedded technologies offer an immersion in a liminal (third) place, i.e. a gateway to potential worlds, where boundaries are deliberately blurred between artistic and scientific disciplines; performers and audience; the virtual, the imagined and physical; between daily routine and art events. Lastly, the third part involves the common perspectives experience design and performance studies share in organizing live events, involving concepts, methods and tools that accrue from the field of performance and theatre and are applied in the design thought and practice, the notion of *mise-en-scène*, and particularly the opportunity given to the audience to become enactive participants of the whole event.

3.2 Performance practice and audience participation

3.2.1 Performance events and audience participation

Performance, and performance art in particular, are art forms centred at the performer's body, in contrast to past, more traditional, art forms focusing on materiality and objects as artefacts. Similar to performance, experience design is more about evoking meaningful experiences, and puts emphasis at interactions and relationships evoked though the design outcome, than adapting object-oriented strategies. Additionally, performance also eludes explicit definition, like experience design, as evades classification and unambiguous segregation from relevant art fields. In Bretano's words the term *performance* was coined to describe the "empirical time-based and process-oriented work of conceptual 'body'" (Brentano, 1994, pp. 31-32). Since time, space, and audience are essential elements, performance pertains to the intangible forms of culture, necessitating a type of live aesthetic experience, a live art event, to be presented, documented and preserved. To safeguard such a time-related creative process is a challenging, constant endeavour with equivocal results. Scholars and researchers can access and manage only parts or arbitrary registered archives of past performances, therefore the possibility of sedulous recording is nothing but limited.

As a verb, *to perform*, expresses both 'to do' and 'to act out', indicating its correlation with theatre. It is also though a complex term: whereas in the field of the arts implies to put on a show, a theatrical play, a dance, a musical concert, and extends to everyday life, with the intention "to show off, to go to the extremes, to underline an action for those who are watching", in the area of business and sports it involves "to do something up to a standard – to succeed, to excel" (Schechner, 2002, p. 22). Contemporary approaches on social studies, suggest any event, activity, item, space and behaviour may be examined 'as performance' (Schechner, 2002, p. 167). Performativity is considered to inherent most of individuals' interpersonal and social activities, from performing arts to politics and economics. Nevertheless, although human interactivity may be considered and studied 'as performance', not everything is meant or created to be a performance. For example, a simple action, like making dinner, is non-performance per se, unless a person is watching it as such. Therefore, no (inter)activity is considered as performance, unless somebody is attending it 'as performance'.

Performance comprises a corporal practice aspiring to convey meaningful aesthetic experiences, just like experience design. Amanda Coogan stresses the essential role of human body as vehicle and semantic material of performance and attempts an accomplished definition: performance is an artistic practice emphasizing at the live presence of artists who address time- and space-related bodily actions at an audience, offering them an evanescent artistic experience (Carlson, 2004, p. 68-73). Any type of performative art involves the presentation or re-actualization of symbolic systems through living bodies, as well as (physical and mixed-reality) mediating elements (McKenzie, 2005). The association of performance with other artistic forms has been compound, at least during the last century. In essence all the arts require a performance (Dufrenne, 1973) to be realized and conveyed to people and societies. However, 'performance art' as concept and artistic field remains

ambiguous enough, regarding its essence and the range of practices it entails. In a broader sense, performance is frequently and plainly associated with the act of performing a play, involving actors, a pre-designed stage, and an audience to be addressed at (Berghuis, 2006, p. 12). For Kaye, performance art as term:

> "[…] has referred not only to certain artist's presentation of innovative performances to audiences in galleries or theatre spaces, but to a wide range of inherently interdisciplinary practices which have expanded the notion of art into performance and challenged the idea of performance as something 'done by' a performer 'for' an audience. Performance Art may be 'done by' a spectator, it may be 'done' with the artist, or in the absence of the artist in accordance with an agreement (1994).

Performance art flourished out of the artistic movements of Futurism, Dadaism and Surrealism in the early 20th century, challenging the common perception on art (Goldberg, 1979). The theoretical base is already set by the Constructivist theories, as well as Roland Barthes, concerning of the tendency of the social value systems of the contemporary western world to create 'myths' (Barthes, 1957), Umberto Eco and his semantic separation of 'open' and 'closed' art works (Eco, 1962), and Guy Debord's *The Society of the Spectacle* (Debord, 1967). By that time new art forms needed to be discovered, beyond the established merchandizing system and exhibition strategies, to defy the conventional way art was produced and managed. Performance was a fresh vehicle to challenge the artist's social role, what is in essence an art work, what is art, and relevant critical issues raised by that time.

Performance art begun in the 1960s to describe any live artistic event that included poets, musicians, film makers inter alia, as well as visual artists. Among the earlier precedents are the Dadaists' live performances merging poetry with visual arts, the Black Mountain College (founded in the United States by Bauhaus instructors exiled by the Nazi Party) incorporating theatrical studies with the visual arts, and the Bauhaus including a theatre workshop to explore relationships between space, sound and light. Moreover, the composer John Cage and the choreographer Merce Cunningham are key figures of performance, sound art and dance, who worked in America and worldwide. Cage organized a library of incorporated environmental sounds to create musical compositions, whereas Cunningham experimented on dance and performance. A few characteristic paradigms of performance and performance art involve Joseph Beuys' *How to Explain Pictures to a Dead Hare* (1965), Hugo Ball, *Dada Performance* (1916); John Cage, *4'33''*; Allan Kaprow, *18 Happenings in Six Parts* (1959); Claes Oldenburg, *Happening* (1960) and *Store* (1961); Robert Morris with Carolee Schneeman, *Site* (1965); Carolee Schneeman, *Meat Joy* (1964); Nam June Paik, *T.V. Cello* (1966); Vito Acconci, *Undertone* (1971/3). By the 1970s, the definition of performance art is mellower: a live event, detached from theatre, encompassed other art forms (dance, music, song, video, etc.) that cannot be bought, sold or traded as commodity. Actually, performers aspire to take their art directly to public forum, eliminating the role of galleries, agents, brokers, tax accountants and any other aspect of capitalism.

Specifically, Allan Kaprow coined the term 'happenings' to describe his installation-performance *18 Happenings in 6 Parts*. He describes his art as 'lifelike', as close to daily life, underlying his concentration at everyday behaviour. Focusing on simple present activities,

Kaprow endeavours to merge artistic experience with the regular, iterative, ritualizing daily life. His *Seven Qualities of Happenings* have determined the features of contemporary performance art, describing an art interwoven with the processes of everyday life. Specifically, the line between art and life is fluid, even indistinct and the themes, materials, and actions of happenings are taken from anywhere but the arts. Kaprow suggests happenings should be performed only once and in several widely spaced locales; time, which follows closely on spatial considerations, should be variable and discontinuous; the traditional notion of audience is entirely eliminated; the composition/sequence of events is not rational or narrational, but based on associations among various parts, or by chance (Kaprow, 1966, pp. 88-98). Numerous scholars and artists have since converged towards this direction in the history of theatre and performance, contributing in breaking the boundaries, theoretically and practically, between artistic and everyday experience.

Moreover, Yves Klein influenced the course of contemporary art, as among the ancestors of conceptual art, minimal art, installation and performance art during the '60s and '70s. He conceptualized art as threshold, opening common perception to new horizons and perspectives. His work *Leap into the Void* (October 1960) (figure 23) expresses that everything is possible in arts; there are no limits in artistic inspiration and creativity. He was creative with the notion of immaterial, of art as non-object, as an endeavour to reach an intellectual, spiritual way of living. Klein associated painting with sculpture in live performances to emancipate artistic creation out of canvas. In his *Anthropométries* (1960) (figure 24), Klein was no longer a painter, but a conductor. He directed nude female models to cover themselves with paint and leave their traces on white paper, challenging conventional concepts on artistic creation. Their bodies are used as living brushes, left blue or even burnt imprints, while Klein is conducting[28] the whole live event. Meanwhile, the audience is dressed in formal evening wear and Klein's *The Monotone Symphony* (1949) is played live. He had already discarded his brush and painted with rollers, in his words: "hoping to create a distance between me and my canvases", so with his live brushes "[I] could continue to maintain a precise distance from my creation and still dominate its execution" (Blocker, 2004, p. 65). His *Anthropométries* is on the verge when a traditional artist becomes a performer.

On the other hand, performance and theatre share an extensive common ground as 'the arts of showing', since at least for Hilton theatre "involves the synthesis of symbolic and iconic systems (words and moving pictures) in a single indivisible performed event" (1991). Nevertheless, it is crucial to stress performance defines itself as the antithesis of theatre. Under a traditional perspective, theatres are "places of/for seeing and saying" (Schechner, 2003, p. 336). Etymologically the Greek term *ϑέατρο* (pronounced: theatro) derives from *ϑέα* (pronounced: thea) and involves a sight, viewing of something. But any activity related to *seeing* entails a short of distance, and additionally "engenders focus or differentiation; encourages analysis or breaking apart into logical strings; privileges meaning, theme, narration" (Schechner, 2003, p. 333). Within the Eastern performance culture, everybody enjoys the same space; everybody is actively involved in the enactment. Performance space

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[28] See http://www.youtube.com/watch?v=gGLv2GIR9sQ&feature=related, http://www.youtube.com/watch?v=h50IzHh4T_g, and http://www.youtube.com/watch?v=Yr2htuMuQNo&feature=related.

and experience space juxtapose. Secondly, whereas traditional theatrical plays follow an Aristotelian structure, meaning a distinct succession of beginning-middle-ending, performance acts usually unfold in a non-linear way. A third differentiation raises identity issues: in case of theatre, one or more characters are addressed at the audience, acting out particular roles, whereas in performance plays an actual person, the artist, rather than a character, is exposed to the people (Schechner, 2002, p. 158). Nevertheless, the above comparison is made between traditional forms and conceptions on theatre and performance plays and not any contemporary and experimental hybrid art forms. For instance, Toporišič describes a contemporary tendency towards theatre as performance, in which "the *textual model* of the theatre, has been replaced by the *performative model*, in which both the text and the referential function have lost their primacy" (2011, p. 22). Contemporary forms of theatre and performance are mutually influenced by current developments in the broader realms of performing arts and the affordances of technological achievements.

In both performance and theatre practice, spectators and performers are temporarily members of a community subjectively translating and participating within a live artistic event. As audience is given the opportunity to gain power and influence the process of the event, their individuality is crucial for meaningful and substantial experiences to emerge, and unpredictable events to unfold. Rancière's *spectators* needs to be *emancipated* from any mode of passivity and associate present with past and potential experiences. They have to subjectively interpret what they witness and accordingly create their own response / story / experience out of it; in his words emancipation means:

> "[…] the blurring of the opposition between that who look and they who act, they who are individuals and they who are members of a collective body" (Rancière, 2007).

Rancière's *emancipated spectator* challenges all oppositions "looking/knowing, looking/acting, appearance/reality, activity/passivity", and states that emancipation "begins when we dismiss the opposition between looking and acting" (Rancière, 2007). Hence, viewing is thus not associated with passivity; it is rather "simultaneously distant and active" (Toporišič, 2011, pp. 18-19). Viewing is not detached from acting; receiving, interpreting, and participating are qualities of the enactive, creative participant. It is essential to stress that emancipated spectators retain their role in the audience, and by no means are turned into performers. Participants are protagonists of their own story. Performers and spectators become collaborators contributing from different positions and backgrounds to co-create the live event.

Humans always need to incite social interaction and participation to achieve a higher level of perception, and the arts, especially the scenic ones, have been an adequate vehicle since the first cultural formations. Indicatively, ancient Greeks' democratic practices required civilians' public participation in meetings and discussions on social and cultural issues, such as the *agora (αγορά του Δήμου).* Every free citizen had the right and duty to be personally involved in the management and formation of the political and social condition of the city. Similarly, the ancient Greek theatre was a tool of communication, contemplation, and promotion of thought, aiming to culture development in a collective level. Theatrical performances were common experiences shared in public places, inciting the public to share their subjective thoughts and feelings regarding issues about cultural and social life (like

ethics, values, virtues, etc.) Antonin Artaud's *The Theatre and its Double* was originally published in 1938, and in his *Theatre of Cruelty* direct proximity and interaction is suggested between performer, stage and audience (Artaud, 1958). Additionally, the Bauhaus (Dessau, around the 1920s-1930s) was the first institution to envision and organize experiments on the role of stage and audience in the performance play, inciting the latter to become active participants, by introducing elements of Variety Theatre and circus. In the more recent past, Grotowski contributed to theatre becoming more than entertainment; rather a pathway to understanding. Under his viewpoint, the distance between actors and audience is erased, both spatially and semantically: he introduced *interactive performances*, getting the audience to join in with actors, instead of passively receiving pieces of information. Additionally, he made further along experimentations in stage/audience layout and positioning: he removed the stage completely and incorporated the audience as creative component in the play production. Grotowski envisioned a theatre addressed at participants rather than audiences.

Under a performative perspective, audience participants gain an enhanced role in the performance act, as they enter the space of the scene (stage) rather than staying aside separated from the performers. In this way spectators are turned into enactive participants. This transition a new relationship is developed among audience and performers; the audience is no longer consisted of viewers, but people who contribute in course of the live event shaping strings of interaction and collective experience. We have already analysed in the beginning of this chapter, how artistic movements in the past (like dada and futurism), encompassed time and chance in their artworks, in part by embracing audience participation, especially in case of performance acts. In addition, artistic personages (for example Duchamp and Brecht among others) contributed to challenge the passive role of the audience and endeavoured to transform them into creative participants. Specifically, Boal's *forum theatre* defies traditional theatre forms, structures, techniques, methods and processes: everything is open to question and transformation transcending typical forms of performers-participants interaction. After initial improvisation is completed of a particular scene, people attending stand in for the actor and suggest alternative improvisations of the kinesiological monologue they just saw. In the end, the actor makes his/her choice and improvises the concept that inspires him/her the most (Boal, 1995, p. 184). In Boal's view, this theatrical practice aspires to turn audience into enactive participants, not somebody the theatre has imposed finished visions of the world to.

Artists applied performance to challenge audience perception and incite their interference in course of this type of live artwork. By extension, spectators open up their horizons participating as collaborators, potentially co-creators, of a collective aesthetic experience. For enactive participation to emerge, additional forms of interaction are needed to emerge between stage and hall, stage and spectators, establishing a co-presence among performers and spectators that abolishes the dichotomy "between observer and observed [...] materiality and referentiality, between signifier and signified, between affect and meaning" (Toporišič, 2011, p. 22). Respectively, Brecht and Artaud expressed two (only superficailly) diverse conceptions regarding how "intense and cordial participation" (Lehmann H. , 2006, p. 120) could spring among the various (static and mobile - human, intelligent and material) parts of *mise-en-scène*. On one hand, Brecht supported through his epic theatre spectator should become more distant from the stage action, whereas Artaud's

Theatre of Cruelty evokes audience to enter the events that occur stage. In first case, the spectators are deliberated from emotional and intellectual passivity of identifying with the actors/performers and contemplate on what actually unfolds in front of their eyes. Brecht emphasizes on people reflecting on the play and making their personal interpretations on the event, by alienation effect. Complementarily and not conversely, Artaud focuses on 'vital embodiment', introducing the audience's physical encounter as well. Being part of a play coincides with being a part of a social practice, a collective experience that people exchange thoughts and feelings through their embodied self. Both Brecht and Artaud are concerned with the *emancipated spectator* (Rancière, 2007); Brecht by inciting audience to first become aware of the social situation and then react accordingly, and Artaud by instigating audiences to become participants in the core of action. Therefore, the spectator is considered collaborator of the performer; not an ignorant waiting to receive certain pieces of information and knowledge, but enactive participant conveying and exchanging knowledge with everyone present in a particular live event.

By introducing audience to happenings and events, artists' perception concerning live mutually-created experiences is redefined. By extension audience perception and expectations have been altered as they become personally engaged with the process of creating lifelike, emerging artworks. Contemporary examples also defied strict conventional academic dictates and incorporated different embodiments and perspectives on space, time, presence and interaction, surpassing the boundaries between art and daily life with the integration of mixed-reality technologies. Performance art commenced in the late 60s and emerged in the intersection between art, theatre and everyday experience; a subversive artistic practice with pointed topics applied in cultural and social level. Since then, the notions of performance and performativity are elastic, embracing a variety of meanings and applications, according to the academic field or artistic perspective approached from.

3.2.2 Performance studies & the performative turn

"An act hath three branches – it is to do, to act, to perform"
(Hamlet, 5, 1:11)

Performance studies concentrates on human performance and interactivity, in social and artistic contexts. Under the perspective of performance, scholars concentrate on the way people adapt and respond to certain situations. Performance studies is a interdisciplinary field constantly regenerated and redefined, seeking to raise issues like: the body as a site of knowledge, the performance of everyday life, ritual as performance, as well as the relation of theatre, dance, and performance art to sciences (neuroscience, ecology, and more) and everyday experience. Performance is an established applied method employed to study 'multiple literacies' on 'bodies, musics and visual cultures' (Shepherd & Wallis, 2004, p. 105). Respectively, design theory and practice also turn to performance and performance studies, as well as the broader scheme of drama and theatre, to gain new insight and study users' behaviour when engaged with current technologies. As academic discipline, performance studies was initiated in the 1980's and merges together knowledge on performance as art, cultural practice and everyday routine from a wide spectrum of scientific and artistic domains - like theatre, literature, visual arts, anthropology, sociology,

linguistics, theatre, anthropology, philosophy, visual art, artificial intelligence and cultural studies. As Pearson and Shank recapitulate:

> "I work in the slash between performance/everyday, in the space between performer and spectator, in the distinction between ability and disability, in the small print of the transactional conventions, in the brackets that mark off a strip of behaviour as performance" (2001, p. 15).

Both performance studies and performance art lack compound definition, similar to experience design, as constantly surpass established boundaries to include personal activities and socio-cultural practices (Schechner, 1998, p. 360). Theatre is the place as well as the condition human behaviour and activity spontaneously or deliberately emerges. Performance covers a wide spectrum ranging from artistic expression to common patterns of behaviour, from planned social and cultural events to daily interactions, involving: for example, ceremonial occasions, marathon races, parades, public celebrations, sporting contests, carnivals, graduation parties, and more. In other words, performance is about social events wherein "culture complexly enunciates itself" (Diamond, 1996, p. 6). Rancière also refers to "community as a performing body instead of an apparatus of forms and rules" (2007, p. 274). Besides, Schechner suggested approaching the broad sense of performance as human activity and expression encompassing seven interwoven objectives: to entertain; to create beauty; to make or change identity; to make or foster community; to heal; to teach, persuade or convince, and finally, to deal with the divine and the demonic (2002, p. 46). He further claims performance reflects the course of life and is inherently "intergenric, interdisciplinary, intercultural – and therefore inherently unstable" (2002, p. 22). For a significant amount of scholars, performance remains of vague definition comprising both a "doing and a thing done" (Diamond, 1996, p. 1), meaning an action / behaviour (becoming) and a complete event; on the boundaries between artistic and cultural practice (Finnegan, 1992, pp. 91-111); a liminal or 'in between' space (Leach, 1976) of change; a means of communication and interplay (Pearson & Shanks, 2001, p. 14); even a 'third space of enunciation' (Bhabha, 2004, p. 56).

Performances occur in a wide spectrum of social situations; from everyday life, sports and entertainment, to business, technology, ritual, and the art (figure 25). In the context of a world that appears *as a performance to participate in* (Schechner, 2002, p. 19), performance studies and social sciences share common ground, including intentional and improvised performances of everyday life. By extension, the sense of *performative* also involves actions and experiences not considered performing arts, for example dress-up, or certain kinds of writing or speaking. As Butler further explains, *performativity* exceeds performance as the former "a reiteration of norms which proceed, constrain, and exceed the performer" (1993, p. 234). Emphasis is put at human behaviour, meaning "a given set of individuals [who] are in one another's continuous presence" and interactions in the context of a certain physical, social and cultural environment (Goffman, 1990, p. 26). Carlson supports everyday routines are interwoven out of personal and collective, iterative and socially admissible patterns of behaviour, considering them as *performances*, defined as activities "carried out with a consciousness of itself" (1996, p. 5). In an artistic-theatrical context, performance involves "all the activity of a given participant on a given occasion which serves to influence in any way any of the other participants", referring to those who contribute to performances, i.e.

performers, audience and co-participants (Goffman, 1990, pp. 26-27). Consequently, the notion of performance is wide enough to exceed given borders and fields of study; as Carlson refers to:

> "[...] the futility of seeking some overarching semantic field to cover such seemingly disparate usages as the performance of an actor, or a schoolchild, of an automobile" (1996, pp. 4-5).

Performance has been of critical scientific and artistic concern since the middle of the 20th century. One of the pioneers is Austin, and his famous lecture *How to Do Things with Words* in 1962*,* who supported that "to *say* something is to *do* something" (Austin, 2004), expressing that certain utterances perform acts. As Schechner explains many years later "promises, bets, curses, contracts, and judgements do not describe or represent actions: they are actions" (2002, p. 123). Nevertheless, in the beginning of the 20th century a major dehiscence between text and performance took place, appending performance against language, i.e. literature and textuality. According to Walker, this split had been occurring at least since the Plato's time, but at that time an epistemological topple resulted in the segregation of the 'dramatic' from the 'theatrical', i.e. of literal texts from performance, and peaked in the institutionalization of separate academic disciplines, as the former was considered to be a 'more scientific' type of knowledge (Walker, 2003, p. 150). Since then, two reverse models are developed: the first *culture-as-text* is supported by scholars, like the structuralists, based upon an anti-performative prepossession. The second standpoint was an endeavour to amend this split. The work of Futurism, Dada, Surrealism, Absurdism, Artaudian cruelty, Happenings, Body Art, Fluxus, political street theatre, feminist performance art, and the experimental 'theatre of images', organize art works as opposition to the status quo. By associating words with repressed bodies artists gave them voice, and stressed the limitations of language as means of expression and communication. For example, Artaud's work is a surprise attack to the audience senses in order to help them realise their torpidity by the comforts of modern life style. A turn to performance indicates an emphasis on 'actors acting upon the world' in a need to retrieve a subjective form agency perceives, acts and responds within the world in a probably organized, although undetermined way.

Under this perspective, meaning is not constituted solely through logic associations, but rather within the body, as "emotional or 'experiential' knowledge" (Walker, 2003, p. 160). Also, Damasio's research is oriented towards proving cognition, emotion and embodiment as inseparable states, although diverse aspects of consciousness, each predicating the other two to shape personal experience (1999). Besides, although language had ignored the corporeality of human communication, research on the physical body has long been included in cultural studies (Martin, 1990), expressing the common contemporary conception that meaning is not merely conceptualized, but lived, with our embodied self.

The performative turn applies this theatrical metaphor as heuristic principle to understand human behaviour and interactivity. Considering all human socio-cultural practices 'as performances', any activity is therefore considered and studied as public presentation of the self. Performance and its derivative performativity are introduced to social sciences and humanities around the 1990s as methodological approach, although rooted about half a century ago, in the fields of anthropology and philosophy of language.

The *performative turn* put emphasis at human practices in relation to their contexts, comprising a systemic approach of human experience, using representation in a contemporary, poststructuralist sense. Fischer-Lichte analyzes this shift in reconceptualising and redefining the relationship between subject and object, material and corporeal. Art as performance (work-event, objectile) is materialized during the artist's creative activity and the aesthetic experience of those participating in the event (Fischer-Lichte, 2004). The performative turn focuses attention and creativity on the physical, material aspect of a performance act. This shift perceives the actor's body as '*bodily-in-the-world*', rather than the '*semiotic body-of-the-text,* composed of signs' (Toporišič, 2011, p. 17) (my emphasis), since there is no author to guide the theatrical event, directly addressing at the audience body with the actor's body, the props and the stage (physical and mixed-reality) environment. Poststructuralism as philosophy contributed to disavow polarities, like signifier and signified, and thence deliberated meaning from the artefact, moulded out of the artists-performers and audiences aesthetic experience. Gade describes the performative turn as a shift from 'culture as text' towards 'culture as performance', underlining the emphasis on "the processual, interactive and transitoric aspect" (2005, p. 20). Since our mediatised culture and society have been turned into hyper-reality interwoven out of simulations and simulacra, as representations and reality have been merged into hybrid forms of experience, a reorientation of the artwork from object to event has been introduced the fields of art and design, considering audiences enactive participants and co-creators of the final outcome. The performative turn is a keystone in performance art and studies, since performative practices (like the author) no longer represent, or repeat; they are productions, processes, performativities.

Particularly, Schechner defines *performing* as 'showing doing', meaning pointing to, underlining, and displaying an action. He further describes *performance studies* as "explaining 'showing doing'", a discipline that concentrates on comprehending the world *of* performance and the world *as* performance (2002, p. 22). He regards performance studies a "response to an increasingly performative world", where more or less everything has gradually being converted into performances (Schechner, 2002, p. 4). According to Goffman's *Theory of Dramaturgy*, performance has been established a mode of social analysis that employs dramatic concepts (performances, props, backdrops, scenery scripts, scenarios etc.) to describe and understand everyday interaction (1990). Similar to Justice-Malloy's theatre as the one place civilians gather to look in upon their society in public (2000), performance studies focus on broadening our conception on performance, both as critical artistic (hence cultural) practice and means to comprehend social and cultural processes. Performance comprises a method of making meaning and certifying individual and cultural values (Stern & Henderson, 1993, p. 3). Performance studies are centred at the way performance creates meaning and comprise the means to study daily activities and aesthetic experiences.

Performance practice is not a condition that stands *in* a specific place and time, but emerges between certain people, objects, systems and/or interfaces, within a specific (physical and mixed-reality) environment. Pearson and Shanks, referring to Van Gennep and Leach, regard the performance space as the "'in between' space of contestation and change", and concurred with Schechner's position that "performances exist only as actions, interactions, and relationships" (2002, p. 24). Just like interactivity, performance emerges

within particular individuals, props and environments and cannot be predetermined, only designed; a directed communication mode among performers and participants, never entirely destined. Performance practices as event-works are unique, due to their interactivity and not their materiality (Schechner, 2002, p. 23). Particularly in mixed-reality environments, as we have analysed, materiality has transcended the features of matter to incorporate characteristics, behaviours and potentialities enabled by embedded digital technologies. Any kind of performance necessitates two communicative parts: people (or agents in general) who perform, and people who witness the performance, and above all emerges within those moments these parts share and co-mould collective experiences.

Performances refer to all human activity 'from ordinary gestures to macrodramas' (Schechner, 2003, p. 326), covering a wide spectrum from arts and rituals to ordinary life. They involve 'twice-behaved behaviours' or 'restored behaviours', meaning actions people are trained to perform in time, actions they 'practice and rehearse' (Schechner, 2002, p. 23). Both 'once-behaved' and everyday activities, Schechner supports, are based on familiar actions and patterns previously behaved, "built from known bits of behaviour rearranged and shaped in order to suit specific circumstances" (2002, p. 23). Performances, like everyday routines, are consisted of repetitive activities and fixed patterns of behaviour interwoven into endless combinations and variations. Therefore, directing a performance resembles designing an event or an experience as creating a never-the-same puzzle of organized though unpredictable strings of communication and interaction.

Additionally, performances are extensions of social interaction; meaning certain social rules, norms, conventions and behaviours are followed, inspired from realistic interpersonal interactions among civilians. Nonetheless, performance is also 'exteriorized fantasy' (Schechner, 2003, p. 266), and fantasy involves deliberated from any accepted or expected patterns, possibly interiorized behaviour blocked from expression. In the context of social and interpersonal interaction, individuals restrain their actions and reactions, by holding back their feelings and thoughts from being revealed. Performance also contributes to divulge actions and impulses material either blocked, or difficult to be expressed. Imagination, like dreaming, is an 'interior drama', merging individuals experience with their esoteric world. Accordingly, performance comprises a synthesis of actions, interactions, objects, space, time, music and text inspired by the performer's personal imagination and creativity, expressing emotions and behaviours that otherwise would remain interiorized and concealed from social interplay.

Performance studies surpass both artistic and scientific boundaries to study and theorize as academic discipline social and cultural inter-activities. Scholars have embraced performance as method to approach embodied interactions, and by extension corporeal experiences, within disciplines as disparate as philosophy, linguistics, cultural studies, sociology and psychology. Human performance in physical and MR environments is under study and especially the kinaesthetic effects of the interacting body, to enlighten people's motives, needs and behaviour in socio-cultural contexts. The performative turn, in particular, broadened scientists' and artists', as well as designers' perspective in developing an awareness regarding the relation between everyday actions and stage performances, and applying this knowledge in their work. In essence the language of performance is applied to describe and interpret certain (inter)activities and deepen in personal and collective experiences occurring in particular situations.

3.2.3 Poststructuralism, posthumanism and performance

"Meaning is always performed: always in rehearsal,
its finality forever differed, its actuality only provisional,
played out in specific circumstances"
(Schechner, 2002, p. 146).

Poststructuralism has offered a contemporary perspective on performativity merging everyday actions and artistic experiences into a united research field of human interactivity and expression. For poststructuralists, every human activity, utterance, and idea is performative. They put weight at process, like Nietzsche and Heraclitus in the past, and support everything is in flux, involving any definite, fixed perceptions and narratives, and go further stating that performance (and experience) is shaped by collective and personal criteria. Furthermore, meaning is not predetermined, rather performed. As process and outcome meaning emerges from the interaction among people and social-cultural systems, in physical and technologically-enhanced environments. A thorough analysis of poststructuralism is beyond the objectives of this research, I only focus at its contribution to performance and experience design thought and strategy.

Poststructuralism was initiated around the 1960s in France, as an opposition to structuralism, a method of analysis and philosophy (Ehrmann, 1966) for many, which discerns and studies "universal unconscious structures of language, mind, and culture" (Schechner, 2002, p. 142). Structuralists, like Saussure, Jakobson and Lévi-Strauss, analyzed cultural practices both 'diachronically' (over time) and 'synchronically' (as a single structural unit) to discover 'binary oppositions', meaning structures either respectively maintained in the course time or as a single structural unit. Correspondingly, poststructuralists criticized against every sense of stable structures, authorities and originals and rejected structuralism's viewpoint as simplified. Representing stories – narratives, events – is an ongoing performative process reflecting a subjective perspective on things and reality. Ever since, Grand Narratives have collapsed, every text (story, event, work) is considered a personal narrative, a subjective interpretation, shaped irrespectively of the author's (similarly artist's and designer's) objectives. As Peterson and Langellier state, "personal narratives are *not* objective representations of experiences or identities" but rather "a strategic practice in its occurrence" (Wood, 2004, p. 124). This is Derrida's sense of *deconstruction* implying that any sense of reality is created out of discourse. Every text is a palimpsest of impacts already enounced; every culture an amalgamation of performed processes and subjectivities.

Under a poststructuralist perspective, all social realities are moulded of encounters with the *other*, i.e. of relationships among members. Such interactivities evolve and change constantly, resulting in 'emergent behaviours' (Cham, 2011), in personal behaviours and cultural practices. Social life is performed, meaning it "can be understood as a *showing of a doing*" (Schechner, 2002, p. 167), involving not only artistic expressions, but all human codes and cultural expressions, according to Derrida's definition of 'writing'. Meaning is contingent and provisional, moulded in process through the multifarious perception and interaction of social members in particular personal and cultural circumstances. Poststructuralism eliminated any deterministic connection between signifier and signified, opening artworks to

numerous interpretations. Meaning is no longer fixed; it rather reflects personal and cultural perspectives, moulded of interrelations in flux, i.e. complexes of interactivities constantly variable. This notion is in accordance with Barthes' *Death of the Author,* as meaning is conceived by the 'reader', it is not embedded in the artefact itself. Respectively, all cultural artefacts are open to interpretation. For Barthes, the 'author' is an impersonal collector of people's views, incapable of infusing his personal vision into his work. The *Death of the Author* refers to the latter's inability to convey original, essential utterances (Barthes, 1977). At its core, poststructuralism concerns at deposing any form of hegemony and fixed system, disputing not the final outcome, but the way artworks (texts, designs, events, etc.) are made, performed, organized, deepening into and sabotaging the order of things. Every discourse is of equivalent weight. Accordingly, the term *performative* refers to every bodily activity, covering every aspect of everyday and artistic experience.

Scholars and philosophers have developed an ensemble of key concepts, under the umbrella of poststructuralism and deconstruction, concentrating in individuals' performativity, embracing their communication and interplay in socio-cultural schemes and mixed-reality conditions. Indicatively, Umberto Eco also evolved the concept of the *open work*. Borrowing his perspective from the linguistics, Eco's *open texts* allow manifold or mediated interpretation by the readers, promoting personal judgment, in opposition to the *closed texts* that direct the reader towards a single, predetermined comprehension. In addition, Saussure described spoken language as *performative system in use* (1983, p. 236). He argues that creating interpretative scheme is mainly a structural and relational process. Meaning of every discourse is determined by the context, i.e. by the words included and the way they are performed, meaning expressed. Although every word conveys meaning, forming specific arrays of words and enouncing them in a particular way, determines the overall sense. Additionally, Lyotard's designation of the 'performativity' of knowledge has been proven crucial in personal and social encounters within the digital (like in case of the internet) and the physical world. Lyotard defines performativity "the best possible input-output equation"[29], discerning 'investment knowledge' from 'payment knowledge', i.e. a periodical exchange of pieces of knowledge to enhance common perception through fruitful projects (1984, p. 46)[30]. Performativity in this sense emphasizes on personal and collective interpretation and creativity to create meaning, knowledge, art and eventually culture.

Since meaning is no longer fixed or imposed by different types of authorities, demarcated realities, classifications and hierarchies have collapsed, and multiple readings and perspectives are expressed, combined into personal narratives. For Schechner,

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[29] Specifically: "The production of proof, which is in principle only part of an argumentation process designed to win agreement from the addressees of scientific messages, thus falls under the control of another language game, in which the goal is no longer truth, but performativity – that is, the best possible input/output equation". The State and/or company must abandon the idealist and humanist narratives of legitimation in order to justify the new goal: in the discourse of today's financial backers of research, the only credible goal is power. Scientists, technicians, and instruments are purchased not to find truth, but to augment power".

[30] In his words: "It is not hard to visualize learning circulating along the same lines as money, instead of for its "educational" value or political (administrative, diplomatic, military) importance; the pertinent distinction would no longer be between knowledge and ignorance, but rather, as is the case with money, between "payment knowledge" and "investment knowledge" – in other words, between units of knowledge exchanged in a daily maintenance framework (the reconstitution of the work force, "survival") versus funds of knowledge dedicated to optimizing the performance of a project".

performativity "cover[s] a whole panoply of possibilities opened up by a world in which differences are collapsing, separating media from live events, originals from digital or biological clones, and performing onstage from performing in ordinary life" (2002, p. 123). Consequently, differentiations, like the self and the other, present and past, inner world and surrounding environment among others, are disputed, inciting new potentialities to the arts, and in particular to performance and design. As there is no single point of view, there is no single truth commonly accepted, nor a single author, a single interpretation, and therefore, a single artistic style. As Jencks mentions, the 'enjoyment of difference' involves "the past seen with irony or displacement", since humans now have the opportunity to experience 'successive worlds' once we feel overwhelmed of each one's qualities (1986, p. 56). Artists and designers juxtapose past and even contradictory styles and conceptions with present interpretations and viewpoints, contributing to "an art of shifting perspective, of double self-consciousness, of local and extended meaning" (Russell, 1980, p. 192)[31]. In addition, the 'presence of the past' is an essential argument of postmodern art; what Hassan named 'presentification' (Hutcheon, 1988, p. 20) and Jameson 'pastiche'[32]. This cultural recycling involves the reapplication and redefinition of forms and notions of the past. In this way, the actual organic nexus with past events and history is repealed. The past is integrated as content material into new artworks. Accordingly, numerous personal interpretations are encouraged, and the world created appears to be a representation, a differentiation of itself.

In case of performance act, as well as in common socio-cultural practices, one of the techniques of performativity is *simulation*, i.e. the difference between a copy and an original is erased. For Schechner, simulation is not 'the enactment of a fiction' but "the presence of an appearance... so perfect it is indistinguishable from an original" (2002, p. 134). Poststructuralism theories and simulation in particular are introduced in science, business and art to enhance scholars and professionals' comprehension on people's interactivity and behaviour. Baudrillard, in *Simulacra and Simulations,* states signs have become interchangeable in our technologically augmented world, wherein almost all communicative and semantic acts are dominated by digital media and hybrid forms of reality. He claims events no longer hold any particular sway on the subject nor have any identifiable context; they have the effect of producing widespread indifference, detachment and passivity in industrialized populations. And further suggests a constant stream of appearances and references without any direct consequences to viewers or readers could eventually make the appearance-object division indiscernible. This transition would result, ironically, in the 'disappearance' of mankind, at least in a virtual or holographic state composed solely of appearances. In this point, Schechner also explains from the field of performance studies the distinction between the real and the simulated has been not only negated, and also how performers, like designers, manage to interweave original elements with simulations (representations of reality) to create new outcomes, new originals, and by extension, new forms of communication and expression, as displayed following: *Real life → Pretending → Acting on stage → Simulating → Real life* (Schechner, 2002, p. 135). Simulation hence does

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[31] In parallel, postmodern design virtually reeks with the presence of the past, and it often pastes together a collage of stylistic imitations and functions not as style but as semiotic code. Whether or not this is a 'dead language', though, is certainly debatable" (Aronson, 2008, pp. 14-15).

[32] The latter is defined as 'the imitation of a peculiar or unique style, the wearing of a stylist mask, speech in a dead language' (Jameson, 1988, p. 16).

not produce a copy, imitation or pretence of a specific situation or activity; it is a process of re-creating another entity, or even reality, based on an existing one.

In parallel, posthumanism is a contemporary perspective of humanism developed in conformance with human experience in the frames of digital age. Posthuman philosophy has influenced the way we perceive and design our physical and potential world. Nonetheless, the notion of posthumanism is not still crystallized (Ranish & Sogner, 2014, pp. 7-27) (Clark, 2011, pp. 139-155) (Braidotti, 2013, pp. 163-169). It comprises an umbrella theory for various equivocal ideas never actually decidedly allocated[33]. The prefix *post-* does not indicate the replacement of the term that is combined with, in this case humanism, but expresses a new perspective and ideology regarding it (Burgin, 1996, p. 189). The posthuman philosophy aspires the transcendence of human abilities on account of technological advancement, while at the same time supports a balance between the virtual and the physical world, as alleges the significance of human connection with nature to be maintained.

In the frames of digital age, human awareness continuously challenges and surpasses physical boundaries, raising issues of identity, embodiment and interaction. And posthumanism endeavours to contribute to this transcendence under an anthropocentric viewpoint. In accordance, Nietzsche expressed through *Overman* in his masterpiece *Thus Spake Zarathustra* his aspiration of self-overcoming. Katherine Hayles also made an extensive research analyzing her viewpoint on posthumanism, body and experience. She notices how units of information dominate over corporeal formation. The physical body is considered a prosthesis people mould in conformance with technological achievements, and consciousness as epiphenomenon, resulting in the amalgamation of human embodied self and objectives with the simulated, the digital and the mechanical (Hayles, 1999, pp. 2-3). In the *Posthumanist Manifesto* the body is thorough viewed:

> "[…] as field of relational forces in motion and of reality as immanent embodied process of becoming which does not necessarily end up in defined forms or identities, but may unfold into endless amorphogenesis… performing this development away from humanism" (del Val & Sorgner, 2004-2010).

Human experience and interaction, in the context of digital age and culture, has already surpassed physical constraints of space and time. The role of digital media in enhancing the embodied self may be differently appraised, but scholars foresee the emergence of a so called *posthuman experience,* directly associated with technology. For example, as Joel Dinerstein opines:

> "The posthuman is the dream of bodies of pure potentiality – ones that do not decay but plug into networks of information and pleasure" (Dinerstein, 2006, p. 588), while for Gomoll the posthuman comprises "a hybrid figure

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[33] "The sciences multiply new definitions of humans without managing to displace the former ones, reduce them to any homogeneous one, or unify the. They add reality; they do not subtract it", in Latour, B., 1993. We Have Never Been Modern. C. Porter (trans.) Cambridge, Massachussets: Harvard University Press [p. 136-7].

characterized primarily by the merging of human and machine" (Gomoll, 2011, p. 3).

Posthumanism reckons human biological constraints inflict limitations to human conception, perception, and health condition, and hence to experience life. Digital media are introduced to extend human capacities and reach undiscovered, potential states of being. Hence, posthumanism offers an insight of how technology can creatively be applied "to change what we are - not to replace ourselves with something else, but to realize our potential to become something more than we currently are" (More, 1994). For Donna Haraway, the human is not predetermined, but rather *created* in an evolutionary process of technological and anthropological amalgamation (1991). Given this opportunity, matters of identity, gender, and race inter alia, are approached subjectively. This new creature, Haraway's cyborg, is both frightening and potentially liberating, as the attainability of superhuman (or posthuman) intelligence and ability is viewed both with awe and fear, like in case of Icarus, Frankenstein and the Tower of Babel. Hans Moravec, from the Robotics Institute at the Carnegie Mellon University, expresses his view towards posthuman experience and future: no remnant of human corporeality and intellect will be retained, as artificial intelligence will have penetrated our cognition, and human awareness will be allocated to multiple places and impulses worldwide and synchronously, to the extent that such segregation cannot even be characterized as 'out-of-body experience' as embodiment will be of a totally different synthesis (Moravec, 1998, p. 87).

Posthuman experience is intimately intertwined with technologies, altering our perception and interaction within the world. Du Preez argues that "being is distilled into mere information (data, code, ones and zeroes)", while the human body becomes "a mere coincidence in the evolutionary trajectory of the superior mind" (2010). In addition, Hayles states posthumanism comprise a shift from 'embodied reality to abstract information' by "privileging the abstract as the real and downplaying the importance of material instantiation" (1999, pp. 12-13). Furthermore, posthuman aesthetics is reflected on artistic creation, like in case of the photographer Oleg Dou (Oleg Duryagin). He digitally manipulates photographs of people in white background, and creates an almost classless, sexless and raceless universal face of the future. As he stated in CubeMe.com, his subjects "lack individuality: the eyebrows and the eyelashes are removed, the skin is smoothed." His humanlike creatures resemble more posthuman beings rather than earthlings, to reveal life and perception beyond physical boundaries and especially this otherness created once the human has been wrung out of them.

In parallel, a significant feature of posthuman experience is the demarcation of signifier and signified, which provokes noteworthy difficulty to import coherent meaning. For Lyotard, postmodernity grieves the 'loss of meaning' since "knowledge is no longer principally narrative" (1984, p. 26). This dissociation of signifier and signified is named *schizophrenic experience*, involving "isolated, disconnected, discontinuous material signifiers which fail to link up to into coherent sequence" (Jameson, 1988, p. 119). When signifier and signified lose their correspondence, meaning is lost - for example, watching shows and news on TV may comprise a schizophrenic experience. In this case, the signifier is transformed into mere image, i.e. a picture deprived of any depth of interpretation. Pallasmaa notes contemporary advertising strategies are essentially based on 'instant persuasion'. Referring

to architecture, he notices buildings are "image products detached from existential depth and sincerity" (Pallasmaa, 2007, p. 30). Harvey also correlates "the loss of temporality and the search for instantaneous impact" (1992, p. 58) in the frames of experience in digital age. Therefore, the loss of a continuous meta-narrative – i.e. a narrative (interpretation) about narratives - breaks our experience into heterogeneous moments of subjectivity that do not configure a coherent story, shaping accordingly our awareness.

Moreover, fragmentation and compression also characterize our experience in mixed-reality environments. Embedded technologies separate worlds, dissociated places and moments, due to the hybrid nature of space and time. Charitos, analyzing the intrinsic characteristics of virtual environment, quotes that virtual space is non-contiguous and time is not necessarily continuous as well (Charitos & Coti, 2000). Participants have the option to be transferred to another part of the same virtual place or get dislocated to another one through (inter)active points (like links and teleports). However, multiple mixed-reality worlds can be connected without necessitating any kind of physical attachment or spatial proximity, like in case of physical environment, since materiality as we know it is (even partly) transcended. Time, like space, is also disrupted during displacement from one spatial unity to another, excluding any sense of continuity. Respectively, digital media have significantly influenced our perception concerning the self, the body, and the reality around us. Even established methodologies applied to collect and exchange information, to communicate and develop knowledge, have long been changed. 'Point and click' is a common non-linear mode used to navigate and interact within any computer-based environment. We open and close windows and visit places that 'exist' only connected in an ambiguous virtual space. Even the rate of events can be adjusted to users' needs and desires. Hence, knowledge has been transmuted into information, meaning coded messages within a system of transmission and communication (Lyotard, 1984). Interactive media have defined the way we shape our self-awareness, and introduce new ways of experiencing events occurring in mixed-reality environments.

When a person experiences separated moments on end, when there is no sequence or conceptual coherence of actions and events, there is no narration, no story, no meaning. Any present or past moment is only a single slice of time. Being present and participating in a project, involves committing myself to it for a certain period of time. Otherwise, we live in hallucination characterized by heightened intensity. Since any sense of identity is attached to time (past, present, future), a sense of *self* is developed over time, involving our personal story connected to a particular physical, social and cultural environment. If we lose these connections, we lose track of time and identity. Jameson also argues that "as temporal continuities break down, the experience of the present becomes powerfully, overwhelmingly vivid and 'material'" (1988, p. 120). The 'loss of meaning' (Lyotard, 1984, p. 26) and 'the loss of temporality' (Harvey, 1992, p. 58) are directly associated; just as words are disjointed from meaning, flow of time (like space continuity) is also disrupted, resulting at an intense present, where appearance dominates meaning.

3.3 Mixed-reality performances

3.3.1 Materiality, intelligence and form

Contemporary design has exceeded previous limitations, by conceptualizing and incorporating *intelligent materials* to interact with human within projects. These materials are actually embedded with technologically-enhanced potentials, which shape the design elements form and enrich them with behaviour. Intelligent materials are capable of converting their qualities in conformance to current circumstances, by sensing the surrounding conditions. Their intelligence is attributed to sensors that enable and control the interactive activity of these materials. Materiality, previously considered the cause to envelop certain content, is now augmented with additional functionalities, becoming both the border and the contact point among human and the physical world (Küchler, 2010). Küchler describes a change that diffuses the boundaries between the physical and the virtual, the natural and the artefact, and Bensaude-Vincent claims materials used to be an impediment designers needed to exceed (2006). Materiality is no longer a constraint, but rather designed for specific performances. By endowing inanimate elements with attributes of living entities, designers create compound systems of mixed-reality artefacts, which collaborate, are capable of sensing and responding to the surrounding world, and principally learn how to improve their functionality and behaviour in real time.

Design process mainly encompasses the aggregation and configuration of appropriate materials to create results that perform certain functionalities. Materials are usually synthesis of physical and artificial features serving specific socio-cultural needs and interests, an amalgamation of nature and technology (Bensaude-Vincent, 2006). From methods of inscription (writing, painting, printing) to practices of iteration (performances, recitals, rituals) cultural practice always includes a short of corporeality. Meaning is created and conveyed through 'materialities of communication' (Gumbrecht, 2004, p. 8), i.e. preconditions, like technologies, human bodies, languages, buildings, and environments, which all have a material aspect and contribute to human communication. Nevertheless, information is not attached to materiality; people narrate stories orally long before any printed medium was invented. For Hayles, message is a pattern rather than presence (1999). She further adds a message is materialized into a specific form, as long as it needs to be transmitted through a particular medium (paper, screen, sound, etc.), and therefore it is encoded accordingly. Materiality therefore is the medium, not the precondition of communication and interaction. Although no form of interactivity is feasible without a mediated medium, information is liberated from materiality to cross space and time.

By introducing digital media to contemporary design practice, form is emancipated from matter. In the context of mixed-reality environments, form is dissociated, firstly from materiality and derivative physical restrictions, and secondly from natural laws, like gravity and decay, that govern the natural world. Designers integrate intelligent materials to enhance the potentialities of the designed objects and environments and offer the opportunity for experiences beyond physical restrictions. In case of architecture, Martin emphasizes the liberation of designed project from matter, and associates architecture to music, as both artistic fields comprise more than the sum of the qualities of their components, i.e. building and sound, respectively. In his words:

> "The intuition that allows us to even consider architecture as 'frozen music'
> or music as 'molten architecture' comes from a deep and ancient

understanding that, in its very essence, architecture exceeds building, as music exceeds sound. Music, especially computer music, will have much to teach the new liquid and gravity free architecture. Architecture, in turn, will provide music with its greatest challenge: its emancipation from sound – and therefore linear time, inspiring instead a new navigable music of places. Together architecture and music will stand as the arts closest to the functioning of the human cognitive and affective apparatus" (1994).

Nevertheless, Pearson compared organic architecture with *living* instead of *frozen* music, a kind of melody we are experiencing right now, moment by moment, rather than a past memory, object or complete process (an experience) (Pearson, 2001, p. 24). In this way, new materials are created incorporating features of different materials. Consequently these new features combine the characteristics and capacities of the elements they derive. Intelligent materials are synthesis of matter and information, and their artificial intelligence involves 3 levels: "sensation, action and processing; self-diagnosis, self-tuition, self-correction and consistent response; adaptation to human and social values" (Bensaude-Vincent, 2006). As human beings are more than their body, materiality transcends the boundary of matter to include information and potentially structured behaviour.

At this point a significant transition has been made: while in the past, materials were characterized by their features, synthesis and overall structure, in the recent present and future they are defined by their performance. A new type of materials, named *smart* or *intelligent materials*, is generated, which respond to their environment, diminishing the differentiation between the physical (meaning the natural) and the artificial. They comprise materials by design, distinctive for their composite nature and membrane-like quality. Their capacities surpass by far the features of materiality (colour, texture, elasticity, etc.) simulating the attributes of living creatures, like sensing the surrounding environment, and more important learning how to adjust to it. In this way, the technical function of the designed elements becomes part of the material as well. For Bensaude-Vincent, contemporary materials "combine physical and chemical properties with social needs, industrial or military interests; they... blur the boundary between society and nature" (2006). Particularly, they are characterized not only by their structure and properties, but their ability to process and perform as well (figure 26). What's more, the contribution of end-users has been added to the design of such materials. According to courses made in the context of Materials Science & Engineering (MSE) potential users have been induced to actually participate in their design process, to form their hybrid functionality and performance. In align with science and technology developments, smart materials involve a kind of intelligence, which enables them to adjust and correspond to the environment, and hence shape a primary type of behaviour.

Novak, one of the pioneers in digital architecture, stated about a decade ago that in the future architecture, within virtual or physical reality, will respond to the surrounding environment, involving material elements and people as well. Especially architectural constructions will serve particular needs by evolving and actually learning how to develop a primary type of contact with the world (Novak, 2001). A new era has been opened up wherein designers no longer design the appearance of things in advance, but rather set particular conditions and standards, from which analogous forms and behaviours emerge. By

extension *virtuality*, for Hayles, is not about living in an immaterial realm of information, but "the cultural perception that material objects are interpenetrated by information patterns" (1999, p. 13). The polarities between potential and physical, biological and mechanic, building and body, body and mind, have already attenuated, as elements of different nature and affordances are combined to hybrid forms. Technological evolution generates mutations, enabling new states of presence, existence, contact and interactivity.

In the context of architecture theory and practice, Toyo Ito, like Jean Nouvel, is oriented, since 1994, towards the notion of *membrane* or *skin* in architecture. Similar to our own skin, it is flexible, sensible, and capable of interchanging information with the environment. The architectural outcome, a building, is not just covered by matter, but is rather enveloped within a sensory skin that mediates between the environmental conditions and the content of the edifice, interconnecting the body with the surroundings. In this case, architecture and design in general, serve as clothe and costume (De Kerckhove, 2001, p. 65) that exchanges information in local (physical site) and global level (via the internet). Smart materials enrich the potentialities of physical element with affordances enabled in the framework of mixed reality. This kind of skin is the means of interconnection between the physical and the virtual, and multiple approaches have been developed since, other conservative and other innovative, that seem to meet in one point: the initial perspective 'form follows function' appears to be replaced by 'form allows function'. Simulating cloth and skin at the same time, these membranes perform as boundary and contact point between human and objects, the physical and the potential. An inseparable link between materials and knowledge has been developed due to technological advancement. Design endeavours to merge the virtual and the physical in everyday life and practice. By interconnecting the physical and the potential, the tangible and the imaginary, here and there, the self and other, beyond time and space, enhanced potentials are delivered to experience that surpass time and space restrictions.

Every type of physical form includes a quantity of matter (natural material) evolving in time (development, maturity, decay) and changes are apparent ascribed to forces that affect shape. As D' Acry stated many decades ago, "the form of an object is a diagram of forces" (Heaton, 2000). Similar conditions are studied and simulated in virtual and mixed reality environments, enabling designers to control forces regulated to act upon the digital models and direct elements shape and behaviour accordingly. This process of diagramming puts emphasis on abstraction rather than form, interwoven out of forces and conditions (Rocker, 2002). Deleuze and Guattari coined the notion of *abstract machine* to define "the aspect or moment at which nothing but functions and matters remain" (1996). We have already referred to parametric design as tool to create objects and environments with digital media, controlled by constraints and parameters. Abstraction refers to the process of generating animate, virtual work through the abstract mechanism, i.e. the diagram, giving designer the opportunity to control the action and morphological shape of elements under design. Under this approach, design practice is not focused on materializing the work into a final shape. The diagram is responsible for arranging the structure and function of the model, determining its form and action.

In the framework of intelligent materials and objects that respond to changes within the surrounding environment, science, technology, art and design meet to produce amazing results. The *E-Cloud* (2007) (figure 27), a collaboration between Dan Goods, Nik Hafermaas,

and Aaron Koblin, is a permanent art work installed between gates 22 and 23 at the San Jose International Airport. This dynamic sculpture reflects the volume and behaviour of clouds. Consisted of polycarbonate tiles, it changes from opaque to transparent state, and periodically provides visual indications of the weather from places all around the world. Travellers are provided with the opportunity to experience a walk under a cloud simulating the different weather conditions of distant places. Moreover, the artwork *Audience*, created by Random International (2008) (figure 28), is a field arranged of interactive head-sized mirrors, each moving and interacting with the living audience. When a participant approaches the mirror field, the art work actually chooses or rejects the subject to engage with. Having chosen their subject, the mirrors all synchronize and turn their surfaces towards him/her, who can see his/her reflection in all of them. In this way, instead of a passive one-sided fixed image reflected by any mirror, the artists created a dynamic two-way engagement between self and image. Finally, Philip Beesley, representing Canada at the 2010 Venice Biennale in Architecture, created *Hylozoic Ground* (figure 29), an immersive interactive environment. Beesley referred to "architecture as a sheltering quality", as these technologies "form a responsive filter around us and react to us as individuals" (Jegatheesan & Noakes, 2007). This artificial forest is made of intricate lattice of small transparent acrylic meshwork links, covered with a network of interactive mechanical fronds, filters, and whiskers. Tens of thousands of lightweight digitally-fabricated components are fitted with microprocessors and proximity sensors that react to human presence. This responsive environment functions like a giant lung that breathes in and out around its occupants. Each of the above cases reflects the idea of life coming out of materiality, as objects obtain potentialities beyond the features of their matter to include capacities of living organisms to adjust their function and interact accordingly within the surrounding world.

Technology has long become a means of cultural production. Cognition and technology are bound in a bidirectional relationship that stimulates creativity due to enormous opportunities the latter entails. A swiftly advancing material technology has been integrated into daily life in the contemporary world. Combining physical and virtual attributes, a new perspective on materiality is opened up, challenging our perception and imagination. Materials are becoming intelligent, designed based on the experience people may have, under the umbrella of interaction and experience design. I suggest we borrow Oosterhuis' concept on the architect "becoming a choreographer who sketches the main lines, but never knows exactly what the material he deploys will do" (2002, pp. 106-107), to enlighten the designer's work on experiences. Materials are no longer viewed as functional structures, but as hybrid products enriched with knowledge of natural, artificial and social aspects.

3.3.2 Performing with technology

Mixed reality performance involves the integration of mixed-reality technologies in staging theatrical performances. Among the last spectrum of applications: MUD, MOO, and webcam are useful tools; 3d modelling, motion capture, video processing and advanced animation contribute to project images of virtual dancers on stage; artificial intelligence, robotics, and biotechnology endeavour to create interfaces of body and technology; motion sensing systems enable audiences to control images, avatars, sounds, lights on a scene,

stage; live video conferencing brings together people and performers from distant places. Additionally, Nayar, focusing on dance, discerns four complementary rather than segregated types of environments, which can be related to any form of performance act: *interactive environments* involve sensors and motion tracking; i*mmersive environments* are virtual and mixed-reality based (like Cave and panoramic installations that integrate the body by using stereoscopic devices in front of the eyes to create a multisensory illusion of moving through space); n*etworked environments* include tele-presence, videoconferencing and tele-robotics, offering people the opportunity to experience a dispersed body and to interact with traces of other remote bodies, avatars and prostheses; and finally d*erived environments,* which are motion-capture based, including (re)animations of bodily movement and liquid architecture. These spaces can also be networked and reintroduced into live tele-presence or tele-robotic operations and communications between remote sites (2004, p. 142). Whether it is live or recorded, on a theatre stage or in the street, such technologies are incorporated into any type of performance, involving anything as small as video recordings or projection on a screen in front of a live audience, to devise a performance in a mixed reality environment, motion capture and sensing software, to artificial intelligence and robotics.

In essence, *mixed reality performance* is a term with twofold meaning: on one hand, it refers to the digital media used, associating physical and virtual spaces. By interconnecting distant places, an even global 'stage' is configured, linking personal and collective experiences beyond physical restrictions and enabling performers and participants to co-create and share the artistic experience. For example, Lisa Naugle coined the term 'distributed choreography' to describe one created for a single real-time environment, where physical and projected spatial unities are juxtaposed, and networked performance acts are directed. In this case, the performance is allotted in a two-way video teleconferencing environment, creating a live, synchronous and interactive communication context (Naugle, 2002). On the other hand, performances staged in mixed reality environments result in diffusing the boundaries between artistic experience and everyday life; an anyway inherent characteristic of performance act exalted though by the affordances of mixed reality performances (Giannachi, 2010). Hence, mixing realities do not only refer to the physical-virtual connection, but also the convergence of everyday life and artistic experience.

Historically, the concept of integrating the virtual into performance work draws on several genres of art work, i.e., Happenings, performance and live art, participatory art, interactive art, installation art, media and communication art, etc. A brief retrospect indicates that Loie Fuller, in 1911, was the first modern dance choreographer, who incorporated technology within her performance work. She projected film footage onto diaphanous robes, and she danced wearing these robes, which actually became a sort of screen. Her experiment was one of the first theatrical pieces that film footage was introduced to become a part of a live theatre performance. Moreover, although digital arts have been developing since the 1960s, in the 1990s the 'Digital Revolution' had a great influence on the aesthetics, creation and culture of the performance arts. By that time, a significant augmentation in the digital performance practice was noticed, as 'user-friendly' digital media, like digital cameras and the internet, were integrated in the performance, influencing the creation and final synthesis of the performing arts. Around the '70s, the visual aspect dominated the verbal in theatrical experimentation, associated with a wide

application of media projections in theatre, dance and performance art, like screens and video monitors. This transition resulted in an ascending number of performers, and artists in general, who experimented with the potentialities of integrating visual media within performance practice. In 1979, RoseLee Goldberg stated a mostly influential definition of performance art: she describes performance as a live event before an audience aiming to challenge the viewers' perception on art (1979). Nowadays the notion of performance is extended beyond the performer's live or mediated act, and since embraces the performance of the media used (both physical and digitally enhanced), the participants' bodily and psychically response, as well as the performance of the surrounding environment. Computer sciences have largely exploited performance creativity, and performance practices have incorporated mixed-reality media to enhance their content, getting mutually inspired by each other's potentialities.

Nevertheless, with or without such technologies, during performance acts, people are immersed in the play, transferred into the reality of the performance. Mixed reality environments contribute to this transition, as a simulation world surrounds visitors diffusing the sensation and conception of presence. Experiencing such places involves *being here*, and simultaneously *not being here*, present and not present, inside and not inside (Druckrey, 1996, p. 262) such hybrid worlds. As the physical and the simulated are interwoven together in everyday and artistic experience, their realms are vaguer than ever, continuously challenging our perception of the real. For Beckman the virtual acts beyond the feasible as "a continuous unfolding on the road to *becoming other*" (1998). Yet, W.I. Thomas states that "if men define situations as real, they are real in their consequences", in accordance with Wallace's viewpoint that "reality can be whatever the software people choose to make it, and the people operating in the outside, real world choose it to be" (Wallace, 2006). Moreover, Goffman supports that "the important thing about reality [...] is our sense of its realness in contrast to our feeling that some things lack this quality" (Lemert & Branaman, 1997, p. 150). Therefore, reality is mutually constructed, accepted and established, and in no case does it comprise an objective condition outside human experience, awareness and interactivity.

In addition, digital technologies do not only advance their capacity to imitate the real as faithfully as possible, as an end for itself, but they rather attain to alter our perception on the real. When the physical is not satisfying enough, we seek for an altered, new reality. It is critical though to refer to Giannachi's research which underlines that participants experience a state of *fragmentation*, being both in the physical and virtual world, as "both a subject (in the real) and an object (in the virtual)" (2010, p. 123). Putting emphasis on the abatement of the subject-object distinction, she further adds that the main objective of immersing in virtual reality environments is not a mirroring of the physical reality "but rather its ability to estrange the viewer from the real" (Giannachi, 2010, p. 126). As the boundaries between the physical and the virtual are diffused, the real is difficult to be discerned, defined and conceived; we become familiarised with the virtual and alienated from the physical.

The performer's body is embedded with mixed-reality technologies, and thence immersed in an amalgamation of the digital and the physical, like in almost every aspect of everyday life. A wide spectrum of viewpoints has been developed discussing how ubiquitous computing has been transforming our whole world into a computer interface (Bolter & Grusin, 2000, p. 213): Massumi, citing Giordano Bruno, states that the virtual is the "'real but

abstract' incorporeality of the body" (2002, p. 21), while Weisser coined the term *embodied virtuality* to describe "the phenomenon by which the 'virtuality' of computer-readable data [...] is brought into the physical world" (1991, p. 20). Mixed reality environments are multi-sensorial, experiential worlds, designed to be inhabited and lived, rather than viewed as artefact or event, inciting audiences to participate and interact within. The very essence of interface involves every kind of physical or digital surface and environment working as an occasion for interactivity to emerge. Our body is our interface to interplay with the world. According to Merleau-Ponty "our body is not primarily *in* space; it is *of* it" (2005 [1962], p. 117). In such mixed-reality environments, human perception has been developed towards what Ascott named *cyberception* (2007, p. 376), stating:

> "We are now each of us made up of many individuals, a set of selves. Actually, the sense of the individual is giving way to the sense of the interface [...] We are all interface. We are computer-mediated and computer-enhanced" (2007, p. 318).

Inhabiting both the real and virtual worlds at one and the same time opens up new horizons of perceiving and creating both everyday and artistic experiences.

However, a recorded scenic performance, like in case of dance, rarely conveys the same qualities with a live event. Dance is less likely to be yield successfully on screen in comparison with the rest of the Performing Arts is, especially on television (Povall, 2000). A dance play takes place in a living space, where audience and dancers directly and mutually interact, during the whole course of the play. This conscious and interactive process is more felt than seen. If this connection is broken down, all performance qualities are vanished. Respective to an eye and a camera, our ear listens differently than a microphone: human sensors discern and interpret the messages they receive, in association with numerous other processes, whereas a mechanic or electronic device records various types of stimuli in order to be later edited, stored and reproduced. Such devices do not have any form of sensitivity of the qualities of the capture content; they mechanically record. Thence, integrating live and recorded visual and auditory aspects in a performance act offers the opportunity for a multi-sensorial experience, without making sure the qualities of the captured moments are entirely conveyed to the audience.

Embodied practice and events has always been the main subject of research within performance studies, supports Kirshenblatt-Gimblett in a report written for the Rockefeller Foundation, (1999). Under his perspective, the very act of the body's performance "inscribes its presence and absence" within both physical and mixed-reality environments (Broadhust, 2007, p. 1). Meanwhile, Mark Hansen develops the notion of 'body in code' expressing embodiment as "bodily performance of and through information" (2006, p. 102). His conception of mind-body-technology interactivity creates a 'mixed reality' based on the notion of fluid interpenetration of realms (Hansen, 2006, p. 2). Like Hayles' posthuman and Haraway's cyborg, the *body in code* is not associated with the deprivation of human form, but rather with an extension beyond the flesh, opening new horizons of contact and action. In this way, the performer's body also lies between the physical and the virtual, "submitted to and constituted by an unavoidable and empowering technical deterritorialization - a body whose embodiment is realized, and can only be realized, in conjunction with techniques"

(Hansen, 2006, p. 20). The body, like space, is dematerialized and distributed as well; movement is captured, transferred and reconfigured / rematerialized elsewhere.

Particularly, performativity contributes to experience design as the body plays a fundamental role in communication and interaction, offering a fresh approach on spatial organization and interactivity in a dialogue between space, body and time. Body and space, similar to human performance and space performance, maintain an unbreakable correlation in the scenic arts. As a means of expression, contact and interactivity, our body creates space, events in space, experiences accommodated and incited by the physical world as well as the enhanced potentialities of responsive environments. For example, the famous Japanese performer and choreographer Hiroaki Umeda states regarding the relationship of body and space in his work:"no meanings no messages - on the basis of my impulse I create the space" (2011). His approach to his art making expresses a general position of any kind of scenic performers; as he adds in another interview:

> "The basis of my works is an impulse from my body. For me, the body is just an object and has the same value as other components on stage, such as sound, lighting, video and so on. So choreography is not only for the dancers but also for any component on stage. By choreographing them and creating a space, I would like the audience to see the work as an experience" (Umeda, 2012).

Nonetheless, live *performance has always been interactive*, since the ancient Greek theatre and even before that. Every time an actor or performer appears before an audience, he/she is affected by the latter's response, and inevitably adjusts his/her act in subtle or obvious ways. Stern and Henderson also agree that any performance act is interactional in nature, "involving *symbolic forms* and *live bodies*" (Stern & Henderson, 1993). Improvisation, flexibility and adaptation are strong means of every performer: from avant-garde plays of the sixties to vaudeville, from commedia del l' arte to a band of court fools in front of the king, repeated practices in the history of performing arts involve audience reaction. In addition, *performance has always been multimedia,* as delivers experiences made up of more than one sensory component and/or artistic discipline. The scenic arts, like theatre, have always comprised a synthesis among multiple artistic disciplines, in which sound, music, movement, sets, and costumes, inter alia are combined in a single event. With or without technological enhancement, performance act, like any other form of the scenic arts, have always induced diverse sensory impacts on the audience. Moreover, as work-event, performance has always been created *here and now* by performers and participants, and is not completed on the rehearsals.

Among the numerous examples of interactive performances that integrate mixed reality technologies is *Mortal Engine*[34] by the Australian dance company Chunky Move. This multi-media dance performance applies movement and sound responsive projections to describe an ever-shifting, flickering scene where the boundaries of the human body are illusive. Choreographer Gideon Obarzanek describes *Mortal Engine* (figure 30) as a dance-video-music-laser performance. This cutting-edge demonstration includes an interactive

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[34] Videos and photos at http://www.youtube.com/watch?v=sbjOMuaILVs&feature=fvwrel, and http://chunkymove.com.au/Our-Works/Current-Productions/Mortal-Engine.aspx

system designed by Frieder Weiss, allowing video, light, sounds, and laser images to be generated in response to dancers' movements, and consequently resulting in different outcomes each time the work is performed; "this essentially means that there are no fixed timelines and the production flexes according to the rhythm of the performers. While the scenes are always in the same order, the work is truly live every night, not completely predictable and ever changing" (Mortal Engine). *Mortal Engine* is a compound work that explores the potentials of contemporary choreography and highly sophisticated technology, beyond good and evil, light and shadow, the self and the other, mortal and engine.

Meanwhile, Daniel Wurtzel is interested in "creating art that is experiential, interactive and constantly changing" mostly focusing in modulating airflow systems. His projects are both experienced as individual works or part of performances with groups like Canali Spring fashion show, Cirque du Soleil and Ex Machina[35]. Elements like fire, air and fog are associated with performances bridging "the conceptual realm to the material world" as he explains. For example, *Pas de Deux* is a piece that both stands alone in an exhibition space and has also been included in the *Amaluna* performance of Cirque du Soleil (figure 31). Two crimson fabrics dance together inside currents of air produced by a chorus of twelve household fans encircling them; they behave as though they had been choreographed. Although the digital part of the work is not sophisticated but rather simple and discrete, the outcome is astonishing creating an elegant atmosphere, as the inanimate has been animated. As an event-work on its own, and a vivid element accompanying the performer, *Pas de Deux* engages colour, movement, flow, and chance beautifully.

In addition, *Apparition*[36], a dance & media performance developed collaboratively by composer and media artist Klaus Obermaier and the Ars Electronica Futurelab, has been honoured at the Brighton Festival, England's largest art festival, with an Argus Angel Award for outstanding artistic achievement (figure 32). It innovatively integrates sensor & tracking technology that enables dancers to interact with graphical and musical surrounding elements and let them influence them. Klaus Obermaier is a famous media artist, director and composer with pioneering works in the area of dance, music, theatre and new media, including interactive installations, video art, web projects, computer music, radio plays as well as large outdoor events for thousands of people. Nevertheless, *Apparition* goes one step further: enhanced interactive technology deliberates the performer from any fixed choreography and enables real-time synthesis of the visual content. As a result, this digital interactive system comprises much more than a mere extension of the performer's body, becoming rather a potential performing partner. The charm and dynamics of the human body and its movement quality are extended beyond the physical scene into the mixed reality world.

The convergence of interface design and movement analysis, in the context of a mixed reality - physical and virtual, everyday and artistic - experience, addresses performance as interaction, and performance practice as the occasion for collective experiences and real-time events to happen. In case of mixed reality performance, the space and the body have been extended and transformed to the extent that new perspectives on inter-face and inter-space (Birringer, 2003-2004) have emerged, having multisensory impact on people

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[35] See http://www.danielwurtzel.com/sculpture-artist-news-new-york.cfm
[36] See http://www.youtube.com/watch?v=WRQc_O7UbbA&feature=related

participating, and augmenting their experience. The performing body is synchronously situated in multiple types of space; physical, virtual, imaginative places, like video, animation, VR, remote sites. It is dislocated, and subsequent re-distributed, captured, processed and reassembled as image, and juxtaposed with the physical in distant places. Performing with mixed reality technologies involves being present in the realms of art and everyday life at the same time, beyond bodily and physical restrictions.

3.3.3 Technology as intelligent participant and performer

The notion of performance implies interaction within physical, virtual and mixed reality forms of space in personal and interpersonal, social level. Mixed reality environments are social, performative spaces where events and experiences unfold. For Lefebvre, *social space* is not a detached basis that merely accommodates people's interactivities but a synthesis of factors, i.e. objects as well as relations among people and their surroundings (1991). He further mentions social space is characterized by continuity and cohesion associated with social members' performance (Lefebvre, 1991, p. 38). Both mixed reality environments and performance space are places embedded with information, meaning information patterns and behavioural modes, where events unfold, inciting performers and audience interaction (States, 1985). In the field of architecture, Tschumi reffers to *architecture as event,* meaning that place 'of the invention of ourselves' (1996, p. 258), while Novak introduces the term *building's 'performance'* to associate built environment with the potentials of virtual and hybrid forms of space, and the scenic space of 'dance and theatre' (1993 [1991]); a performance that may be watched, practiced, or even generated by visitors. Consequently, mixed reality spaces are places where real events and experiences unfold; *a space of performance* (Benford & Giannachi, 2011, p. 45).

Moreover, *performative space* suggests individuals need to perform and use the potentials of the place, and considered therefore participants and co-producers of the overall experience. The sense of performative space is based on the interplay between the digital and the physical, and is participant-oriented or participant-required place (Johannesen, 2003). Emphasis, therefore, is placed at movement and action rather than static observation. People are incited to do things. In accordance with contemporary theatre practice which explores new ways of engaging the audience, performative space concentrates on inviting people to interact with the space and objects contained in novel ways. Hence, new potentials of interactivity are surveyed, centred at participants' body and movement through mixed reality environment, also playing a crucial role in the evolution of the whole experience.

Computer intelligence has been incorporated in the field of theatre and performance practice to enhance, and assist in the event development. The performance space is embedded with information, and comprises more than a composition of physical and digital components. The scene becomes an environment moulded from interactivities and behaviours generated and supported by technology, responding to and shaped by performers, designers, and technicians. These intelligent environments aim to expand the expressive potentials of traditional theatre in providing performers, directors and designers with additional power to manipulate lighting, sound, and the entire visual outcome. By incorporating computer intelligence and creating responsive environments, relevant artistic

forms (like music, visual arts, dance, and theatre) are associated and practitioners from different backgrounds and perspectives collaborate. Augmenting the artists' expressive potentials renders digitally enhanced media into an 'intelligent participant' that shape the final work-event (Lovell, no date).

Computer intelligence involves a set of processes that exceed by far any machines' abilities: comprehension, reasoning, and application knowledge, meaning sensing the environment, assimilating what is happening within that environment, and responding. For Lovell, three kinds of abilities are required for computer intelligence in the interactive arts: *perception* refers to the level of understanding about what is happening in the environment - computer-based systems shape this short of peripheral awareness through information collected through sensory input and analysis of video images, spoken text, and user interface interactions - *reasoning* is the ability of the system to choose the appropriate responses to certain contextual and sensed information; and finally, *dexterity* is the technological potentiality to react to performers' and participants activity and make decisions using digital media (Lovell, no date). Consequently, a responsive environment gains the potential to become a kind of participant (like a performer, technician, or assistant) within a theatrical work, or any type of interactive art piece. In this point it is essential to underline that performance events, like theatrical events, cannot be reduced to the potentialities of a physical and/or mixed-reality container. The performance practice is clearly more than the lighting, or the set, or even the actors; it is about the communication and interactivity that emerges among participants within a certain context and specific direction objectives.

The theatrical scene is essentially a potential world, like any virtual environment, as both types of space include: agents that initiate actions and create events; the participation of both human and technological factors; figures, which form a representation of an imaginary environment or of natural world (objects, buttons, etc.), in a world where the representation is all there is. All that matters is that which is illuminated literally and figuratively (Laurel, 1991, pp. 14-17). Almost two decades ago Robb Lovell focused on generating *Intelligent Stage*[37] in Silicon Atelier*,* at the Institute for Studies in the Arts (ISA), Arizona State University. On the other hand, Silicon Atelier is "a place for the creation of live performance and installation based art, and the creation of technology that supports that work"[38], and has now been extended to Motion Analysis Lab/Intelligent Stage Research Lab and performance space, which is dedicated to motion analysis and interactive, multimodal feedback development. *Intelligent Stage* is a media controlled performance space providing innovative tools and interesting paradigms in which artists can create a new generation of performance works. It operates through the use of video cameras which look at a musician, dancer, or actor within a structured environment. These responses include changes in environmental elements such as lighting, sound, and video, or actually affect the structure of the environment itself. The flexibility of *Intelligent Stage* allows artists to tailor many elements: where sensors are located, what kind of actions the sensors are sensitive to, and what responses occur when actions are recognized. The *Intelligent Stage* is a research and performance space that responds to the actions of artists as they move or speak, allowing them to control theatrical elements such as sound, lighting, robotics, graphics, and video

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[37] See http://www.intelligentstage.com/
[38] See http://www.siliconatelier.com/

through cameras, microphones, photo electric detectors, switches and other types of sensors. More recent research activities, though, emphasize on enhancing the Intelligent Stage into a system deliberate from the performance particular location. Aiming at creating performance-aware intelligent systems that can adjust themselves regardless of the performance space, artists and designers are offered the opportunity to create non-site-specific performances.

On occasion of *Intelligent Space*, another potentiality of MR technologies is displayed: the deterritorialisation of participants' and performers' interaction, and consequently of the entire live event. As already mentioned, a performance can take place anywhere. Physical space and MR environments are creations and expressions of the notion of becoming, of livelong transition and metamorphosis from one state of being into another. When space is embedded with information, it constantly evolves in time. MR space is always in process, as the virtual, the physical and the potential are converged into the *relational space*. Integrating MR technologies offer performers, dancers and audience the opportunity to share common - even simultaneous - experiences through interconnected places, as their interactivities are extended beyond physical restrictions of space and time. Therefore, any sense of interaction, presence and identity is no longer place-bounded, reorienting our perception on 'being in the body':

> "The privileged state of performance as a 'being-here' in the elusive present is no longer embodied in the taken-for-granted 'thereness' of the stage of soil and flesh, it becomes a superabundance of becomings experienced as hyper-realities and distributed presence" (Brown C. , 2011, p. 85).

Furthermore, the *Double Skin/Double Mind* project comes in two virtual versions, as an interactive installation and a DVD-ROM with booklet, and derived as an extension of the corresponding *Double Skin/Double Mind* workshop (figure 33). As an interactive installation *Double Skin/Double Mind* offers performers and everyday people the possibility to participate in a digital edition of the particular workshop in real time, while receiving audio and visual, physical and peripheral guidance as well as feedback to their activity. Participants gain a deeper comprehension of their involvement along with the demands and objectives of this workshop, by collecting various forms of sensory information and following the instructions of the choreographer Emio Greco's life-size moving figure. Particularly, under an aluminium frame construction with three projection screens, one studio monitor and two tracking cameras, participants are offered the possibility to become performers in a real time work-event, being physically and mentally engaged. The *Double Skin/Double Mind* interactive installation is designed by Chris Ziegler, also including the movement-tracking program *Gesture Follower,* developed by Frédéric Bevilacqua. The latter monitors the real time participants' movements and evaluates their performance with the filmed version of the workshop. In this way, performers and public receive feedback, meaning further instructions and explanations, via the interactive environment Ziegler has developed.

The entire project is addressed to audience, professional dancers, and performers as well. Individuals are welcome to participate in this workshop, which due to its small size, can be easily adapted to any educational (schools, universities) and entertainment (rehearsal studios, theatres) space. The installation in particular, has two modes: the basic mode concentrates on non-professional practitioners, i.e. the public, that wish to experience a

short version of the *Double Skin/Double Mind* workshop. The workshop mode refers to professional dancers and performers and provides them with a thorough training program of Greco's principles and perspectives. This mode through different levels (workshop, learn, customize and play) offers an enhanced learning experience through the use of emotive icons, text instructions, video explanations and demonstrations as well as sonic and visual feedback produced through video. It is also essential to notice two parameters: first that through movement, music, and rhythm, participants have the feeling they are involved in a personal one-to-one workshop, and secondly that various disciplines collaborate to produce such results; studies on film, interaction design, architecture and theatre are among these fields.

The ancestors of this project also offer an insight of the needs that led Chris Ziegler in collaboration with various researchers, designers and artists to concentrate on the creation of such responsive spaces with performance-aware intelligence. Since his first project in 1991, a system is involved that initially supports new dancers and performers to learn their part of the play before going into rehearsals; secondly, enables accurate solid documentation of the concepts and rehearsals on choreographies never completed and presented to people; thirdly, it serves as archive/teaching media including theory (lectures) and practice (rehearsal, performances). We notice therefore three requirements that were fulfilled in accordance with the technology of the time: preparation of new performers or rehearsal on new choreographies, recording and documentation of past ephemeral attempts and ideas (like in case of the prototype interactive media installation designed for the choreography *Loss of Small Detail*, and the CD-ROM entitled *William Forsythe: Improvisation Technologies, A Tool for the Analytical Dance Eye*) and education of people through preservation of traditional dance forms. Concerning the latter, two more DVD-ROMs were completed regarding the preservation of the Japanese Kyogen Theatre that flourished and vanished in the 16th century and the traditional Indian Bharatanatyam dance (DeLahunta & Bastien, 2007), facilitating the impartment of knowledge and tradition from one generation to the other. Relevant applications and projects serve as tools that aid scholars and artists to study, preserve, and create performance events that embrace public engagement in virtual spaces (CD and DVD-ROMs) that were later extended in responsive 4dimensional environments, like the *Double Skin/Double Mind* project.

Even though performance art, like theatre, cannot be reduced to the affordances of the space that is placed in, mixed reality technologies comprise an intelligent participant that is integrated in the artistic practice to enhance potentialities that emerge among the public participating and the responsive environments, resulting in the evolution of events.

3.3.4 Immersion in this 'other' place

"Find new spaces and move into them"
"When the limits have been explored allow the rules to change"
(Jones R. , 2004, p. 52)

Since the Cubist artists opened up the artistic horizon, introducing methods like collage that incorporated heterogeneous elements on paint and canvas, "it was only a matter of time before everything else foreign to paint and canvas would be allowed to get

into the creative act, including real space" (Kaprow, 1966, pp. 165-166). In both experience design projects and performance practices, people enter *another* place and immerse in the reality of the event. Just as audiences are turned into participants, stepping into the shoes of a character, so is performance space transformed into a third place among imagination, the virtual and the physical. For audience and performers, the reality of the play is the only reality they perceive. As long as they are engaged to the performance/project, they are engrossed in the imaginative world of the play/project, whereas the outside world temporarily lies beyond their perception.

Any human activity is space-situated. In case of performance act and experience design projects human presence and activity is located in a *third space*, meaning a place where the experiential space of the designers/performers coincides with the place of the participants, comprising a place of research and study where designers can comprehend and direct human practices. This third place is in essence a synthesis with an *otherness,* and like the audience's turn into participants, has diverse levels of reading and comprehension. This sense of otherness involves an intermediate place where everyday reality and artistic expression co-exist, one where "theatre and everyday life were in continual negotiation and there was no foregone conclusion as to their possible equilibrium or as to which would prevail" (Read, 1993). In addition, this third place pertains to the symbiosis of the artificial and the physical, expressing respectively a sense of estrangement and development beyond the feasible on one hand and human conscience on the other; an attempt for a more humanised perception and behaviour of computer-based systems.

During performance practices, like in any scenic play, the reality of the narrative emerges, immersing those attending in an imaginative world. Similarly, in dance performances choreography is characterized by Brown as "one way to incorporate and experiment with emergent realities" (2011, p. 95). Stanislavski underlines the *magic if* (Carnicke, 2009, p. 221) that is interwoven every time during a performance act and Kantor describes the realization of the 'impossible' and "possibilities that are beyond our imagination" as "the strongest fascination and the deepest secret of art" (Kantor, 1993, p. 47). In this way, experiential space and performance space no longer have distinct boundaries.

Nevertheless, live or mediated performance has always been interactive. In addition, live performance acts have always been immersive, as performers and participants are engrossed in a potential world, an emergent reality. As Justice-Malloy explains, during a play actors and audience are mentally transported into the realms of *another* place, beyond the scene where performed. They may both remain physically in the same environment, but mentally and emotionally transported to *another here*, where action and narration unfolds. Cyberspace and theatre are places where events and interactive experiences emerge, where performers and audience are involved psychological, and potentially physically too. Their interplay as well as the course of events take place only in the context of this encounter (2000, pp. 74-78). Besides, in Schechner's words, "both actors and audiences identify with the characters, shed real tears over their faces, and become deeply involved with them" (2002, p. 124). This is the place of art, design, of the infeasible, where all potentialities are open to numerous creations and infinite forms, and thus inheres in the process of becoming. As Goffman aptly states "all the world is not, of course, a stage, but the crucial ways in which it isn't, are not easy to specify" (1990, p. 64).

The scenic arts have contributed to the broader field of design and particularly in experience design. Performance plays are immersive by nature, both in terms of performers and audience, even without the integration of digital media. During a performance, both performers (including actors, musicians, singers, etc.) and audience are mentally transferred into *another* place, beyond the theatrical or social space where gathered. Although the physical body remains in the present space and time, people are mentally and emotionally transferred in the sphere of the play. For Stanislavski, "when true theatre is taking place the actor passes from the plane of actual reality into the plane of another life" (1948, pp. 464-466). He named this process *living over* a role, as the very notion of *over* expresses: beyond a reference level, from an aspect (mentally), or side (spatially) to another, opposite or across through movement or displacement towards the distant view, or area. A sense of transcendence is implied in this way, inherent in all scenic arts.

Every creative attempt, even when a single line is drawn, is a subjective depiction of a concept, real or fictional, and therefore a form of illusion. Both design projects and theatrical plays comprise representations of another world, a memory, a present story and situation, or even reflect a prospective reality; either case they reveal a third place, one between reality imagination and the potential. Both theatrical design and experience design aim at creating representations of worlds that resemble reality but at the same time surpass physical restrictions. For Benford and Giannachi also virtual reality involves immersion in a fictional or fantasy world (2011, p. 9). Laurel, in her book *Computers as Theatre*, compares the role of graphic designer in Human-Computer Interaction with the role of theatrical scene designer, since both organize a context of interaction incorporating representations of objects and environments (1991, pp. 9-10). Mixed reality worlds and theatrical plays are subjective interpretations and simulations of a (physical, technologically-enhanced or imaginative) reality. For Pearson and Shanks Interpretation is associated with a story, an event "acting out something to give it an intelligible life […] making a past work a present presence", also stressing that acting out involves deciding upon and conveying specific meanings, rejecting directly or indirectly other interpretations (2001, p. 11). Each performance, like each design approach, reflects a specific standpoint, and during the performance time, the subjective, imaginative world of the work becomes the audience's reality as well.

Mixed reality technologies are integrated both in experience design projects and performance practices as creative media of imaginary worlds "which we can extend, amplify, and enrich our own capacities to think, feel and act" (Laurel, 1991, p. 33), enabling like artistic expression, numerous kinds of 'as if-ings' (Schechner, 2003, p. 322). By surpassing the physical restrictions of space and time, virtual reality affords unforeseen places, where experiences are not predetermined, but open to evolve, as people interact and actively participate within. As Negrotti quotes the artificial world comprises *third reality*, one between nature and conventional technology, swaying between these two realities, as it cannot "overlap neither the former nor the later unless it loses its peculiarity" (2010). Specifically, digital media and mixed reality technologies frame an alternative mode and conception on space: they provide greater geographic and temporal flexibility, by enabling the exchange of stimuli beyond physical limitations, and by shaping environments distant in time and space, or belong to the realms of imagination and the potential. And by interconnecting distant places, a global 'stage' is configured, linking personal and collective

experiences and enabling performers and participants to co-create the overall artistic experience. Human experience in such environments involves a compound combination of space, time, interfaces, and interaction; a sophisticated synthesis made of physical and technological elements.

Performance works, like experience design projects, emerge between worlds where boundaries are deliberately indistinct. The borders within multiple disciplines (like technology, science, and art) are diffused, and so are distinctions between performer, participants and audience, as well as the virtual, the physical and fiction. One of the most characteristic qualities of performance, according to performance studies, is to be *in-between* or in *liminal* space - a term coined by Victor Turner (1988). Liminal is a space of possibility, a passageway connecting places of conventional cultural activity. Performance implies an expansion across social and cultural boundaries and a thorough penetration to personal and collective experience. Schechner explains the term 'liminal' as:

> "A limen is a threshold or sill, a thin strip neither inside nor outside a building or room linking one space to another, a passageway between places rather than a place in itself. In ritual and aesthetic performances, the thin space of the limen is expanded into a wide space both actually and conceptually. What usually is just a 'go between' becomes the site of the action. And yet this action remains, to use Turner's phrase, 'betwixt and between'. It is enlarged in time and space yet retains its peculiar quality of passageway or temporariness […] An empty theatre space is liminal, open to all kinds of possibilities – that space by means of performing could become anywhere" (2002, pp. 58-61).

Besides, performance studies and act is an inherently intercultural and interdisciplinary field, surpassing customs and behaviour within one culture; "it is about the relatedness among the genres and cultures and analogies between performance and other modes of human behaviour" (Schechner, 1986, p. 5). Therefore, the sense of luminal also involves this transcendence, and includes information collected from beyond national and cultural boundaries. As Muller explains in *Participatory Design,* experiences in this third space are hybrid experiences or practices "open to reciprocal learning, and facilitate polyvocal or many-voiced discussions across and through differences" (Muller, 2003, p. 1062). In an increasingly globalized world, there is hardly a place unaffected in any way by changes made even at distant places. Intercultural performances of everyday life offer a concrete methodology to study cultural differences and similarities on the way people dress, talk, interact, celebrate, collaborate and are entertained. Through wide spread interconnected systems, like the internet, people still try to comprehend the spectrum of consequences in their life, as they locate themselves and their transactions in this global digital map.

The theatrical scene, and particularly the performance space, especially when embedded with mixed reality technologies, comprise *liminal places,* passageways to worlds of possibility, beyond the restrictions of the self and the physical. Novak stresses the bidirectional transition of human embodiment and cognition from the physical towards the virtual space and conversely. He names this mutation towards the virtual as 'immersion' and the opposite as 'eversion', adding that the latter comprises a rehearsal of the "phenomena

and entities first encountered in virtual space" that have been (and will continue to be) embedded in the physical world (Novak, 1999). Entering such places is like entering a frame, a step into another world. The notion of *frame* as analyzed by Goffman, in his *Frame Analysis,* involves the sense of passage, in cases like the curtain of a stage play and the frame of a painting; a leap onto the dream world, or even a transition into a play-world (1986). States explains that during a theatrical play, actors and audiences are psychically displaced from the theatrical space (scene) into the realms of another place, the one of the play (1985). Although remain physical present at the performance space, they cognitively and emotionally travel to another place, where the action and narration of the play unfolds. Cyberspace and theatrical space are contexts of events, where performers and audience co-participate creatively. A particular mode of relationship and interaction emerges between them, which determines the course of the live event, a mode activated only during their encounter (States, 1985).

Few examples of this luminal space, this third place of possibilities, further depict the nature and atmosphere of these fascinating lands of the unfeasible. *Cinématique*[39] (2010) is a harmonious synthesis of dancing, juggling and digital arts of Adrien Mondot and Claire Bardainne, a dream-like spectacle of physical and mixed reality worlds (figure 34). The choreographer Adrien Mondot makes a poetic trip, with dancer Satchie Noro by his side, through lands that reside in the realms of both the physical and the potential. As an artist, he is fascinated by images of circus and dance, integrating digital materials, rumpling and moulding them to captivating performing environments. Both performers run along computer grids, slid around swelling ridges, trek through rough terrain, hurtle over vortexes and dodged craters, as the floor is disintegrated into three dimensions. They knock down an illusory wall of words with a ball, attract broken letters with flashlights like buzzing insects, and interact with luminous shooting stars under unreal skies. *Cinématique* is an invitation to travel, dream, and play; a journey in virtual landscapes where the dreams of our childhood can be relived.

In addition, *Un point c'est tout*[40] (2011) is both a conference and a show by Adrien Mondot and Claire Bardainne (figure 35). As the creators describe, it is a trip to the relationship between reason and sensuousness, where technical demonstrations are of sudden significance of dreams (Adrien & Claire, Projects, 2011). The conference is an occasion for a dialogue on the 'point', meaning the reason to construct complex materials, bricks of a limitless universe beyond physical restrictions. This point can be everything: a starting point for exploration - an opened door to the unfeasible - the technical and the art to create a digital living. The project is organized "around a synaesthesia between speech, written text, image movement, the balls and the body" (Adrien & Claire, 2011). The performers' bodies are immersed in a land of digital and physical elements, and dance together, generating a kinesiology that evolves in *another* place.

Performance space and experience space coincide and mixed-reality technologies mould the world of the play or project. Embedding mixed-reality technologies in performance practice "the imaginary has a space to play and create" (Brown C. , 2011, p. 95). Participants are immersed in a third world, without needing to be aware of technical

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[39] See http://www.am-cb.net/projets/cinematique
[40] See http://www.am-cb.net/projets/un-point-cest-tout

aspects; for them the action on the performance/project space is *all there is*, borrowing Baudrillard's statement on simulacra and illusion (Hegarty, 2004, pp. 84-85). The imaginative world of the play/project becomes their reality, although a representation, a simulation, of real or potential worlds. Consequently, performance space is a passageway between potential and physical worlds where boundaries are deliberately blurry: between art and design fields, between performers and audience, among the virtual, imagined and physical, between everyday reality and art.

3.4 Merging experience design and live art

3.4.1 Interactivity & performativity, where art & everyday life meet

Experience design and live art share common ground by concentrating on human experience and interactivity within physical and mixed reality environments. Performance studies focus at the wide spectrum of human performance and embodied experience. Since its commencement by Schechner as academic multi-disciplinary field, studies gatherings of every kind (1973, p. 36), applying the language of performance to describe and interpret certain (inter)activities within particular social and cultural schemes. Turner emphasized on human improvised and daily performances, and defined humans as *homo performans,* i.e. "essentially performing creatures who constitute and sustain their identities and collectively enact their worlds through roles and rituals" (Conquergood, 1983, p. 27). Under a performative perspective, aesthetic and everyday experiences are bond together, regarding:

> "all members of a speech community as potential artists, all utterances as potentially aesthetic, all events as potentially theatrical, and all audiences as potentially active participants who can authorize artistic experiences" (Pelias & Van Oosting, 1987, p. 224).

According to Schechner, *performativity,* a term even broader than performance, involves an aggregate of potentialities that any diversities between mediated and live events, onstage performances and ordinary life collapse (2002, p. 123). Individuals carry out everyday performances according to particular needs and objectives, in personal and social level. Our behaviour is appropriated in conformance with the place and the different circumstances we are facing (school, church, amusement park). People follow certain patterns of behaviour (purposely or unintentionally), and adopt particular roles, to gain particular results and impressions[41] (Wood, 2004, pp. 119-120). Humans, apart from adapting to specific social demands, have an irresistible need to enter other worlds, other selves, to have new experiences. People design the frame for events and conversations to unfold, and performance practice and studies enrich this endeavour.

Performance studies concentrate broadly on culture and identity, studying people as performing beings within a particular social context. For Turner, performance is "the basic

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[41] Impression Management: "The process of managing setting, words, nonverbal communication, and dress in an effort to create a particular image of individuals and situations" (Wood, 2004, p. 120).

stuff of social life" (1988, p. 81), and Carlson states that "within every culture there can be discovered a certain kind of activity, set apart from other activities by space, time, attitude, or all three, that can be spoken of and analyzed as 'performance'" (1996, p. 15). Also Goffman, in his book *The Presentation of Self in Everyday Life*, is centred at the examination of performances organized for other people in daily routines, referring at ordinary *dramaturgies*. Dramaturgy in the context of social studies involves performances, i.e. interactivities, rituals, roles and attitudes, of everyday life. Moreover, Goffman's dramaturgical model focuses on comprehending human communication by adopting certain roles, principles and terminology of theatrical performance. Explicitly, the general setting, or context, wherein certain activities and events emerge, becomes a *stage (mise-en-scène)*, the active agents *actors* and the passive ones *audience*; the objects included are named *props*, whereas the *scripts* (or *frames*) involve guidelines for interaction based on cultural conventions, decreasing any ambiguity about how to behave and define situations. Performance practice and studies offer an essential viewpoint in analyzing human participation in daily interplay, by borrowing theatrical knowledge and analysis to daily life.

Performance and theatrical practice, staged both in physical and mixed-reality environments, result in diffusing and mixing conditions and norms of artistic experience and everyday life. Contemporary theatrical performances, like the ones Boal directed, are occasions for art to penetrate daily routine. For example, in *analytical theatre*, a participant shares a story with everybody else present, which is following directly improvised by the actors. Then the characters/protagonists involved are analyzed and alternative scenarios are suggested which are also performed by actors and criticised by everyone attending the event (Boal, 2008, pp. 132-133). Respectively, the *invisible theatre* is addressed to an audience who is not aware that the whole event is improvised, and therefore considers it as real. By extension, social, political, economic, personal, and artistic realities adopt the qualities of performance. Consequently, "the improvised scene becomes reality" (Boal, 1995, p. 185), as fiction, design and art penetrate reality.

Many well known artists devoted their lives to their art. In the performance field artists like Tehching Hsieh and Jamie McMurry made a commitment so complete their lives and artworks were merged for a respectively long time period: even a whole year. Tehching Hsieh[42] is maybe the one who tried to chain his life with his art in the most literal way. Between the 1970s and 1980s, he made a series of artworks in New York: five separate one-year-long performances[43]. His *One Year Performance 1980 – 1981 (Time Clock Piece)*[44] (figure 36) was presented in FACT (Foundation of Art and Creative Technology) in 2010, and his full dedication was required: he punched a worker's time clock in his studio on the hour, every hour, for a year. He impressed these moments by taking every time a self-portrait on a single frame of 16mm film. This series of photographs together yield a 6 minute movie and reflects among his six artworks a year of his life devoted totally to his art. Besides, during his *One Year Performance 1981-1982 (Outdoor Piece)* he did not enter a single building but moved around New York City with a pack bag and a sleeping bag, while in *One Year*

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[42] See http://www.tehchinghsieh.com/

[43] His 5 one-year projects: One Year Performance 1978–1979 (Cage Piece), One Year Performance 1980–1981 (Time Clock Piece), One Year Performance 1981–1982 (Outdoor Piece), One Year Performance 1983-1984 (Rope Piece), One Year Performance 1985–1986 (No Art Piece).

[44] See http://vimeo.com/16280427

Performance 1983-1984 (Rope Piece) (figure 37), he was chained to Linda Montano for one year once more. They both had to stay in a same room but did not touch each other for one year period. In addition, the *365 Performances Project – Investigating Borders* of Jamie McMurry (Meyer, 2010) took place from the 23.09.2005 till the 22.09.2006, while he also broke down the limits of art and everyday life in 365 daily actions. His art piece, like his childhood, was centred on hard physical labour, and involved actions that vary from everyday activities, and performances in festivals, to private moments. His concept resembles Duchamp's *Ready Mades,* since an action is considered performance practice, as long as it is declared or witnessed as such. Therefore, every action is of equal value, as long as it is addressed at an audience. Such artists have driven the convergence of art and reality to the extreme, as their experiences were not only overwhelming their lives - their artwork actually became their life for an extended time period, whereas audiences had the chance to witness only moments of these live performances.

Experience design involves a wide spectrum of domains that extend from technologically-mediated outdoor activities of everyday life, to the creative fields of the arts. Historically, Human-Computer Interaction (HCI) and performance studies have both been researching on experiences and practices performed in everyday routines, since the late 1960s. Whether it be the performance of particular tasks using mainframes in the 1960s for filling airline seats or printing payroll checks, or for improving performance of individuals through word processing or spreadsheet applications using minicomputers in the 1970s, practitioners and scholars soon concluded technology advancements are not an end in itself. Since the 1990s, multimedia and computer technologies have become an even indispensable, and increasingly ubiquitous, part of everyday life. A thorough research has been developed studying how people associate and collaborate with others, as well as the role of technology in this consociation (Grudin, 1994, p. 19). Moreover, in business industries, organizations have been proven to have a profitable development, if all systems, processes and people supporting them perform well. Thus optimal performance has become a critical organizational goal. However, in the mid 80s the introduction of Computer Supported Cooperative Work (CSCW) combined knowledge from diverse disciplines (psychology, economics, anthropology, inter alia) to study group activity, whereas Human-Computer Interaction was also incorporated with design to result in the also interdisciplinary field of interaction design. Consequently, people's interactivity and performativity gained advantage between people and systems, and since then, contemporary platforms of communication have evolved as a critical aspect of cooperative work, involving multimedia applications, like the internet, email, and teleconferences among others. This general shift in the design field resulted in reorienting the meaning of performance: from task or functionality, to performance as social or group endeavour.

Nonetheless, technologies have always been designed and incorporated having a short of human performance in mind. Almost three decades ago, Heckel states that when designing a product, he conceptualizes "giving a performance for its user" (1984). Furthermore, Muller describes how drama has been introduced in design strategies, providing a juxtaposition of end-users' perception and activity with developers' and researchers' conception and practice, in correlation with the technologies applied (2003). Drama allows modification and improvement of the initial concept, according to participants' needs and objectives. Both participants and designers/researchers negotiate

meaning, and reach to common admissible conclusions and agreements, co-creating therefore the final outcome (Muller, 2003). Thus, multiple voices are articulated, opening up the possibilities for new and shared perspectives to emerge. Design thought and practice has benefited from the introduction of performance studies enabling participants and designers/researchers to collaborate for a common objective.

Performance act and experience design strategies have made diverse and mutual advancements in approaching and encompassing the potentialities of virtual and mixed reality environments, rendering such technologies a common and essential vehicle of directing collective experiences. Performance act has integrated hybrid forms of space, light, cameras, video-projection, microphones, sensors, interactive real-time digital signal processing synthesizers, computer software, resulting into new modes of performance to be created, like networked ones. In parallel, movement and folding of space and time has become an essential part of digital art, design, animation and film editing. The emergent interactivities are depended on the media incorporated, as different media offer the opportunity for different sensorial experiences to occur, combining data of diverse stimuli. By aggregating multiple media designers and performers set the frame for respective multisensory experiences to occur. Moreover, encompassing MR technologies enables both performers and experience design practitioners to configure a place beyond physical limitations, a place where unique events are actualized. A sense of *becoming* therefore expresses both works, transforming them into work-processes. But principally, as we will analyse further in this chapter, as the designed result becomes an event, design thought is more and more comparable to writing a scenario. In this way, design thought, in the broader sense and not only in relation to field of experience design, becomes more similar to the one of the director who sets on the scene, meaning the interactivities and behaviour of certain people in a place with particular affordances. Mixed reality technologies determine the potentialities embedded to the context (i.e. environment and objects) where meaningful performances and experiences are designed to emerge.

Furthermore, both performance acts and experience design projects involve simulations of events and actions which could not take place in the physical world. This inherent characteristic of performance act is exalted via the affordances of mixed reality technologies (Giannachi, 2010). Mixed reality technologies along with artistic creativity enable participants to surpass particular physical limitations, by stimulating and augmenting their perception, emotion and sensation (Laurel, 1991, p. 32). As Laurel concludes, human-computer interaction designers have analogous objectives with the scene designer, as they "both create representations of objects and environments that provide a context of action" (1991, p. 10). In both cases, designing for experiences and directing performances involve the synthesis of static objects placed respectively on the (physical) scene and/or the mixed reality environment, as well as the behaviours embedded to these elements unfolding in time.

In the following sub-chapters, this common ground is more thoroughly analyzed and similar perspective of experience design and performance act and studies on human interactivity, including the fact that both: stage, i.e. direct events and experiences, create work-events and not static objects, engage audience as enactive participants in the course of the event, both involve practices where art and everyday life meet, where people are immersed in a third place, both physical and virtual, real and imaginative.

3.4.2 Common ground and tools

Live art share common ground with experience design in studying and staging collective experiences. Principally, live art events and experience design projects, like performances, are created to be addressed at somebody, on the borderline between artistic and everyday experience. Pearson and Shanks referring to Schechner (1977) defined performance as "organized human behaviour presented before witnesses" (2001, p. xiii). They regard performance any situation that involves four basic elements: time, space, the artist (performer and/or designer), and an audience. Live art and experience design projects are always experienced by at least one person, enabling audiences to jointly become participants, as the roles of viewers and creators are not rigid any more. Live art events and experience design projects share common ground: 1) they are ephemeral and iterative, meaning staged every time in order to be experienced by participants; 2) they comprise singular events never repeated twice; 3) can happen anywhere, in any venue or setting; and 4) digital technologies are often integrated, liberating the whole experience from physical restrictions of materiality, space and time. Finally, interactivity is the keystone in both cases embracing human behaviour (i.e. enactment and participation) in moment-by-moment improvised and organized embodied encounters beyond the limits of a theatrical space.

Analytically, both performance acts and experience design projects come into existence every time performed or staged for people to interact in physical, emotional and cognitive level. They are created to be experienced as processes, activities and events in flux. For Schechner today a performance is organised as both 'a social drama and a media event' (2003, p. 327); a work-event reaching its purpose when experienced by an audience. Since audiences are given the opportunity to become performers, a different kind of theatre practice has been developed, surpassing disciplines' boundaries, and theoretical loyalties. Hence, as Read notes, performance (like theatre) and everyday life are 'in a continual negotiation' (1993, p. 104).

Furthermore, a performance, like an XD project, is a singular event never repeated the same twice. Like theatrical plays, they are ephemeral and repeat - only those who attend such work-events are able to experience them, unless registered by audiovisual media. Nevertheless, although performance plays and XD projects are iterative processes, they are performed and experienced each time differently, resulting in a unique outcome. In the scenic arts, even a slightly different development in the course of things results in different experiences for everyone involved (performers, audience/participants, among others).

Performing, like experiencing and designing, expresses Heraclitus sense of change and *becoming*. Unlike theatrical plays, a singular outcome is succeeded every time performances are staged, due to unstable factors: 1) people participating behave spontaneously and not in a predetermined way; 2) dissimilar spatiotemporal, social-cultural schemes are applied each time performed - since the context is changed, the messages conveyed may be conceived under another perspective; and 3) people experience and perceive reality subjectively. Performances, like work-events, evolve within the 'in between' space of interactivity and change. Schechner, from the perspective of performance studies, states that accounting phenomena and human interactivity as performance, involves considering them "as provisional, in-process, existing and changing over time, in rehearsal" (1998, pp. 361-362).

Performing, like 'doing' and 'showing doing', implies actions, and is therefore always in flux, presenting the course of things and not things themselves.

A performance act may be unscripted or scripted, improvised or orchestrated in every detail; spontaneous or otherwise carefully planned with or without audience participation. In a live performance presented before an audience – using the term in the general meaning including artistic content (like dance and music) and within the frames of everyday life (teaching a lesson, explaining future business plans, narrating fairy tales, and more) – the distinction is vague: a performer presents not only certain movements and expressions prepared in advance (even in detail), but also spontaneous actions acted on 'with little calculation and forethought' (Goffman, 1986, p. 80). Formulating beforehand performers' vocal and bodily activity does not determine the final outcome, as depended on the multidimensional way performers interact with the audience. Since audiences are involved and "social intercourse is itself put together as a scene" (Goffman, 1990, p. 80), the line between scripted and improvised performance is not entirely clear. Although a performance act may be based on a written text, there is always room for audience response and even slight improvisations in terms of the performers. Therefore, every performance is acted out differently, even from the same artist, and interpreted in a personal way by each participant. Therefore, the performer, like the designer of XD projects, sets the frame for (inter)activities and experiences to emerge, by combining predetermined structures with spontaneous behaviour and (re)actions.

Additionally, performance can happen anywhere, in any venue or setting and for any length of time, just like a live designed event. The actions of an individual or a group of people at a particular place and time can be the occasion for and material for the work-event to emerge. It is *not* necessary a site-specific artwork, like traditional theatrical plays, as we will analyze later. Therefore, performance "isn't 'in' anything, but 'between'" (Schechner, 2002, p. 24), meaning it is interwoven among the interactivities that emerge between performers and participants. For instance, more that 15.000 people gathered together on 27 August 2011 in Margate Seafront (UK) for the McMcArts' production *Blink Margate* (figure 38). This large-scale, outdoor event involved local performers working with the award-winning choreographer Wayne McGregor and his company Random Dance, the theatre ensemble Pan Optikum, and soundscape artist Scanner. The level of local involvement made this artwork a spectacle. "Blink Margate was the culmination of an extraordinary process and a very enjoyable six months working with local schools, colleges, youth clubs and other local people" (Blink Margate, 2011) says McMc Arts co-Director Jane McMorrow[45], as Kent County Council, South East Dance, Thanet College, Thanet District Council, Theatre Royal, Margate, Turner Contemporary and the University of Kent all contributed to the realization of the whole project.

In addition, performance in essence act does not have any kind of physical-material existence, but vanishes in time; it needs to be performed or recorded to be witnessed and experienced. Although performance works and experience design projects are always situated in space and time, they are at the same time detached from these dimensions, i.e. they can be re-located and re-created in any time and place, under specific specifications and conditions. Even though the final outcome is never identical – as in any work-events and

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[45] Also see relevant video: http://www.youtube.com/watch?v=I0iJ1XsxtbY

in opposition to other art forms, like movies or videos – and they can be presented and displayed in different places. As Etchell describes, performance practices are more about 'being here and now', which feels "exactly what it is to be in this place and this time" (1999, p. 18), a feature that also pertains to projects of experience design. They may both be dislocated from time and space, experienced everywhere and in anytime. For Birringer performance is no longer site-specific like theatre, but appertains to the field of digital art, in the context of which interactivity emerges within any kind of digitally-enhanced environments (2011, p. 45).

By integrating mixed reality technologies in the broader context of performing arts, the dialogue among performers and participants is not restricted to their simultaneous presence within a physical location, like in case of a theatrical space, as digitally enhanced experiences and events may be organized. As a performance work can be live or via media, the performer can respectively be both present and absent. Troika Ranch is a company founded by composer and media artist Mark Coniglio and the choreographer Dan Stoppiello, and according to the latter *troika* means *three* in Russian, implying the three core elements of the group: digital interactive media, dance and theatre. Their performance *Surfacing*[46] (New York, 2004) seeks the notion of 'surface' in our environment (physical and architectural), skin, and imagination among others, implying a transcendence from the personal to collective, from hidden to exposed, and vice versa. Only four tipable wedge-like rectangular sculptures are situated on the performance scene, surfaces that project live captured or recorded images and videos. Respectively, four performers unveil their interpretations on the subject, interacting with the projected material, to the extent that sometimes the physical and the virtual were blurred. The dancers had the opportunity to both "see their images in confinement while experiencing their bodies in relative freedom" (Troika Ranch), a merge of video and live performance. In addition, *The Future of Memory*[47] (2003) is another performance of theirs, exploring the realms of memory and remembering, using a wide variety of interactive technology. In this case, twenty individual screens were approximated forming the size of a human body, displaying different images or a single one over all screens. The shimmering images in conjunction with the performers' kinesiology composed a place that lays both in the fields of reality, imagination and memory, live and projected, here and there, now and then, whole and fragmented as well. Mixed media and realities are integrated blurring the boundaries of live and mediated experience for both the performers and the participants.

This combination though, does not only involve the association of various media, but also the amalgamation of different expressive forms, each one offering the whole project a different perspective and method. For example, Chris Ziegler's *Turned* is an interactive dance performance that mingles elements from dance, painting, visual art and music. The *Turned*[48], is actually "turntable: it begins as a concert, continues as dance and then turns into an interactive video sequence and finally into a VR-installation; a multi-media spatial structure evolves before the eyes of the viewer" as the director explains (Turned). Besides, the *»Scanned V«*[49] connects dance and painting, the performing and the visual arts, in three

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[46] See http://www.troikaranch.org/vid-surf.html

[47] See http://www.troikaranch.org/vid-future.html

[48] See http://www.movingimages.de/index.php?type=performing&txt_id=3&lng=eng

[49] See http://www.medienkunstnetz.de/works/scanned5/video/1/

parts: in the first, scanned images of the audience are displayed entering the theatre; in the second phase, the dancer's movement are scanned and presented in a real-time projection in correlation with the physical body. In addition, short movement sequences are recorded as they will be later used; lastly in part 3, an operator resamples and reorganizes the recorded performance, synthesizing the final choreography. In both cases, it is not only scenic arts and music that are combined, but also visual arts as well.

Performance art typology is applied to design projects to experiment with the translation of mediated and immediate and unrepeatable actions, i.e. performativity, that typify a performance practice, into the design field in general, and experience design, principles in particular. Certain aspects of performance, like personas and scenarios, have been introduced to design strategies to aid designers develop new techniques and approaches on their creative process. In this case, performance practice mainly involves the representation of a situation, an action, a behaviour pattern. Representation in social studies involve all cultural practices and forms human societies apply to interpret and depict the surrounding world and, mainly, to expose themselves to others (Cloke, Crang, & Goodwin, 2005, p. 610). Performance is inherently associated with representation and simulation and contributes to enlighten designers on their goals, helping them to follow clearer decisions and objectives more adapted to people's needs and desires, rather than loosing focus in abstract personal conceptions of a better future. The last decades, scholars have discerned the advantages of applying performance aspects in design process claiming that performing may contribute to designers imagination and creativity, due to their enactive and experiential character, help them empathise with people their work is addressed to, and finally assist designers communicate their ideas with colleagues and potential clients/users/audiences (Burns, Dishman, Verplank, & Lassiter, 1994). Therefore, performance typology enables present the potentialities that may spring out of the designer's concept, bridging cognitively and physically a current with an improved, future situation.

The word *persona* is rooted from the Latin describing the theatrical mask, and the Greek as face (*πρόσωπο* in Greek), describing a social role or a character played by an actor. In ancient open-up theatres classical masks managed to bring a character's face closer to the audience. Besides, in fiction and poetry, persona is also applied to indicate a second self who narrates the story, presenting a clear perspective on events, comprising the organizing consciousness of the narrative. Alan Cooper introduced the term persona first in 1983 to help design and marketing industries to visualize their customers and define their needs and desires. A persona is a fictional description, a hypothetical archetype, of an actual and potential user/client/participant; it is a representation of a real individual during the design process, which stands for to a group of people who share similar needs and goals. Persona is a fictional person created to model that serves to describe the goals, needs, and characteristics of a specific type or group of users, instead of real, individual or average person. It often includes made-up personal details to make the fictional person more "real" (UPA, 2005-2010). In User-Experience Design, a persona gives the development team a thorough comprehension of people, their work is addressed to, with real characteristics, attitudes, goals, capacities, within real contexts. In this way, designers and developers empathize more with the needs and desires of individuals their work is addressed at. In a design process, personas include realistic, believable descriptions including names, photos,

goals and behavioural data. They are described and conceived through narratives to development teams that are compelling and memorable. They are important to the whole design process to visualize realistic information about the people they are working for and make decisions that respond to their needs and desires.

Outlining a *persona* involves specifying the target group of people the design work is addressed to, describing therefore people that live and interact within current social and cultural situations, whereas at the same time is oriented towards a future improved and enriched experience via the efforts of the team. It keeps the team focused on people and target groups and don't let personal bias and conceptions mislead the collective endeavour. In this way designers have a clear and focused vision of whom their decisions (should) serve. Saffer explains that personas comprise abstract models - archetypal figures - that stand for groups with similar characteristics and objectives. They are applied to segregate people's different actions and behaviour, goals and motivations, and expectations (2010, p. 106). For Cooper, "the more specific we make our personas, the more effective they are as a design tool" (1999). Personas help to prioritize the design considerations by also providing a context of what the participant needs and what potentialities are best to offer him/her. They can also provide a human face and existence to a diversified and scattered user group, and can also create some empathy and add emotions when referring to the users. The fact that a persona engages empathy is essential to the design strategy. Nevertheless, personas may have stereotypical properties, which may give a narrow approach to the entire design process. Moreover, a respectively small amount of personas is advisable; 9 personas are enough to cover 95% of the population studied, according to Saffer (2010, pp. 109-111). Finally, personas contribute to consider people are different and behave in a subjective way. People use different interaction techniques, different adaptive strategies, and different assistive technology configurations. People have different experiences, different expectations, and different preferences (figure 39).

Designing personas involves using behavioural data to define and outline particular groups in the population. It's the result of slicing your target audience into individual groups of people. Personas are usually built based on intuitions and impressions the design team has observed on people, making patterns of similar behaviour and features and from data collected from data analysis (interviews, surveys, demographics, stats, etc.) in this way personal bias is removed and certifies asserts and assumptions expressed for the personas. Thence, creating personas is based on real data, along with educated speculation about their personal histories, motivations, and concerns. When developing personas, we need to "find a common set of behaviours or motivations among the people they have researched" (Saffer, 2010, p. 106) as well as assign different tasks for different people, a process which can also help to uncover new interaction cases between people and the final design result. A persona involves given a name and a picture accompanied by demographic data to make it resemble a real person.

Therefore, personas are just the beginning of a long-term project. And most importantly, they are worthless outside the design process, meaning that they exist only in design scenarios to test features for appropriateness and utility. A persona sets a common language among the design team, the stakeholders and potential participants. It also assists in evaluating the design's effectiveness. Since design choices are tested against persona behaviours, contexts, and expectations, in advance of testing on prototypes or final products

contributes to attain better quality earlier in the design process, making afterwards modifications more convenient. They must be memorable, believable, different and distinguishable enough from each other, not too many, and finally, represent key behaviours and attributes to help guide decisions.

In addition *scenario*, in case of User-Centred and Experience Design in particular, like in a theatrical and performance play, comprises a fictional story narrating a sequence of interactivities and events involving audience and the design result under specific design objectives. They are plain stories illustrating various ways to experience the design result, an easy and effective method to imagine and visualize the design concepts in use. And stories are easier to understand and follow than research stats and analysis. For Saffer, "scenarios are prototypes built of words" (2010, p. 144). Usually the persona(s), created for the same design process, are included as protagonist(s). Within different scenarios, particular personas are placed to encounter and interact in multiple ways with the design result. Different personas, like different people, are expected to react in a dissimilar way and different scenarios help designers visualize this diversity in perception, desire and response. The use of scenario is an excellent technique for studying and realizing the pros and cons during the design process. Gabriel and Griffiths quoting Weick (2001) stress the 'creative improvisatory qualities of storytelling', which similar to jazz music, "entailing codes, assumptions, variation, embellishment, etc." (Gabriel & Griffiths, 2004). The more specific the scenario, the deeper comprehension designers will gain regarding the research questions they face. It's the small details and explicit instructions that offer more unambiguous results, concerning the cognitive, emotional, and physical engagement of potential participants (figure 40). For the Usability Professional's Association, scenario comprises a story – or possibly a set of stories - that describes a realistic context, where individuals (users in this case) utilize the design product (UPA, 2005-2010). Stories delineate different behaviours and interactivities, enabling researchers and designers to comprehend people's needs and desires and respectively improve their design work.

Furthermore, enactment and *improvisation* is also common tools, borrowed from performance practice in the field of design. As *Shelley Evenson* states, a sense of *enactment* have been introduced *in the field of Service Design, involving* the development team as well as participants from the delivery organization, who "act out the service experience with specific roles and rough props" (Saffer, 2010, p. 27)*. The design team is the first to test the affectivity of design ideas, multiple improvisations are performed in various steps of the design process, to enable them to comprehend and improve possible deficiencies. After all, when acting out* "you are what you pretend to be […] you are what you play" (Turkle, 1995), meaning that designers become potential users/audiences to foresee and improve in advance, their aesthetical experience. *In addition Larry Tesler, describing the characteristics of a good Interaction designer, emphasizes at the designer's empathy for people's needs and desires* (Saffer, 2010, p. 117)*. I*mprovisation encourages bonding between participants, collaboration, brainstorming and creative problem-solving in case of performance practice and by extension to experience design projects. *Tesler's* 'Method Design' springs from Stanislavsky's 'method acting' and dictates the way designers can design for the people their creations are addressed to or used by: he suggests designers to focus not on themselves, but rather on particular 'characters', i.e. a fictional models, similar to the personas analyzed before, which he suggests to be rigorously constructed by ethnographic studies and usability

studies (Saffer, 2010, p. 117). Therefore, imagination, improvisation and enactment are tools that contribute to comprehend the needs and behaviour of the people the design work is made for during the design process.

Consequently, a balanced approach is required in the design process, when applying tools from the field of performance. Using multiple scenarios about people's potential experiences involves organizing certain strategies. Taking for granted though that we design *for* experiences, and not experiences per se, we need to be flexible enough and embrace the change, in the course of events, creating results that adapt to people's behaviour and improvised interactivity. Using personas, as well as the actual design team, to perform various enactments, imagining and actually experiencing the design concept in different phases of the creative process, help designers improve their ideas and creations before people come across and interact with it.

3.4.3 Mise-en-scène: staging experiences and events

> "*I can take any empty space and call it a bare stage.*
> *A man walks across this empty space whilst someone*
> *else is watching him, and this is all that is needed for*
> *an act of theatre to be engaged*"
> (Brook, 2008 [1968], p. 11)

Performance act and experience design practices aim at producing interplays and events among people participating. These fields, though, involve more than happenings arranged to occur in particular space and time; they encompass holistic perspectives as regards "bring[ing] a variety of elements and forces into relation with one another" (Parr, 2010). A performance, like any theatrical play, is an organic synthesis, according to Aristotle; an organic whole, comparing to the way a living organism comprises much more than the actual composition of its constituent parts. Respectively, an experience design project, designed to be integrated in mixed-reality environments, just like a performance play, is moulded out of the relationships developed between the component elements and the people participating; a collaboration of both human and material/digital factors. Birringer, for example, supports the necessity of examining video projections in performances as "moving structures in the environment" (Birringer, 2003-2004). Also, Samo Gosarič talking about the performance *Monument G (Spomenik G)* performed by Dušan Jovanović and Jožica Avbelj (1972) in Slovenia, explains that the key novelty was the fact that the various aspects of the performance were combined into an organic whole (Gosarič, 2008-2009). Even though material elements are almost always included (props, scenery, objects, etc.), this lack of materiality in the essence *(ousia)* of the *work-event* itself – to borrow Deleuze's (1995) term *object-event* – condemns it to evanescence. Consequently, the constituent element in both cases is interactivity among performers and participants, which interweaves their experiences, forming the final result. The magic of life, like the magic of theatre, needs this transcendence to let the mystery unfold.

The magic of performance, like experience design projects, involves a sense of becoming, of change and evolution in time, beyond the limitations of our physical everyday life. This sense of expansion is associated with continuity in time and space; a *'moving through'* every event, such that each is simultaneously start-point, end-point and mid-point

of an ongoing cycle of production (Stagoll, 2010). Performance acts, like experience design projects, does not necessarily follow a strict Aristotelian plot, but comprise non-linear sequences of events. Basically, Parr quotes that change is evidential in performance art. Like any artistic event "that in its singularity concomitantly expresses a multiplicity of relations, forces, affects and percepts" (2010, p. 31), performance and performance art are organic synthesis that emerge from the relationships and interactivities among people, stable elements and forces within physical and mixed reality environments.

In performance, like any theatrical practice, this synthesis involves both "symbolic and iconic systems [...] in a single indivisible performed event" (Hilton, 1991), diverse aspects that set the frame for events and experiences to emerge among people and performers. Laurel, about twenty years ago, discerned that theatre and multimedia applications bear certain similarities, like the fact that they 'incite and orchestrate (direct)' collective and personal experiences for the audience (1991, p. 32), a view that can be applied to performance practice and experience design. For Anceschi, graphic design apart from setting the form and position of static objects, also involves practices of organizing the behaviour of characters – people and objects – in the framework of a particular "designed, photographed, or kinetically represented" environment (Anceschi, 2010). In both cases, a (short of) scenario is created involving the *organization of human behaviour* that is open to human participation and intervention. They both comprise processes open to the unexpected; a combination of directed, choreographed plot and improvised participation; an everlasting procedure of experimentation, rehearsal, interpretation and creation, an always evolving situation – like the course of life.

Contemporary design theories allege a holistic approach on the content and context where people's interactions with the designed projects occur. Experience design involves setting the overall context for experiences and events to occur. This contemporary perspective, i.e. design as a sequence of events and experiences, necessitates a reorientation in design thinking and practice. In parallel, performance acts involve the 'orchestration work' of artists and performers of organizing participants' experience (Benford & Giannachi, 2011, p. 7) in space and time. Henrion, referring to visual communication, described it as "the art of composition, disposition, and modulation" and adds that "this art is a 'sequential' one" (1988). His viewpoint can be connoted to encompass new design fields, like Experience design, and imply the complexity of contemporary design theory and practice.

Performance studies offer an enlightening insight as they concentrate on all the essential components of a play. These elements comprise not only material objects (static and mobile, physical and virtual), but human factor (actors, participants) as well, and they way they interact and behave in the course of a structured play. The study and practice of orchestrating the environment and the conditions for experiences to occur, is named mise-en-scène[50], literally meaning 'put in the scene', 'place on stage'. Explicitly, it principally expresses the direction of both the scenery (scenography, set design) as well as the actors' activity on stage, or in front of a camera, in the context of a theatrical and filmic production. Moreover, this term is also applied to relative artistic and design fields to describe the

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[50] The French word *en* may serve as a preposition or as a partitive; as a preposition, the word means *in*, as a partitive, it means *some*.

practice of setting the physical context for an action to occur. It is also quoted by Lefebvre describing the *unsought theatricality* and *involuntary mise-en-scène* of everyday life in Venice (Lefebvre, 1991, p. 74). In other words, this art "consists in orchestrating all the elements of form in space and time" (Anceschi, 2010).

The French term *mise-en-scène* originates in the theatre. Although it remains for the film critics a "grand undefined term" (Henderson, 1976, p. 315), it basically refers in every respect of the design and organization of a theatrical or film production: from the setting of the scene, the composition of space and objects therein, lighting, setting the camera, directing the actors' positioning and actions, costumes, etc., even sound. Matters of space and time as well as the whole atmosphere of the play is assigned in both cases through synthesis of colours, textures, lines, shapes, shadows, light and objects, according to the style and messages we want to deliver through the scenery. It is though extended beyond the broad fields of film making and visual media (film, stage design, storyboard, images, etc.) to the realms of storytelling directing objects, space and people. It is therefore a matter of staging a production, a project, an event, which involves both static and mobile elements. For Pearson & Shanks, *mise-en-scène* comprises "a set of material conditions" (2001, p. 17), but it is extended beyond any sense of materiality to include points of engagement and interaction among people and the design outcome. Voss & Zomerdijk propose certain innovations in the field of experiential services regarding five distinct design areas, which are associated with theatrical terms (Grove, Fisk, & Bitner, 1992) suggesting that a service can be regarded as a performance: physical environment, service employees, service delivery process, fellow customers, and back office support are respectively correlated with stage, actors, a script, an audience and the back stage area (Voss & Zomerdijk, 2007). This notion of direction could be connoted to the design of every kind of project that includes both static and mobile components (ones that perform a motion or activity of any kind, or even trigger actions and events), people's participation, and requires organization in space and time; it pertains to any kind of work-event.

Mise-en-scène can be defined as the synthesis of scenic space and interactivity that emerges within. It is not identical or restricted to scenography, though, which involves the style, method or techniques to design scenic space (scene, stage) in the context of a theatrical play or movies, as it involves exhibition space, like in case of museum. Performance or theatrical acts, and experience design project, comprise more than the amalgamation of its components. As in case of every organic synthesis, "the designer must strive to achieve in his setting what I can only call a high potential. The walls, the furniture, the properties, are only the facts of a setting, only the outline. The truth is in everything but these objects, in the space they enclose, in the intense vibration they create" (Jones R. , 2004, pp. 70-71). In the broad context of everyday life and performance practice as well, the scene is not restricted to the limitations of a theatre, but is rather expanded to the experiential space of interfaces, including a wide spectrum from social physical environment, to mixed reality worlds (hybrid forms of display) and virtual reality applications (screen). Both experience design and performance studies focus on the moment when, along with the interface where, spatial entities become the place of narrations and events to unfold; they are concerned with staging the context for interactivity, experience and eventually culture to be developed.

For instance, comparing the scenery of the events with the theatrical-performance stage contributes to the study the parallelism of social interaction as drama. Particularly, the front stage and the back stage of the theatre, include respectively the part of a play production that is visible and invisible to an audience. In case of social encounter and interplay, the back stage involves the place where people behave in ways that might undermine their front stage performances. For example, an employee is permitted to act and behave differently and more relaxed during his break, than while serving customers. Knowing there is a backstage where we can let our hair down and relax helps people tolerate the sometimes stressful front stage work we do. It is a place where people are allowed to vent their feelings and thoughts; backstage behaviours may also improve togetherness and association among members of a group and "allow them to plan effective front-stage presentation" (Wood, 2004, p. 121). Designers, performers and directors, organize to keep backstage behaviours out of view of the audience so they don't invalidate their front stage performance. The sense of front-stage and backstage performance is only a paradigm of paralleling the performance world with everyday, social experiences.

Experience design and performance[51] share common perspectives in setting the frame for experiences to occur. Contemporary design theory encompasses the organization of appearance, location and behaviour of active members (performers and participants) as well as static objects (images, typefaces, three-dimensional models, sounds), combining in this way interaction design, architecture, and scenic arts among other artistic and design fields. Experience design and performance consist of a set of still elements (e.g. doors, windows), placed respectively at the physical and mixed reality forms of space (scenery), as well as their position, distance, action, and behaviour in space and time (open, close). Among these elements there are those that instigate people's interactivity; they are assigned to behaviours that trigger actions and therefore events, in the frames of a given narrative form. In addition, certain characters may also be involved that either perform choreographed - predetermined activities to stimulate people's activity. Moreover, metaphors are used to create realistic as well as non-realistic elements to be included in the scene and render of the appropriate surrounding for the play. These metaphors involve icons, audio elements and in general any kind of stimuli as well as activities that provide information regarding their content and their behaviour according to the form of action they initiate. In this case design incorporates the formulation and action of static and mobile data, forming a specific meaning or narrative.

The notion of *a design* (see chapter 1), similar to a performance, expresses a proposed context - narration, a scenario as basis for experiences and interactivities to occur (Mytilinaiou, Cham, & Hutchison, 2011). Designers, like directors, suggest a script and give options; they set the general context and propose alternatives patterns of behaviour. Rules are necessary for a context to be framed; by setting "a balance between freedom and restraint" designers, like performers, give purpose and direct (inhibit and incite) participants'

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[51] Further research that focuses on the connection between experience, design and the role of performance: Iacucci, G., Iacucci, C. & Kuutti, K., 2002. Imagining and experiencing in design, the role of performances. NordiCHI 10/02. Arhus, Denmark: ACM. ISBN 1-1-58113-616-1/02/0010, Brandt, E. & Grunnet, C., 2007. Evoking the future: Drama and props in user centred design. C&C '07 Proceedings of the 6th ACM SIGCHI conference on Creativity & cognition. New York: ACM. ISBN: 978-1-59593-712-4, Garabet, A., Mann, S. & Fung, J., 2002. Exploring Design through Wearable Computing Art(ifacts). CHI 2002, April 20-25, Minnesota. USA: ACM.

interaction and experience (Pearson & Shanks, 2001, p. 19). Although a particular plot is made to structure the whole event, different results will certainly arise each time people experience them. Its configuration from selected control parameters appears to resemble the layout of a plot.

For example, IDEO is an award-winning global design and innovation consulting firm that has designed a tool called *Scenography,* which "helps to create not only a strategy or a design, but a culture that thinks about and values experience design" (Aaker & Flink, 2012). This tool reflects and derives from the company's perspective that is similar to theatrical set design; in their words: "designing brand experiences isn't about writing a script. It's about setting the stage and allowing consumers to participate in the story. In theatre, it's the job of the *scenographer* to set the stage" (Aaker & Flink, 2012). The *Scenography* approach regards people's experience in terms of *Scenes,* i.e. "highly crafted, specific, emotional moments" that require their enactive participation in setting the stage for a desirable outcome. A *Scene,* like in case of every theatrical or performed play, includes the general *context* (when and where a Scene occurs), a collection of *props* (physical and virtual objects), *tone* (service and functionality), *mood* (elements and qualities of the surrounding atmosphere) and *tuning* (customization to public desires and objectives). These parts are analyzed separately and the results of these studies are presented through books and workshops. The *Scenography* tool was actually applied in case of the Ritz-Carlton, a set of luxurious hotels and resorts all over the world, and was described "as the most influential initiative the brand had launched in years". The hotel guests' experience was manifestly enriched, as the latter expressed their satisfaction, like in case of other implementations of the tool in global level.

The participant in both performance and experience design practice is faced with choices; choices made among alternative solutions, realized in a particular sequence in time. Hence, experience is approached as a verb – experiencing – expressing the concept that we cannot design an experience, we design *for* experiencing. Experience in this case is associated with the sense of *becoming*, a continuous work-event expanded in space and time. In the context of an open undetermined procedure, designers, performers and participants equally contribute to the final outcome. Unlike cinema, that the sequence of events is predetermined and already decided, both performance play and XD project are dynamic, becoming moment by moment, but like any scenic art, is not static and fixed. Even though the scenario is made by performers or designers, the final outcome is never predetermined; it is created in collaboration with the participants.

The overall experience emerges during the course of things. "No director injects a performance" (2008 [1968], p. 122) asserts Brook. Just like form, analyzed earlier, a performance act and experience design project is the result of opened-up creative process, and not an end-in-itself; no definite shape and appearance is the reason to finalize the work-event. Actually, as both artwork and event, it never reaches resolution, it is always in process. Creators stop the creative procedure whenever feel it is finished, otherwise it can be continued eternally. The performer, the director, or the designer of the work, are only setting the frame for things to happen; "a stage designer [...] is an artist of occasions" (Jones R. , 2004, pp. 67-68). We make suggestions; we cannot fix people's reaction in face-to-face interplay, like in screen-based computerized environment. Hence, multiple results are possible to occur; the same play has innumerous becomings, versions, and materializations, as many as its co-creators (directors, performers and participants).

Designing for experience(s) to emerge is more about organizing events (happenings) than staging a play, i.e. the case of scenic arts (theatre, dance, film, and performance). It is about organizing (inter)activities (communication processes, like dialogue, physical contact, etc.) developed among all participants, that is people and practitioners, as well as the environment wherein they interrelate in physical, mental and emotional level. Therefore, design integrates 'figures of staging', meaning arrangement of static and dynamic aspects in space, beyond the realms of a theatrical play. Designing for experiences and events to emerge involves more than "the disposition and movements of an ensemble of actors, putting them in poses and fundamentally regulating them so as to produce patterns and actions" (Anceschi, 2010); it is about organizing interactivities and performances to occur.

Live art event and performance plays, like an experience design projects, are organic synthesis; they comprise much more than the composition of their constituent parts. They are moulded out of the relationships emerged among their diverse elements. Directing a performance and designing such projects, is named *mise-en-scène* and involves objects placed respectively on the physical (scene) and virtual space (virtual environment) embedded with certain behaviours that unfold in time, as well as actors (performers in the first case) that through choreographed and improvised kinesiologies interact with the audience. This orchestration is the art of the occasions, where people, designers and performers co-produce events, i.e. results with plentiful organized, though unpredictable, becomings. The borders of daily and artistic experience are blurred, merging the imaginative, the potential, the virtual and the physical, the experiential space and the stage, the role of the performer/designer and the audience, reality with the play. The magic of life, like the magic of theatre, need this transcendence to let the mystery unfold.

3.4.4 Designing the event space

"A setting is not just a beautiful thing,
a collection of beautiful things.
It is a presence, a mood, a warm wind
fanning the drama to flame.
It echoes, it enhances, it animates.
It is an expectancy, a foreboding, a tension.
It says nothing, but it gives everything"
(Jones R. , 2004, pp. 22-23).

When designing for experiences and events to occur in places beyond expected restricted areas, like buildings or theatres, art and common life are merged and every social-cultural space potentially becomes a stage. For Brecht "theatre is not something that exists but something that occurs" (Van Maanen, 1994, p. 239), meaning that artistic experience is interwoven from and within physical, everyday reality. Live art, for Keidan, also shares this perspective at the edge:

> "Live Art is synonymous with practices and approaches that cannot easily be accommodated or placed, whether formally, spatially, culturally or critically: practices and approaches that could be understood as being *placeless* simply because they do not necessarily fit, or often belong, in the

received contexts and frameworks art is understood to occupy, and particularly the galleries, theatres and cultural centers where the representation and experience of art is contained and controlled. […] So, Live Art occupies not one location or circumstance but many: from performances in theatres and actions in galleries, to artists working within civic or social spheres, in contested, loaded and unexpected sites, and at the points where live and mediated cultures converge. Live Art represents practices and approaches that both expand the formal and cultural frameworks art is allowed to operate within, and the practices and approaches which are firmly grounded in questions of context, site and audience" (2004).

This perspective is not contemporary; Oskar Schlemmer as head of the theatre workshop at the Bauhaus, experimented in converting the scene into three-dimensional artistic world, through integration of expressive forms, while maintaining the performance as the primary means of communication. Designing live events also involve staging interactivities and experiences that are moment-by-moment mutually moulded by designers, performers, and individuals engaged as enactive participants. Under a contemporary approach, the "stage is not a background; it is an environment" (Jones R. , 2004, p. 20), implying a systemic perspective regarding the system of performers, performance space and participants involved throughout a performance event. Therefore, live event space, especially when digitally enhanced, does not merely comprise the container of a fantasy, or a layered compound multimedia performance, but an essential extension of the performance, and integrated MR technologies serve as a crucial tool for interactivities and events to unfold.

Contemporary design theories allege a holistic approach on the content and context where people's interactions with the designed projects occur. Experience design involves setting the overall context for experiences and events to occur. This contemporary perspective, i.e. design as a sequence of events and experiences, necessitates a reorientation in design thinking and practice. In parallel, performance acts involve the "orchestration work" of artists and performers of organizing participants' experience (Benford & Giannachi, 2011, p. 7) in space and time. Staging performances involves not only the organization of the appropriate material elements, but the direction of the body moving and interacting in space. Performance act merges out of the body actions and "its function *in* space and of its managing *of* space" as Berghuis notices (2006, p. 2). Bodies traverse space, interact within it and create events. Conversely, events create space (Pearson & Shanks, 2001, p. 21). Public speech, ceremonies, a street fight, sport events, among numerous other interpersonal encounters and social practices, are occasions for people assembling to participate under a common goal. Their embodied selves occupy and create space; as an ensemble it has have volume, an inside and outside, a rhythm, and pathways which lead to the centre. Essentially, the whole structure is never stable, always evolving, changing, moulded out of people's behaviour.

Performances, as events, are interwoven out of the relationships that merge between inter-action and space; two basic parameters directed within a particular *mise-en-scéne,* in a bidirectional dynamic scheme of inter-affecting each other. Tschumi referred to the violent

behaviour of individuals; by entering and occupying a place, they ruffle the physical qualities of the latter with their unpredictable movements, producing random, unexpected, provisional and fluid spatial unities. Consequently, performance events, as collective human interactivities generate space. Equally, each structural element within a place implies human presence and activity; a door entails somebody crossing its threshold, a corridor the transition into another room, a cup of coffee an object to interact with. (1996, pp. 123-124). As Umberto Boccioni explained in *Plastic Dynamism*[52] "the result is conflict and disorder, which in turn leads to a dramatic multiplication of (ostensibly creative) random or chance effects". Consequently, designing event space involves concentrating on this balance of interdependence between space and interactivity, involving planned and improvised actions, and not an aesthetically appropriate container of events.

LABoratorio and *Persepolis* are two examples of performances that combine mixed-reality technologies with human and music performance in accordance with image projection, whereas *t*series* involve a set of responsive digital-generated worlds that enable human-environment interaction. The *LABoratorio*[53] is a cross-media performance for viola, percussions, live-electronics, dancers and real-time generated video, Karlheinz Essl and commissioned by the XIII International Festival *Musica y Escena*[54] (Mexico City, 2011) (figure 41). The performance project comprised an amalgamation of various art forms immersed in an environment composed of visual effects (synthesis of paintings, letters, textures, etc.) architectural aspects and human movements. The flow of the visual images projected onto a large screen in the back of the stage and the music performed were controlled by the musician(s) using random-based real-time algorithms as well. Two dancers in front of the projection screen and two instruments are performing in connection with each other, creating a dialogue of sound, movement and visuals. In addition, *Persepolis*[55] is a Fabrizio Rosso's work (Samstag, 2011), is part of *BASHIBA*[56] *Persepolis Experiments* and is described as real time video scenography by its creators (figure 42). *Persepolis* is a fusion of music, performance and video art, combined in a fifty-six minute, apocalyptic-sounding work. The music used is actually the *Persepolis* of Yiannis Xenakis (1971) who also combined mathematical and physical laws to the composition and performance of his music. Again, bodily movement, visuals and music are related in a synchronized dialogue enabled by embedded mixed-reality technologies.

Moreover, foAM[57] is a network of multidisciplinary labs composed by people with diverse skills interests and fields. Among their activities, *t*series*[58] are interactive environments that generate responsive hybrid worlds where performers and participants can be immersed and full-bodily interplay within. Specifically, *TGarden*[59]*, txOom*[60] and *TRG*[61]

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[52] Published 15 December 1913.

[53] See http://www.essl.at/works/laboratorio.html#dance

[54] See http://www.musicayescena.org/index2ingles.html

[55] See http://www.youtube.com/watch?v=r-0Rck-VegU&list=UUF3PycwsfHrOaWS63LV8lAw&index=1&feature=plcp, http://vimeo.com/32179098 and http://www.flickr.com/photos/bashiba/sets/72157623440426666/detail/

[56] See http://www.bashiba.com/live.php

[57] See http://fo.am/grig/

[58] See http://fo.am/t-series/

[59] See http://fo.am/tgarden/

[60] See http://fo.am/txoom/

are three distinct groups of environments within the series that incite playful interaction among people, materials and media. These digitally enhanced surroundings change over time according to internal processes and people's interaction within, responding respectively. By combining various media (like lighting, sound, graphics) and physical structures (active materials, soft walls and pliant costumes) a hybrid ecosystem is created where events and performances take place and evolve. The group concentrates on offering public the opportunity to shape social space on the fly, by focusing on space performance enabled by missed-reality technologies rather than static forms of representation. As Kuzmanovic explains emphasis is put on transformation rather than object adding that "the geometry of a place gives a shape to the imagination of the inhabitant, the imagination inspires the behaviour, and the behaviours build the event" (Kuzmanovic, 2012). For example, *TGarden* is an adaptive, autonomous and evolving environment inspired by calligraphy and scrying (figure 43). According to their description:

> "In TGarden, players' gestures are transformed into generative computer graphics and digital soundscapes, leaving marks and traces in much the same way as a calligrapher would with brushes and ink. When the approach the *TGarden*, they choose from a range of costumes, designed to encourage particular kinds of movement. Light and voluminous for space-filling, fast movements; tight and restrictive for small, fine gestures; heavy and transparent for slow, meditative actions. In intimate dressing chambres, in addition to the costumes, the players are equipped with accelerometers, sensors able to detect changes in speed and tilt of the movement, an optical device for tracking the players' position and direction in the space, as well as a small wearable transmitter that communicates with the software systems 'back-stage'. Once players enter the space, they are left alone to explore the connections between their bodies and the environment. [...] As an apprentice calligrapher must learn to find a balance between the flow of ink, the pressure of the brush and the speed of his gesture, a player in TGarden slowly learns to write, scratch and dig through the media space, to be able to play it as an instrument..." (TGarden, 2012).

Live events, in terms of experience design and live art, are work-events. Likely, the event space, like any performance space, is always unstable, an 'as-if' space, meaning a spatiotemporal context "where reactions can be actual while the actions that elicit these reactions are fictional" (Schechner, 2002, p. 124). As everyday life and artistic experience and coincide, participants are immersed into a situation and a place of transition where art and life are amalgamated. For Schechner this condition "is paradoxical and uniquely human" (2002, p. 125), emphasizing the intellectual as well as psychical engagement of those participating. It resembles a *limen*, i.e. a door-sill, a symbol of crossing between places rather than a place in itself, therefore a space of possibility. As analyzed further in this section, the spatiality and temporality of performance have been essentially augmented and altered the last fifty years, since different notions and sensations of presence and interactivity have been introduced. Mixed-reality media have been incorporated to

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61 See http://fo.am/trg/

performance act and art resulting in mediated forms of presence. As Berghuis states, in the present the space is both physical and virtual by nature, underlining the interdependence of these forms (Virilio, 2002, pp. 67-68). Since *direct* and *deferred, live* and *mediated,* performances were realized, the conception of live presentation addressed to an audience has no longer been dominant; both forms are usually integrated in performance events, incorporating different, mixed-reality media, and challenging our perception on space and time. Performance act and space has always been inherently interactive, ephemeral, dialogical, and risky, but incorporated technologies have also become an intelligent participant, along with audience, in the course of the performance event.

3.4.5 Becoming creative participant

> *"Enter not as yourself but as a fresh ingredient*
> *called into being by the state of affairs in the space*
> *at that moment finding a gap that calls out to be filled."*
> (Jones R. , 2004, p. 87)

Any kind of performance is presented to an audience who emotionally and cognitively interacts with the play. In performance artworks and experience design projects that incorporate mixed reality technologies, the audiences are incited to become participants. Diller, Shedroff and Rhea asserted a democratic and egalitarian view, stating that "anyone who builds value based on customer understanding is, in effect, a designer" (Diller, Shedroff, & Rhea, 2006, p. 60). According to this thesis approach though, people concerned are not mere customers but enactive participants who co-design, co-create the final result. Respectively, audiences of performance plays become part in the course of the event, through a series of communicative responses on sensory, artistic and symbolic level. In this way, people are given the opportunity to change roles and become performers/designers for a while, "gaining multiple perspectives over a given experience" (Benford & Giannachi, 2011, p. 7). Performers and participants collaborate to create a collective artistic experience, not in discrete, but in shared moments of inspiration. Every time a particular performance act is witnessed by somebody, both performers and audiences co-create and re-create the play over and over again, with no distance between them, spatially and metaphorically speaking. Audiences are invited to get immersed into the world of the play or the project, take embodied roles and become an essential part of the play. Like in various cases of everyday social life (for example carnivals) people do not merely observe sing and dance freely; they actually become co-creators of the collective experience.

Interactivity as medium of artistic expression and aesthetic category was initiated in the early 20th-century art movements (like Dadaism, Futurism, Surrealism) and their experiments with live performance. By incorporating multiple, and sometimes conflicting media, performance became a powerful, conceptual instrument to incite and provoke the audience, challenging the established conception of the audience's role during a play. The participatory events during the 1960s – happenings, Fluxus, process art, Situationism, kinetic art, conceptual art, the John Cage and Robert Rauschenberg collaborations, cybernetic art, closed-circuit video installations, among others – along with the dematerialization of the art object, contributed to people's enactive, physical participation during the event. Art has been 'de-materialized', i.e. it is prior to its physical substance, and as conceptual artists

declared that 'the idea or concept is the most important aspect of the work' (Lewitt, 1967). The artwork appeals more to cognition (idea) than to the senses (object); according to Kosuth, 'the actual works of art are ideas' (Lippard, 1973, 25). Moreover, multimedia installations and digitally enhanced environments serve not only as containers of the audience's participation, but as interfaces that incite people's engagement in physical, emotional and cognitive level. Process matters more than materiality. Art is more about intellectual inquiry and reflection rather than beauty and aesthetic pleasure.

Contemporary performance art has many examples of public actually becoming part of the whole live event. For instance, Marina Abramovic's *The artist is present*[62] took place at MOMA (Museum of Modern Art) in New York from March 14 to May 31 2010 and thousands of viewers participated enactively in the work (figure 44). The audience also co-created value and meaning, they became an artist themselves as well. Abramovic was present, addressing to people in a one-to-one silent encounter. She sat still in a basic wooden chair for over 700 hours, giving in her words "unconditional love to complete strangers". On occasion of this performance of hers, she explained the Abramovic Method, where the observer becomes the observed and vice versa, as they have the opportunity to exchange positions during the live event. She states that two things are transformative in performance: time and direct experience and that the public is usually a voyeur; people stay outside, not inside the work. According to her method, this situation is reverse by having people sitting, encountering in silence, and others who use telescopes watching them. So, there are those who perform with her and others who can have not only a total image of the scene, but also a micro image of the formers: details of their eyes, their expressions etc. In this way, the observer and the observed exchange their roles and positions, giving the performance 2 levels of observing and participating in the whole event (Abramovic, 2012). During this silent dialogue she had with more than 750.000 people were present. They were present in a kind of art that "everything is real and that reality actually makes performance different than any other kind of art" (Brown J. , 2011). This kind of art that is moulded within specific context: "If you make the bread in a bakery, you are the baker. But if you make the bread in the gallery, you're the artist. The difference is about the context" (Brown J. , 2011). The observer, the observed and the artist are co-performing, exchanging roles in face-to-face encounter, communicating emotions and thoughts in silence, during an event where art and life merge.

Moreover, Helge Meyer is a performer who works on the series *Hand to Hand – A Cultural Exchange of Cloth and More,* since 2002 (figure 45). For him "there is no 'other' to relate to in a performance, I often choose the audience as partner and/or counterpart" (Meyer, 2009). His project was commenced with System HM₂t in Philippines in association with Marco Teubner, as an attempt to investigate how clothing conveys personal, cultural or economical values. Teubner was wearing a typical American suit while burning low-priced Asian shirts with a lighter. In the meantime, Meyer incited the audience to exchange their clothes with his, piece by piece. Each piece of cloth was permeated with a deep personal relationship to his life; it had a story which he shared with the audience before exchanging it with another piece that was offered to him, along with the story that reflected a profound

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[62] http://www.youtube.com/watch?v=jY3VwmiT3j4
http://www.artinamericamagazine.com/features/-marina-abramovic-david-ebony/
http://www.vice.com/read/marina-abramovic-599-v17n11

connection with the other person's life. Therefore, the audience becomes an essential part of this interaction; people share their possessions, their stories and emotions in a kind of ritual that surpasses the borders of a single culture. People's garments accompany them in their lives, individuals are emotionally attached to them, and when offered away, different relations are made within different social contexts: different personalities are influenced and further continue these garments' stories, bridging the distance between dissimilar cultural and personal diversities. In this performance, a piece of cloth is the occasion to share different stories and moments in life and co-create collective experiences that will continue for long after the end of the actual event.

Regarding design thought and practice, presenting, explaining and applying alternative viewpoints on occasion of a particular idea, opens up the potentiality for different, even unforeseen, becomings to be expressed, discussed and realized. Drama and performativity, initially developed in theatrical practices, are among the means that enable designers to comprehend and discuss alternative scenarios and conditions when setting the objectives and the context for experiences and events to occur. Performativity is a medium to tell stories in another way in a direct, embodied mode, and basically to study advantages and disadvantages when we are about to take certain decisions. When designers and participants, like in case of performers and participants in performance acts, collaborate under a common goal, critical insight is gained regarding the frame of interactivity that is co-produced for future and potential people to encounter and interplay as well. In this way, designers research and deepen into how and why people behave the way they do under particular impulses and circumstances.

A significant number of design methods have been developed based on performativity and people's enactive participation, during the creative and decision-making phase of a project as well as after its completion. Boal and his *Theatre of the Oppressed,* was among the directors and artists that contributed to change traditional schemes of the theatrical practice. The audience is invited to become authors and directors of the drama, even repeatedly change it until they approve of the outcome. His perspective of the *Forum Theatre* was applied, even twenty years, in the UTOPIA project, among other early Scandinavian research efforts, addressing testing new technologies in the newspaper production (Ehn & Kyng, 1991) (Ehn & Sjögren, 1991). Particularly, software professionals acted out work-group relations and activities, using cardboard and plywood prototypes, envisaging the integration of new technologies. The workers were the audience, who critiqued the performed work activities and working arrangements. The drama was carried out iteratively, with changes, until it was more supportive of the skilled work of the people in the affected job titles. Actually, researchers made repeated visits with more detailed prototypes, again using iterative performances, to continue the design dialogue with the workers. Design strategy was inspired by the potentiality of performance to represent, comprehend and improve people's interactivity under specific circumstances.

A second technique of interest involves staging of a *tableau*, or *frozen image*, a technique where performers are directed by participants to freeze during play and are asked to describe what they are "doing, thinking, planning, and hoping" (Muller, 2003, p. 1071). In this way, their direct experiences are analyzed in a collective discussion. Brandt and Grunnet made a more formal use of the *frozen image* in two projects, the "Sittings" and the "Smart Tool", in which a group of performers positions its members as if they had been stopped in

diverse moments of the play (Brandt & Grunnet, 2000). Hence, designers positioned themselves in the "frozen image" of the work situation, and then led a discussion of (a) the work activities that were captured in the stopped action, and (b) the work relations in which each particular tableau was embedded. Working with refrigeration technicians in the "Smart Tool" project, designers and technicians enacted work dramas and tableaux around four fictitious workers. This gave further insight on technicians' work, as well as a study on the possible technological applications to enhance and support their work. According to the following description, the use of the *Forum Theatre* and the *frozen image* is obvious:

> "The role of the refrigeration technicians changed from being a passive audience into being directors with an expert knowledge. The users recognized the situations shown in the dramatized scenario… Because of the openness of the scenario there was a lot of 'holes' to be filled out" (p. 14).

Performance, like participatory design practice, has also been applied in multiple cases: for example, during the *situated and participative enactment of scenario*. Iacucci (G.) Iacucci (C.) and Kuutti describe that designers take part in a "projective series of improvisations with 'the magic' thing in users' homes and workplaces" (Iacucci, Iacucci, & Kuutti, 2002) (Iacucci & Kuutti, 2002). Moreover, Muller et al. presented *Interface Theatre*, in the context of which a group of numerous end-users and stakeholders are also involved. Particularly, designers and developers act out the appearance, functionality and dynamics of a user interface, while the audience (end-users and stakeholders) criticizes the display, interfering and improving the initial concept during the design process. A theatrical stage is actually used as the screen with each performer playing the role of a concrete interface component (e.g., Kim the Cursor, Marty the Menu bar, Dana the Dialogue box) (Muller, Haslwanter, & Dayton, 1997, p. 283). Also, Pedersen and Buur cooperate with industrial workers to create videos showing a suggested set of fresh ideas on work practices and technologies. During the process, workers acted out their concepts and monitored the action sequences that were recorded on video to further help other associates and managers to comprehend their proposals (Pedersen & Buur, 2000). More recently, Kantola et al. applied analogous dramatic methods, like giving participants role and characters, to deepen the understanding of users' situations (Kantola, Tiitta, Mehto, & Kankainen, 2007), while Enquist and Tollmar used role-playing as part of a series of workshops to envision a future health-related memory aid for pregnant women (Enquist & Tollmar, 2008). Finally, Salvador and Sato (1998, 1999) used acted-out dramas as triggers for questions in a setting similar to a focus group, and Howard et al. (2002) described the role of professional actors and directors in dramatizing attributes of proposed new products. In all cases, the methods used were performance-driven, much like the people and technologies used to describe.

Nevertheless, live art and conceptual art share common ground as both involve the presentation of a work in front of an audience, rejecting conventional, linear, scripted narrations of theatrical plays. Conceptual art has embraced and influenced various forms and tendencies on art (such as happenings, performance art, installation, body art, and earth art), under a common disavowal on traditional conception on art, the rejection of art as commodity, and the acceptance that all art is essentially conceptual. Conceptual artists challenged the common perception that the artist's role is about creating material objects.

They deliberated their inspiration away from the materiality of their work, and included action or spoken word to address the audience, concentrating towards the 'dematerialization' of art. For example, artists like Lawrence Weiner, Edward Ruscha, Joseph Kosuth, Robert Barry, and the English Art & Language group started in the 1960s to apply entirely linguistic means. Many conceptual artists used discourse, like painters used brush and canvas, and deliberated words from their common meaning, opening up to subjective interpretation. Moreover, in particular occasions (as in the work of Robert Barry and Yoko Ono) a set of written instructions were only available as a means to describe a work, which was never actually created or completed, to underline that the idea is of more importance than the artefact. Consequently, conceptual artists, like performers, supported that the artwork is only initiated by the artist and then it's on the audience museum artist and/or gallery to complete it.

Performance practice and design objectives involve works which are participatory. As Read states, "seeing, watching and looking at theatre do not begin to explain what happens between an audience and a performer" (1993, p. 58). Actors - performers of any kind and spectators are transformed to participants who actively intervene to influence the course of events and jointly mould their personal and collective experiences. No curtain is falling after a performance work is finished, literally and metaphorically, as the audience mutually contributes to the creation of the *living image* (Meyer, 2009). People attending a performance act, are engaged in an event. But enactive participation is an extended type of interaction in the frames of which the audience is introduced as agents to initiate actions and create events. The audience is not consisted of viewers, but rather of participants, co-creators of the final outcome. Therefore, participants and designers-performers are not separated, both in their position in space, where experience space and the stage are juxtaposed, as well as creatively, as fundamental components of the entire experience. Respectively, the differentiation between participants and object, like the one of performers and participants, is overturned. Audience and performers mutually co-create events in the threshold of everyday life and artistic experience.

3.5 Reconstructing the four walls

Experience design concentrates on setting the overall context (space, time, cultural and social factors, etc.) for experiences and events to occur. Live art events and experience design projects are both created to be addressed at audience to participate, on the borderline between artistic and everyday experience. Four elements are fundamental when designing projects to occur in physical and mixed-reality environments: *space, time, designer(s),* and *participants,* equal in number to the walls of a common room. Additionally, traditional theatrical plays, performance practices, and live art, also include four essential elements: *space, time*, *performer(s)/actor(s),* and *audience*. In both cases, MR technologies play a critical, though not indispensable, role that usually opens new perspectives to people's experience, by exceeding physical limitations of space and time. Respectively, traditional indoors theatrical space is consisted of four walls, like every ordinary edifice. The role of each wall is crucial semantically and ontologically, as it backs each element and action included. Four walls, four essential aspects, constitute the surrounding environment and frame the place where people and elements are included for events and experiences to

unfold. By paralleling the four vertical walls of the theatrical space with the four aspects of performance practice and experience design projects, we notice how contemporary tendencies in art and design, as well as the integration MR technologies, have affected people's participation while participating in live events. According to the purposes of this thesis, emphasis is specifically put on the role of audience, not as spectators but as participants co-creating the final outcome. Hence, people's enactive participation during the course of the event comprises the fourth wall.

André Antoine, founder of the *Théâtre Libre* (Paris, 1887) and the leading practitioner who introduced the concept of considering the audience as the fourth wall during a theatrical play. He even suggested putting pieces of furniture against the stalls (fourth wall), facing in this way, away and ignoring the audience. The aim was to help actors perform naturally and audience to experience a real-life situation. During that era of the history of the theatre, realism and naturalism dominated, requiring a separation of the audience from the stage. Diderot, in his *De la Poésie Dramatique* (1758) urged actors to "think of the spectator as if he did not exist [...] act as though the curtain would never rise" (1875-1877) and Moliere. In *L' Impromptu de Versailles*, refers to "this invisible fourth wall [that] does not conceal a crowd observing us" (Fourth Wall, 1998). In order to gain realism in actors' performance, the audience was conceptualized as another of the four walls. But artistic personages, like Klein, Duchamp and Brecht among numerous others, queried the passive role of the audience and endeavoured to transform it into enactive, creative participants.

The *fourth wall* is a theatrical notion, involving not only the stalls, but any form of mediation between performer and audience – between fiction and reality. When Brecht watched the performance of Mei Lanfang, the Master of Peking Opera, in Moscow (1935), the spectacle had such an essential impact on him that discussed his concepts in the *Alienation Affects in Chinese Acting,* an essay published a year later. Chinese drama comprises a synthesis of different artistic traditions and fields, including singing, chanting, dancing, acting, storytelling and acrobatics. Yangzhong quotes that Chinese drama "has more flexible and open conventions for character entrance and exit, change of scene and communication between actor and audience than those of the fourth wall dramaturgy. The Chinese actor knows very well that he is speaking directly to the audience instead of living within four walls" (Yangzhong, 1982). Accordingly, Brecht proposed a different stage-audience relation, mainly by changing the actor's acting style: instead of the audience being fully emotionally manipulated by the events on stage, he suggests to offer them the opportunity to be certainly engaged, but at the same time to appreciate the live event that unfolds in front of them. Just like the Chinese actor doesn't have to actually become the character, but rather fruitfully represent the character, depending on the artistic means and techniques he applies. On occasion of this culturally different performance, Brecht came forward with a new conception: the actor is the actor himself and the character at the same time; "his performance should liberate the audience from the state of hypnosis, thus enabling them to be aware of the fact that they are watching a play in a theatre" (Yangzhong, 1982). Thence, the audience is not alienated from the play evolving on stage, but rather is invited into the poetic atmosphere and imagination of the actor's performance. When Brecht stated "we want to demolish the fourth wall" (1977, p. 52) he introduced a bi-directional conversation and relation between audience and actors; the audience has ceased being the unforeseen spectator ever since. *Within the context of this thesis, deconstructing*

the fourth wall, could also mean rejecting the dichotomy between designers and participants, performers and audience, and is the key concern of the entire reconstruction of the four walls.

As soon as a wall is located within a theatrical or ordinary space, the area is divided in two sections: front and back, front-stage and back-stage, primary and background activity, concealed and exposed, each one resulting at respective forms of performance, behaviour and interplay. Crossing the threshold from one partition to the other also entails a transition from one position, state, and potentially interaction to another. Reconstructing symbolically this standing wall not only facilitates transition from a place or condition to another, but also diminishes fixed boundaries that traditionally bond each element (space, time, participants, designers or performers) with certain features or role. These four essential factors have already being reconstructed due to integrated mixed-reality technologies and contemporary strategies concerning individuals' participation during the event, as analyzed in previous sub-chapters:

- Space and time have been augmented and embedded with potentialities beyond physical limitations in mixed-reality environments (see subchapter 3.3.3).

- Audience performing with technology (see subchapter 3.3.1), and technologies as intelligent co-participant and performer (see subchapter 3.3.2).

- Audience immersed in a place where space of experience and stage are merged; a place where artistic and everyday experience coincide (see subchapter 3.4.1).

- Audience becoming participant and co-creator like the performer (see subchapter 3.4.5)[63].

The first step was made by poststructuralism stating that everything is in flux, involving any definite, fixed perceptions and narratives. Every social reality is moulded of encounters with the *other*, i.e. of interactions among individuals, which evolve and change constantly, resulting in personal behaviours and cultural practices. Meaning is no longer fixed; it rather reflects personal and cultural-social perspectives, moulded of interrelations in flux, i.e. complexes of interactivities in incessant process. Therefore meaning is always performed; so is social life, involving not only artistic expressions, but all human codes and cultural practices. Derrida's sense of *deconstruction* expresses that any sense of reality is created of discourse. Every text is a palimpsest of impacts already enounced; every culture an amalgamation of performed processes and subjectivities. Following, the *performative turn* considers all individual and cultural-social practices 'as performances' any activity is therefore studied as a public presentation of the self. Under this perspective, emphasis is put on human practices in relation to their contexts, contributing to a systemic approach of human experience, using representation in a contemporary, poststructuralist sense.

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[63] The correlation between the performer and space-time is partly covered in the performer-technology association and partly exceeds the objectives of this work.

Respectively, in experience design projects, designers develop the context for experiences – performances, interactivities – to emerge; they do not concentrate on object-based projects any more, as they used to in the past. Within experience-oriented design, the design space abandons the former product-centred view to a view on the entire experience. The abatement of the subject-object distinction shifts by extension the division of the participant and the artefact, event in our case. Artists'/practitioners' along with people's performances co-create (co-mould) the whole event; a project in constant process and development. In this case, participants and artwork are a 'one and only' ensemble; individuals "making art became, then, the auratic object itself" (Schneider, 2005, p. 33).

Consequently, in both performances and experience design projects, like live events, the boundaries between artistic experience and everyday life have been diffused. This inherent characteristic of performance act, i.e. the merge of physical reality and the reality of the play, is now even more exalted by the affordances of mixed-reality performances. Hence in both cases, mixing realities do not only involve the spheres of the physical and the virtual, but also the merge of everyday life and artistic experience. Consequently, a conceptual convergence has been deliberated, in the fields of art and design, between the subject (participant) and the object (work-event, event), the artist and the audience (like the designer and the people), artistic experience and everyday life, the fictional, the potential and the physical. The design space has changed from an artefact-centred to an experience-centred space.

Experience design and performance practice consist of a set of still elements placed respectively at the physical and mixed reality forms of space (scenery), as well as their position, distance, action, and behaviour in space and time (open, close). Among these elements there are those that instigate people's interactivity; those assigned to behaviours that trigger actions and therefore events, in the frames of a given narrative form. Performance studies offer an enlightening insight as they concentrate on all the essential components of a play, involving not only material and MR elements (static and mobile, physical and virtual), but human factor (actors, participants) as well, along with the interaction that emerges among them. Mise-en-scène, a term borrowed from the theatre, expresses the orchestration of the environment and the conditions for experiences to occur. Explicitly, it principally expresses the direction of both the scenery (scenography, set design) as well as the actors' activity on stage, or in front of a camera, in the context of a theatrical and filmic production. Experience design is about a contemporary form of mise-en-scène, i.e. of directing a production, a project, a work-event, and involves organizing people's performance and participation in space and time.

Performance space and MR environments are places designed to be experienced and lived, not merely viewed, involving what Rodoway named as 'intimate senses' (the haptic, the kinaesthetic, the visceral, the proprioceptive), rather than the 'distant senses' (hearing and sight) (Rodoway, 1994). Inciting these 'intimate' senses as well, results in expanding people's abilities to perceive and respond to the surrounding world, on account of the opportunities available of MR technologies. Massumi underlines the seed of potentiality in human need to overcome his/her capacities and common awareness, and experience the unfeasible, as becoming springs from as a desire to overcome incorporeal restrictions (1996, p. 94). In addition, the performing body is synchronously situated in multiple spaces (physical, virtual, imaginative fields), therefore is dislocated, processed and reassembled as

image. Virtual and physical forms of embodiment are juxtaposed within detached spatial unities. Therefore new potentialities have opened up as the physical and the simulated are interwoven together, enabling human to gradually *become other*, meaning to overcome the feasible, continuously altering our perception of the real and the simulated, the material and the corporeal. In case of mixed reality performance, new perspectives on inter-face and inter-space have emerged, inciting augmented and multisensory experiences and performances to unfold.

Digitally enhanced environments have become intelligent competent partners that contribute to the process of the live event, enabling personal performances and social practices to be realized, beyond the physical space-time restrictions, while shaping with participants their private and collective experiences. In regard of events encompassed within MR environments, the fourth wall involves the (set of) interface(s) where participants and places, develop a dynamic interrelation that enable mutual interactivities and live performance to occur. In live performances, like in any art event, performers and audiences are the protagonists, personally engaged in bodily level as well. Hence, a variety of bodies mould a bundle of stories within MR (performance – experience) spaces. Hence, participants are transformed into embodied interfaces, shaping embodied histories (Brown C. , 2011, p. 95). These embodied interfaces are afforded the opportunity to configure and experience a sequence of presences and performances incorporating the physical and the digital, everyday reality and artistic experience, as well as notions like near and distant, here and there, now and then, that are incompatible but still potentially co-existent; in this way multiple arrays of *otherness* (Brown C. , 2011, p. 97) are moulded shaping hybrid forms of space where human performances and experiences are grounded.

This conceptual convergence is accompanied by spatial closeness in performance space and experiential space. Both in case of performance space (stage) and the experiential space of mixed-reality environments, the space of the performers/agents and the space of the participants are unified. In a performance play, performers are not separated from participants spatially and ontologically; the latter are not viewers (like in cinema films) or listeners (like in concerts), their space and the artworks space collide; stage and audience space is united. In experience design work-event projects participants navigate and interact in the whole extent of MR environments, not in separated areas. Performance space and experiential space are unified.

Moreover, four-dimensional MR environments are never static, finalized creations, nor fixed. They denote a sense of *becoming* as dynamic fields, where processes, experiences, and performances are integrated; where interactivities and events are intertwined among people, places, and time. MR environments, integrated in contemporary multimedia performances and experience design work-event projects, are products of relations which are constantly evolving. As *relational spaces* they are interwoven out of relationships, meaning materially embedded practices, between people, environment and technology; mixed-reality space is a dynamic field, a product of evolving processes and events. MR technologies juxtapose physical and virtual spaces, beyond any physical sense of proximity. Detached and dissimilar by nature spatial entities are interconnected together challenging our perception of propinquity. Linking together distant places enables the exchange of stimuli, even in global level, associating therefore personal and collective experiences beyond physical restrictions of space and time. Contemporary digitally enhanced cultural

practices are at present located within a global stage (like in case of the internet) enabling performers, designers and participants to share collective experiences and co-create work-events.

The last wall, the last element of performance practice and experience design projects is time, or more precisely the sense of process, change, and perpetual becoming. Performance is actually "a process sensitive to its own transformation", an "art without guarantees; this is because it exists entirely in duration and amidst the play of divergent forces that typifies Deleuze's understanding of 'becoming'" (Parr, 2010, p. 30). Both scientific research and artistic practice shared common thoughts and conclude that time is fragmented, no longer thought merely linear. Present time is not simply deliberated as intermediate moments between past and future; it *is* rather past and future. The concept and aesthesis of 'now' have since been transformed into notions of an unallied, constant time, in respect to events occurring simultaneously. The significance of a given event is not depended on arrays of events with sequential position in time, but rather on its connection and relation to other concurrent events, emphasizing at their position in space - the relational field. In this way, time is moulded out of self-contained, detached sequences, of series of starts and completions, of synchronized constructions and deconstructions, resulting in the synthesis of personal and collective narratives and events. Time now comprises a synthesis of detached, simultaneous potential states (becomings).

Contemporary design theories converge towards a holistic approach on the content and context where people's interactions emerge. Experience design concentrates on setting the overall context for experiences and events to occur. This contemporary perspective involves staging sequence(s) of events and experiences for people to participate. Experience design along with performance practice and studies focus on the moment when events and collective experiences unfold, and the interface where, spatial entities become the place of narrations. Both are concerned with setting the context for interactivity, experience and eventually culture to develop. The very notion of *a design*, like *a performance*, suggests a certain context – space, stimuli, scenario – a basis for experiences and interactivities to occur. Designers, like directors, suggest a buddle of options (like scripts), inciting alternatives patterns of behaviour. And live event space, like performance space is a place constructed of stable and interactive elements (especially when integrated with mixed-reality technologies), which becomes the interface for human-environment interactions to occur, in physical, emotional and cognitive level.

Contemporary notions on design demand a reorientation in design practice and thought, and performance studies enlighten this new recently discovered horizon. According to the objectives of this thesis, experience design involves staging collective experiences in MR environments for people to be engaged in the borderline between the physical and the virtual, where everyday life and artistic experience converge. Designing for performances and experiences to occur, requires a fresh conception of *mise-en-scène* – a reconceptualization and reconstruction of the entire context where human interactivity would emerge. If the fourth wall reflects not only people attending a work-event but rather their participation during the course of things, the other three walls can be the aspects of time, space, and performers/practitioners. Digitally enhanced environments have become intelligent competent partners that contribute to the process of the live event, enabling personal performances and social practices to be realized, beyond the physical space-time

restrictions, while shaping with participants their private and collective experiences. Four walls, four aspects to be considered and reconstructed in designing staged live events with MR technologies.

Experience design involves staging collective experiences in physical and mixed-reality environments for people to be engaged and enactively participate, in the borderline between the physical and the virtual, where everyday life and artistic experience converge. Designing for performances and experiences to occur, requires a fresh conception of *mise-en-scène*; i.e. a reconceptualization and reconstruction of the entire context where human interactivity would emerge. Experience design involves a contemporary concept of mise-en-scène, i.e. of directing a production, a project, a work-event, and involves organizing people's performance and participation in space and time. According to contemporary tendencies in art and design, the borders between stage and hall, performers/designers and spectators/participants have been redefined softening the dichotomy between the observer and the observed, and in effect between materiality and referentiality. Therefore, spectators are not mere ignorant receivers of information, but active participants interacting within a certain content and context of a live event. By extension, reconstructing the fourth wall may conceptually be extended beyond the spatial and ontological distance between actor-performer and audience and also involve diminishing the remoteness of the physical and the virtual; the feasible and the potential; the participant and the artwork; everyday life and artistic experience; reality and fiction; performance stage and experiential space; present time and performance/event time.

4. Enactive participation: soma + structure

4.1 Introduction

According to the objectives of this thesis, preservation and promotion of intangible forms of culture require a fresh approach and methodology incorporating people's participation, interactivity and performances. Designers create the context for experiences to occur; they set the scene for events to unfold, events that are open to the ephemeral, the unexpected, emancipating individuals from spectatorship. As analysed in chapter 1, the *end cause* (i.e. the reason why - intention) of enactive participation involve the engagement and collaboration of audience initially in designed events and artistic experiences and by extension in conservation, promotion of intangible culture. According to the objectives of this thesis and the four causes of Aristotle, the *efficient cause* (i.e. the creator's conception - inspiration) is focused on the experience design, as well as at live art practices and performance studies in organizing live events, where art and everyday life meet, evoking people's participation, transcending audiences into collaborators of the collective experiences. The key points of chapters 2 and 3 involve design as change; design as staging of events (mise-en-scène); design as participatory event – people are welcome to get involved and engaged during the creative process as well as the final outcome. Designers are more like directors of collective and personal experiences, while individuals become performers in the common ground of between art and everyday life.

In chapter 4, emphasis is put at the notion of *enactive participation* in live events, which premises and extents *conventional* modes of *participation,* by inciting audience physical, emotional and intellectual interaction with practitioners, other people and the surrounding set, and secondly, by giving them the opportunity to get personally involved and collaborate in the course of the event. In this case, both the *formal cause* (i.e. scenario, plot of the whole action) and the *material cause* (i.e. what is made of) of the live event are influenced and altered. Enactive participation, along with mixed-reality technologies, props and scenery, become the actual material out of which live events are constituted. In this chapter, focus is placed firstly on the *aesthesis* while experiencing an event, emphasizing at the corporeal interaction of the living performing body. Moreover, as live events are works open to people interference, the formal cause is open to chaos, partly scripted and partly improvised, wherein multiple stories unfold in parallel. Enactive participation entails both corporeal engagement and personal interference in the course of the event.

4.2 The *efficient cause.* Designing the aesthesis of experience

Aristotle describes, in his *Physics II 3* and *Metaphysics V 2,* the *Four Causes (Material Cause, Formal Cause, Efficient Cause* and *Final Cause)* to comprehend the surrounding

world. As analysed in chapter 3, the *Four Causes* were applied by Aristotle in every aspect of everyday life and artistic process, involving four ways of explaining the changes or factors responsible for a certain formation, i.e. four motives something is created in a certain way. Briefly, the *material cause* refers to the substance, meaning 'that out of which' something is made (created, formed); the *formal cause* concerns change as imposition of form on chaotic matter, as form connotes shape and configuration; the *efficient cause* encompasses the creator's (artist's, designer's, etc.) idea, along with its actual realization (design, direction, moulding, etc.); and lastly, the *final cause* stands for the reason why something is created and/or reached a final state. Specifically, the *efficient cause* involves the designers, artists and practitioners who contribute in the creative process, as well as the media and material used both digital and physical in contemporary art forms. Design is a social art form and contemporary fields of design, like experience design, are not confined to any art-design boundaries. Actually, they overflow such borders to make aesthetic experiences for the people participating. Respectively, in case of designing live events, the *efficient cause* involves the synthesis wherein individuals' experience and interaction emerge. Designing for experiences to spring extends staging a play (like in case of the scenic arts) to include the organization of events (happenings), i.e. (inter)activities, developed among the participants and the environment in corporeal, intellectual and emotional level. As events comprise sequences of actions and procedures, experience design integrates 'figures of staging', meaning the arrangement of static and dynamic aspects in space.

A new age on design thought and practice has been developed involving holistic and human-centred approach, focusing on experience, aesthetics and interaction. Although neglected in the past, aesthetics is considered critical and has been brought to designers' and scholars' attention, affecting the conceptualization and design of experiences. Aesthetics is not associated merely with form and appearance, but most importantly with human interaction within a certain context and environment, and particularly with people's emotional, thoughts and somatic contact and interplay. Specifically, the sensual aspect of experience is brought into designers' attention when setting meaningful and engaging contexts for positive and gratifying human interaction to emerge. For the purposes of this thesis, emphasis is put on *the physical interaction principally among people* although a radical approach is necessitated while designing for experiences and events to emerge.

The source and core value of the term *aesthetics* derive from the Greek *aesthesis* (meaning sensing, feeling, observing, perceiving), emphasizing at sensory aspects of experience and cognitive over traditional concepts on art and beauty. Aesthetics of interaction comprise a radical approach on human experience, involving the body with the senses, cognition and emotion. Engholm asserts that aesthetics firstly, occurs when a subject is able to find coherence and meaning in the experience; involves emotions or affects activation, not mere sensation; generates satisfaction and enjoyment; aesthetics has an effect on the subject - the whole event will be more or less affected by the subject and the subject by the experience; it is people that create their personal aesthetic experience through their activities; and finally, aesthetics is not narrowly associated with the arts, but may occur in any domain of human experience (2010). Specifically, aesthetics of interaction is a rather everlasting and mutable process and emerges in-between people and environments (Löwgren & Stolterman, 2004). Aesthetics as *aesthesis* offer design thought

and practice a profound comprehension of how sensuous aspects of interaction affect our perception and overall experience in social, as well as art and art-related contexts.

Pragmatism rose as philosophic stream in the early 20th century and advocates the truth, the meaning of an idea, relying on observable practical consequences rather than anything metaphysical. For pragmatism reality changes, and hence truth is not fixed or ultimate truth, but rather elusive. Contemporary notions of aesthetics embrace a *pragmatic* perspective, supporting that aesthetics is emerging from our interaction within the (physical, virtual and/or mixed reality) world, rather than being intrinsic to the material dimension of the surrounding objects and environment. Pragmatist perspective has influenced the notion of aesthetics, by putting emphasis on the emotional and physical aspect of experience. Whereas the *analytic* perspective suggests that people's interaction comprise basically a cognitive process and design thought and practice entails common, objective standards and norms applied in design projects, *pragmatic* aesthetics concentrates instead on experiencing the world dialogically as embodied entities. According to Fiore et al., a holistic approach has been adapted embracing "thinking, feeling, doing and effecting change within an intersubjectively constructed world" (2005). Contrary to past concepts on aesthetics as synonymous to beauty, and on form as related to static features of an object (like colour and texture), pragmatist aesthetics associates form with variable aspects of interaction, what Shusterman refers to as "dynamic interaction of elements" (2000, p. 7). Contemporary tendencies on aesthetics are more concerned with aesthetics of interaction among people and the surrounding world. A variety of researchers has emphasized on aesthetics of interaction: Adorno mentions 'the processual essence' of aesthetic experience and the art work, arguing that "works of art exist only in *actu*" (2004, p. 233), meaning in lived dynamic experience. He concludes that "art is a quality that permeates an experience"; not the experience per se. Moreover, Shusterman supports that "all art is […] an undergoing and a doing which involves a reorganization of energies, actions, and materials" (1992, p. 6); Dewey states that "the actual work of art is what the product does with and in experience" (2005, p. 1); and Nietzsche asserts that "in the actual world […] everything is bound to and conditioned by everything else" (1968). Aesthetics is inherent and depended on the way people experience their everyday life within the world.

In contrast, the *analytic aesthetics* rely on the intuitive evaluation of aesthetics of objects, as if the material world and culture existed detached from any socio-cultural context, and hence aesthetics constitutes product property. Aesthetics, in this case, has a purposeful role: to make things appear attractive embedded as an 'added value'. Thus, according to pragmatic perspective, aesthetics is not an inherent attribute of the artefact, but rather the outcome of the human interaction with it. Hence our ability to engage in an aesthetic experience is determined by our social and cultural context, manifested in particular personal physical, emotional and intellectual responses, extended beyond the duration of the actual experience. Therefore, aesthetics is not an a priori but potential aspect of life, which emerges in use and experience, released in dialogue with the world.

Therefore, the role of the designer as well as the participant is equally fundamental to events, processes and experiences actualization. Although experiences are designable, designers cannot predetermine the participants' experience and aesthetic experience. Individuals create their personal experience while interacting within a physical or mixed reality environment and conditions configured and realised by the design team. Hence,

interactive environments are not necessarily comprehended and used as designed (Forlizzi & Battarbee, 2004) but rather appropriated in use. Designing experiences can by no means guarantee a meaningful and aesthetically advanced outcome as aesthetics is not regarded an integral part of the understanding of an interactive system (Petersen, Iversen, Krogh, & Ludvigsen, 2004). Although designers try to situate themselves in the participants' place, they "cannot see through the eyes of another, feel what another feels or develop meaning as any other person would" as expressed by Shusterman's words, and subsequently, the contribution of both the designer and the user is essential to co-create meaningful and enjoyable experiences around an event (2000). Aesthetic experience, like any other type, may not be developed in conformance with the designer's intentions; it emerges from various personal and interpersonal sensations, emotions and reflections that stem out in time and place.

Art and design evolve within a socio-cultural context and culture is respectively inscribed via creative social practices. Culture evolves in time through the changes, stories and practices of particular social members; culture emerges and develops out of collective actions and experiences. Contemporary aesthetics are concerned with the way cultural phenomena, like design, affect people's perception and life rather than the artistic qualities they may contain (Engholm, 2010). Extending Engholm's state on digital artefacts (2010) to live events, no event can be designed, experienced or estimated extorted from a specific (philosophical, social, cultural and more) context. Dewey also supports the aesthetic aspect can only be studied within human experience, and vanishes in case objects are detached from the original social and cultural scheme where created and experienced (2005, p. 2). Design thought initially studies the social conditions, norms and habits the final outcome will be integrated, as well as the individuals' needs and desires within a given society. According to the pragmatist perspective, an experience is more valuable and also satisfying for those participating when is oriented to fulfil people's needs and desires. Contemporary notions on aesthetics focus on the impact design results have on individuals, their perceptions, emotions, moods and behaviours when interacting within particular cultural contexts, rather than concentrating at standardized and objectified artistic qualities.

Contemporary notions on aesthetics as *aesthesis* extend beyond the field of the arts to embrace the multi-sensorial aspect of experience and interaction within everyday life and interaction. Concerning experience design (design of experiencing), the sensual aspect is critical in staging human interaction within meaningful and engaging contexts. Accordingly, all experiences have an *aesthetic* aspect, not merely those associated with design or/and art work (Dewey, 2005). Multiple scholars support Shusterman's pragmatic viewpoint that aesthetics of experience involve every aspect of daily life, including but not restricted to the arts (2000) as analytic aesthetics regard. For instance, he describes the positive impact of singing during workload in physical and psychological level:

> "the work-song in the harvest fields not only provides the harvesters with a satisfying aesthetic experience, but its zest carries over into their work, invigorating and enhancing it and instilling a spirit of solidarity that lingers long after the song and work are finished" (Shusterman, 2000).

Additionally, Engholm supports that the aesthetic experience is "capable of taking the individual out of his/her life and everyday context while also returning the person to his or

her life" (2010). This sense of profound connection evolves during sharing and co-experiencing, under given circumstances, involving gratitude, social coherence and balance (Dewey, 2005). After all, artistic creation and expression is not abstract aesthetic notion, but concrete cultural practice, materially rooted in the physical world and significantly structured by particular socio-economic and political factors.

Aesthetics is inherent in our everyday experience within the world and not in tangible properties. This view is essential in case of aesthetics of interaction in physical and mixed-reality environments, as common perception on interacting with art and design works has been altered and weight has been placed at physical interplay and personal participation. Since new hybrid artistic forms have been developed, incorporating multiple media and potentialities of interaction, the material aspect of the design work is hardly tangible, unlike traditional design fields (wood, plastic, metal etc.). Contemporary digital and mixed-reality art and design works are rather flexible, ungraspable, and phenomenal. The term *mixed reality* entails combination and integration of elements and characteristics of physical and virtual environments. This new aspect of materiality has affected immensely our everyday life and communication, and has expanded the creative media in the fields of art and design. Technology, as well as information, has been embedded in our daily communication, affecting the aesthetics of interactions in everyday encounters and artistic events.

For pragmatism, designing for gratifying and valuable experiences to occur is orientated towards fulfilling people's needs and desires. Designing according to people's motives offers involves taking profoundly into account their choices and behaviour. In the context of experience design, individuals' motivations are significantly taken into consideration, by studying the causal thread and needs behind certain activities, and accordingly shape a holistic perspective of the qualities meaningful experiences ought to encompass for them. Particularly, Hassenzahl discerns *intrinsic motivation* and *extrinsic motivation,* a distinction that is not dichotomous, but rather continuous and complementary. *Intrinsic motivation* refers to self-determined behaviour, and involves personal incentives that make individual's action and behaviour meaningful, for fulfilment and satisfaction to be achieved. *Extrinsic motivation* concerns incentives actuated by others (external regulation) to incite certain activity and behaviour towards a particular goal. This type of motivation is more complicated and demanding. Usually, people are incited with a short of profit to gain, which does not actually bring them joy and happiness, but mainly responds to social restrictions and demands (Levy, 2001, pp. 38-40). Hassenzahl, based on *Activity Theory* of Kaptelinin and Nardi (2006), describes three types of goals regarding people (inter)activities (2010, pp. 44-45):

- *Be-goals (why? activity - motives)* refer to individuals' benefit while accomplishing a goal focusing on their interaction, and therefore is self-referential. Indicatively, for Sheldon, Elliot and Kim, the key ten psychological needs are: be autonomous, competent, related, self-actualization, secure, wealthy, and influential, physically thriving, and self-esteemed (2001). Be-goals comprise the incentive of a certain scope, making an action meaningful and worthwhile.

- *Do-goals (what? action - goals)* appertain to a certain goal, a complete action, and desirable effect that a person tries to succeed. The connection between

action (do-goals) and motives (be-goals) is considered according to Hassenzahl "to colour experience; to set its emotional tone" (2001, p. 45).

- *Motor-goals (how? operation - condition)* encompass the set of processes and sub-processes required to achieve a particular goal. In essence motor-goals involve the interaction. In contrast to self-referential be-goals, motor-goals concern people interaction with the surrounding world, under specific standing conditions, and the requisite processes to succeed a goal.

The above three goals (why, what and how) are achieved in design practice by concentrating at the *pragmatic* and *hedonic quality* of the design result (product, system, environment, etc.) (Levy, 2001, pp. 49-50) (Hassenzahl & Roto, 2007, pp. 10-12). The *pragmatic quality* focuses on the product and particularly its potentials regarding the do-goals (what) and motor-goals (how), meaning matters of utility, usability, and appearance among others. The pragmatic quality does not actually have any meaning per se, but acquires meaning through the product role to facilitate or block particular experiences. Respectively, the *hedonic quality* is associated with the product's affordances to fulfil be-goals. In this case, weight is put on the reasons why a person chooses to interact with a particular product and by extension to have a certain type of experience. For example, the photographs we take during an enjoyable journey, or the souvenirs we brought back home with us are symbols and vehicles of beautiful moments and memories. Intense hedonic attributes may have a respective affect on people. Therefore, simplicity as quality pertains to the pragmatic aspect and novelty to the hedonic one. The pragmatic quality is responsible for the actualization of an experience, setting the framework and removing barriers for interactivity to emerge, whereas the hedonic one comprises the ability to offer people positive, fulfilling experiences.

Aesthetics of interaction concerns the aesthesis of the surrounding world. Aesthesis is a compound notion involving manifold esoteric processes involving the corporeal and material aspect in general, emotions, and contemplation. Numerous scholars have long asserted the instrumentality of aesthetic interaction (Jormakka, 2002) and how artefacts are appropriated in use (Bannon, 1991). Initially, Norman explains how emotion and behaviour are determined by different levels of the brain, and further proposes a model of involving the *visceral*, *behavioural*, and *reflective* aspect of a product: the *visceral level* includes rapid responses to daily events, making judgments of what is safe, useful, dangerous etc., and triggers emotional responses to stimuli (pleasure, happiness, fear, etc.); the *behavioural level* includes brain processes that control our everyday behaviour, interactions and well-learned routine operations (driving, typing, talking…) with the environment; finally, the *reflective level* is about the moment we step back of the routine to think over and comprises the conscious thought about particular events and experiences. By extension, Norman suggests three complementary aspects of design based on these levels: the *visceral design* involves creating results that are aesthetically appealing (meaning their appearance, sound, sensation, etc.), in accordance with the objectives they were made for. Relatively, *behavioural design* involves contexts of use and matters of usability, and *reflective design* focuses on the meaning and personal value of a product within a particular cultural scheme (2005). It is though essential in this point to stress that designers and practitioners also ought to take into consideration the context of experience that relatively influences the

visceral, behavioural, and reflective aspect of use and interaction. Contemporary aesthetics is about the aesthesis of a specific environmental and socio-cultural context wherein interaction and experiences emerge.

Experience design concentrates on designing potentialities that may induce somatic, emotional and intellectual response. Specifically, McCarthy and Wright's theory of pragmatist aesthetics supports that aesthetics of experience is directly interrelated to the analytic mind, the senses and the emotional reaction. They conceptualize the essence of experience through a holistic approach involving four core threads of experience (2004): the sensual, compositional, emotional and spatio-temporal thread. The *sensual thread* refers to people's sensuous engagement while present and interacting within a particular environment and situation, similar to Norman's *visceral* aspect regarding the human sensory perception (2005). It is not restricted to visually-oriented and static elements, like colour, shape, contrast, and balance (Fogarty, Forlizzi, & Hudson, 2001), but involves a multisensory approach on human interaction with the environment and others. *Compositional thread* particularizes in the experience synthesis and narrative, meaning the way an event unfolds and how people that participate make sense of the whole event; it refers to *our internal thinking* during an experience. In McCarthy and Wright's words: "how do the elements of an experience fit together to form a coherent whole?" (2004). Many scholars like Fiore et al. have also stressed the importance of affective storytelling (Fiore, Wright, & Edwards, 2005) as influential technique that supports the aesthetics of interaction design.

Moreover, the *emotional thread* indicates how the emotional aspect emerges, colours and influences people's relationships within a certain situation. Feelings are essential in estimating the value of our experience with a design result, like in case of conversing with a helpful or unmannered employee while trying to decide between commodities.

> "Emotion is the moving and cementing force. It selects what is congruous and dyes what is selected with its colour, thereby giving qualitative unity to materials externally disparate and dissimilar. It thus provides unity in and through the varied parts of experience" (Dewey, 2005).

Lastly, *spatio-temporal thread* concerns space and time as decisive means of communication, converse and interaction. The architectural, physical, social, and cultural environment and time are not only containers of human experience but significant components of experience. For the purposes of this thesis I concentrate on audience *enactive participation* live events with artistic and educational character. Therefore, emphasis is mainly put at the sensual and compositional aspects of experience, meaning at the designers' choices to induce individuals' participation in live events and become personally and physically engaged at the course of things.

Contemporary design strategies, and experience design in particular, embrace a pragmatic perspective, supporting aesthetics emerges from our interaction with the world, rather than being intrinsic to the material dimension of the surrounding environment, or solely related to artistic experiences. Design works contain aesthetic potentials, actualized by personal experiences and everyday routines. In accordance to pragmatic aesthetics, experience design considers experience *before* product, oriented towards people's interaction and participation, instead of focusing on the product's features, appearance and

functionality. Aesthetics of experience emerges in relation to designer's aspirations and work as well as participants' personal, interpersonal and social associations and interrelations within a particular cultural context. Therefore, the role of the designer as well as the participant is equally fundamental to the actualization (becoming) of events and experiences.

4.3 The *material cause.* Audience participation in live events

> *"Enter not as yourself but as a fresh ingredient*
> *called into being by the state of affairs in the space*
> *at that moment finding a gap that calls out to be filled"*
> (Jones R. , 2004, p. 87)

All audiences participate in a common experience. Spectators become emotionally, cognitively and/or physically engaged within the event they witness. No theatrical play, like no performance act, ever fulfilled its objectives unless addressed at and experienced by an audience, incited to participate in different ways. In live art and experience design events, the boundaries of daily routine and artistic experience are opaque. Similarly, the borderline between stage and hall, public space and performance place, materiality and referentiality, digital and physical, real and imaginative, participant and the artwork, performers/designers and spectators/participants has less discernible narrowing the dichotomy between the observer and the observed. The term *fourth wall* is introduced (in chapter 3.5) as a metaphor for thorough reflection regarding *audience participation* during live events, as approached in the context and objectives of this thesis[64]. By reconstructing the fourth wall, I suggest transcending the notion of *conventional audience participation* that is experienced in a typical theatrical play, and endeavour to comprehend and study the qualities of *enactive participation.* The term *enactive participation* is introduced to involve audience engagement in emotional, intellectual and basically corporeal level beyond the typical audience response (sitting in the hall, laughing, applauding), and entails collaboration with performers (in case of live art events) and designers (in experience design live events) for the live event to be realized. To clarify this concept we need to set definitions and a theoretical frame to study and clarify the various ways and qualities people interact during live performances, and afterwards concentrate on the particular way enactive participation can be incited while directing/designing a live event.

In the frames of this thesis, the notion of audience typically comprises an ensemble of people, or even just one person, a live event with artistic content is addressed to. In addition, audience participation does not involve activities of individuals who belong outside the audience ensemble and are considered active members of the event, like in case of rehearsals and workshops, or people who come to the event being aware they are part of the show (actors, artists, practitioners). It is essential to stress that the definition of audience is socially and culturally contingent, also variable in time, and never fixed. In the frames of

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[64] The other three walls of the scheme are associated with *time*, *space*, and *performers*.

this thesis, *conventional participation* audience and performers are spatially and metaphorically divided in two ways: they are spatially separated in stage (actors) and hall (non-specialists) and are given discrete roles to hold throughout the play, which entail different patterns of behaviour and control. During a typical play (for example theatrical and dance performance) the performers/actors keep control of the overall event and action, while the audience keeps the right to attend and remain inactive, meaning to mainly watch, hear, comprehend and feel as action unfold. *Conventional participation* is lucid and stable during the entire artistic event, and involves all typical audience reactions: outward actions and manifestations - like laughter, weep, and applause - as well as necessary movements - like sit and make themselves comfortable on the chair - as well as inward processes, meaning emotional and cognitive engagement.

Two essential keys in audience participation are *engagement* and *interaction*. Audience engagement and interaction entail direct, willing and undisrupted personal involvement in emotional, cognitive and/or incorporeal level. In her book *Computers as Theatre*, Brenda Laurel explains that "engagement is what happens when we are able to give ourselves to a representational action, comfortably and unambiguously" (Laurel, 1991, p. 115). She additionally refers to emotional guarantee as an important factor, meaning to feel free and safe from the fear, pain, and disappointment of everyday life during the event - in her words "pretending that the action is real affords us the thrill of fear; knowing that the action is pretend saves us from the pain of fear" (1993, p. 113). This emotional guarantee is aspired to be achieved through various techniques: for example, by inciting the audience to feel joy and playfulness; by giving people the right to have a choice whether to do or refuse to do something, through a plethora of possibilities ('as-if' scenarios); by making them feel they can rely on a system/event/structure under given circumstances and expect no unpleasant or risky consequences; by giving them the opportunity to experience directly the live event without mediation, and so on. Emotional guarantee is a crucial aspect as performers and designers aspire to make their audience *feel* comfortable, give themselves unambiguously to an action, go along without disruption, and avoid conflict and blocking from and to others; in other words to *feel the flow*. The sense of flow is aptly described by Mackintosh:

> "Although this energy flows chiefly from performer to audience the performer is rendered impotent unless he or she receives in return a charge from the audience. This can be laughter in a farce, a shared sense of awe in a tragedy and even a physical reciprocity to the achievement of dancer or actor. The energy must flow both ways so that the two forces fuse together to create an ecstasy which is comparable only to that experienced in a religious or sexual encounter" (1992, p. 172).

Audience participation in theatrical and performance practices emerges from audience interacting with both performers/artists and other audience members, props and environment in bodily, emotional and cognitive level. Accordingly, McAuley emphasizes at 'the specificity of theatre' based on the interaction between performers and audience in a given space (2000, p. 5). This type of interaction in artistic practices, like performance live events, always has social and cultural implications as interwoven out of an ensemble of society members co-experiencing and collaborating within a given place and time. Goffman

is in alignment with this standpoint and in *The Presentation of Self in Everyday Life* he asserts that "life is a dramatically enacted thing" and further states that in performance practices "ordinary social intercourse is itself put together as a scene [...] by the exchange of dramatically inflated actions, counteractions, and terminating replies" (1990, p. 78).

Similar to the 'specificity of theatre' and the 'fourth wall' and their association with audience interaction, Aristotle coined the sense of *material cause*. As analysed in chapter 2.5, Aristotle introduced the *four causes (material cause, formal cause, efficient cause* and *final cause*), and applied them in every aspect of everyday life and artistic process. The *material cause* in particular refers, as its name implies, to 'that out of which' something is made (created, formed). Material cause indicates potency towards a new determination; an action of an efficient source to reach a new actualization. Matter is the keystone of change, the actual potency of physical things to undergo a spectrum of transitions. The material cause denotes *creation through change*, and symbolizes mere potentiality, the potency of matter in limitless change. In both case of live art and experience design projects, practitioners compose adequate means and contents to incite people's engagement and participation, as audience interaction is the material out of which live events are actualized. Artists and designers only set the general frame (environmental aspects, objects, people, and technology) for audience interaction and participation to unfold in time.

At this point, it is crucial to stress that audience engagement and collaboration during artistic and especially theatrical events is not coined in the contemporary Western art world, but established since the ancient times. There is also evidence that ancient Greek tragedy derive from *dithyrambs*, religious and social rituals involving dance and hymns in praise of the god Dionysus (the god of wine and fertility) (Felner & Orenstein, 2006, pp. 26-27). Unfortunately, the precise origins of theatre still remain unrevealed in the mystifying spheres of unrecorded history; as intangible cultural practices, they leave no concrete trace in time. Rooted back to rituals with artistic and also spiritual, social, and educational scopes live participatory performances have been taking place in ancient cultures all around the world. Performers (actors, priests, shamans, and people of social power inter alia) did not initially address at the audience, but toward the shrine and the temple deity. Even in this cases audience attendance was also considered an act of worship. As in time audience active participation gains ground over passive attendance, sacred ritual theatre is gradually evolving into secular theatre (Felner & Orenstein, 2006, pp. 26-27).

There is a long (recorded history or intangible evidence) tradition of participatory audience engagement from the Antiquity until the 1800's, as Professor Lynne Conner states in her *In and Out of the Dark* (2008). People had the freedom (even the duty) to personally interpret and express their standpoint of the art performances, for example audiences used to vote the best plays in Ancient Greek theatrical events, and share their opinion in public of the play, even in intense and spontaneous ways. Audience participation was considered indispensable, not only as viewers (*theatron* in Greek) but participants with positive or negative responses in physical, emotional, and cognitive level. Their approval and/or rejection determined the tragic poets' success and establishment as great representatives of the Greek culture and civilization. Besides, Peter Burian, professor of classical studies and

theatre studies, argues convincingly that audience participation in ancient Athens contributed to promote democratic life[65]. In his words:

> "The Athenian conception of democracy gave a central role to frank and open speech, and the theatre was a privileged locus of such speech. The Greek theatre's democratic character is not so much a matter of taking ideological positions that are certifiably democratic, but of participating in a culture of democratic discourse and expanding it to make heard the voices of women, foreigners, and slaves who had no place in the political institutions of the polis - speech mediated of course by the fact that male citizens acted all the parts… By the time of the Peloponnese War, when some self-doubt began to enter the mix, the theatre was firmly established as a place for serious (tragic and comic) dialogue, where thoughts could be thought and things could be said that might otherwise never enter public discourse".

In the contemporary world people are willing to experiment with more active audience experiences beyond the framework of conventional spectatorship, as personal participation may require additional risk to be taken, but has proven to (or at least have the potentials to) deliver more enjoyable or fulfilling experiences. An emotionally, somatically and intellectually active auditorium was substantial for every type of live artistic, social and cultural performance, even after the Middle Ages. As Conner refers, an illustration of the *Ballet Comique de la Reine* (Paris, 1581) witnesses the placement of the king on the stage, indicating he is an essential element of the performance (2008, p. 82). She also states, placing audience members on stage was a familiar custom in England and France until 1770, and the position of their seats provided people with respective amount of control over the play. Audience had control over the action on stage (by clapping, throwing objects, or even demanding a repetition of a part). Audience seats were not bolted down before the nineteenth century.

Until the late 19th century, when auditoriums were first darkened, audiences were significantly responsive, expressing disapproval as openly and intensively as approval. Since then, certain conventions of audience behaviour restrict participation to silenced and conventional modes. People of all social classes are expected to sit silently in the hall, and express their opinions in interpersonal or public discussions only after the play was completed. Spectators have lost the opportunity to influence the happening or exchange views during the artistic event. The reasons were mainly two: partly because of spatial configuration (dark auditorium vs. lightened stage), and as mandated etiquette determined by the increasing societal status (*sacralization*) of the arts and the artist in particular. As Butsch mentions: "quieting audiences privatized audience members' experiences, as each experienced the event psychologically alone, without simultaneously sharing the experience with others" (2000, p. 15). Even though audiences have been typically identical to passive

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[65] Retrieved May 3, 2015, from http://research.duke.edu/stories/5-questions-on-theaters-role-in-democracy.

spectators in modern theatrical performances, this norm is neither universal nor transhistorical, only detained since the 19th century.

In an endeavour to borrow and apply a theoretical frame from performance and live art field to experience design domain, this thesis mainly embraces Ervin Goffman's *Frame Analysis* (1986) combined with contemporary approaches of relevant studies. Goffman introduces a detailed terminology at the way social interactivity is moulded in routine activities and artistic experiences. For White, the scope of Goffman's *frame* is to study the passageway from one kind of activity to another "instructing each other or asking question about what is going on" (2013, p. 39). Firstly, Goffman sets the *primary frameworks* or 'schemes of interpretation' to be the *natural* and the *social*. The *natural framework*, involves events constructed without human and social agency, while the *social framework* encompasses the "will, aim and control" of humans for events to generate (1986, pp. 21-22). Secondly, he defines as *keyed frames* those patterns of behaviour that pertain to theatrical acting and storytelling involving imaginary and/or 'non-serious' behaviour (1986, p. 44). By 'non-serious' Goffman does not imply any fake or inferior modes of communication, but denotes the way individuals respond outside the context of their everyday (or 'serious') life, meaning outside commonly acceptable frames of social behaviour, without rejecting at the same time principle values of social interaction, like showing respect at people's viewpoint and freedom to choose. Therefore, *keyed frames* are played 'in a different key', implying that social experiences although deeply connected, are also differentiated or 'anchored' as he suggests, opening up to various possibilities and interpretations of performance worlds and artistic practices. In Goffman's words:

> "I refer here to the set of conventions by which a given activity, one already meaningful in terms of some primary framework, is transformed into something patterned on this activity but seen by the participants to be something quite else. The process of transcription can be called keying" (1986, p. 44).

Specifically, in chapter 7 of his *Frame Analysis*, Goffman inserts an expedient selection of terms about the different types of connection between activity frame and the surrounding world within live events: 'episoding conventions', 'appearance formulas', 'resource continuity', 'unconnectedness', and 'the human being': 'episoding conventions' involve the signals that 'mark off' a particular bundle of activities from the "ongoing flow of surrounding events" (1986, p. 251); 'appearance formulas' refer to the conventions regarding the distinction and connection of the performer or audience member and his/her particular part in the event; 'resource continuity' reflects the fact that mainly audiences and performers as well, behave in performace plays according to how they feel and think – they bring sides of themselves, they do not support just a role outside any cultural and social scheme and independently of any personal abilities and skills; 'unconnectedness' refers to all aspects of the surrounding world that are not controlled anyhow or related to the context or meaning of the performance or social activity; and 'the human being' challenges the concept that we have a single, undifferentiated and fixed self and we act and experience under any circumstances accordingly. For White, Goffman approaches "the self as an effect – illusory or otherwise – of communication with others" (2013, p. 38); in accordance with the pragmatist, posthuman and poststructuralist philosophies supporting the notions of

culture and meaning are performed in flux, and are never crystalized (see subchapter 3.2.3). Moreover, Battershill reckons Goffman's viewpoint an ancestor of "the post-modern self [as] an interactive terminal" and "illusory effect of communicative process" (Riggins, 1990, p. 167). Meaning is not predetermined, but rather performed; as process and outcome it emerges from the interaction among people and social-cultural systems, in physical and by extension in technologically enhanced environments. These five terms, briefly analyzed here, emphasize at key aspects of social and artistic interactions and can further be applied to live events experiences designed for cultural purposes.

Thirdly, the *episoding conventions* are in essence *incitements* – or 'invitations' for White (2013, p. 39) – to incite people participation (Goffman, 1986, pp. 251-269) risking in this way to induce invited and uninvited behaviours. Specifically, Goffman distinguishes four types of incitements: *overt*, *implicit*, *covert* and *accidental*. An *incitement* is *overt* when artists (performers) address the audience unambiguously and incite them to respond in a specific way. An *implicit incitement* takes place when the audience is indirectly invited to participate, meaning no practitioner has apparently asked them to do anything, heightening in this way the risk taken regarding what each audience member would comprehend and respond. Respectively, a *covert incitement* uses tricks to incite people's participation without individuals realizing their actions are part of a performance piece but in the frames of everyday routines. Finally *accidental incitements* are those which were never actually incited or intended. According to the objectives of this thesis, further analysis on the methods directors and designers incite audience (enactive) participation is later included in chapter 4, followed by an additional research part extended in chapters 5 (methodology) and 6 (results). At this point, it is essential to stress an incitement is just an invitation; in White's words: "the invitation itself is not the change of frame" (2013, p. 43). No guarantee exists whether the audience will accept an invitation, become engaged and respond accordingly within an artistic experience and work.

Fourthly, risk is always taken when audience members are invited to leave their seats in the hall and participate beyond conventional frames for unwanted or unforeseen behaviours to emerge. Audience members are totally unaware in advance of the potential strings of interaction that may occur during a live event, and unlike performers they never have the chance to contemplate and rehearse within a certain artistic condition and narrative structure. Goffman conceived the audience as 'unpractised players' (1990, p. 78), meaning participants that improvise on the fly as the event unfolds. Therefore, performers cannot foresee any form of response or behaviour on behalf of the audience, and just try to be prepared for a spectrum of outcomes. There may be unexpected and inconvenient reactions, unpleasant encounters among performers and audience, interruptions, even faze. Performers take a significant risk by embracing audience spontaneous response. Nevertheless, trained performers have been equipped with skills to manage such behaviour in favour of their performance work, as later analysed in subchapter 4.6.4 about improvisation. Performers are capable of handling unpredictable behaviours and inconvenient occasions and raising the suspense, turning an unexpected situation into a challenge and captivating the audience, (Mason, 1992, p. 101). Performers are trained to react accordingly to numerous and dissimilar audience responses, but in no case can they predict the performance event as a complete outcome. Similarly designers can only get prepared for the unexpected when organizing live - hence never the same - events.

Lastly, a live event is interwoven out of a wide range of potential strings of interaction and modes of participation organized by performers and designers, realized in a different way every time experienced by people. The range of potential behaviours perceived by the audience waiting to be actualized by their participation in a performance is called by White 'horizon of participation' (2013, p. 57). And further explains, quoting Benett (1997), the horizon of participation, like the horizon of expectation, is a both "a limit and a range of potentials within that limit, both gaps to be filled and choices to be made". He refers to gaps as those parts of the narrative structure that need to be filled by audience (enactive) participation while experiencing the event. White also borrows Gadamer's conception of 'horizon' to be "not a rigid frontier, but something that moves with one and invites one to advance further" (2004, p. 238), also stressing that Gadamer's 'horizon' identify with Goffman's 'frame'. Under this viewpoint, inciting audience to participate entails "revealing a horizon through which to choose a path or to take a position" (White, 2013, p. 59). The horizon of participation both in case of live art and experience design events may be used to cover the overall context of limits, opportunities and choices offered and perceived by audience members to become collaborators of the event. A crucial aspect about horizons though is that designers (in case of experience design) and directors (in case of live art) cannot predetermine the overall result as people interaction will realise the live event, but they set the context for this interaction to emerge; they merge out of people interaction during the live process.

In the beginning of this chapter, the *conventional mode* of audience participation is analyzed, involving all typical responses of spectators as engaged in emotional, cognitive and physical level; outward actions and manifestations (like laughter, weep, applause, etc.) and inward processes (feelings and thoughts). A theoretical frame is also suggested based mainly on Goffman's *Frame Analysis* and White's *horizon of participation* offering a set of terms and approaches on audience participation in social and artistic events. Nevertheless, as Shaughnessy notices and critics support there is a need to discover new ways to engage individuals by "exploiting the physicality and immediacy of the live, theatre experience" (2012, p. 189). A holistic approach is necessitated to embrace involving "attention, memory, empathy, and heightened emotions" (McConachie, 2008, p. 19). Following, the enactive mode is proposed and explained thoroughly in live art events, and is extended to the role of spectator to the role of unpractised collaborator, applied at experience design live events.

4.4 Enactive participation

In the frameworks of this thesis, the significance of social members' interaction and participation is explored in the design process and conduct of cultural live events. Furthermore, focus is placed at the methods, techniques and potentials borrowed from live art of turning the audience member into collaborators during live artistic events, and following apply this knowledge and experience at the field of experience design. As emphasis is put on designing for an extended mode of *audience participation* to emerge beyond the usual frames of audience response (laugh, applause, etc.), I suggest the notion *enactive* to describe a mode of participation that exceeds conventional patterns, meaning basic physical, as well as emotional and cognitive engagement, to embrace additional somatic involvement in the live event process. Audience presence and participation is

indisputably indispensable for theatre and performance shows. Enactive participation though concentrates on the human body, borrowing Machon's perspective on (syn)aesthetics (2009). *It is essential to stress that the conventional mode is the prerequisite basis for enactive participation to emerge not a different mode of participation.* The notion of *enactive participation* is proposed to challenge audience role by firstly, involving corporeal, emotional, cognitive and experiential engagement with others and the surroundings (conventional participation), and further to transcend traditional patterns to put emphasis at bodily interaction, and at giving audience the opportunity to get personally involved and collaborate in the course of the event.

For the purposes of this thesis, the term *enactive* denotes something that is collaborative, interactive, immersive, and participatory, and is borrowed from the cognitive sciences: Varela, Thompson and Rosch describe as *enactive* the *approach* focused on *embodied action* and *cognition* in cognitive sciences (1993). Additionally, Bruner's *enactive* of learning as well as stage of knowledge (1990) is centred at propositions rather than objects, gives ideas a hierarchical structure and considers possibilities in a combinational way (Spencer, 1991, pp. 185-187) (analysed in chapter 1.6). Specifically, *enactive participation* has twofold meaning: firstly, this type of participation incites individuals to stand up literary and metaphorically from their seats, cross the hall, enter the event space, and interact in somatic level with the surroundings and with others: audience, performers, practitioners, facilitators, and everyone involved in the live event. Secondly, the audience role exceeds spectatorship and includes actual and organized intervention as the event unfolds. The first aspect is associated with the sensual thread and the second with the compositional thread of experience of McCarthy and Wright (2004). The notion *enactive* participation, as proposed in this thesis, supplements and simultaneously transcends conventional participation (involving somatic, emotional and intellectual interaction within a particular physical and/or mixed-reality environment), and comprises the *material cause,* i.e. 'that out of which' live events, like performance events, are made of.

Conventional participation typically entails audience as spectators and trained artists or practitioners as performers of action. Nonetheless, in performance works both sides included have moved outside the boundaries of their role and experimented on the borders on the quality of their contribution during event events (see chapter 2); "so that control – and authorship – is shared, and passed back and forth between them" (White, 2013, p. 31). It is critical to stress that audience and performers never actually exchange places and roles. The former is never aspired or willing to become performer and the latter although steps aside at times, never loses his/her role of holding the responsibility and the energy of the overall event. Therefore, White suggests not to consider audience as *co-creators* of the performance events, but *facilitators* of potential performances, and his viewpoint offers a different perspective in audience participation overall (2013, p. 74). The performer changes roles from 'stage-actor', meaning the professional artist who acts as facilitator of action during the event, to 'stage-character', meaning his/her role within the narrative world, and vice versa (Goffman, 1986, pp. 129-131). Respectively, the audience has the option to experience the event as 'theatregoer', i.e. as customer who plainly buys his time in the theatrical play, and as 'onlooker' involving the role of the spectator and attendant of the play (Goffman, 1986, pp. 129-131). A complex synthesis is interwoven in the same context as at any given time a constantly variable synthesis of roles interact in relation with each

other: 1) people who conventionally participate, 2) those who enactively participate, 3) and even those who may not be even engaged at a certain moment, in terms of the audience, 4) as well as performers who follow scripted behaviour as characters of the play, 5) and those who facilitate the audience participation so the story unfolds. All these elements are interrelated and influence each other, apparently or indirectly, during frames and between frames of action. Evidently, all roles and encounters are not directed but organized to a certain extent, attuned in potential, desirable and meaningful, strings of interaction.

The term *theatre* was named after the ability given to every spectator to have a different view (θέα meaning view in Greek) of the same spectacle. Theatre is a viewing place (Shaughnessy, 2012, p. 8) (θέατρο in Greek) but was never meant to confine as this. Theatre, like every type of artistic performance, involves a lot more than viewing; feelings, thoughts, understanding, sensing, imagining, remembering, and more, are principally involved through the body. Nevertheless, viewing was never just a process of receiving images, as deeper levels of communication can be reached. Applied theatre and performance though focus on audience participation, as entails understanding and responding, not only emotionally and cognitively, but through the entire active body. Enactive participation concentrates on the body as sentient vehicle for sharing, interpreting and contributing at collective experiences in live socio-cultural and performance events.

This thesis concentrates on live events with cultural and artistic content with entertaining and educative extensions, aspiring to promote and preserve intangible forms of culture through events and people participation. In terms of culture, the intangible aspect involves not only cultural values and practices, but also notions, like, beauty, emotion, pleasure, thought, meaning, story/structure, virtual, becoming. The objective of this thesis extends beyond the production of an artefact, to organize and design the intangible, and turn it into tangible, meaning through the body, through audience participation and interaction incorporating 'tangible' elements: scenery, props, characters, spectators, visual design, interfaces, sensations, mixed-reality technologies and performances. In this effort, audience participation is keystone as in the wide spectrum of social and cultural events, and enactive mode in particular shares common perspective with Denzin's viewpoint on postmodern audience:

> "Under this postmodern performance aesthetic, the traditional audience disappears. The postmodern audience is both an interactive structure and an interpretive vehicle... as existential collaborators they are co-constructed by the event... postmodern audience members are neither voyeurs nor spectators; they are not passive recipients of a performance event. Rather, audience members are participants in a dialogic performance event, an event that is emancipatory and pedagogical" (2003, p. 41).

Concerning the educative aspect, scholars have long acknowledged the contribution of performance (see chapter 1.5), and embodied participation in learning. Scholars stress the benefits of incorporeal engagement and collaboration in education: Shaughnessy asserts the physical level of social interaction is keystone in learning (2012, p. 11); Cytowic states the limitations of language and thought in knowing and doing, as "*some of our personal knowledge is off limits even to our own inner thoughts!*" (2003, p. 17); and Nicholson emphasizes at "the place of learning, and the movement of bodies" as essential to the

experience of learning (2006), referring to Ellsworth's concept of the 'materiality of learning' (2005). Following (chapter 4.5), focus is placed at inciting *visceral forms of social encounter* and contact through embodied experiences, under the perspective of experience design.

Moreover, according to Nicholson's analysis and Ellsworth's pedagogy, performance event is a 'shared field of experience' and a place with learning potentials as "a complex moving web of interrelationalities" (Ellsworth, 2005, p. 55). The actual experience of participating inside the artistic work offers audiences a different perspective of the action and the plot than remaining seated spectators. When audience leaves the auditorium to enter the performance space and becomes participants, a 'liminal, inter-subjective space' is configured (an 'in-between zone', the 'lucid third') accommodating practitioners and participants in participatory performance (Shaughnessy, 2012, p. 38). In live events under the perspective of experience design, the event space and social space coincide, as stage and hall or outdoor space emerge in live art events (see subchapters 3.4.3 and 3.4.4).

Furthermore, the narrative structure of live events that aspire to embrace enactive participation is differentiated from one that aspires to incite conventional participation. In case of interactive work, directors and designers are 'authors' of remarkably complicated 'scenarios' as they endeavour to configure and organize audience interaction, such a fleeting and unforeseen factor. In live events, audience members enter the event place as potential collaborators of the ongoing work. Audience response necessitates space and time to emerge and develop during the live event, and guidance so the narrative structure and flow is followed as well, otherwise chaos will dominate. For White:

> "The interactive work is prepared so that it has gaps to be filled with the actions of participating audience members… The work of the interactive performer consists of repeating this structure and allowing the participants to fill the gaps in different ways in each iteration of the work" (2013, p. 30).

Designing enactive participation involves one compound structure to incite audience personal engagement and interaction, meaning one story comprised of several potential performers-audience interactions, combining performers' action as facilitators and characters, as well as improvised though scenario-based audience participation (analyzed thoroughly in chapter 4.6).

Lastly, as understanding is not only formed out of sensation and cognition but emotions as well, a brief reference to emotions is also made at the end of this chapter (4.7). Initially, this aspect was not chosen to be involved at the objectives of this research, not to broaden the spectrum of search, but eventually it proved of essential importance by the results of the case studies. Our emotions influence the way we experiences the world, not only during certain events, but afterwards as well as well remember and contemplate on them. Our feelings colour our experiences and scholars support their significance in designing strings of interaction (Norman D. , 2002) (Russell, 2003) (Hassenzal, 2010). Some researchers even support their primace over reason, like Cytowic stressing "the impossibility of a purely 'objective' point of view" and the "force of intuitive knowledge", and supporting that "affirming personal experience yields a more satisfying understanding than analyzing what something 'means'" (2003, p. 7). Emotions, sensations, and cognition are interrelated and powerful tools of perception.

At this point, it is crucial to stress that participation is principally a matter of choice. Designers and directors offer audience the opportunity to experience their live work in an enactive way, but it is up to the people to decide when and if they attend as spectators or enactive participants. Goffman also refers to this key point and names it 'central understanding' in his *Frame Analysis*, supporting: "the audience has neither the right nor the obligation to participate directly in the dramatic action occurring on stage" (1991, p. 125). Audience members have the choice to enter any of these modes of states of participation during the event according to the quality of their experience: feeling uncomfortable or relaxed, shy or confident, overwhelming or energized, and more. An essential issue is also raised, as such practices may demand much of their audiences, especially in the eyes of the spectators who are not experienced in such artistic and/or cultural contents (Machon, 2009, p. 60). As Machon explains "the audience is expected to experience and interpret a whole stage picture that interweaves live performers with design elements" potentially involving a combination of mixed-reality technologies, verbal texts, pre-recorded scenes and live soundscapes (2009, p. 60). Having the right and the opportunity to come in and out of the actual action is liberating and distressful, giving the benefit of a wilful and meaningful experience based on the personal way each person is willing and able to experience the event. Another important matter concerns the design of such an event that invites free will and facilitates audience passing from one mode of participation to another. At any moment of the live event, some people choose to follow guided patterns of behaviour or respond spontaneously to the given situation, while others remain outside the frame and attend the whole event while laughing and/or applauding, for example. This complicated situation entails an efficient narrative structure which respects and enables the audience choices, while in parallel retains the flow unhindered so the story unfolds according to the directors' objectives.

The notions of culture, tradition, identity, audience, and participation are culturally and socially constructed therefore constantly variable, as everlasting developing processes (see chapter 1.2). For poststructuralism, meaning is not fixed either, as reflects and is moulded out of personal and cultural perspectives and interrelations in flux, i.e. complexes of interactivities in particular space and time (see subchapter 3.2.3). Glassie, in particular, conceptualizes tradition never stable in time, as "a people's creation out of their own past", adding that "its character is not stasis but continuity" (1995, p. 396). He claims that the opposite of such an ever changing process is oppression, supporting that "oppressed people are made to do what others will them to do" (Glassie, 1995, p. 396). Respectively, live performance acts are interactive and participatory events, necessitating audience collaboration to unfold. And performing, participating and designing as creative processes also involve a sense of becoming, meaning of change (see subchapter 2.4.1), characterized by uncertainty, spontaneity, responsiveness, and the opportunity to give/make choices. Cultural practices are variable by nature, interwoven out of live social and artistic encounters within particular socio-cultural contexts. Accordingly, meaning is in flux defined by cultural and social ferments and changes.

Similar to meaning and tradition, the role of the audience is also reconceptualised, in modern times more rapidly and broadly than ever. Art has been shifted from object-oriented to event- and interaction-oriented, collapsing the binaries of subject and object (see subchapter 2.4.3). Audience and performers/practitioners are associated in an 'autopoetic

feedback loop' (Fischer-Lichte, 2008, p. 39), meaning a self-engendered relation in which audience feedback is part of the work. As in performance and interactive theatre plays 'production' and 'reception' happen simultaneously, participants "become increasingly aware that meaning is not transmitted to but brought forth by them" (2008, p. 150). Turning spectators into participants and 'active producers' (of meaning, of the live event) entails inciting them to engage in creative activities with educational, social and community content, aiming at social transformation "a valuable goal of applied theatre praxis" (Sutton, 2005, pp. 32-33). Change is associated with power. In a performance event, everybody involved (artists, practitioners, audience, etc.) share control of the live situation, to a different extent though. They share control of what strings of interaction are realized and the qualities of experience that emerge. Audience takes over an amount of power as collaborators in creating meaning when invited to participate enactively in a live event.

Apt examples of enactive participation are the works of Punchdrunk, Shunt and De La Guard. The Argentinean group De La Guard created an overwhelming production named *Villa Villa* (1999/2000) with no dialogue, plot, or seats, which appears to be improvised, performed on the wing (figure 46). The audience is standing in a large dark square room, with four black walls and a paper white ceiling. The light effects and the acrobatics of the performers above the audience are impressive, giving the impression that the audience are outside in a forest looking up at the sky above. Then, the black walls come off and the whole stage and backstage is seen. The stage completely surrounds the audience so everybody can see the action. Water is also used as prop in the performance, contributing to making a wild party as the actors jump in and out of the dampen surface and splash the audience. At different points, the performers interact with the audience and improvise wild dances with them, flirt with them, and kiss them, always with the consent of the individuals (Knopf, 1999). The whole show is a pandemonium of flight, emotions and sensations:

> "In a kind of living action painting the group rains stars on us, finally bursting through the membrane of heaven and in moment after moment of awesome theatrical poetry, penetrating our emotions through sensation. We touch, smell, see and hear, above (and beneath) it all, *feel* the throbbing noise and beat of flight, of abandon, of aspiration. Pushing the envelope of pure theater, *Villa Villa* on one level gradually explores complex social dynamics" (Larson, 1999).

In addition, Shunt is a London-based performance group, founded in 1998. Their performance *Dance Bear Dance*[66] (2003) first invites the audience to sit in a conference room and suddenly half the performance space is turned into a casino and the performers take the role of the croupiers. Without any clear guidance, the audience members find their way to the available seats, are offered snacks and begin to play. Later on with no performers in the performance space, a phone rings waiting until a member of the audience answers it to receive necessary instructions to help the story unfold. It proved to take the audience some time till someone decides to take that call, as no apparent instruction is given about who should pick up the phone. The general feeling is vague: "it is not always clear who is a performer and who is not, and there are moments when you do not believe your eyes"

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[66] Photo gallery and video: http://www.lizzieclachan.co.uk/Dancebeardance.html

(Gardner L. , 2003). Due to lapse of guidance, the audience needs to find the courage and stand from the mass to help the event continue.

Moreover, Punchdrunk group (figure 47) has produced several site-specific and participatory shows, like *Faust* (2005), *Sleep No More* (2014), *The Borough* (2013), experimenting on what happens when audience leaves the security of the auditorium and becomes a character. Since 2000, their work involves "classic texts, physical performance, award-winning design installation and unexpected sites, our infectious format rejects the passive obedience usually expected of audiences" (Punchdrunk). According to the director Felix Barrett, the Punchdrunk perspective is summed up in what they call *interactive theatre*:

> "[…] a unique theatrical experience where the lines between space, performer and spectator are constantly shifting. Audiences are invited to rediscover the childlike excitement and anticipation of exploring the unknown and experience a real sense of adventure. Free to encounter the installed environment in an individual imaginative journey, the choice of what to watch and where to go is theirs alone" (Punchdrunk).

Faust[67] in particular is a site-specific performance placed in an enormous disused warehouse in London. For Punchdrunk, "the more real it is the deeper it comes" transforming empty spaces to performance places 'to cinematic detail', and emphasising at tangible elements, so that "everything is tactile, everything you see you can touch" as well as "tactile contact with another living entity" (Barret, 2013). At first, the audience is given white plastic masks and is welcome to enter a huge disoriented and dark area of over five floors and forty rooms (a diner, a corn field, a cinema, a laboratory), and make its own way to the event. The mask is an essential element helping individuals feel part of the show, while intensifying ay the same time a sense of anonymity, "only heightened by the odd occasions when the actors, suddenly alert to your presence, grab you by the hand, stroke your face or whisper in your ear" (Gardner L. , 2007). As the director explains, the mask is used to give the impression that "people are ghosts who disappear in the aesthetic of the piece" (Barret, 2013). As Glusker witnesses:

> "[…] without the usual division of space between audience and performer, spectators are often unsure of how to behave. In a dance sequence, the fourth wall collapses entirely: some of the performers take a partner from among the audience" (2006).

For Punchdrunk the audience is shifted from 'faceless audience member' to part of the action and play. As the roles are nothing but conventional in their work, "anybody can be a part of the show... you are the hero, you are in the film" (Punchdrunk).

Beyond the field of live art and performance, installation art also incites the audience to become physically, emotionally and intellectually engaged with an artwork during a participatory artistic process. Installation art is also live and procedural welcoming people to play a significant role in the event. For example, Ann Hamilton invites people in a 55,000-square-foot armoury in New York to participate in her work *The Event of a Thread* (2012),

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[67] Sample video: http://vimeo.com/19408848

which pertains to the field of installation-performance art (Smith, 2012). In the performance place, 42 large wood-plank swings are constructed with an enormous, diaphanous white curtain hanging in the middle from the ceiling. People are invited to swing on and their actions are crucial for the event to unfold (figure 48). Depending on the quantity of people who swing on and the intensity of their action, the curtain made of a lightweight silk twill, ascends and descends, so the air in the place is stirred and everybody present can feel the breeze and the calming image of the waving curtain. Other parallel activities of trained performers accompany the event, stressing the atmosphere of joy and contemplation.

In addition, *Obliteration Room*[68] (2011) is an interactive children's project developed by Yayoi Kusama for the Queensland Art Gallery's "APT 2002: Asia Pacific Triennial of Contemporary Art". Kusama investigates interactivity and audience participation since the mid to late 1960s initially with solo public performances and later with participatory happenings (The Obliteration Room, 2011). The artist takes an Australian domestic environment and recreates it in the gallery space, complete with locally sourced furniture and ornamentation, all of which has been painted white (figure 49). The audience was given thousands of brightly coloured stickers in the shape of dots to stick them in all available surfaces of the colourless scenery, like a white empty canvas waiting to be revitalized. Both cases necessitate the collaboration of audience to unfold and their physical participation exceeds far beyond the role of spectators.

Following, more examples of contemporary forms of participation are quoted in live events far from the fields of art and design, outside any artistic, exhibition or even physical space. These cases reflect among numerous others that people interaction and participation has been considered essential in a wide spectrum of social and cultural practices and is not restricted to art. For example, *Before I Die* is the project of Candy Chang who took permission and painted the side of an abandoned house in her neighbourhood with chalkboard paint and stencilled it with a grid of the sentence "Before I die I want to _____." (figure 50). She had just overcome a loss and a long period of grief and depression and wanted to share that feeling of gratitude for what is important in life. Passersby had the chance to take a piece of chalk and complete this sentence according to their believes, and responses varied: *Before I die I want to… sing for millions, plant a tree, hold her one more time, straddle the International Date Line, see my daughter graduate, eat more everything, abandon all insecurities, be completely myself* and so on (Before I Die, 2011). This action helped an entire neighbourhood to express and share their thoughts and emotions on the particular subject.

Besides, the *aporee radio* is a digital German platform (aporee.org/maps) where an international community of phonographers, artists and sound enthusiasts uploads soundscapes of public space from all over the world. This sonic cartography transmits since 2006 via the internet using the Google maps, involving environmental sounds recorded by people from any place on earth. Contributors upload their audio file and link it with a red spot with the exact position the file was recorded on Google maps (figure 51). Indicatively, 39 audio archives are recorded in Athens, more than 130 in Istanbul, almost 30 in Madrid, sound of seabirds on the north Norway, sea waves from Florida, etc. In this way, users can explore and access thousands of archives including one or more audio files, as well as their

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[68] Photo gallery: http://www.thisiscolossal.com/2012/01/yayoi-kusama-obiliteration-room/?src=footer

place on the map, and relevant metadata concerning their record (time, place, contributor, file size, etc.). The *aporee radio* is a platform where audio memories of public space are collected, archived and accessed. In the creators' words "radio is both a technology in transition and a narrative. It constitutes a field whose qualities are connectivity, contiguity and exchange" (Radio aporee). Any individual with internet connection is potential participant - both contributor and listener - by exchanging and sharing audio fields, and in extension audio narratives and memories from all over the world. Hence, any discrimination between artist and audience, contributor and listener, becomes vague, almost interchangeable.

The two last examples blend everyday social life with the culture and views of distant places and people, inviting their visitors to surpass traditional customs of accommodation and food and come to know distant artists and cultures. Besides, *Conflict Kitchen* is a restaurant in Pittsburgh that according to its website "only serves cuisine from countries with which the United States is in conflict" (Conflict Kitchen, 2014), focusing on the food, culture and politics of a different country. Every few months the country changes in accordance with current geopolitical events. During that time the menu is associated with the tradition, the materials and the customs of the country in focus. Besides, through "social relations of food and economic exchange", a set of events, performances, and discussions seek to inform and familiarize people with the culture, politics, and issues of that country (figure 52). Lastly, the art collectors Laura Lee Brown and Steve Wilson founded in 2006 the *21c Museum Hotel,* involving not only a 90-room boutique hotel, but also contemporary art museum, award-winning restaurant and cultural civic centre, out of a wish to "make contemporary art a part of more peoples' daily lives" (21c Museum Hotel, 2014). Much more than a luxury hotel in Louisville of Kentucky, this place accommodates "world-class contemporary art by today's emerging and internationally acclaimed artists", offering visitors with multidimensional experience (figure 53). Although these examples are not live events with artistic and educative content, at least according to the sense we examine in this thesis, nonetheless they involve a series of social encounters (discussions, exhibitions, dinner), and they do have artistic and educative aspect as people have the opportunity to learn the culture and the geopolitical conditions of another country as well as the work of well-known artists.

4.5 Somaesthetics

4.5.1 (Syn)aesthesia

"Interpretation takes the sensory experience of the
work of art for granted, and proceeds from there.
This cannot be taken for granted now...
what is important now is to recover our senses.
We must learn to see more, to hear more, to feel more"
(Sontag, 1982, p. 102)

In participatory art forms, like performance practices and live events under study, embodied experiences are designed inciting visceral forms of social encounter. Enactive participation puts weight at the body as sentient vehicle for sharing and interpreting human experiences in live sociocultural and performance events. Nevertheless, all applied theatre and performance practices are participatory, as participation is a principle of applying performance (Shaughnessy, 2012). In the context of enactive participation, weight is put at the human body during experiencing live events, since "immediate perception is primarily located in the body" (Machon, 2009) inducing 'other kinds of knowing' and 'intuitive knowledge' (Cytowic, 1995, p. 167). The human capacity to make sense through the senses, to make meaning through the somatic experience, is inherent and educed out of the limbic system. Therefore, the semantic is generated through perception and remembrance, functions that emanate from experiential memory of the embodied self (the somatic).

Every design proposal involves sensorial stimulus (smell, colour, text, image, sound, music, symbol, etc.) that trigger thoughts and feelings in everyday interactivities and participatory art practices (figure 54). Machon coined the term *(syn)aesthetics* (with parenthesis) to "encompass both a fused sensory perceptual experience and a fused and sensate approach to artistic practice and analysis" (2009, p. 14). As he further explains, *(syn)aesthetics* emanates from the Greek *syn* meaning *together,* and *aesthesis* meaning *sensation* or *perception,* and explains that experiencing (syn)aesthetically entails to perceive somatically the details (2009, p. 17). Machon also contends that synaesthesia is 'artistically induced' clarifying that synaesthetic abilities can be instigated to non-synaesthetic people through artisitc experience (2009, p. 19). Concerning his association of (syn)aesthetics and performance, he further asserts:

> "[…] characteristic of the (syn)aesthetic performance style is its consolidation of a variety of artistic principles, forms and techniques, manipulated in such a way so as to fuse the somatic and the semantic *in order to produce* a visceral response in the audience" (2009, p. 15).

The (syn)aesthetic approach encompasses a synthesis of sensory, emotional and cognitive appreciation and response through the body. Stressing at the experiential nature of perception and interpretation Machon explains that (syn)aesthetic sense emerges in performance practice where "dramatic techniques express ideas, thoughts, emotional experience, psychological states and so on, that are beyond the bounds of conventional communication" (2009, p. 20). The performing dancing body within the surrounding natural and/or architectural scenery is a powerful means of expressing thoughts and feeling. The performing sentient body is the core of communicating and appreciating – the signifier and the signified of - the *unsayable* (Machon, 2009). The somatic aspect of experience instils a 'primitive sensitivity' (Luria, 1969) and turns the elusive and immaterial into perceivable and understandable. Accordingly, the (syn)aesthetic performance style can make the unpresentable and inarticulable presentable or *'the intangible tangible'* (Machon, 2009, p. 67) (my emphasis). Based at the corporeal aspect of experience, a visceral cognition is developed through the amalgamation of reason, sensations and emotions, giving sense to intangible and inarticulable aspects.

Both Machon and Cytowic emphasize at the experiential nature of understanding through the senses and concentrate on *synaesthesia*. Similarly, Shepherd refers to

'kinaesthetic empathy' between spectators and performers via their musculature (2006, p. 46). In order to get kinaesthetically engaged and connected, participants and performers need to be present and interact closely, within the same space, so the effects 'bypass the intellect' and are 'felt in the body' (Shepherd, 2006, pp. 336-337). This proximity and contact in terms of space, embodiment and feeling evokes meaning and describes the intangible in a mode of *connected knowing* as aptly expressed by Field Belenky, McVicker Clinchy, Rule Goldberger, and Mattuck Tarule (1986, pp. 431-446). Also Kester, concentrating at the durational character of such aesthetic experiences, talks about a *'somatic epiphany'* which evolves "through a cumulative process of exchange and dialogue, rather than a single, instantaneous shock of insight, precipitated by an image or object" (Kester, 2004, p. 79). All referred viewpoints meet in aesthetic experiences enable through physical connection and the body, emotional engagement and semantic comprehension through in participatory performance practices.

Experience design creates process- and experience-based works adopting a performative and participatory approach, especially in case of live events. Kester describes artists that affiliate such approaches as *context* rather than *content providers* (2004). Designers of live participatory work-events are creators of the general frame thoroughly organised to potentially incite certain feelings and thoughts through embodied interactions. Practitioners who emphasize on (syn)aesthetic experiences to emerge actually set the overall context for meaning to be felt through the body, enabling the intangible (beauty, emotion, pleasure, thought, values, meaning, story/structure) to be experienced through tangible decisions (scenery, characters, visual design, interfaces, sensations, physical interaction, function of objects and elements included, performance).

Synaesthesia is primarily a medical term to describe the neurological and physiological condition when a stimulus causes a reaction in more than one sense. It is a function of the left hemisphere of the brain related to the limbic system, which is directly linked to cognitive functions such as memory, emotion, consciousness and the way we manage and process incomplete information. People who are synaesthetics have the opportunity to experience an additional potential activated during an aesthetic experience that two or more senses are stimulated simultaneously without any of them to lose its effect comparing to the other. For Cytowic, synaesthesia offers the opportunity for 'multisensory evaluation', since a combination of senses is activated, resulting in a more complex 'additive experience' (1995, p. 92). He also points out that humans are synaesthetic from birth, but most of us learn to separate the body from the mind, so only few people "are consciously aware of the holistic nature of perception" (Cytowic, 1995, p. 8). For Machon, synaesthesia is defined as "the production of a sensation in one part of the body resulting from a stimulus applied to, or perceived by, another part" (2009, p. 13); a rare ability to hear colours, see music, and more. Scholars support that some colours caused Kandinsky audio impact as well, whereas Rimbaud created a poem which combines images with colour (Miyasato, 2000). Surveys have shown that during infancy humans are not able to distinct the sensory stimuli they perceive. This raises suspicions that synaesthesia is rather a phase of our biological growth, rarely maintained in adulthood. In this case, synaesthesia is a transcendence of the conventional perception in a world dominated by objectivity and logic.

Synaesthesia involves a fusion of sensations caused by a single motive, a medical condition that more than one senses are stimulated by one stimulus. Since the boundaries of

physical reality are surpassed, the power of imagination is essential in synaesthetic perception and response, changes are brought about blurring the sensation of corporeal and fiction (Luria, 1969, pp. 138-144). In this way, a synaesthetic experience feels like an individual lives in "two worlds at one, like being half awake yet still anchored in a dream" (Cytowic, 2003); similar to experiencing a live performance as performer and participant, and the borderline between the world of the performance and the everyday experience is blurred. Accordingly, the (syn)aesthetic approach entails fusion in multiple aspects:

> "[…] the fusing of separate disciplines within the artistic process; the fusing of this performance practice with a special individual aesthetic appreciation; various fusions of sensory experience within this aesthetic appreciation; combining cerebral and corporeal perception; and the fusing of performance practice with critical analysis. Fused here also reaffirms the 'fused' experience of the human body and mind within experience" (Machon, 2009, p. 14).

A (syn)aesthetic performance work comprise a synthesis of performance methods and blur disciplines transcending traditional forms and concepts on the artwork. Borrowing Artaud's viewpoint on 'total theatre', a (syn)aesthetic hybrid surpasses "the ordinary limits of art and words" (1993, pp. 68-87) combining design, speech, dance, music/sound, technology and site among others. In relation to Luria stating that "there is no real borderline between perceptions and emotions", as sensations are "so vague and shifting it is hard to find words with which to convey them" (1969, p. 77), Machon emphasizes the fusion between cognition, emotions and sensations as inseparable factors of perceiving and interacting within the artistic experience.

In accordance to Machon's (syn)aesthetic approach at experience and art characterised of fusion of modes and boundaries, this thesis further concentrates on three case studies, three performance works that incite individuals' enactive participation making the role of the audience and the performer's vague, while incorporating scripted action with improvised interaction. These directed artworks under study aim at delivering participants a holistic sensory experience, embracing perception as synthesis of the corporeal, the emotional and the cerebral. As further analysed in the following chapters, various artistic disciplines, as well as techniques, forms, methods and aesthetics are merged within the artistic process resulting in hybrid art forms where audience members gain central role. Another boundary one of these case studies *(Situation Rooms)* cross is between physical and technologically-enhanced experiences, forming mixed-reality worlds and overcoming physical restrictions of space, time and physical interaction. In this way, the line between real and imaginary, physical or digital, scripted or improvised, somatic or semantic is bleary and results at hybrid forms of performance and social interaction.

4.5.2 Soma, aesthesis and participation

> *"Theatre is the only place where the mind can be reached through the organs and... understanding can only be awakened through the senses"*
>
> (Artaud, 1978, pp. 182-3)

Every human experience involves a sensory aspect as the embodied self interacts within the physical, virtual and/or mixed-reality world. The embodied aspect of interaction is conceptualized by McCarthy & Wright as *the sensual thread of experience* (the other three threads are: emotional, spatiotemporal, and compositional) (2004). Norman also comprised the somatic in his three levels of processing experiences, as the *visceral level,* where appearance and sensations dominate, and the initial impact of an experience is formed (2002)[69]. The corporeal aspect of experience, i.e. the body itself, is coming to the foreground as the site where "affects emerge, and relationships are established", where the artefacts are 'actualized and 'created'' through the senses (Engholm, 2010). The embodied self is constantly interrelated with other bodies, literally and metaphorically, within the surrounding environment. Spinoza approaches aesthetics of interaction not "as *form* or *function* but as *mode"* (Kleinsmiede, 2001, p. 81), and experience as complex sequences of continual becoming through interrelation and interaction with other bodies; not only with human bodies, but metaphorically speaking with unities of work, music, institutional ones and more. (Spinoza, 1997[1675], p. 53). However, although the boundaries of the self may be distinct, like the edges of our body, our awareness covers our internal as well as the external world. The interdependent relationship of body and spirit within a particular geographical, social and cultural environment is ceaseless. Influenced by Dewey's pragmatist perspective, Shusterman introduces the term *somaesthetics* to define both bodily-connected aesthetic experiences, and the sensation of our inner bodily functions (2000, p. 262). The core of the aesthetic experience is the living body interacting physically, emotionally, and cognitively with the world.

Relatively, Natyasastra[70] is a Sanskrit guidebook of performance and performance theory, written by Bharata-muni a figure both historical and mythical. According to this (sacred for some) manuscript, performance requires *rasa*, meaning the effect of stimuli, as well as deliberate and unintentional reaction (1996, pp. 54-55). Rasa, though, is a compound term expressing multi-sensorial aesthetics of experience; for Schechner "rasa is sensuous, proximate experiential [...] rasa fills space, joining the outside to the inside" (2002, p. 337). According to rasic viewpoint, performance, like food, which when eaten becomes part of the body, involves the given circumstances where the outer space and action and the esoteric world of those involved (performers and participants) are juxtaposed. In all cases, performance *"interactional* in nature and involving *symbolic forms* and *live bodies*, provides a way to constitute meaning and to affirm individual and cultural values" (Stern & Henderson, 1993, p. 3). By extension, *performativity* also emphasizes on the sensorial aspect of interactivity, on the aesthetics of experience, involving "a pervasive mood or feeling –

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[69] Respectively, the *behavioural level* about the actual experience with a design result, how it functions, performs and how we interact with it), and the *reflective level* (about the overall thought, meaning and emotions about the design outcome).

[70] *Natya* is roughly a combination of dance, theatre and music and *sastra* indicates that this is a sacred text, authorized by religion (Schechner, 2003, p. 334).

belonging not so much to the visual-aural realm (as performances do) but to the senses of smell, taste, and touch" (Schechner, 2002, p. 168). This perspective expresses an emphasis on the embodied self as an agent of activity and interplay with others.

Enactive participation in performance practice aspires to engage individuals cognitively, incorporeally and emotionally with multisensory representations, and encourage integrated, holistic responses. Hence, understanding relies on embodied, sensuous experiences where 'felt emotion, memory, desire and understanding' merge (Denzin, 2003, p. 13) and become palpable. Machon in particular describes in the frames of (syn)aesthetic interpretation that memory of past experiences is tactile as "*the original visceral experience remains affective in any subsequent recall*" (2009, p. 18) (my emphasis). Applying performance is concerned with understanding through visceral cognition and scholars have studied 'the possibilities of learning, healing, and transformation' of this creative participatory process (Trimingham, 2010). Schiller refers to 'enchanting pedagogy' and Wallace Naomi asserts that the body is a means to bring change as "the site where power is enacted and struggled over", and continues supporting:

> "For me theatre, because it is live and history is enacted through the body, social relationships are enacted through the body, is the perfect medium in terms of looking at resistance through art" (interviewed in (Machon, 2009, pp. 132-133)).

The human performing body is the place where cognition, emotions and sensations merge together in generating conduits of empathy and social interaction with people and the surrounding environment, opening the potentials for transmitting memories, feelings, understandings and character psychologies, with educational and cultural extensions.

The performance event requires a lot more than an intellectual approach in terms of the audience to perceive visceral and experiential qualities that are transmitted through the performer's body. The performing human body dominates as *sentient conduit* in (syn)aesthetic approach, being both the signifier and the signified of the overall experience, responsible for production and understanding of the live event (Machon, 2009, pp. 62,68). McConathie alleges the importance of empathy among people and performers and particularly how 'visuomotor representations' are essential elements of the performance, as they "provide spectators with the ability to 'read the minds' of actors/characters, to intuit their beliefs, intentions, and emotions by watching their motor actions (2008, p. 66). Regarding creating meaning through somatic perception, Artaud refers to 'intuition' or 'direct knowledge' explaining that "there is a mind in the flesh, but a mind as quick as lighting, and yet the agitation of the flesh partakes of the mind's higher matter" (1978, p. 166). This type of corporeal knowledge is notably subjective as the complex and multidimensional (syn)aesthetic hybrid ensures a "complex simultaneity of stage processes leading to the impossibility of producing a single interpretation" (Broadhurst, 1999, p. 78). Each participant is incited to have his/her own visceral interpretations and respond accordingly as the event unfolds.

For example, in *Situation Rooms* of Rimini Protokoll audiovisual and tactile systems are incorporated to enlighten people regarding the global net of war industry. People are immersed in rooms where they collect information from different 'experts' that are actually

involved in this industry somehow; they can hear real people narrating their stories, watch in videos parts of their narrations, touch objects their use, stand, kneel or lay down like these experts need to do, and so on. Participants, in this performance work, in fact have the opportunity to experience a simulation of the actual stories of people around the world who share their point of view and experience about the war industry with the audience members. In addition, *Katerini* is a performance work of Blitz Company, where people are also incited to enter and participate in various rooms, and different stories. In the Room of 'All the Lost Letters', for instance, only women were invited to participate in one-to-one relationship with the male performer, and experience a story based on love letters exchanged or not by lovers. In this room, women could participate with most of their senses: they ate chocolate pastry together with the performer (taste, smell); looked at each other (vision) for some time while playing a small role; exchange written messages on rolling papers (touch); stay in silence (audio); read the dialogue of a play (audio - voice); watch that dialogue in the laptop (vision + audio), and so on. In this way, the sense of loss was not only felt in the form of a letter never sent or received, but as a memory of an emotionally charged story that happened within a room in *Katerini*.

Performance work as participatory practice is applied to convey messages and affect people in inner, cognitive and emotional level. As already argued, all kind of theatrical or performing work are created to be addressed at an audience, and people within the artistic experience are *simultaneously* attendants and participants due to the fact they constantly participate with their feelings and thought (Di Benedetto, 2010, p. 21). Specifically, in contemporary design trends (as analyzed in previous chapter 2) and performance practices, people (users, consumers, audience, spectators) become an affective element. Hence, individuals become collaborators immersed in a creative process in which various artistic disciplines and techniques are blended; in this other place where the real and the imaginary, the physical and the digital, the possible and the potential coincide. In case of mixed-reality worlds, immersion refers to the "sensory experience/perception of being submerged (being present)" in an environment embedded with digital features and capacities (Bay-Cheng, Kattenbelt, Lavender, & Nelson, 2010, p. 47). Immersed in a physical or mixed-reality world, both the performer and audience make a 'substantial journey *through the senses*', while the interpretation of the work "enters the mind through the body" (Artaud, 1993, pp. 89, 77).

4.5.3 Our hyperbody, a mixed-reality interface

Aesthetics is not merely about satisfying visual stimuli, but rather about subjectively felt experiences (McCarthy & Wright, 2004). Although attractive interfaces are easier perceived and used than less attractive ones (Blythe, Overbeeke, & Monk, 2003) (Norman D. , 2005), aesthetics is more than an exterior cell, as aesthesis involve the overall experience when interacting with the design result (Bertelsen & Pold, 2004) (Davis, 2003) (Fiore, Wright, & Edwards, 2005) (Petersen, Iversen, Krogh, & Ludvigsen, 2004) (McCarthy & Wright, 2004) (Mahlke, 2005). For pragmatic aesthetics, design does not concentrate on appearance as constituting the essence of things; on "how a thing manifests itself in a world of expressions" (Zaccai, 1995). Djajadiningrat et al. urge designers to conceptualize beauty in interaction rather than appearance (Djajadiningrat, Overbeeke, & Wensveen, 2000, p. 132).

Aesthetics rise from interactions among physical bodies, objects, systems and complex symbolic representations.

Our bodies occupy space, communicate through the senses and respond respectively in time; our perspective of the world is centred in our bodies. Our bodies are our means of expression; they convey our thoughts and feelings. Social interaction is brought into effect within a specific cultural and social context, through expressive forms, like gestures, performances, actions, visual and physical contact. Our encounter and contact with the surroundings mould our perception, while our awareness determines our interpretation of the world. We are ceaselessly and interdependently bound with the surrounding environment, our embodied self and thinking mind are in a constant interrelationship with the world (Merleau-Ponty, 1991 [1945], p. 10). We see what we are able to perceive on account of our character and awareness. The process of bodies interacting upon and influencing one another is expressed by Spinoza as *affectio. Affect* (in Spinoza's vocabulary, *affectus*) is for Spinoza the key-property of the human body, described in the *Ethics* as "the ability to affect and the ability to be affected" (Spinoza, 1997[1675]). The term *affect* involves more than just emotions or 'passions'; it implies dynamic material forces that act upon the bodies. Bodies convey modes of being when interrelate and influence each other, states that change respectively among the participants in corporeal, emotional and intellectual level. The human body is perpetually changing its state as part of the circle of life, in social and interpersonal encounters with other bodies.

> "A body, of whatever kind, is defined by Spinoza in two simultaneous ways. In the first place, a body, however small it may be, is composed of an infinite number of particles; it is the relations of motion and rest, of speeds and slownesses between particles that define a body, the individuality of a body. Secondly, a body affects other bodies, or is affected by other bodies; it is this capacity for affecting and being affected that also defined a body in its individuality. These two propositions appear to be very simple; one is kinetic and the other, dynamic" (Deleuze, 1988, pp. 123-124).

Digitally enhanced interactive environments have been integrated in everyday life and augmented human experience and interaction. The boundaries between the physical and the virtual, the real and the imaginative are blurred. The *virtual* is the "'real but abstract' incorporeality of the body" (Massumi, 2002, p. 21) (citing Giordano Bruno). In the present, space is both physical and virtual by nature, in Virillio's words "next to actual space, which has been the space of history, there is now virtual space, and the two are interdependent" (Virilio, 2002, pp. 67-68). In mixed-reality environments the distinction between human and non-human factors has become vague. The amalgamation of the physical and the potential is no longer limited to visual and auditory streams of information but includes stimulation of most sensory input as well. Data-driven structures are capable to adapt to environmental changing conditions, and develop their own response in real time processes. Similarly, hyperbodies are programmed to adapte and behave accordingly, in form and content. Oosterhuis describes:

> "The building body is now programmable. […] buildings themselves have been measuring their temperature and humidity in real time since time

immemorial. [...] architects can design experiences and that users can evoke experiences with their own particular climates. [...] A *hyperbody is a programmable building body that changes its shape and content in real time.* Real time building bodies feed on information; they process information and then separate it again. That information of course travels as hypertext does, via warp holes from one universe to another. When this information settles in the hyperbodies as a hypersurface, then our perception of the spaces in and around the hyperbody can be programmed and driven and is therefore a subject for design. Architecture becomes a game and the users the players. Architects are the programmers of this game" (2002, p. 42).

Moreover, Du Preez argues that "being is distilled into mere information (data, code, ones and zeroes) that can be extracted at will from the material stratum or the bio-organism" (2010). The bio-body is a mere coincidence in the evolutionary trajectory of the superior mind, or rather it is perceived as a prosthesis which apparently can easily be traded for another that is more durable and suitable for a digital lifestyle. The distinctive line between natural and artificial is meaningless:

> "We are all becoming, to a greater or lesser extent, bionic [...] Our prostheses not only amplify and extend the body and its five senses but also augment cognition and memory and subtly transform the personality. The psyche is certainly affected by interactions in the electronic space" (Ascott, 2007).

In the context of digital world, significant alterations have been occurred redefining physical presence and sensation. The boundaries of the physical body have been magnified. We sense stimuli from areas remote from us like never before. Numerous messages are transferred through digitally enhanced systems of communication, connoting the notions of space and time as well. In addition, our knowledge regarding the human body structure and function has been promoted and images from its internal part have been presented, revealing a world so tightly closed. Our notion of its boundaries in the digitally enhanced world has been re-evaluated, for the potentials of a single person surpass the circumference of his skin. Thus, numerous global social groups are formed, sharing the same sources of information and participating in similar experiences. Consequently, a notion of *collective body* (Levy, 2001, pp. 35-42) is moulded, autonomous, though vague and inapprehensible, which exchanges information and material available to the vast scale of its amplitude.

> "Once technology invades the body, the body will never be the same again. [...] These bodies are a part of global networks, they are wired. The bodies are connected to databases and their behavior and shape can be programmed. [...] Once technology invades the design material in the design process and animates this material in real time [...] this movement will become unstoppable, not only at the design stage but also in the life-cycle of the project after the design stage" (Oosterhuis, 2002, p. 101).

Nevertheless, human experiences are always situated in space and time. Our body is extended in space and comprises a whole unified system of sensorium and motor skills.

Technological achievements have surpassed the limitations of the physical to reach the realms beyond the approached, and offer participants the opportunity to discover new dimensions of spacetime. However, present time is surpassed due to the capacities of the physical body to embrace past and future. Specifically, *sensation* involves our interaction within physical and mixed-reality environments as well as the vibrations of these actions. Therefore, sensation exceeds the present to include stimuli and affects of the immediate past, and for this reason it is past-oriented. Similarly, *motor skills* focus on preparation and performance of our next movements, to determine the immediate future. Hence, *motor skills* are future-oriented. But human aspiration in accordance to the capacities of technological achievements and artificial intelligence development is endless and seeks to overcome all boundaries, at first in physical level:

> "Our mind will have been transplanted from our original biological brain into artificial hardware. Transplantation to yet other hardware should be trivial in comparison. Like programs and data that can be transferred between computers without disrupting the processes they represent, our essences will become patterns that can migrate the information networks at will. Time and space will be more flexible – when our mind resides in very fast hardware, one second of real time may provide a subjective year of thinking time, while a thousand years spent on a passive storage medium will seem like no time at all. The very components of our minds will follow our sense of awareness in shifting from place to place at the speed of communication. We might find ourselves distributed over many locations, one piece of our mind here, another piece there, and our sense of awareness yet elsewhere, in what can no longer be called an out-of-body experience, for lack of a body to be out of" (Moravec, 1998, p. 87).

And in Ascott's words:

> "As for the sanctity of the individual, well, we are now each of us made up of many individuals, a set of selves. Actually, the sense of the individual is giving way to the sense of the interface. Our consciousness allows us the fuzzy edge on identity, hovering between inside and outside every kind of definition of what it is to be a human being that we might come up with. We are all interface. We are computer-mediated and computer-enhanced. These new ways of conceptualizing and perceiving reality involve more than simply some sort of quantitative change in how we see, think, and act in the world. They constitute a qualitative change in our being, a whole new faculty, the post-biological faculty of 'cyberception'" (2007).

Nonetheless, the individual body is gradually weakened, giving the sensation of losing its density and consistency. The physical body feels small and isolated, as the climax of things and distances is reassigned. In the contemporary world, humans trend to feel unique, increase their abilities, configure their technological-enhanced options, and finally reconsider their identity. Moreover, human seek to participate in intense experiences, while technological achievements affords multimedia applications that adapt and respond to such needs, allowing them to act within a wider range of movements and opportunities (Levy,

2001). Humans seek to adopt another body; we desire an improved body, even potentially another life, a second life (like in case of avatars) embodying human conscience into artificially intelligent structures and systems. Nonetheless, under Brian Massumi's perspective, "becoming begins as a desire to escape bodily limitation" (1996, p. 94), and as he further points out desire, crucially, is not a desire *for* anything that is lacking; "desire is a constituting activity of becoming; it is the individual current within the oceanic mass" (1996, p. 94). For instance physical limitations are exceeded in case of *Situation Rooms* of Rimini Protokoll with the use of technological-advanced systems, as participants have the opportunity to watch and listen to real people ('experts') narrating their stories in the same room participants are. Experts were recorded sharing their stories in the same rooms participants enter to learn about them, through the use of an ipad and headphones they hold all the time during the performance. In this way, the reality of the expert is created in a room where he tells his story, and then these rooms are transferred to multiple countries where people come and enter these rooms to experience parts of the experts' stories in the same rooms, due to the potentials of mixed-reality technologies.

In digital culture, binaries like body and hyperbody, physical and artificial, personal body and collective body are more distinct than ever, raising issues not only about the nature and features of these qualities, but also on their effects on human sense of self, on self-awareness, changing the way we perceive and accordingly create life. On the verge between genetical capacities and technological-advanced experiences, humans are challenged to adapt to enormous changes and constantly overcome past limitations. This fact distances day-by-day the physical body from what seems to be an ideal - an amalgamation of flesh, information, feelings, intelligence and superhuman capacities. This digitally-enhanced hyperbody resembles more to an advanced form of interface capable for personal and social interaction beyond physical limitations.

4.6 The *formal cause.* Experience and narrative structure

4.6.1 Story, participation and technology

Telling a story is a stimulating experience for both the narrator and the listener. New relations and meanings of the world are discovered, new aspects of a familiar issue are illuminated, and hence people expand their knowledge and perception. The authenticity of a story is not solely depended at whether the content is real or fictional. Even, a new approach over a familiar content has the potential to offer a fresh perspective and understanding, adding an element of *originality* to the narration (Shedroff, 2001). As the story unfolds, new ways to associate facts are conceptualized, unrevealed aspects are unveiled, and novel paths are discovered opening up innovative horizons. The magic lays in expressiveness: there are as many different ways to tell a story, as the number of their narrators. Every person has his/her own way to conceive, shape and communicate the meaning that underlies among things.

At the very beginning of a narration, in the form of a play, book, performance, practice and live event everything is possible. The moments before action begins – prior to

performers appear on stage, or characters are presented by the author – audience has no expectations; no frame of reference is set yet. In case of traditional narrative structures, characters are gradually revealed along with their lives and stories, involving their thoughts, feelings, and actions, starting to form certain events in causal relationship. Then protagonists experience *peripeteia*. Bruner refers to Aristotle's concept of *peripeteia* as 'sudden reversal of circumstances', and a 'breach in the expected state of things' (1990, p. 5). The protagonists need to make considerable endeavour to confront or compromise with this breach and its consequential circumstances. Their decisions, made according to their personality and objectives, actualize a set of solutions and exclude others at the same time, interweaving accordingly the development of the story. In this point, the audience is starting to have relevant expectations about what may happen. According to Aristotle, as the story unfolds, the possibilities are gradually decreased, as some of them become more likely to be realized than others. As the story proceeds to an ending the possibilities are dramatically lessened, until finally only one prevails; in this point a possibility becomes necessity, excluding all the other alternative options, the project has reached to a completion.

Telling a story, like playing a theatrical or performance play, involves people participating and interacting with their senses, feelings and intelligence. The term *plot* is applied in most forms of narration like in films, books and theatrical plays. But *plot* differentiates from a simple story: *story* is a specific array of events arranged in time-sequence, whereas *plot* is almost the same with emphasis put at causality, meaning at seeking to understand *why* rather than *what then* things evolved in a certain way (McQuillan, 2000, p. 46). Respectively, for Aristotle, the *formal cause* concerns change, as form (connoting shape and configuration) is imposed on chaotic matter. The *formal cause* involves the essence, the look of things, answering the question "what sort of thing it is and why", as well as "why are things arranged in a certain way". The substantial form defines the particular species and/or the category something belongs to, determining its features. By extension, the notion of *form* also concerns the way people behave and interact, and encompasses how individuals and communities are organized to co-exist and cooperate, as well as what do members of the same group have in common. As *matter* is the principle of *potentiality,* i.e. of becoming or waiting to become somebody or something, *form* is the principle of *actuality*, i.e. of being somebody or something.

Storytelling is one of the oldest interactive methods, and still among the most powerful ones, even in times when mixed-reality technologies are immersed in our everyday experience and communication. In case of designing for experiences to occur in live events, *information management* organizes when and where meaning will be revealed, meaning sets the context for experiences to unfold, and incite knowledge. The designing team interweaves threads of causes and effects in order to evoke certain possibilities and further escalate one of these possibilities (even the least obvious one) to realization. *Information management* (also known as *information planning* and *information architecture*) is also narrative-structured. Deciding over the structure and presentation of the content necessitates a form of narration, taking into consideration the subjectivity of human perception and feeling. In this way, the designer organizes the content, like the author manages the plot, involving essentials elements, like surprise, suspense, and catharsis, to stimulate individuals' engagement.

A traditional narrative structure, for example theatrical play, requires at least a protagonist (agent) who needs to make his path and overcome difficulties (action) to achieve a particularly task (goal), using appropriate means, within a relevant scenery (setting), although this form is now constantly challenged in almost every form of contemporary art. For Bruner a story is incited by *trouble,* meaning the occasion *peripeteia* is initiated (1990, p. 34). The way the story unfolds is organized in three main parts, *introduction*, *main body* and *conclusion* which are based on the three-part structure of Aristotle including: initially, *attraction* is the first impression made, the pull needed to engage audience in an experience, a form of stimulus that provokes interest; *engagement* is the following step once members of the audience are attracted in mental, emotional and/or physical level; *resolution* or catharsis, which is a lot more than a closure of the whole experience like in case of installations; and *extension* that expands the whole experience, or contributes to its revival after a period of time, or even comprises a connection to a future project. Extension involves an expectation that will take place in the future, with potentially even more impressive results. In addition, during this climax there is the peak of the overall impact the work has on the audience. During this brief but highly intense point, revelation comes, as one probability is turned into necessity, whereas all other alternatives are excluded. This peak entails escalation in terms of emotion and suspense, as well as the amount of information provided, since the more informed we are regarding a particular situation, the more we can sympathise with the hero. In case of traditional narrative structures (like in theatrical plays and movies) the plot remains invariably the same every time performed or played, according to the scenario based on.

Gradually, contemporary narratives are more and more compound especially in films, involving the route and actions (or peripeteia) of usually more than one protagonist. Instead of a central hero, the story follows more characters making efforts and inner encounters to accomplish specific goals. In this case, their individual efforts and targets are usually connected under a common purpose or objective. Therefore, narration is divided in additional stories, creating more than one point of interest and consequently causing more tension (Shedroff, 2001). David Siegel proposes that a story with more than one (but maximum 3) goals is more interesting. Through the renewal of interest towards a new goal, more tension is incited, and additional possibilities for emotional and dramatic engagement evolve. He also states that action is a core requisite element, even if there are no characters, because through action interest is maintained in high levels and meaning is created. In order to create interesting, informative or entertainment experiences, a form of action and interaction is required to be integrated and designed (quoted in (Shedroff, 2001, p. 214)). By increasing emotional and dramatic involvement within parallel stories, narrative becomes more intricate, and people are more likely to sympathize with a character, so remain fully engaged.

Nevertheless, in case of designing live events, the *formal cause* involves the actual form and scenario, and differs from the traditional narrative structure and past modes of human-computer interaction, since opened up to individuals' participation embracing the unexpected. A live event (even thoroughly organised) is still fluid and variable, as synthesis of common experiences, interactivities and parallel stories, resulting in different outcomes every time experienced. Live events do not comply with the Aristotelian narrative structure: firstly, as open artworks live events are not, and cannot be, stabilized in form during the

design/making process. They rather reach a point of completion every time performed according to the design objectives. Secondly, there is no longer a single linear narrative with sequent parts/episodes, but rather parallel stories which evolve even simultaneously in equal points of action, within a certain time period. Thirdly, participants are offered choices to make their own way through the whole event. The audience are not spectators, but individuals who decide on the way they want to get engaged and contribute to the overall experience. But principally, participants are given the opportunity to walk on the borderline of scenario-based interaction and improvised behaviour, opening the work to the unpredicted. The design process hence concentrates on certain objectives set from the beginning. In the frames of this thesis, these objectives involve the presentation, preservation and promotion, of intangible forms of culture, an educative and entertaining scope. Emphasis is put on the entire journey, the actual experience, not a particular pre-organized destination; the every-time-unique journey moulded out of people's enactive participation. Bishop describes such art and design work as 'art as process' which he defines as "open-ended, interactive and resistant to closure" (2004). Traditional types of scenario, form and materiality are challenged when people are incited to become personally engaged and physically involved in the course of events.

Participants' role in live events has been reconceptualised, partly due to technologically-driven potentials offered to the audience in terms of their presence and interaction during the event. Especially technology has contributed to contemporary forms of storytelling, like in case of *digital stories*, i.e. multimedia narratives involving a variety of digital media. For McLellan, digital storytelling:

> "include the interactive narrative forms from hypertext, web-based narratives combining image-sound-animation-video, the virtual cinema of narrative games or game-like conceptual pieces and other practices of using digital media tools (video, motion graphics, animation, etc.) to explore both nonfiction and fictional narratives" (2007, p. 70).

Based on democratic principles of empowering people to be heard, McLellan underlines that digital storytelling is 'intimate and participatory' but most importantly 'with deep and lasting power' (2007, p. 69), as one of his projects *Capture Wales* indicates. *Capture Wales* is a BBC's award-winning Digital Storytelling project produced by BBC Wales in collaboration with Cardiff University. BBC Capture Wales ran monthly workshops from 2001 to 2008 giving the opportunity to more than 500 people across Wales to make share their own stories in a two-minute film they created themselves (Capture Wales). This project gave people a voice assisting them to make their script and see turn into a film by combining personal pictures from photo albums with voice-over narration. Under the leadership of Daniel Meadows, the aim was twofold: on one hand to bring the BBC closer to the communities it served by contributing to the production and presentation of personal stories in Wales, giving people the opportunity to be expressed and incite a sense of community and fellowship. But the project's objectives exceeded BBC's aim, following a tradition first developed in the 1930s of "listening to the voice of the people" (Meadows, 2003, p. 191). For Meadows, the main difference had to do with the fact that people have editorial control of their work, instead of being modified by professionals according to their aesthetics and viewpoint:

"Contributors are not just originating their own material, for the first time they are editing it too. This is what first excited me – and still excites me – about Digital Storytelling, for no longer must the public tolerate being 'done' by media – that is, no longer must we tolerate media being done to us. No longer must we put up with professional documentarists recording us for hours and then throwing away most of what we tell them, keeping only those bits that tell our stories their own way and, more than likely, at our expense. If we will only learn the skills of Digital Storytelling then we can, quite literally, 'take the power back'." (Meadows, 2003, p. 192)

Live events are never the same. Participants shape their own personal experience, and according to the options they are given and the choices they make, the overall work is differently formed every time experienced by individuals. Each member of the audience creates his/her own way through the event, affecting and contributing the overall story in a different way. Each participant makes his/her own strings of interaction while pertaining and following the main narrative structure of the event. Live events that incite enactive participation are also scenario-based works linking series of events and interactions under a meaningful and desirable narrative structure, and offer people the opportunity to collaborate during the flow of their own experiences.

4.6.2 Designing with narrative techniques

Experiences involve human stories. Stories contribute to preserve and assimilate experience and knowledge, as both narrator and listener communicate their concepts and exchange viewpoints. Hassenzahl defines experience as 'holistic account' concerning a particular event, extended over time (2006). The value of stories is ascertained by designers, sholars and practitioners: Atchley sees stories as a tool for marketing, motivation, and communication (1999); Joyce Hostyn apprehends content only as 'tool for conversation', stressing that "the experience is the message not the content" (2010); Arne van Oosterom, founder of DesignThinkers Group, supports the significance of the story over product or service (UKEssays, 2013); and finally Rapaille supports "the structure is the message not the content" (2006). Storytelling is an essential way of planning information in order to optimize communication, interactivity and learning.

For the purposes of this thesis I seek to set the context for valuable and positive experiences to emerge and make the intangible (pleasure, emotion or meaning) tangible (scenery, content, characters, design, interfaces, senses, performance,) through the use of story and appropriate narrative techniques. Stories are essential element when designing for live events as:

Stories create meaning

Experiences are structured and developed within boundaries. Experience design practitioners need to decide the type of interactions and experiences appropriate to emerge among the individuals participating, according to set objectives, and following to organize the content in potent narrative structures to accomplish their goals. In experience design projects story is just another way for 'strategy', i.e. a mode of creating order out of chaos.

Designing live events involves organizing and manipulating specific content, like scenery, props, interfaces, people's interaction, and more, under the appropriate narrative structure. The planned narrative path contains the art of storytelling, and can turn successful events into memorable experiences. For Cindy Chastain:

> "We tell stories that seek to order chaos, provide meaning and engage the emotions of our listeners. We design experiences that hopefully do something similar. But in the context of design, meaning is also about what this experience, product or service will do for a person. It's about how something fits into or enhances his life. It's about understanding how something is supposed to function" (quoted in (Inchauste, 2010)).

Stories incite remembering, togetherness and sharing

Narrating stories brings people together, as the very act of sharing incites companionship and self-expression. Past experiences are retained in memories, i.e. in narratives, where they can be recalled and shared. Sharing our experiences and future plans with other people gives us the feeling of been heard and sympathized. Sharing our personal stories turns an enjoyable event into an overwhelming one, or a dreadful course into an obstacle we can come through, just because we feel that somebody else is on our side. Also by identifying with the protagonists of the story we share their emotions and struggle to overcome difficulties, and in the end we have the feeling we confronted everything together, sharing a collective experience.

Stories help create results with long-lasting emotional impact

Emotional intensity is a common aspect of memorable narratives and experiences, describing the way we felt and got engaged, or even changed throughout an experience. Even a mental stimulating experience may become memorable because of the intense of our feelings (Shedroff, 2001). From the field of User Experience design, Unger & Chandler emphasize at the significance of creating a reasonable and feasible structure for the experience, creating an 'emotional connection' with the product's user (Unger & Chandler, 2009). Additionally, Dorelle Rabinowitz also stresses the significance of emotional connection, as storytelling facilitates communication, and "people respond emotionally to stories, bond over stories and share stories again and again" - as she denotes "the more I integrated storytelling into my work the better the work was" (quoted in (Inchauste, 2010)). Emotional impact and bonding is an essential element to create truly memorable and gratifying experiences.

Stories give us a deeper understanding of what is important to us

By narrating stories, we explain something and/or exchange information with another person. Moreover, we also give ourselves the chance to observe our own thoughts and feelings regarding a particular experience or event. Storytelling entails reflection, realization and learning on occasion of the event narrated, not only in terms of the listener but the narrator as well (Tappan & Brown, 1991, p. 182). No matter how stable we think and feel we are on certain issues, our views (just like cultures and identities) are variable schemes although their main core is preserved in time. In stories our way of thinking is unveiled,

constantly in connection with our feelings. For Luna, the fact that stories "hold cognition and emotion together" is the what makes them 'powerful and transformative' (Luna, 1993). Listening to our own stories help us realize our emotions, needs and evaluate the situation, hence clarify our intentions and organize our action and behaviour accordingly.

Stories help designers elucidate their goals

Respectively in case of experience design, stories and discussions over *stories help designers specify the type of experiences they want to deliver people*. By narrating stories designers define the problem and contextualize quantitative details according to the experiences they want people participating to have. Bruner stresses the contribution of stories as "a way to domesticate human error and surprise" explaining that through stories designers can be prepared for "what can be expected to go wrong and what might be done to restore or cope with the situation" (1990, p. 31). Stories help designers standardize their concept of what a designed service or product will do, how it will be used, and what changes will occur as a result (Druin, 1999) (Druin, et al., 2000) (Sanders, 2000) (Demirbilek & Demirkan, 2004). Besides, stories are not only transmitted orally. Another way to narrate a story during the design process apart from oral presentation is storyboarding. Storyboard is an illustrative technique borrowed from filmmaking, which combines a scenario with additional images and text, enabling designers to describe more powerfully their ideas, displaying particular features in a context. By sharing stories with their partners, designers share their viewpoints and inspirations and find mutual points of agreement and improvement in their work.

Personas need stories to make them complete

As analyzed in chapter 3, personas are imaginative people designers conceptualize to analyze and deepen into the features of the people their work is addressed at (their desires, way of thinking, needs, etc.). Personas help designers understand people's behaviour and motivations by making meaningful stories about them. Plenty of stories (scenarios) are possibly constructed centred at each persona to approach holistically and understand real people. Personas stand as proxies for real people (Triantafyllakos, Palaigeorgiou, & Tsoukalas, 2010) (Muller, 2003), and ultimately help designers organize meaningful experiences. Designing personas involves using behavioural patterns and information to define and outline particular groups of population. Personas are usually conjured up out of intuitions, impressions and information the design team has collected by observing and conversing with real people, possibly through interviews, surveys, demographics, and stats, making patterns of similar behaviour, motivations and features. In this way, personal bias is aspired to be minimized as room is given to people's voice. Thence, creating personas involve making stories based on actual data, research and contemplation on individuals' motivations, behaviour and concerns.

Furthermore, scenarios involving certain personas help designers conceptualize them being present and interact within a particular physical or mixed-reality social-cultural context. During the design process, multiple scenarios are configured involving disparate circumstances, in order to cover a wide range of potential responses and experiences and improve the design result. For instance, there is the *'best case scenario'* in which case the design work is perfectly effective, the *'worst case scenario'* where everything goes wrong

concerning the persona's experience helping the design thought to prevent it from happening, and an *'average case scenario'* involving a standard typical result with many possible effects though. Just as personas endeavour to represent real people, alternative scenarios are conceptualized to imitate real situations and corresponding responses, in order to perceive possible stories that may be brought up on occasion of the design outcome, i.e. a live event in our case.

Stories are triggers for conversation, analysis, and feedback

Stories also assist designers communicate their ideas with colleagues and potential clients/users/audiences. Stories are used to approach people, in three ways: comprehend their needs, motivations and desires; secondly, specify with their help the *what* and *how's* of the designed work (product, service, event), meaning to set particular design objectives, regarding function, features, materials, place, and more; and thirdly to bring feedback by discussing the opportunities and efficiencies of the design product or service, through people experience (Noble & Robinson, 2000) (Brandt & Grunnet, 2000) (Muller, 2001) (Yu & Liu, 2006) (Salvador & Howells, 1998) (Salvador & Sato, 1998). An essential advantage of this method is that past experiences (actual facts) and future/potential plans (hypothesis) can be communicated through narrative structure, exploring possible scenarios of encounters involving people and design result. The narrative mode of converse and thinking is an essential design tool to avoid unexpected occurrences, what Burke names 'trouble' or Aristotle 'peripeteia'. Numerous possible scenarios are conceptualized enabling the design team to be prepared for various after effects and lead the design process to desirable results, i.e. to deliver meaningful and valuable experiences through live events. Stories are used at the beginning of the design process as triggers for conversation, analysis, or feedback, during the design process to set the goals of the creative work, and at the end to test the overall outcome and improve any deficiencies.

Stories reinforces participation

The most elementary and natural way to initiate interaction with your audience is to start a dialogue by asking simple questions: their name, opinion, how they feel, etc. Questions require at least one person who invites at least another one to share his/her perspective with the group, usually in form of stories. Stories improve team collaboration under a common goal. On the other hand, the effect a story has on individuals depends at many a spectrum of aspects (like their interests, goals and current psychological condition). A story is likely to have an entirely different impact on each listener. This is the reason why designers appropriate the content as well as the structure of a narration according to who is attending (Shedroff, 2001). Borrowing Dickey's view on adventure games, there are mainly two techniques to motivate audiences: *plot hooks* and *emotional proximity* (Dickey, 2006). The first one, a plot involves *hooks*, meaning queries people are intrigued to answer as the story unfolds, arousing curiosity and inciting personal engagement. The second technique, *emotional proximity* refers to participants' engagement with the story, also influenced by the act of narration. People are mentally attracted to stories as intrigued to follow the *peripeteia* of the story, as well as emotionally engaged through empathy that evolves among protagonists and listeners (as we will analyze further in this chapter). In both cases, stories are narrated *with* the people *for* the people.

Stories raise expectations and surprise

Surprise is a key element when designing experiences; something unexpected changes the flow of things. When successful, individuals' interest and engagement is instantly elevated. One way to surprise participants is to transcend their expectations and beliefs of the whole experience towards certain probabilities, when suddenly an unforeseen possibility occurs beyond any expectation. For Kahneman and Miller the difference between *probability* and *surprise* is that "probability is always construed as an aspect of anticipation, whereas surprise is the outcome of what we shall backward processing – evaluation after the fact", and further add that "probability reflects expectations". Whereas "surprise (or its absence) reflects the failure or success of an attempt to make sense of an experience, rather than an evaluation of the validity of prior beliefs" (2002). Additionally, Shank suggests that we can elicit surprising events:

> "(a) by eliciting hypotheses and expectations, which later events confirm or disconfirm, or (b) by laying down a trace that is activated when a subsequent event provides an appropriate reminder" (1982).

For example, the building of the Institut de Monde Arabe in Paris consists of 20.000 active metal shutters, which extend across the outer glass of the building (Shedroff, 2001). Apart from a beautiful decorative synthesis this system enables control of lighting of the space in a totally unexpected way. Designing how to surprise participants positively during live events is a significant challenge designers need to take into consideration.

Stories reflect and create culture

Finally, stories are indispensable part of every community and cultural scheme. They communicate culture, organize and transmit information, as we will analyze thoroughly in the following subchapter. Stories not only narrate and transmit the histories, values and beliefs of social groups to other groups or generations, but also shape oral forms of culture (see chapter 2) every time told. Stories can never present content in identical way; there as many ways to tell a story as the number of narrators. Narrators are not mere carriers, but personally configure and convey the content, influencing the way it is perceived and eventually passed on to others. But above all, both narrators and listeners have the opportunity to "discover connections between self and other, penetrate barriers to understanding, and come to know more deeply the meanings of his or her own historical and cultural narrative" (Witherell, 1991, p. 94). Cultures need stories to preserve and promote their practices, traditions, values, morals and customs and pass them over to other social groups or generations. At the same time, stories not only convey cultural content but also shape and influence the way people perceive it.

To sum up, stories help inform, persuade and motivate. Particularly, in case of design strategies, stories help designers: incite remembering, togetherness and sharing; create results with long-lasting emotional impact; standardize structure and strategy for their work; entertain and surprise the audience; specify the experience they want to deliver people through their work; communicate their concepts to partners; create meaning; define the problem and contextualize quantitative details; improve team collaboration; support

individuals' participation; intrigue conversation, analysis, and feedback. For the objectives of this thesis another essential benefit of employing narrative mode is further discussed: its contribution at creating educative contents where cultural practices can be developed and experienced.

4.6.3 Storytelling, education and culture

"Now shall I, as an old man speaking to his juniors,
put my explanation in the form of a story,
or give it as a reasoned argument?"
Many of the audience answered that he should
relate it in whichever form he pleased.
"Then I think" he said, "it will be pleasanter
to tell you a story. Once upon a time …"
Plato, The Protagoras

Our stories contain our lives; our experiences, feelings, conceptions. Our stories bind us with people and places sharing common actions and effects within certain social and cultural contexts. By narrating stories, we share our experiences and help us empathize with others. Grumet states that "we are, at least partially, constituted by the stories we tell to others and to ourselves about experience" (1991, p. 69). In addition, stories contribute to the conception of self with cultural consistencies in identity formation, presentation and modification. Moreover, we narrate stories to convey meanings and conceptions; a participatory action and performance serving educational purposes as well. Storytelling is not only a mode to make and transfer meaning, but also a method to create educational contexts wherein culture is further comprehended, preserved and at the same time created afresh.

In the frames of this thesis, stories are approached as participatory cultural practices and performance events. Studying the way performed offers designers an insight on the relationships developed among narrator (performer) and audience, the nature of the experience they share in emotional, cognitive and physical level, as well as the quality of the performance (Gabriel & Griffiths, 2004). Likewise, more than half a century ago, Austin stressed the value of language in use as a social action (2004). He called a sentence or utterance a 'performative sentence', when the act of expressing something constitutes the object; in other words, when the act of speaking actually accomplishes something (Austin, 1962), for example name a ship, make a promise, make a bet, and so on. In this way, he relates spoken words with the notion of *performativity*, further explaining that such sentences involve the 'performing of the action'. Respectively, apart from stories as performances, performance as artistic and cultural practice is based on a narrative structure, regarded by Richard Bauman a mode of 'spoken verbal communication' in his book *Verbal Art as Performance*, which consists "in the assumption of responsibility to an audience for a display of communicative competence" (Bauman, 1977). Storytelling and performance are participatory practices and share similar features and objectives with potential cultural and educative purposes and extensions.

Storytelling is a time-based way to comprehend and express matters of the self, formed in various ways (personal, social, and more). The notions of self and culture are interdependent, constantly evolving in time through experiences and narratives: individuals conceptualize and possibly build their lives according to 'culturally possible narratives' and cultural schemes depend on individual voices and narratives for their reconstruction (Luna, 1993). Each place has its own history moulded out of people, actions and activities in long-term periods. Histories are accounts of the past involving collective experiences and schemes people constitute their identity with. Glassie regards story a vital factor of culture, due to its 'adaptive urge to becoming' (1995), and Bruner calls story the 'currency and coin of culture' (1990, p. 16). Stories are not only conduits to convey knowledge, messages, values and identity matters, as cultural principles and values are actually reformed every time expressed by a narrator / performer (Glassie, 1989, p. 64). Storytelling contributes to what Glassie expresses as 'cultural reconstruction' by re-moulding and modifying cultural content every time narrated or performed in any way. Stories are common means to convey and at the same time create cultural contents, passing them from certain social groups and generations over to others.

Stories are also familiar means to create participatory contexts with educative contents and objectives. Passing on information and cultural values through sharing stories is an established performative mode, and derives from ancient times when people were telling myths, fairy tales and other forms of codified knowledge. Stories have educative potentials, as scholars and scientists have affirmed their connection to understanding, communication and intelligence. Specifically, Seybold ascertains that "concepts and how-tos really only take root when they're embodied in a story", stressing that stories have much potential: for instance, setting a story as example is the best and most convenient way to pass knowledge and be comprehensible. Moreover, information and experiences conveyed through narrative form are easier perceived and memorisable when passed over to others (1998, p. xix). Gabriel states that one of the six principal functions of stories is to provide education - besides entertaining; stimulating imagination; offering reassurance; justifying and explaining; informing, advising and warning (2000, p. 9). Finally, Gabriel and Griffiths' research on organizational communication and learning acknowledge stories an essential element. Their work can be extended beyond the organizational frame to design possibilities of communication and learning, including stories: as 'cognitive depositories' where significant concepts are 'mapped and stored'; as memorable structures assist knowledge and concept transfer among colleagues, by "informing, warning, educating and brainwashing"; and finally as tools to designate design strategies involving matters of action and change (Gabriel & Griffiths, 2004). It is further noted that exchanging stories is a distinctively effective way of learning in "cultures which value relationships" (Luna, 1993). Felix Barrett director of *Punchdrunk* states that "the future of storytelling is placing the audience in the heart of the experience" (2013). Since primordial times people have instinctively used stories to share their past experience, tradition, values and knowledge and come together on a common social and cultural basis interwoven out of social interchange.

Stories actually have educative potentials as related to the way we think while narrating or listening at stories. And the way we think, understand, memorize, recall and share our knowledge and experiences is reflected by moulding it in narrative form (Gee, 1985, p. 11). Apart from our past experiences, stories are ideal to imagine possible plans,

fictional worlds, future challenges. They help us find alternative solutions, be prepared for potential challenges, approach new ideas and perspectives and explore possible scenarios of events. Especially in multicultural and interdisciplinary education, Luna asserts that "we need to tell ourselves a new story, one that reflects an understanding of current discourse politics but that also looks beyond them" (1993). Stories are also central to human cognition (Gardner H. , 1995, p. 14). Roger Schank, artificial intelligence expert, supports thinking depends very much upon storytelling and story understanding (1995), and further claims that human beings are predisposed by nature to share stories (1991). In addition, Bruner discerns two modes of thought and literacy, each one providing typical ways of regulating experience and creating reality: the *paradigmatic or logico-scientific mode* and the *narrative mode* (1986, pp. 11-14)*.* The *paradigmatic or logico-scientific mode* comprises the endeavour "to fullfill the ideal of a formal, mathematical system of description and explanation" (Bruner, 1986, pp. 11-14). The *paradigmatic mode* uses observation and reason in order to create "good theory, tight analysis, logical proof, sound argument, and empirical discovery guided by reasoned hypothesis". On the other hand, the *narrative mode,* in contrast to the 'heartlessness of logic', aims not to convey empirical truth but to convince people through verisimilitude, and lifelikeness. Whereas the *paradigmatic or logico-scientific mode* views the world in an abstract way the *narrative mode* emphasize at particular contexts as "narrative is built upon concern for the human condition" (Bruner, 1986, pp. 11-14). The way we narrate or create stories designates the way we think, and respectively the stories we hear and experience influence the way we conceptualize the world.

It is essential to stress at this point that first for post-structuralism and following the *performative turn*, knowledge and meaning are not fixed and transferred, but rather constructed and performed (see chapter 3). Today, no definite, fixed perceptions and narratives are acknowledged; everything is in flux. Meaning is no longer standardized but moulded out of individual and cultural-social practices considered 'as performances' in flux. Nevertheless, meaning has always been performed, in human codes and cultural practices. For Derrida any sense of reality is created via discourse; every text is a palimpsest of impacts already enounced; every culture an amalgamation of performed processes and subjectivities. Under this perspective, emphasis is put on personal participation instead of past education patterns, according to which all students used to be directed to do the same thing simultaneously (Dickey, 2006). People are considered participants in the learning process meaning explorers, who interact within physical and/or mixed-reality environments, associate information in a personal manner, make decisions and solve problems. Therefore, people are not plainly receivers of information, but play an active role in the learning process.

Identity, culture, history and tradition are notions mainly characterized not by stasis and fixed conceptions but change and continuity. Making sense and communicating through stories also modifies cultural content every time narrated, or performed in any way. Stories have educative potentials as memorable and easy to pass knowledge and information over to social groups and generations. They are related to the way we think, construct and communicate meaning, helping individuals to shape and preserve their identity in personal, social and cultural level. Stories contribute to create educative contexts and by extension safeguard and co-create cultural contents.

4.6.4 Designing stories of enactive participation

Experience design practitioners organize the context for behaviours and interactivities to emerge among people and their surrounding environment. In accordance to contemporary trends on design, experience designers aspire "to persuade, stimulate, inform, envision, entertain and forecast events, influencing meaning and modifying behaviour" (Jones & Samalionis, 2008). In this case, the role of people attending is essential in the emergent design process. The designer cannot in effect predetermine any experience, as the final outcome is co-dependent on their subjective perception and behaviour of everyone involved in the live event. Although the frame is set for sequence[s] of events (Allen, 1997) to take place, different people adapt dissimilar behaviours, choose to interact differently resulting in multiple outcomes. Consequently, live events are differentiated every time experienced by an audience.

Live events and live art projects share common perspectives in terms of their narrative structure. This association is not random as Shedroff ascertains, but well grounded, as most acknowledged Interaction Designers are related to a type of performance "whether it is dance, theatre, singing, storytelling, or improvisation" (2001). The fields of script-writing, storytelling, performance, and instructional design concentrate on social interaction and particularly at conveying messages and values through meaningful and qualitative experiences (Shedroff, 2001). Such stories comprise synthesis of 'explicit and implicit notational systems' wherein performers and audience work together (Hilton, 1991) in different roles though and responsibilities. Interaction design, experience design and live art share the same objective: they aspire to create events in which practitioners and people collaborate as the story unfolds.

The narrative structure of designed live events is a compound synthesis of scenario-based and improvised components. Similar to the world of games in mixed-reality environments, Murray in his *Hamlet on the Holodeck* introduces a type of *authorship* he names *procedural*, and explains*:*

> "Procedural authorship means writing the rules by which the texts appear as well as writing the text themselves. It means writing the rules for the interactor's involvement, that is, the conditions under which things will happen in response to the participant's actions" (1999, p. 152).

The *procedural author* creates narrative structures with gaps waiting for an every-time-different ensemble of spectators to fill them up with their interactivity and participation. Likewise, Callois designates a fusion of 'free play and rule-bound gaming', 'anarchy and discipline', a merge between what he calls 'paidia and ludus' (Shaughnessy, 2012). Callois describes *paidia* as the principle of "diversion, turbulence, free improvisation, and carefree gaiety", and unrestrained imagination, whereas *ludus* as the tendency to bind this capriciousness with "arbitrary, imperative, and purposively tedious conventions" (2001 [1958]). When *ludus* is applied to freer forms of a play, a greater amount of "effort, patience, skill, or ingenuity" is required form the player (Callois, 2001 [1958], p. 13). A procedural author combines free interaction with conventions and rules, as well as personal contribution and responsibility with chance and random encounters. Callois also distinguishes four patterns of play: *agon* (competition), *alea* (chance), *mimesis* (simulation)

and *ilinx* (sensation). By merging the conditions of the first two patterns (*agon* and *alea*)*,* a "combat in which equality of chances is artificially created" (agon) is fused with a context wherein "work, patience, experience, and qualifications" are excluded (alea); in other words the 'vindication of personal responsibility' that gives "precise and incontestable value to the winner's triumph" with the surrender to destiny, where the player is entirely passive (Callois, 2001 [1958], p. 13). Both *agon* and *alea* though are patterns of play, involving conditions of 'pure equality' people cannot have in everyday experience. The fun of play, like in live events, derives from the ability to set and experience ideal conditions instead of the confused routines of contemporary daily life. Murray further adds the procedural author creates "not just a set of scenes but a world of narrative possibilities" (1999, p. 152); possibilities that overcome everyday routines and physical restrictions of space, time, and interaction to potentialities that only imagination and technology can restrict, always grounded at certain design objectives.

Similarly, designing the narrative structure (i.e. the scenario) of enactive participation entails parts performed by trained artists as well as parts improvised by audience members during the event. Scenarios are among the common tools performance and theatre practice have with design fields, like experience design and interaction design, which concentrate on human interaction with design results within social and cultural contents (see subchapter 3.4.2 about common tools and scenarios). Mainly, scenarios are integrated as credible design methods, based on previous research results, as well as empirical and epistemological studies. The process of acting out embodied stories in specific social-cultural contexts, and assessing the design result in various stages of the creative process, advances the final outcome according to mutually agreed objectives. Scenarios give designers the opportunity to conceptualize new ideas and evaluate evolving ones, usually by incorporating technological advancements to create them (Picon, 2003). In any case, scenarios are proposed structures organized by artists and designers, according to certain approaches and viewpoints they have on the qualities of meaningful and desirable experience and the way to deliver such experiences to their audience. The scenario provides the live event with structure and target necessary to achieve the design objectives.

Improvisation is often associated with dance and theatre, also described as 'organized chaos' too. It is a common applied methodology of making a performance work: actors improvise during rehearsals to build their character. There are also performance plays based entirely at improvisation as live actions that accrue on the fly. Outside the fields of art as well, people improvise all the time. Although we make efforts to control our day-to-day existence, the fact is that we live in an unscripted world, constantly called upon to respond within moment-by-moment situations, i.e. to improvise. Children also, like dancers, actors and performers, act out roles to realize their fantasies and discover new patters of movement, new stories, future plans, and express their inner ideas and needs. In enactive mode of participation the essential element is mutual engagement among performers and audience to develop stories according to a certain narrative structure, coherence and relevance on the fly, meaning without any previous rehearsals. These stories include the dynamics and characteristics of the public which vary continually. Designing potential experiences situated in real time and space, may take inspiration from the limitations and capabilities of actors / performers who improvise in live performance events to create meaningful and interesting results with the people for the people.

Improvisation entails alertness and spontaneity; everything is happening right here and now for the first time ever. Spontaneity is essential factor of every work of performing arts as any actor without this quality lacks presence, and most importantly lacks authenticity (Book, 2010). Spontaneity carries absolute truth – babies are always truthful, impulsive. Likewise, the audience needs to have the feeling the play they are attending is occurring for the first time ever, and they are lucky to be there and witness it. For Book, every performance (shooting, practice, work) is spontaneous, new, and slightly different every time realized. It is not recreated; performers do not repeat what they did the first time. They perform each time for the first time. So there is no fixed idea or notion of what happened in the past to redo it, they focus each time on their present performance. In live designed events, also both participants and practitioners are engaged in the moment, incited to feel safe and respond spontaneously to current conditions. In Jones words, improvisation contributes to evolve a crucial skill: the ability "to *be still and open one's attention to the present moment*" (1977, p. 46) (my emphasis). The way we are prepared for potential interactions, and manage spontaneous changes and responses on the fly, creates a successful flow in the whole experience, constructing a cohesive evolving scenario and an interesting result. Denzin described contemporary performance techniques, like performance ethnography, as practices that enable:

> "... theatre to be placed in the hands of ordinary people, who can use theatre to tell stories of their reality, to analyze and reflect through drama, to communicate and to explore the possibilities of change (in whatever way this is defined by a community)" (2003, p. 232).

Drama and improvisation are considered entertaining and educative methods to inform and sensitize people on particular social matters, empower social communication and participation, support a sense of social and cultural identity through social interaction, and even have therapeutic potentials (hence used in psychotherapy) among other goals (Blatner, 2007). And Sutton, in his unpublished PhD thesis, states that *drama* applied in "educational, social and community contexts involve participants as 'active producers'" (Sutton, 2005). Especially, interactive and improvisational drama methods empower audience spontaneity and imagination, and serves as a vehicle of social participation and change, as every field of art aspires.

For instance, *Bibliodrama* and *Playback Theatre* are both methods of improvisational interactive theatre which use improvised enactment of scenes derived from personal stories and the Bible respectively. They may both though be applied as a vehicle to incite audience participation in experiencing stories and events related to tradition and intangible culture (myths, fairy tales, historical events etc.) of a particular social group. Particularly, *Playback Theatre* utilises personal narratives as material to incite social change. Specifically, after a fictional story, a memory, or a particular concept is shared with a group of people, the actors along with the audience act out the entire story in an effort to offer a different perspective of the story to the teller as well as the audience. In *Bibliodrama* spectators also have the opportunity to participate in this enactment. Although *Playback Theatre* initially served therapeutic and artistic purposes by using artistic expression, it is adaptive to particular social needs to overcome personal issues and reach collective ideas and values. The theatre always appealed to universal needs, beyond space and time, and *Playback Theatre*

acknowledges this need for "gathering, listening, dialogue and understanding" (Blatner, 2007). Although theatre, drama (thought, creation and practice) and performance have many differences (that exceed the objectives of this thesis to analyse), they coincide in their sharing objective of empowering the people to co-create events that involve change and learning.

Besides, all three performances used as case studies *(Katerini, Situation Rooms,* and *Fake Time @ Ariston Hotel)* also have this compound type of narrative structure (see chapter 6). All works comprise combinations of scripted parts and parts wherein participants' interaction is incited by the performers (except from the *Situation Rooms* where there are no performers), by the environment (structure of rooms), by other members of the audience, objects and digital devices (*Situation Rooms*). All structures involve a bundle of stories unfolding in parallel in the floors and the rooms of each performance event. Participants are given separate instructions in the beginning to start their experience from a particular room or point in space. Then they are incited to follow their own path through the performance space (*Fake Time @ Ariston Hotel*), or they are further guided by digital media throughout the event (in *Situation Rooms* through iPads), or they are informed in advanced to follow a predetermined route within the performance area (*Katerini*). Participants have different amounts of free or guided navigation: in *Fake Time @ Ariston Hotel* people are slightly conducted, only at the beginning and at the end of the play, in *Katerini* people know beforehand the route given to them to follow, and in *Situation Rooms* each participant follows his unique route through the performance space entirely depended at his/her iPad to move around. A certain number of unhearsed and untrained individuals (20 in *Katerini*, 13 in *Situation Rooms,* and random-numbered in *Fake Time @ Ariston Hotel*) are simultaneously navigating around the given performance, conducted or freely, participating in various ways at the whole action. Like everyday life, these performances are not about a primary story spectators watch unfold, but a synthesis of stories developing simultaneously with the participation of the audience members, within a given space and time period.

4.7 Taking the risk

Involving audience in the flow of live events entails taking a significant amount of risk, in terms of both the role of the performers and the audience members. Similar to live art, experience design also embraces a participatory and democratic perspective designing *with the people for the people* (see chapter 2.2 and 2.3). In both cases of live art and experience design, performers and designers respectively provoke enactive audience participation to interact within live events. Regarding the risk taken from the performers, performing live is a multitasking role. Artists support their character and are also facilitators of the action for the audience. Hence, facilitators are usually performers who change frames, who perform and facilitate successively, stepping in and out of their characters to incite enactive participation during the live process. Performers come in and out of their character, or remain in their character throughout the play, to give people direct instructions and/or implicitly encourage them to behave in a certain way. In contrast to traditional Western theatre, which is 'controlled and complete' to a significant extent when played for an audience (White, 2013, p. 74), interactive theatre consists of parts that cannot be totally prepared and rehearsed as

they involve people interaction. Nevertheless, this risk is worthwhile as at the end each show is created *with* the people participating and therefore is unique.

Performers (live art) and practitioners (experience design) are also prepared for different audience responses, in order to keep the flow of the event. No director or designer can predict what can happen during a live event wherein participants are invited to participate enactively. They are rather prepared by organizing the overall context and allowing free audience interactions to emerge within a compound narrative structure. Performers use improvisation while rehearsing the performance play, in an attempt "to know what is going to happen" (Pine & Gilmore, 1999, p. 46) according to the scenario and the potential actions of the audience members. Performers are trained to consider any action or situation an opportunity for new actions to occur. They are alert to the changes of the audience at the hall, and adapt at the same time to new patterns of communication and interaction. For John Britton:

> "You have to try to read the whole room; you have to taste the whole room. But that's what ensemble training does: it trains the performer to taste the whole room. First to let pay attention to myself, then if I'm dancing with you to pay attention to the relationship between me and you, and eventually to pay attention to the relationship between me and the whole ensemble, between me and the entire room" (interview material).

Trained performers know that the best responses are not those imposed or designed in terms of the audience, but those that emerge spontaneously as unstrained reactions to certain occasions and circumstances. Therefore, spontaneous and unaffected responses, though unrehearsed, comprise a motivation for authentic things to evolve, opening up the potentials for new (and probably unforeseen) actions and situations to develop. Performers are trained to help the story unfold through their character and at the same time be aware of everything happening in and around the performance space. They capable of embracing every action and response, and incorporate it in the performance event. Experience designers can benefit from this knowledge from the performance practice: not only by using improvisation to understand people's needs, motives and behaviour (see chapter 3.4.2 about design and improvisation), but also to be prepared and embrace every kind of audience participation.

By involving enactive participation, performers take great risks as all kinds of audience responses are possible to accrue: people may not respond to the incitements of the performers, they may respond in an unsuccessful way, or they may accept the incitement and still do nothing, and none of these situations are ideal for the story to unfold. Nevertheless, audience members have the right to choose their experience and mode of participation, so none of the above responses should be overruled, but accepted as part of the live performance event. The keystone is to avoid conflict and chaos by keeping the flow. For Book, *conflict* is the antithesis of *go with it* (2010). In case for example of a heckler, Double proposes the performer should not show fear, but instead show he/she is capable of maintaining control of the situation (1997, p. 134). Although control and flow seem similar and capable of keeping disorder and chaos out, they are different. It is impossible to control a situation (like a live event) where numerous unstable factors (like audience enactive participation) may affect the overall work in unpredictable ways. In a similar perspective, it is

impossible to control what will happen when we wake up in the morning – we are prepared as much as we can and improvise all the way. Performers are not trained to control situations, but to go along with all kinds of developments, expected or not, desirable or not, invited or not. Performers are not in position to control audience reactions, but embrace them and manage to keep the flow of the event according to the narrative structure. In John Britton's words:

> "As an artist you can use your skill to take a guess - the best guess you can - that you are going to construct the short of experience that you want someone to have. You pay attention to the tasks; you try to guide them towards the short of experience you want, but the last step of that experience, you can't control. Because the audience will have the experience they can have. But it doesn't mean as an artist we can't do anything. When I design a play, I put things together in certain ways to achieve my best bet, for the effect I want to achieve... So you have to choose your audience. Or at least you have to choose the experience and let the audience choose for themselves" (interview material).

On behalf of the audience, many risks are taken as well when encouraging enactive mode of participation. In some cases, like *Katerni* of Blitz Company, people are not even asked to do simple or convenient things. Instead, they are asked to dance in close embrace with someone of the opposite sex, to draw an image picturing them with someone that they loved and passed away, to remember what they wanted as youngsters to become in life, and so on. These are demanding tasks and performers need certain tricks to open people up *before* asking them to take these risks. Anxiety and fear can be valuable, contributing at focusing and reducing distractions, e.g. some performers welcome anxiety, for they recognize that a proper amount of anxiety helps them focus and do their best (Norman D. , 2002). But beyond a certain point, any benefits may be turned into impediment, as for Gardner "anxiety kills theatre", and adds:

> "Audiences are happy to embrace risk – much more than most directors and producers give them credit for – but audiences don't like to be made to feel anxious... the makers of immersive and interactive theatre epxeriences who are creating work that is exploring new ways of engaging with audiences are in completely new territory, both physically and mentally. They are going to have to find ways to create experiences fr their audiences where risks can be taken without causing audience anxiety to rocket" (2009).

In order to accept the invitation, people need to first *feel* safe in three levels: in relation to the surrounding physical or mixed-reality environment, the other members of the audience and what they are asked to do (White, 2013, p. 76). People want to avoid negative criticism, especially if they share personal thoughts and feelings. They do not want to feel embarrassed in front of strangers and more importantly among people they value their relationship with. Besides, people are motivated in case there are indications that their experiences may be stressful, obnoxious, and awkward, physically or emotionally demanding beyond what they can face, or unpleasing in any way. People are also afraid to 'crumple'

their public image as everything they do is not part of any role they play; they are supposed to remain and be exposed as themselves, which is not the same risk trained performers take when they step in and out of their role. Most importantly, taking the risk is not an objective issue but rather a subjective one: it is about *how much I feel I risk* by enactively participating today in this particularly live event. Therefore, members of the audience do not only merely need to be invited to enactively participate in a live event, but to be encouraged and convinced that although they take a risk by stop being spectators but exposing themselves, this risk is worthwhile and small comparing to the experience they will eventually have in the given context.

> "Those taking part, especially if it is a new experience for them, have to be encouraged to get to a point where they can begin to take small but significant personal risks… gently need to persuade and cajole sometimes reluctant spectators into positions where they can become active participants in making a dramatic event of their own" (Hahlo & Reynolds, 2000, p. xxiv).

This guidance and incitement needs to be delicately balanced, meaning that is adequate and clear so there are no misconceptions of what is asked in terms of the audience, and at the same time participants do not feel manipulated. White uses the term *agency* to describe the contribution and collaboration of participants and stresses that there needs to be a connection "between our actions and the results we *intend*" (2013, p. 63) (original emphasis) in order for a result to be accomplished through our agency. He further explains that reactive responses, accidental actions, or behaviours that intent another result, are not considered agency (White, 2013, p. 63). On one hand, Goffman suggests people usually receive only an amount of directions and intructions on how to behave and contribute to the new conditions, borrowing his viewpoint from everyday encounters:

> "When an individual does move into a new position in society and obtains a new part to perform, he is not likely to be told in full detail how to conduct himself, nor will the facts of his new situation press sufficiently on him from the start to determine his conduct without his further giving thought to it. Ordinarily he will be given only a few cues, hints, and stage directions, and it will be assumed that he already has in his repertoire a large number of bits and pieces of performance that will be required in the new setting" (1990, p. 79).

On the other hand, artistic events that incite enactive participation comprise entirely different conditions and norms from everyday circumstances, eventuating at different aesthesis and experiences for those participating. To motivate audience enactive participation a type of facilitation and encouragement is required aspiring to incite individuals' collaboration without manipulating them. Manipulation happens when forms of participation are provoked though not intelligibly willing, intended or meaningful, for many reasons: for instance, participants are probably not sufficiently aware of the implications of their actions; or they are impelled to perform actions (even slightly) beyond their free will; or they feel they are given an amount of responsibility they do not want to take in the first place, but eventually take not to become embarrassed or destroy the flow of the work. The

audience members take the risk, as soon as they leave the safe role of spectators, to become enactive participants. The main aspiration is to keep them engaged and retain the flow of the event. Laurel stresses engagement involves giving ourselves over to a situation, and experience 'comfortably and unambiguously' (1991, p. 113). We feel comfortable when we can rely on certain conditions, feel relaxed and joyful, free from doubts or anxiety. Participation involves not only pleasure, but also risk and imagination as well (Shaughnessy, 2012, p. 188). The boundaries are blurry as certain way and amount of encouragement is needed to incite participation from spectatorship, but this way and amount cannot be defined entirely as it is partly subjective for each member of the audience and no definite rules can be made for that.

Design works and performance practices involve socially engaged interactivities for artistic, educational and cultural purposes. In order for the audience to become an essential component of the live event, multiple risks are taken in terms of the performers who need to both keep their role as facilitators and remain in their characters, according to the scenario of the event, but also in terms of the audience who decide to leave their comfortable role as spectators and enactively participate in the flow of the work. People need encouragement to shift their role and this guidance needs to be clear and appropriate for the people it is addressed at and not impel unwilling results at the same time. This balance is the core of the research part of the thesis and three case studies have been examined in an endeavour to enlighten the issue.

4.8 E-motion: when joy and value set in motion participatory practices

> "[...] there is no real border- line between perceptions and emotions; where images of the external world blend and become part of diffuse experiences; where sensations seem so vague and shifting it is hard to find words with which to convey them" (Luria, 1969, p. 77)

Experience design and live art both concentrate on organizing the context for experiences to emerge in a certain space-time and socio-cultural context for audience to participate. Both fields organize live events from parallel perspectives that aim at communicating messages and stories by evoking bodily, emotional and cognitive response in terms of the participants. Particularly our emotions are vital. Realizing how we feel within certain circumstances help us evaluate their affect on us, as well as the consequences of past events, and organize our future plans and objectives. Our emotions, along with our understanding and sensations, affect our viewpoint and mood while we interact in the moment, as well as our overall evaluation of a past experience. In Dewey's words:

> "Emotion is the moving and cementing force. It selects what is congruous and dyes what is selected with its colour, thereby giving qualitative unity to materials externally disparate and dissimilar. It thus provides unity in and through the varied parts of experience" (2005, p. 44)

The *emotional thread* of experience, as described by McCarthy & Wright, concerns the participants affecting response (2004), which has recently been valued an important factor in shaping meaningful and satisfying experiences (Tractinsky, Shoval-Katz, & Ikar, 2000) (Jordan, 2000) (Norman D. , 2002) (Norman D. , 2004) (Hassenzahl, 2010, pp. 49-50). Emotion, also named as *affect*, *mood* and *feeling* usually with minor differentiations, comprise a keystone to human perception and interaction (Norman D. , 2002), as a means of comprehending and value our experiences (Carlson, 1997). Cognition, sensation and emotions are processes that function in parallel to configure reason and perception inciting consequent behaviour (Shaughnessy, 2012, p. 197) (Damasio, 1999, p. 159). Fiore at al. aptly refer at a holistic re-conceptualization of experience incorporating "thinking, feeling, doing and effecting change within an intersubjectively constructed world" (quoted in (Hassenzal, 2010)). Respectively, Norman regards both *affect* and *cognition* – similar to the *emotional* and *compositional* thread of McCarthy and Wright – as 'information processing systems' with different operations (2002). The first one estimates the general sensation, and evaluates the entre experience as positive, joyful, depressing, anxious, and so on. On the other hand, cognition is responsible for conceptualizing and interpreting the event(s) occurred. Both systems - emotion and cognition - are interdependent: emotions are raised by thoughts and respectively concepts are impacted by feelings. Hence, negative affect can possibly turn a relatively effortless action into a complex or vague one, and reversely a positive affect can make a challenging action appear manageable.

Emotions, sensations, and cognition are unbreakably associated. We sense, feel and conceptualize the world in a compound and cohesive, conscious and subconscious process. Emotions are perceived and experienced through the body and the mind. Our emotions colour our experiences and contribute to evaluate them (Carver & Scheier, 1989, p. 120), in accordance to our needs, objectives and desires. Research in the fields of neuropsychology and social psychology support that emotional response, although associated with cognition, precedes cognition. Emotion is evoked first, probably indicating with the primeval instincts of survival and self-protection (Norman D. , 2002) (Russell, 2003). Although emotion, cognition, motivation, and action are inextricably intertwined, shaping individual's awareness and behaviour, emotions are the actual heart and core of human experience (Hassenzal, 2010).

Recent tendencies in design and art emphasise more at individuals' experience, particularly their thoughts and feelings, while interacting with the design product, rather than the material aspect of the outcome per se. Recent research has affirmed that experiences are more likely to offer people a sense of happiness and fulfilment through mutual participation and sharing of viewpoints and emotions, instead of material purchases (Levy, 2001). The value of a live event is designated in relation to the experience people had, not merely form the materiality and potentialities inherent in the design outcome. For example, while preparing dinner for friends, nobody can ensure the banqueters will enjoy themselves; the only thing we can do is be actually prepared and do our best, meaning to cook a tasteful meal, light probably some candles in the dining room, select the appropriate music, etc. Accordingly, an aesthetically and functionally appropriate designed interface carries the possibility of a positive experience, but emotions emerged in each user are personal and never pre-fixed. Therefore, focusing on creating positive and valuable

experiences is about designing the context and increasing the potentiality of making people happier in a broader sense.

Human experience incorporates a type of (even minor, even inner) modification, a change. A transition (or sometimes the absence of it) induces personal emotional responses. Experience – both as a present action in development (experiencing) and a potential of or a complete story (an experience) – involves a certain evolution from a state to another (becoming), indicating a kind of interaction. Emotions are undisputedly linked to a short of activity, a social or personal event and a relevant motivation (Carver & Scheier, 1989). For instance, dinner is not that satisfying by itself, dinning is; a book is not valuable by itself, reading it though is; a marvellous view to the sea, although appealing to the eye, cannot compare to the actual swimming experience. Satisfaction in this sense is not entirely related to the final result (e.g. I achieved to cross the park this morning) but is also associated to the process of experiencing and feeling within a situation (e.g. walking in the park makes me feel relaxed and refreshed). Emotions derive from the *aesthesis* of experiencing a situation and specifically a change. In addition, emotions and experiences are both associated with (at least) one agent (person, situation or thing): we laugh with a joke, cry with a movie, we are angry by someone's attitude, anxious for a project to succeed, and more. Emotions emerge from our experiencing changes, in an evident or esoteric level, in relation to or independently of other people within certain conditions. They shape our attitude, activity, and overall evaluation the final outcome.

Scientific research and knowledge on emotion and pleasure have been incorporated within contemporary design fields. Thorough research has been evolved more than a decade regarding emotions essential parameter of design, in an effort to explain people's responses while interacting with products (Norman D. , 2005), (Petersen, Iversen, Krogh, & Ludvigsen, 2004), (Levy, 2001), (Shedroff, 2001), (Shusterman, 2000), (Desmet & Dijkhuis, 2003), (Monk, 2000). Particularly, Norman in his *Emotional design* argues that *affect* directs our judgement, our choices, activities as well as the way people cope with problems and perform tasks (2005). During their interaction with the design outcome, individuals' emotional response evaluates the product (for example easy, appealing, or joyful) according to the experience they had (pleasing, positive, or even valuable). In case people are frustrated, angry, or even scared, their thoughts, emotions and sensations focus on finding a way to overcome or resolve the problem; they have tense. In the contrary, when people are happy and feel secure, they probably smile, their body is relaxed and in this positive state of mind, they are engaged in a positive way, making them more tolerant, optimistic and creative. When in a positive mood, we will probably manage things and solve problems more effectively, in comparison to feeling discomfort or irritation.

Defining an experience as positive is an utterly subjective process; I may be the only one who feels this way about a particular event. Also research has shown that people usually control the emotions we express to others, presenting and describing past events in a more positive or intense way than the one we actually experienced them (Koskinen, Kurvinen, & Lehtonen, 2002). Respectively, designers make their proposals according to their conception of a positive experience, theoretically and practically. In parallel, the design product will be experienced and interpreted possibly by numerous people in multiple personal ways, who will eventually define it as positive, negative or indifferent. Therefore, the result of a design process is never ensured. Making positive experiences for people is a continual goal to study

and improve on, as subjectivity is a critical issue in experiencing and evaluating a product, an environment, an event. As repeatedly stressed in this thesis, designers can only design the general context for valuable and positive experiences to emerge.

Furthermore, an experience is considered positive usually when we feel gratification while participating comfortably and unambiguously; when we learn new things and manage under different circumstances; when we rely on given conditions without distraction. We usually feel satisfied when there is flow during the experience, meaning that we are truly engaged within a certain situation, away from everyday disappointment, anxiety and fear, and when we are given options (as-if scenarios) to choose how we will participate. In applied forms of theatre and performance as well as in contemporary design trends, people (especially younger ones) are believed to concentrate easier and learn more profoundly when they find joy in the actual educational process. Specifically, Ping and Na from the design field assert that "pleasing things work better, are more regularly used, are easier to learn, influence future purchase choices, and produce a more harmonious result" (2005). Besides, Shaughnessy explains from the field of applying performance how pleasure contributes to experience a form of 'utopia' in performance, borrowing Dolan's terms, a situation wherein audience is engaged "cognitively, imaginatively, sensually, and physically in new forms of embodied understanding" enabling us to 'perceive differently' (2012). Finally Thompson passionately stresses the "commitment to pleasure, passion, and enjoyment" as a precondition for political-aesthetic practice, and the weight of affection as a stimulus to social change (2009). Concluding, affect and pleasure have an important place in design and performance practices when organizing people participation, especially in case of projects with educative objectives and extensions.

In addition, another important factor is the comparison process, as Norman explains in his *Norm theory,* "people compare reality to a salient possible alternative (a fantasy)" to help them realize how they feel about an experience (Norman D. , 2002). In simple words, a near miss is worse than missing by a mile. In case for example, I just missed the train while running in the platform, I was closer to an ideal desired situation, and this fact caused more indignation. In the contrary, if the chances were very few, it would be easier for me to accept the fact that eventually I will miss the train. Another example comes from a survey of Medvec, Madey, & Gilovich describing that among Olympic athletes those who had won bronze medal were more satisfied with their performance compared to those who had won the silver medal. The research result can be explained by the fact that the athletes who won the silver medal were closer to the gold medal, meaning to absolute success, whereas the ones with the silver medal were closer to the possibility of not getting any medal (1995). The fact that collective experiences raise totally different and subjective emotional consequences is remarkable.

Nevertheless, when we experience pressure, feel uneasy and insecure, or even angry and insulted, negative experiences are more probable to occur. However, even if an experience was initially considered negative, stressful or even heavy to cope, it may prove to be of certain value for the individual, as difficulties and intricacies improve our ability to handle certain circumstances, make us more experienced, while challenging our abilities to cope with challenges and reach our aims. An important experience is not necessarily the most joyful one, but one that brought satisfaction by inciting development in a way, for example by expanding our thought and perception on particular matters, and/or by

enhancing our abilities and awareness. In alignment with this view, Petersen, Iversen, Krogh, and Ludvig regard as superficial the standpoint that people constantly seek for fun and pleasure (2004), while Shaughnessy suggests that not only pleasure but also intelligence, risk, and generosity are qualities required to feel all involved in meaningful and successful performing experiences (2012). Also, Dunne and Raby provide refreshing counterexamples with their critical design approach considering 'provocation and sparking imagination' as essential with regard to the artefacts in use (2001). Respectively, presentation and promotion of immaterial forms culture comprise an educative and entertaining objective; therefore joy is an essential though not adequate parameter for valuable interaction and participation.

Play and imagination are critical factors when designing cultural and educative contexts and play-based methodologies are fundamental in applied performance. In general terms *play* and *joy* are appreciated from ancient Greek civilization, when Aristotle asserted that "the practice of science emerges only when leisure is available" (Politis, 2004, p. 30). Immanuel Kant also valued the free play of imagination (1999, p. 194). In performance studies and applied performance, Broadhurst conceptualizes play as a pleasure depends at "the harmony of the two cognitive powers imagination and understanding" (1999, p. 28). Also, McConachie considers both imagination and play of critical importance in performance and supporting that play "is fundamentally an emotion, a neuronal and chemical system in the mind\brain" (2008, p. 51). Additionally, Shaughnessy regards empathy, imagination and social engagement 'central engines of meaning' (2012, p. 11), and play a vague concept of play-based practices used in applied performance to facilitate social engagement. Lastly, Luria emphasizes at synaesthetic experience and the power of imagination activated within such a response. She further explains that synaesthetic imagination has the ability to induce changes in 'somatic processes' disrupting the boundaries between reality and imagination (quoted in (Machon, 2009, p. 17)). Playfulness is not only a trick to engage people emotionally and physically but an appraised method of communicating educative and cultural contents.

Social interaction within live events aspires to evoke personal engagement in terms of each participant and collaborative under a common narrative, a shared concept and goal. Nonetheless, according to Auslander, live performance inevitably fails in general terms to attain "community *between* the audience and the performer" (2008, p. 57) (original emphasis), but by reinstating the distance between them, a sense of community is possible to be achieved. The sense of *community* involves *empathy* among many other aspects. McConachie describes empathy as a conduit through which people 'mirror and catch emotions' from others induced in parallel effects. In performance and theatrical plays participants may laugh, cry, and even applaud simultaneously. Spectators share common feelings and sensations through empathy, as they have the opportunity to move "beyond the problematics of 'othering' (McConachie & Hart, 2006, p. 5). Hence, empathy incites togetherness and a sense of ensemble. The more people share the same emotion "the more empathy shapes the emotional response of the rest" forming types of 'communitas' (McConachie, 2008, p. 97). In accordance to Bishop's viewpoint, community involves not only coexistence and collaboration within common social and cultural schemes but also the feeling of 'immanent togetherness' as members identify with each other, because they have something in common (2004, p. 67). Under the perspective of relational aesthetics, he

explains that a unified subject is "prerequisite for community-as-togetherness" (2004, p. 79). And this common conduit is empathy described as essential element "of a dialogical aesthetic" incited through "the pragmatic, physical process of collaborative production" (Bishop, 2004, p. 79). His sense of togetherness appears to be critical in our digital everyday experiences in the Eastern world as digital media and social platforms, no matter how interactive they are considered 'disembodied and often solitary' (Shaughnessy, 2012, p. 191). Therefore a desire and need for 'communal experience'; for intellectual and emotional contact through embodied shared experiences; for togetherness, collaboration and communication under the same objective, is signalised redefining traditional notions of relationships and community.

Designers aspire to offer people joyful experiences through *dialogical aesthetic*. But setting the context for valuable, meaningful and gratifying events to occur necessitates respect and consideration of people's feelings and thoughts. For that reason, profound comprehension of how to design valuable experiences is based at the communication of designers with the people their work is addressed at, i.e. dialectic (see subchapter 2.2.2). Like experiences, emotions are deeply personal and elusive; they cannot be easily described, shared or foreseen. People's needs and desires are never articulate enough; they need to be expressed, conversed and finally co-constructed with the cooperation of both parts. A holistic approach on human experience necessitates thorough study regarding the individuals' motivations when interacting within the world. Our experiences emerge from the amalgamation of perception, motivation, and emotion – all together in a dialog with the world at a particular place and time – and experience design endeavours to embrace all these factors. Emotions are the heart of experience, an essential factor indicating the quality of social encounters and personal relationships. Understanding the emotions, goals and motives that impel people to certain actions provides experience design with a significant insight to set the frame for meaningful experiences and interactions within physical and mixed reality environments.

In the context of technologically-advanced forms of communication and encounter, visceral interactions and spontaneous social relations have significantly been minimized, but artistic practice responds by suggesting models of interaction and sociability within performative contexts. Enactive participation challenges audience passivity and exceeds conventional modes of participation – meaning corporeal, emotional, cognitive and experiential engagement with others and the surroundings – by inciting the audience to get personally and physically involved and collaborate in the course of live event. The enactive mode encompasses personal perception and involvement through the senses and the body. Adapting a (syn)aesthetic approach emphasis is put at the synthesis of sensory, emotional and cognitive appreciation and response in the borderline between the world of the performance and the everyday experience. It is essential to stress that people are not invited to intervene to the overall narrative structure, but feel safe and trust so they are willing to work together with the performers/practitioners for the story to unfold. In contemporary live art practices, like in experience design projects, audience participation is essential in the course of the event and performers of live art can enlighten the way audience behaviour is incited and managed throughout the live event. Consequently, the narrative structure is

modified to embrace audience interaction within physical and mixed-reality environments, in the frames of this thesis for artistic, educative and cultural purposes. Designing *for* enactive modes of participation, similar to designing *for* experiences to emerge, entails collaborating *with* the audience *for* the audience.

Section B. Methodology and Case studies

5. Methodology regarding the approach and interpretation of enactive participation

5. 1 Introduction

The fifth chapter of this thesis involves the detailed description of the research methods and practices I have used to collect, record, analyze and interpret data regarding audience participation in live artistic events. As my research pertains to the broader field of Social Sciences and specifically the interdisciplinary field of Cultural Technology and Communication, an interdisciplinary approach has been applied as methodological framework, covering the disciplines of social and cultural studies as well as informatics. Specifically, the research methodology and tools used derive from the field of social research in conjunction with contemporary technological advancements.

The research questions and methods focus on studying various aspects of audience experience during live artistic events. More precisely research methodology is based on people's (basically oral) descriptions *about* their personal experiences within three specific performance events studied as case studies, in terms of the those who aspired to incite enactive participation (directors) and those who experienced the formers' artistic proposal (audience). As experience is configured in a subjective way, I considered critical to approach and juxtapose multiple aspects and standpoints to mould a holistic overview. Therefore I was interested at both the directors' perspective on how to incite this mode of participation, as well as the participants' thoughts and feelings about their personal engagement and interaction during the play. Experience is not an objective variable to observe, measure and evaluate from outside. Experience is a personal affair research methods can only partly approach through the testimonies of the person(s) under study.

On behalf of the researcher as well, subjectivity is a decisive aspect in every research: researchers decide the topic under study, formulate hypotheses, select appropriate methodologies, interpret gathered data, and finally mould and deposit their personal conclusions. In qualitative methodology, researchers are given the opportunity to observe and reflect not only on the data, but also on their own values and objectives that may affect the research work. Objectivity is a critical value and ability in research process, aspiring to minimize bias and configure a deeper and holistic understanding about the topic under study. A critical position is actually required from the researcher recognizing whether

subjectivity facilitates or impedes thorough comprehension. As Gergen stresses the role and value of participation in evaluating social and cultural practices:

> "To tell the truth, on this account, is not to furnish an accurate picture of what actually happened but to participate in a set of social conventions… To be objective is to play by the rules within a given tradition of social practices … To do science is not to hold a mirror to nature but to participate actively in the interpretive conventions and practices of a particular culture. The major question that must be asked of scientific accounts, then, is not whether they are true to nature but what these accounts… offer to the culture more generally" (2001, p. 806).

Considering the above points, the methodology I followed in my thesis includes three parts: firstly bibliographic research (covered in chapter 1-4), secondly personal observation and participation in three specific performances used as case studies, and lastly interviews of both directors and audience members, regarding their experience and participation in the live artistic events. Based on these axles, this research was designed and conducted using three methodological methods: case studies, personal participation and interview, which are following described in details.

5.2 Qualitative research methodology

5.2.1 Qualitative scientific research

> *"To understand is hard. Once one understands, action is easy"*
> (Sun Yat Sen, 1866–1925)

Scientific research is a process that aims to approach reality and discover the truth by applying scientific methods of seeking the causes and laws that regulate the course of the evolution of a phenomenon or group of phenomena (Mantzaris, 2004). A research consists of specific stages, during which pieces of information are collected and analyzed in order to fully comprehend a specific issue or situation (Creswell, 2008). Scientific research is defined as structured method of problem solving (Thomas, Nelson, & Silverman, 2011), and includes gathering information, data and facts for knowledge enhancement (Shuttleworth, 2008). Scientific research is a tool to conduct results in a spectrum of scientific fields, thus presents a variety of applying methods depending on the approach and standpoint of each discipline. It is systematic, controlled and seeks possible relationships between two or more variables. Focused on experiences to be verified, scientific research has the ability to improve and auto-correct (Cohen, Lawrence, & Keith, 2005), research practice and theory is ever-evolving:

> "Theory provides a framework for the systematic interpretation of empirical data - refers to a form that can take the social phenomenon, explains why it occurs, and the conditions under which it exists. The

research is essentially a continuous dialogue of ideas and evidence"
(Kuriazi, 2005).

Qualitative research involves an interpretative, naturalistic approach to the world
(Denzin & Lincoln, 1994, p. 2); a 'situated activity' where the researcher is placed in the
world of the subject and turns it into a series of representations, including interviews,
conversations, photographs and field notes, by using interpretative and material practices.
Researchers examine the subjects in their natural environment, trying to appreciate and
explain them. For Creswell, qualitative research is a process of exploring and understanding
an individual or social issue based on specific methodological strategies (1998). Researchers
investigates meanings and representations that individuals attribute at social phenomena
and processes (Iosifidis, 2008, p. 21). In addition, the research process aspires: to unveil
relations, roles and associations among social members and social groups; to describe,
analyse and comprehend social processes; and to formulate and reformulate cases and
theoretical viewpoints concerning the social frame. In case of qualitative methodology,
meaning is socially documented, as participants under study interact within their physical
and social environment, which is never fixed and stable, since multiple structures inhere and
even more interpretations about them are constantly modified. Qualitative research
methods seek to:

> "… understand situations in their uniqueness as part of a particular context
> and the interactions there. […] to understand the nature of that setting;
> what it means for participants to be in that setting, what their lives are like,
> what's going on for them, what their meanings are, [and] what the world
> looks like in that particular setting" (Patton, 1985, p. 1).

Qualitative research does not attempt to predict what might happen in the future, but
to understand a current situation; for example the importance of the situation experienced
by the participants, what are their lives like, what meanings they give to specific
occurrences. In the context of this thesis, the qualitative method is applied to study live art
events to enlighten the way corresponding projects can embrace audience participation
under the perspective of experience design. For Merriam, qualitative research is aimed at
understanding and extracting meanings from the phenomena that have been observed
through the perception of the people under study (Merriam, 2002). The analysis aims at
understanding in depth specific research topics, and human perception plays a crucial role.
In conclusion, qualitative research aims at describing, analyzing, interpreting and
comprehending social phenomena, situations and features of social groups, by mainly
responding at 'how' and 'why' (Iosifidis, 2008, p. 21). The researcher is considered the basic
tool for collecting and analyzing data, through an exploratory strategy.

Regarding this thesis, the qualitative research has been chosen to investigate different
qualities and restrictions of participating in live events, especially in enactive mode, through
the personal experience of audience, directors, and myself as researcher. The fundamental
features of qualitative research entail the immediate researcher's personal involvement, in
depth analysis, as well as emphasis at the processes, experiences, meanings and
representations of social facts (Iosifidis, 2008, p. 25). Analytically, individuals that participate
in a research process are not considered mere sources to extract information, but partners

to collaborate with in research and socio-cultural frames of communication and meaning-making (Mason, 2003). Secondly, qualitative research prospects in depth specific case studies describing, understanding, and analysing the mechanisms and processes of semantic and socio-cultural frames of social action. Lastly, qualitative methods emphasize at non-measurable aspects of social life, supposing that societies are not moulded out of objective social facts which can be precisely defined, but out of an always-evolving complex of semantic and interpretative schemes, which need to be comprehended from within (Iosifidis, 2008, p. 27). For all the above reasons, the qualitative methodology is applied to approach people's motivations and needs, as well as the obstacles they faced, to create the appropriate context to incite enactive participation in terms of the directors, and secondly to experience such events in terms of the audience.

In the context of qualitative research, the main tools of knowledge production from the field of research are: *interview*, *observation* and especially *participant observation*, *biographical analysis*, *historical-comparative analysis*, *case study*, *content analysis*, *action research*, and *focus groups* (Lazos, 1998). These methods of data collection are usually used individually or in combination, depending on the nature of the research problem and the characteristics of researchers.

Specifically, the methodological tools used for this thesis involve initially the essential part of literature review, which contributed not only to find the points of convergence between experience design and live art under the perspective of people participation, both theoretically and in practice (chapter 1-3), but also to find the gaps this thesis endeavours to illuminate and proceed to suggest a new approach on audience participation (chapter 4). Following, three methods of qualitative research were applied: *case study, participant observation* and *interview*. Initially three performance events were selected as *case studies* since they are directly related to the subject, followed by my personal *participant observation* and lastly the *interviews* I took of both directors and audience members, as further analyzed in this chapter.

5.2.2 Literature review

The methodology I followed in the frames of my thesis includes three parts: literature review, personal observation and participation, and the interviews of both directors and audience members of particular performances used as case studies. Initially, the literature review aspired to: identify aspects of the chosen issue, which have been investigated by other scholars and artists as well; to develop the theoretical framework regarding specific concerns; to make associations and comparisons with multiple standpoints of other researchers and scholars; to anticipate difficulties when approaching the research issue; and to designate and present new views and results deriving from my research.

Literature review is defined as analysis and synthesis of information, focusing on discovering elements, and not as literature quote of references, summarizing in this way the essence of literature, and extraction of conclusions (IES, 1982, p. 82). Simply and aptly put, literature review includes the analysis, evaluation and integration of the published literature to explain complex phenomena (Thomas, Nelson, & Silverman, 2011, pp. 24-25). Literature review requires profound knowledge of the existing literature and critical use by the researcher (Sharp, Peters, & Howard, 2002). The main concern is to answer specific research

questions through information, data and interpretations collected from existing written sources (Paraskevopoulos, 1993).

As Marten asserts, the main disadvantage of literature review, which limits its scientific weight, is the fact that it is not based on primary data, but mainly on publications and surveys containing primary information (Cooper & Hedges, 1994, p. 4). For Paraskevopoulos, in this way the data are not collected under a coherent plan or target as they are written from different researchers and scholars in different times (Paraskevopoulos, 1993). Nevertheless, according to Cooper & Hedges, literature review involves the attempt to discover the coherence and explain the variety of relevant surveys, and for this reason it is often called *synthetic research*. Its main advantage is the analysis, synthesis, categorization, clarification and evaluation of existing information, summarizing the essence of literature (IES, 1982). An additional advantage is that the process may lead to questioning and investigating phenomena, processes and behaviours, which were not foreseen at the beginning of the investigation, but emerged during the research (Iosifidis, 2008).

Literature review is an essential part of every research attempt and in the context of this thesis includes the chapters 1-4, involving: initially, I set the overall frame and issue of people participating in experience design live events for cultural and educational objectives, as well as the research strategy which comprises the convergence of experience design and live art (chapter 1) under this scope. In chapter 2, I analyzed the spectrum of audience participation in the design process in general, and experience design projects in particular. Chapter 3 involves the sense of participation in performance practices, as configured by specific contemporary theories, philosophical perspectives and turns (like poststructuralism, postmodernism, performance studies and performative turn), the influence of incorporated mixed-reality technologies in live art events, and finally designates the common ground of design and performance fields, regarding the participation of individuals and social groups in performance practices. Lastly, in chapter 4 existing forms of audience participation are studied in theatre and performance plays, and a new form of participation is proposed, covering the gap of audience interaction that exceeds conventional forms of spectatorship. My proposal is based on the juxtaposition of Cognitive Science (Varela, Thomson, & Rosch, 1993), as well as Cognitive Psychology and Cognitive Learning Theory in Educational Psychology (Bruner, 1990), applied in the fields of experience design and designed live events for artistic and cultural purposes.

5.3 Case studies

5.3.1 Case studies as research method

Case studies are not merely a way of collecting and analyzing empirical evidence. In the frames of social sciences, this method is used to analyse a general social phenomenon through one (or more) specific instance in action, meaning through a case study (Iosifidis, 2008; Adelman, Kemmis, & Jenkins, 1980). Case studies differentiate from other empirical or experimental research-based methods as they do not necessarily include surveys, statistics, questionnaires or fieldwork. They also differentiate from theoretical projects as they do not

mainly concentrate on conceptual issues. Case studies involve analysis of real life situations and matters, by placing the researcher in an inside position to experience and/or observe the field under study, in order to resolve the facts and conclude to certain views. A case study comprises a unique example of real people in real situations, enabling scholars and researchers to comprehend ideas more deeply and intelligibly, than simply approach them through abstract theories or principles. Typically, in order to choose the appropriate research method we need first to set the research questions. Case study is appropriately chosen as research method in an endeavour to answer '*how'* and '*why'* research questions about: 1) a contemporary set of events, 2) over which the investigator has little or no control (Yin, 2009, p. 13). Yin defines case study thus:

> "1. A case study is an empirical inquiry that 1) investigates a contemporary phenomenon in depth and within its real-life context, especially when 2) the boundaries between phenomenon and context are not clearly evident".
>
> 2. The case study inquiry: 1) copes with the technically distinctive situation in which there will be many more variables of interest than data points, and as one result 2) relies on multiple sources of evidence, with data needing to converge in triangulating fashion, and as another result 3) benefits from the prior development of theoretical propositions to guide data collection and analysis" (2009, p. 18).

This viewpoint stresses a principal advantage of case study: the researcher is offered the opportunity to step into the phenomenon, and have a personal experience without having to reproduce it in a working space, like a laboratory, to comprehend its features and qualities. Especially in case the researcher is not studying a single, but multiple case studies, his/her view is even more broadened by personal involvement within the actual social case. What is critical for the purposes of this thesis, is that case studies concentrate on "the complex dynamic and unfolding interactions of events, human relationships and other factors in a unique instance" (Cohen, Manion, & Morrison, 2005, p. 181). In their *Research Methods in Education,* Cohen, Manion, & Morrison quoting Geertz (1973) assert that case studies endeavour to designate 'what it is like' to be in a specific situation, to comprehend and feel for the reality from within and share the 'thick description' of participants' lived experiences of the situation. Also they further suggest that events and situations should be allowed to speak for themselves rather than be largely interpreted, evaluated or judged by the researcher (Cohen, Manion, & Morrison, 2005, p. 128). By observing effects in real contexts, case studies can offer a holistic perspective on human relations and interactions, and prove associations of cause and effect, evaluating that context is a decisive determinant factor of both causes and effects.

Another important strength of case study research is the fact that it does not appertain strictly to qualitative research methodology, as it may involve a combination of quantitative and qualitative approaches and different data collection methods (like surveys, interviews, documentation reviews, and artefact collections). Usually a case study entails a spectrum of data sources, among which are: direct observations, interviews, and documents (Rowley, 2002). For Rowley, choosing multiple research instruments or techniques is one of the key points of case studies, which reinforces the validity and value of the research, as

data and evidences are collected from different sources providing a synthesis of different views to analyze the case. For the purposes of this thesis, *personal observation* and *interview* were applied as methods to approach and comprehend the perspective and thought behind the direction of the three performance events, as described by the three directors. In addition, the experience of particular audience members was also registered by interviews, to study the results of the endeavour of each director to incite enactive participation. As further described, 2-3 people used stories to narrate their personal experiences while participating in each one of the three performance events.

It is critical to stress that qualitative research, and especially case study research, is more composite as the researcher encounters and interacts with the research subjects during the research process. The researcher is actually involved in people's social lives to accomplish his/her research targets. This fact may involve multiple unexpected consequences, which cannot be initially foreseen (Iosifidis, 2008, pp. 46-47). As the researcher is involved in what he/she studies, his/her behaviour and possible interaction with the participants may influence the overall experience in numerous ways. Therefore, in contrast to quantitative research methods, new research questions, unforeseen problems and limitations may accrue during the research process, probably causing reorientation of the overall approach.

5.3.2 Three performances selected as case studies

In order to research particular instances of audience participation in live events with artistic content, three case studies were chosen, all performed in Greece (Athens and Thessaloniki in particular). The choice was made under certain criteria: The principal reason is that during these performance events different qualities of enactive participation were incited, turning the audience from spectators to collaborators of the overall experience and performance. Secondly, in order to study the physical engagement and participation beyond the level of conventional participation, in each case more than two basic senses (specifically hearing and vision) are stimulated, involving the other three senses as well as physical action and interaction within the performance space. Thirdly, covering in this way the proposed definition of enactive participation, the three performances do not comprise a single narrative, but rather a compound narrative structure interwoven out of a bundle of stories that occur in parallel throughout the play. As remarked in a later stage of the thesis, participation became the performance in all three case studies, which are:

Case study 1
Fake Time @ Ariston Hotel (Thessaloniki, 2011-2013), directed by Lela Ramoglou.

Case study 2
Katerini (Athens, 2010), directed by the Blitz Company.

Case study 3
Situation Rooms (Athens, 2014), directed by the Rimini Protokoll.

The three performances offered the opportunity to study the different way in each case enactive participation was incited, along with relevant advantages and disadvantages accrued, under the viewpoint of the directors and a small group of audience members. The theoretical framework of *enactive participation* in the context of this thesis is based on one hand at the *(syn)aesthetic* approach of Machon (2009) in terms of the physical engagement and interaction, and on the other hand at the *Frame Analysis* of Goffman (1986) with the extensions of White in audience participation (2013) (see chapter 4.3, 4.5 and 4.6). Specifically, Machon's *(syn)aesthetic* approach is based on synaesthesia, the medical situation involving a fusion of sensations stimulated by a single motive. In extension to his perspective, the selected case studies comprise artistic contexts aspired to achieve and/or incite:

- *Fusion of conventional roles:* audience - participant – performer; inspired by Brecht's envision "to demolish the fourth wall" (through a parallel perspective: the technique of trained actors) and break the typical relation among spectators and actors (see subchapter 3.4.2, 3.4.5 and deconstructing the fourth wall in chapter 3.5);

- *Fusion of corporeal, cerebral and emotional perception;* providing the audience with holistic experience involving somatic, semantic and emotional level of interaction – a fusion of body mind and feelings (see chapter 4.4);

- *Fusion of scripted and improvised interactions;* since the narrative structure is a combination of directed parts and gaps that are filled by people willing participation (see chapter 4.5).

- *Fusion of various artistic disciplines;* as various fields, techniques, forms, and aesthetics are combined within the artistic process and result (see subchapters 2.2 and 3.2.1);

- *Fusion of digital and physical*; as technology is incorporated in all of them in less or greater extent, offering a discrete contribution to audience experience or even the potentialities to affect individuals' navigation and interaction within the performance space (see subchapters 2.3.3, 2.4.2 and 3.3);

- *Fusion of real and imaginative;* like in every theatrical and performance play (see subchapters 3.3.4);

- *Fusion of artistic experience and everyday life;* unlike actors and performers, people enter and maintain their position of not playing any role, a rule with possible exceptions based always on audience free will (see subchapter 3.4.1);

- *Fusion of public space and performance place;* as public spaces are temporarily or permanently turned into performance places (see subchapters 3.4.4, 3.4.2 and 3.4.5);

- *Fusion of stage and hall;* for participants and performers move and interact in a way distanced from everyday social encounters, discarding the typical structure of the theatre auditorium (see subchapters 3.4.2, 3.4.3 and 3.4.5).

The three performance events are thoroughly presented in chapter 6 according to the features designated by this axle.

5.4 Research with participant observation

5.4.1 Participant observation as research method

Recently, an increase has been remarked in the number of qualitative studies that include participant observation as a way to collect information. Through observation, the researcher has the opportunity to experience existing situations with all the five senses, and share their knowledge of the topic under study (Erlandson, Harris, Skipper, & Allen, 1993). Marshall & Rossman define *observation* as "the systematic description of events, behaviours, and artefacts in the social setting chosen for study" (1989, p. 79). Observation is moulded out of organized and systematic survey of social behaviour, interactivity, and communication, of social processes and frameworks.

The inherent advantages of observation method involve: direct extraction of information, comprehension of the social frame within which the research topic takes place, and the ability to make research within the actual environments of the situations/topics under study (Iosifidis, 2008, p. 126). Respectively, the disadvantages of this method refer to the fact that this is a strenuous, time-consuming and demanding process that often entails certain risks: for instance, the presence of the researcher may affect the social relations and interactions, by misleading the research process and result. There is also a possibility the observation is not systematic, so the registered processes and behaviours are not typical (Iosifidis, 2008, p. 126).

Participant observation as research method enables researchers to comprehend the motives and activities of the people under study in the social and cultural context they belong through personal engagement and participation in those activities. It provides the context for development of sampling guidelines and interview guides (DeWalt & DeWalt, 2002). Schensul, Schensul, and LeCompte define participant observation as "the process of learning through exposure to or involvement in the day-to-day or routine activities of participants in the researcher setting" (1999, p. 91), and includes "activities of direct observation, interviewing, document analysis, reflection, analysis, and interpretation" (Scwandt, 1997). Participant observation allows systematic observation of social phenomena, behaviours and processes within physical social environment, with the participation of the researcher at the social processes he/she examines, and his/her constant interaction with the people under study (Iosifidis, 2008, p. 126).

Participant observation is used to achieve certain objectives in research: to recognize, comprehend and conduct relationships with the people under study; to evaluate the way and the qualities of social groups encounter and interaction, how things are organized and prioritized, how people interrelate, and what are the cultural parameters; to emphasize the fact that cultural members play a decisive role in manners, leadership, politics, social interaction, and taboos; and to help the researcher familiarize with the social members under study (Schensul, Schensul, & LeCompte, 1999, p. 91). Bernard asserts five reasons for

including participant observation in cultural studies, all of which increase the study's validity: it makes it possible to collect different types of data; it reduces the incidence of 'reactivity' or people acting in a certain way when they are aware of being observed; it helps the researcher to develop questions that make sense in the native language or are culturally relevant; it gives the researcher a better understanding of what is happening in the culture and lends credence to one's interpretations of the observation. Participant observation also enables the researcher to collect both quantitative and qualitative data through surveys and interviews; and it is sometimes the only way to collect the right data for one's study (1994, pp. 142-3).

In my experience, participant observation offered specific advantages in the research: I was firstly given the opportunity to observe ongoing patterns of behaviour as they occur in the flow of performance live events and make appropriate notes about salient features. Having personal experience of specific situations and incidents I was in position to understand deeper the descriptions and interpretations of the audience members I interviewed days later. Having stepped into the same conditions, it was easier for me to empathize with them. Bailey also acknowledges the significance of observation studies in case of non-verbal behaviour (1978), in contract to laboratory-based experiments and surveys that depend upon verbal responses to structured questions, and bias can be introduced in the very data that researchers are attempting to study.

Four observation stances have been distinguished for the role of the researcher (Gold, 1958) (Iosifidis, 2008): *complete participant*, when the researcher is primarily member of the group under study and keeps his/her researcher role secret from the group to avoid disrupting normal activity; *participant as observer*, in case the researcher is a member of the group being studied but in this case the group is aware of the research activity, and yet his/her main role is to collect information; *observer as participant*, if the researcher is not a member of the group being studied, participates in their activities and the group is aware of the researcher's observation activities; *complete observer,* is the opposite case of the complete participant - the researcher is completely concealed, meaning that the public being studied is unaware of being observed. My role in the performance events varied as in different cases different circumstances required flexible management of the situation. I explain this diversity and my experiences in the three case studies in the next subchapter 5.4.2.

5.4.2 Participating at the performances

Case study 1: Fake Time @ Ariston Hotel (Thessaloniki, 2011-2013)

The first case study was performed for a certain period of time from 2011 to 2013 in Thessaloniki, and many changes were made through this extensive period (in terms of the actors, the story, the audience participation, and a lot more). According to the director (Lela Ramoglou), small changes took place during each theatrical season and more critical modifications took place in the mid time of preparation, based on the experience and feedback they had from the audience each time. This point is critical as the play was played in essence in three versions with minor and more significant alterations. I participated in the performance as audience member in November 2011, the first month it was played ever and

my experience and observation regard the first phase of the play, at time when the artists had not received any feedback or made any changes yet. The instance of the play I witnessed was at the initial stage of its formation. Nonetheless, every performance event was unique. I had the opportunity to watch the play twice, meaning two days in a row. The first time, only 12 people participated while the second more than 25. This factor alone modified the entire play as fewer people moved around and interacted with the performers, altering the overall experience for everyone present.

According to the objectives of this thesis a combination of two research stances were eventually used: *participant as observer* and *complete participant*. Specifically, both the director (Lela Ramoglou) and the performers were informed in advance of my research scopes and I participated within their performance event with their agreement of my role as researcher and participant at the same time. I firstly contacted the director and explained what I needed and in return we decided that I should remain neutral during the play, so that the overall event would not be affected by my presence as observer. Afterwards, the director informed performers for my aim and participation, so that I was given the opportunity to see as many things as possible, a chance I also had as we agreed that I had to see the play twice. Hence, for the director and performers I was *observer as participant.* Nonetheless, in terms of the audience members we decided to conceal my observation role so that the overall experience would not be altered as people would feel being observed. In agreement with the director, we decided that this would affect their work and my research to an extent that nobody wanted to risk. Therefore, my research role was not revealed to the other audience members.

Case study 2: Katerini (Athens, 2010)

In case of *Katerini*, unfortunately personal observation and participation was not possible as the play took place in the autumn of 2010 in Athens. By that time (specifically September 2010 until June 2011) I was continuing my research studies abroad, at Kingston University (Surrey, London - Faculty of Science, Engineering and Computing) in the framework of the Erasmus Exchange program; a scholar given from the S.S.F. (Sate Scholarships Foundation) for a full academic year. Since personal witnessing proved impossible, this factor initially seemed determinant not to select the specific performance as case study, but later I overcame this difficulty as I was offered multiple videos by the director covering multiple instances of the overall performance, enabling me to repeatedly study the content. Personal experience and participation is undoubtedly incomparable to watching video showing audience participation. But the views and information later collected from this play were critical to this research and I decided to overcome this limitation. Therefore, I studied *Katerini* only through video I was given by the Giorgos Valais (one of the three directors) and of course the interview of two audience members and the director himself.

Case study 3: Situation Rooms (Athens, 2014)

The project *Situation Rooms* is travelling globally and was presented in Athens (27 April – 3 May) in the frames of *Fast Forward Festival,* which according to the artistic manager Katia Arfara challenges the boundaries between performance, dance, cinema, music, installation and visual arts (Arfara, 2014). The second day (28 April) a workshop was

held with Daniel Wetzel, one of the three directors of the project, the Rimini Protokoll. In this workshop we had five-hour time to listen to Daniel Wetzel, talking about the artistic team Rimini Protokoll, their work and perspectives, and also to experience the project *Situation Rooms,* which lasted 70 minutes exactly. My whole experience of the play was enriched as the director shared the directors' views and objectives with the people present before we entered the world they created, as well as from the conversation that was held afterwards and people shared their thoughts and feelings of the project. Twenty people had the opportunity to speak with the director, experience the project and then discuss all together of what happened. I had no other opportunity to meet Daniel Wetzel or any other member of Rimini Protokoll as they work abroad.

Concerning my stance during the performance event, I was *participant as observer.* In this live event there were no performers, but only audience members, and the rest nineteen people that participated knew that I would participate in both roles of participant and observer. The important thing is that in case of this event each participant had little time to receive many pieces of information (exactly 7 minutes in each story) and the action of everybody needed to be absolutely precise, so that the parallel stories would unfold as planned. As participants were asked a lot, there was no time to socialize; participants were more or less isolated from the rest of the people. Hence, each participant was principally focused and absorbed in his own role and story, leaving only a few moments for social interaction. My presence and work as observer under these circumstances were easily unnoticed from everyone participating. I would only affect the overall experience if I had ruined the flow of the action, which as I said was intense and demanding.

5.5 Research using interviews

5.5.1 Interview as research method

As analyzed in earlier chapter (3), meaning and knowledge are constructed among members of the same and contiguous social and cultural group. Interviews enable participants (both interviewers and interviewees) to converse and exchange their views and interpretations concerning specific events and situations they live in, according to their personal perspective. Therefore, the interview as research method is about more than merely collecting data about life: participating in such a dialogue is not only a technique to gather information; it is about exchanging perspectives, about making meaning on the fly, concluding and changing opinion, and finally about broadening up the horizon of everyone attending in this live and creative process. Kvale (1996, p. 14) defines as *interview* an interchange of views between two or more people on a topic of mutual interest, and additionally discerns the importance of human interaction in meaning-making and knowledge production.

The interview as research method aspires to achieve three research purposes (Cohen, Manion, & Morrison, 2005, p. 268): the first one is to collect information through direct questioning of someone with relevant experience on the subject; secondly, it is employed to evaluate established hypothesis and/or propose new ones, or contribute as an explanatory

medium to help identify variables and relationships; and thirdly, interview can be used in addition to other research methods to extract results and conclusions. The interview is also proved to allow researchers reach greater depths of comprehension than is case of other methods of data collection.

There are also some disadvantages related to interviews, in the frames of social sciences in general (Kvale S. , 1996): Firstly, the implementation of the overall process is time-consuming, i.e. to design, prepare the questions, find the appropriate participants and gain access to them, make the interview and analyze the information given. Secondly, the skills required on the behalf of the researcher (communication skills, sensitivity, flexibility and genuine interest) are of determinant importance, and finally, bias and subjectivity in terms both the interviewer and the interviewee(s).

Applying interview as a research method entails an amount of risk and relativity to be taken, but also has many inherent advantages. Regarding the first, bias and subjectivity can affect the way the interviewer and the interviewee(s) contact and interact during the interview, as well as the former interprets data and extracts the research results of this process. According to Barker and Johnson, the interview is a particular medium for enacting or displaying people's experience and knowledge of cultural forms, but the process of choosing, setting and answering questions is far from being neutral, reflecting the personal (though strongly culturally and socially influenced) way people make sense; comprehend each other and the surrounding world (1998, p. 230). The way we choose to approach the interviewees may be thoroughly prepared in advance, but during the interview the interaction with the participant(s) is hardly predicted or rationally controlled, depended at numerous factors and specific research circumstances. Similar to designing a live event, or directing a live art event, or even improvising in everyday life, the human factor and interaction makes things unpredictable.

In the context of my thesis, the interview was planned according to the seven steps of Kvale interview-based research procedure (1996, p. 88), which are:

- *thematization* - the purpose of the research was formulated and the main topic was standardised before the interviews. The reasons and objectives of the investigation were clarified before methodology was decided and applied;

- *design* - the overall plan of the investigation was designated regarding the interviewees, the interview questions, the type and the media used for the interview, and so on;

- *interview* - the interviews were conducted based on the interview questions and objectives in general, "with a reflective approach to the knowledge sought and the interpersonal relation of the interview situation";

- *transcription* - before the interview content was analyzed, it needed to be transcribed from oral speech to written text;

- *analysis* – the content was analyzed according to appropriate methods of analysis for the specific interviews;

- *verification* of the generalizability, reliability, and validity of the interview findings; and finally

- *report* - involved communicating "the findings of the study and the methods applied in a form that lives up to scientific criteria", as presented in chapter 6.

There are four main types of interview as research tool, for Cohen, Manion, and Morrison (2005, p. 268): the *structured interview,* the *unstructured interview*, the *non-directive interview*, and the *focused interview*. For Lincoln and Guba, the *structured interview* is appropriately chosen when the researchers are aware of what they do not know and also of what they are looking for (1985, p. 269). In this case, the interview questions are configured properly to extract the knowledge required. Whereas, *the unstructured interview* is useful when the researchers are not aware of what they endeavour to find, and therefore, rely on the respondents to help them find. The *non-directive interview* is characterized by minimum direction or control in terms of the interviewer, and lastly the *focused interview* puts weight at the interviewees' personal answers and responses to a given situation in which they have experienced and offer the interviewer their viewpoint of it to analyze afterwards (Lincoln & Guba, 1985, p. 269).

The objective of this phase of the thesis was to take interviews with from the people who directed and experienced the three performance events as audiences. Since I endeavoured to collect as much information and as many approaches as possible, I surveyed the views, attitudes, interpretations and empirical date of these two types of interview participants: directors and audience. Therefore, the method of *semi-structured interview* type was selected. For Iosifidis (2008, p. 112), this specific type of interview is characterized by a set of predetermined questions and additionally shows great flexibility in the order of questions, enabling the interviewer to modify the content according to the flow of the conversation, like to add extra questions to clarify issues raised on the fly, and/or alter the way questions are expressed according to the qualities of the undergoing interaction. Meanwhile, this method entails specific weaknesses as well, like: essential and salient topics may be accidentally left unmentioned; the flexibility offered to the interviewer in sequencing and wording questions may result in substantially different responses, reducing the comparability of responses, as quoted in Cohen, Lawrence, and Keith *Research Methods in Education* (2005).

The *semi-structured interview* is similar to Patton's 'interview guide approach' (1980, p. 206), according to which the interview topics are decided beforehand, and the order of the questions as well as their final wording is decided during the flow of the interview. For Patton, the 'interview guide approach' has particular strengths: the former planning of topics increases the comprehensiveness of the data and makes data collection more systematic for each respondent; in this case interviews remain fairly conversational and situational. The feature of flexibility and the ability to redefine the context as a dynamic, interactive process among researcher and interviewee(s) are important advantages of the specific method that allow the researcher to collect data reflecting the perceptions and interpretations of the participants through their own perspective. In *semi-structured interview*, the phenomenon under research *is presented through the eyes and experiences of the social subjects themselves* (Iosifidis, 2008, p. 131), while the researcher is offered the opportunity to enrich the content of the research with data and characteristics that were not able to assume in advance, meaning before getting engaged in the research field.

Moreover, it is critical to stress the ethical issues that inhere in all forms and methods of research. Principally, the interviewer must pledge to protect the participants' rights to privacy and maintain integrity in general terms and especially regarding content of the interview. Both the principle of voluntary participation and informed consent were applied in the frames of this research. All interviewees participated out of their own will, were thoroughly informed about the procedure, about the objectives of their interview, and how their views would contribute to my research, before consenting to participate.

5.5.2 Research questions

The principal topic raised at this thesis concerns contemporary types of participation in live events with cultural and educational objectives. *Enactive participation* as term is proposed and already defined in a theoretical basis (chapter 4) as a mode of participation that involves (actually presupposes) conventional participation – i.e. emotional and mental engagement along with typical bodily responses (like applause, laugh, and crying) – but exceeds it to include physical involvement and collaboration in the flow of the event. This research initially specified this gap in the definition of different modes of audience participation, lately emerged in contemporary forms of art. Secondly, proposed this sense in a theoretical basis (borrowed from the cognitive sciences and the educational psychology). Following, the characteristics and qualities of enactive participation are studied within specific performance events, as well as the way it was incited by their directors. Specifically, the research is focused at three thematic axles, querying:

- Firstly, regarding the ways each director (or group of directors) conceived and applied to make the audience feel relaxed and comfortable to participate enactively, as well as the effectiveness of their approach, according to the audience members (and my personal) experience.

- Secondly, regarding the reasons and the way(s) multiple senses were stimulated in particular parts of the event, as well as the audience view regarding the multisensory interaction they experienced.

- Thirdly, regarding the narrative structure that is interwoven out of scenario-based parts and gaps where audience enactive participation were invited, forming each time a unique overall experience for everyone involved.

5.5.3 Interview questions

The next stage, according to Kvale (1996, p. 88) is the *analysis* of the proceeding interview(s). As already mentioned, the semi-structured type of interview is selected according to the research questions and the objectives of this research. Initially, an extensive list was gradually created to cover the wide spectrum of creating a live performance event (in terms of the directors) and participating in it (in terms of the audience experience). The first attempt was too thorough and two problems were raised: the number of the interview questions was impossible to cover within a comfortable period of time, and a part of them was so specific that could not cover the differences in approach in each case study; they

needed to be less and more generalized, in combination with probes added on the fly for deeper comprehension when required. Another critical point is that a certain number of questions were added further on the process, as new evidences brought new queries[71]. Continuing, these questions were arranged according to the group of interviewees (directors and audience members), and in addition were distinguished in four main categories (introductory, audience participation, multisensory experience, conducted and improvised interactivity), as following presented:

Questions addressed at directors

Introductory

- How would you describe the kind of art you practice?

- What is your vision and to what extent do you think it is accomplished through this project?

- What is the contribution of technology in your particular project?

Inciting audience participation

- In your performance we see performers and everyday people meeting and interacting together. What is the role of the audience?

- What ways/methods are applied in your project to make people feel comfortable and give them space and time to share their stories / experiences / opinions? How effective these methods proved to be?

- According to your experience, what was people's response to the opportunity you offered them to participate in this way in the performance process?

- Have you noticed any groups of people which were more open to interaction and communication?

- Were there any cases public participation surpassed your expectations?

Multisensory experience

- What is the role of the senses in your work?

- Apart from sight and hearing, which other senses are incited through the performance, for what reasons and in what ways?

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[71] For example, I noticed soon that a significant amount people (not only among my interviewees) went more than once to see each play, and the reason was not narrowed down to the fact that they had really enjoyed it the first place. This fact is not that common in theatrical plays, as it concerns parts and stories of the narrative structure participants wanted to experience again or for the first time as they did not have the chance to experience the first time. In this case I really wanted to further explore the reasons why this fact is turned into something common in all cases. This aspect is directly related to my topic (audience participation) as analyzed in the results section (see chapter 6).

- What consequences sensory stimulation brought to the audience experience and response?

Conducted and improvised interactivity

- To what extent people's participation and interaction are tightly guided or incited to affect the performance?

- To what extent the direction of the work is open to the unforeseen?

- To what extent the stories presented are independent events / narratives, or parts of a coherent story?

- Describe your experience as director of a work-event consisted of many parallel stories, a structure far from being traditional?

- In what ways your work gets to an end and for what reasons?

Questions addressed at audience members

Introductory

- Describe the overall route you followed within the performance space.

- Was this overall experience new to you?

- How many times did you participate in the play? In case you have participated more than once, have you noticed any differences from one time to another in your experience?

- Which do you think was your role in this event?

- In general terms, in what ways do you think you were given the opportunity to participate in this specific play?

Personal participation

- How would you describe your experience and interaction with the performers;

- How would you describe your interaction with other members of the audience during the performance?

- Did you feel comfortably moving around within the scenery? Did you interact with the scenery and the props or did you prefer to mainly observe them?

- Were there any moments during your interaction with the performers and/or the audience that you felt uncomfortable or embarrassed in any way, and why?

- In which room/place you feel you had the most valuable experience for you and why? How did it affect you?

- How did incorporated technology contribute to your overall experience?

- As a whole, how much did the performance move you emotionally, and in what ways?

Multisensory experience

- Apart from vision and hearing in what other ways did you interact with other people (audience and performers) and the scenery?

- Did you have a multisensorial experience? How did it affect you?

- How comfortably did you feel walking so close to others?

- Conducted and improvised interactivity

- In your opinion, did the performers encourage interaction among members of the audience and performers?

- In what ways they succeeded in doing so, and in what ways did it affect you?

- Do you consider that the direction given to you was decisive in your experience? Did you follow your own path?

- Do you think the direction you received was enough to continue?

- How much do you think you were influenced by other people's choices in moving around and interacting within the performance space?

The four above categories (introductory, audience participation, multisensory experience, conducted and improvised interactivity) were used as guidelines to approach and converse with the interviewees, which were later adapted and enriched during each interview according to the interaction with them. In particular, in terms of audience members, their personal knowledge and experience on the topic proved determinant: four out of the seven interviewees proved to be professionally trained actors/performers, so in these cases the conversation reached a deeper level as these people have a broader comprehension and critical thought, gained through their personal work in the field.

The final formation of questions was made according to the model presented by Iosifidis in his *Qualitative Research Methods in Social Sciences* (2008, pp. 15-118). Basically two types were used: *closed* and mainly *open questions*. *Closed questions* were used to note basic personal information (name, surname, age, professional). Moreover, *open questions* involve the main body of the interview, usually used in structured and semi-structured

interviews. Specifically, the following types of questions and probes were ultimately used, considering that a question and/or probe may not clearly pertain at just one category, especially in case of probes:

- *Introductory questions* to start describing the overall experience they had as directors or audience members as well as general thoughts on the work itself.

- *Descriptive questions* helped interviewees to describe their position and experience of the work, as creators and/or collaborators.

- *Opinion questions* contributed to help the interviewees express their personal thoughts and feelings on their experience.

- *Structural questions* were essential to find the ways enactive mode of participation was effectively incited, as well as the reasons why some of them were ineffective.

- *Bridge questions* were useful to pass smoothly over to next or previous topics.

- *Evidence probes,* which are used aiming at justifying audience views, opinions and interpretations by the audience members themselves.

- *Slant probes,* through which I tried to understand the perspective through which the interviewees interpret their practice in relation to the artistic context of reference.

- *Conclusive questions* at the final part of the interview were used to notice possible discrepancies between the initial and the ending standpoint of the interviewee.

It is critical to stress that in the beginning of the interview audience members seemed really excited (almost thrilled in cases) about the play they participated and refused to talk about any deficiencies of any kind, as if they had idealized the overall event. They expressed only the advantages and how the whole experience was very pleasant and funny for everyone. But as our conversation was unfolding, some of them shared aspects of their experience that were not convenient or joyful at all. Their tone of voice changed, their smile was no longer shinning and they revealed other thoughts and feelings that involved discomfort, anxiety, embarrassment, even anger. Physical contact, even if it is not touch, is intensive mentally and emotionally, and only trained actors/professionals are prepared and aware how to handle such situations. Nonetheless, few interviewees have submitted cases wherein audience members' boundaries were exceeded, and patterns of formal social behaviour were surpassed. For example, people witnessed instances that performers were actually physically and verbally attacked under certain circumstances, or I was told that a girl actually sued the director of a show, and more on. All these sensitive and compound aspects of a live event are difficult to testify in an interview, possibly being afraid of the opinion of those who would read them beyond the face-to-face discussion, about the persons who acted this way and about the interviewee who shared these facts openly. It took time to build trust and appropriate types of questions to make interviewees feel comfortable and share their true opinions about the plays and overcome what they think I need to register on their behalf. And this is exactly what directors and performers endeavour as well in every

play and performance of theirs: build trust among them and the participants, the keystone of every type of personal engagement; may it be dialogue, interview or participation in any kind.

5.5.4 Sampling, the interviewees

In qualitative social research scholars are usually focused on individual cases studied in depth. These cases are either small samples characterized by specific socio-cultural features and qualities that cannot be generalized in a broad population of reference, or ways of giving meaning, interpret, and represent within specific social schemes (Iosifidis, 2008, p. 59). In addition, in case of qualitative social research, the sense of representativeness is rarely an objective to achieve (Miles & Huberman, 1994) as an in depth study is aimed at social phenomena through the experiences of social members, in order to formulate theoretical positions that contribute to better comprehension of social processes (Iosifidis, 2008, pp. 60-61). In contrast to quantitative methods, in qualitative research there are no standard norms that specify the size of the sample (Merkens, 2004). Hence, in qualitative research samples are narrowed in few or even one cases, as the research is aspired to be extensive and thorough, a principal purpose of qualitative research methodology.

Accordingly, the interviewees in my thesis are people that experienced the three case studies (*Fake Time @ Ariston Hotel* - Thessaloniki, 2011-2013; *Katerini* - Athens, 2010; *Situation Rooms* - Athens, 2014) as audience members. The main obstacle I faced was initially to accurately designate the number and the identity of these individuals and secondly to contact them – as some of them live in Thessaloniki, *Katerini* was performed in 2010, and more. I shortly concluded that accessing and gathering audience members of a particular artistic event was a demanding task. The sample is therefore very small, difficult to specify, and complicated to access.

Consequently, the strategic of *snowball sampling* was followed according to which researchers initially contact candidate participants in the research process and ask them to introduce them to other candidates they believe follow specific criteria. Snowball sampling is commonly used in qualitative research in case there is a necessity to find a sample that access is limited or difficult enough (Iosifidis, 2008, p. 61). It is essential to stress that ideally *snowball sampling* should include samples that are different or even by far diverse (extreme cases) to the initial contacts in order to approach a wide spectrum of viewpoints and mould a holistic approach on the issue.

For the purposes of this thesis, the people interviewed were distinguished in two categories: directors and audience members. Directors in all cases were approached in advance, to shape a general view of the creators' intentions and perspective, and then the audience members were interviewed to gradually form a compound overview, by listening to the opinions of those these artistic events were addressed at and experienced by. In terms of directors, the interviewees were:

Case study 1: *Fake Time @ Ariston Hotel* → Lela Ramoglou

Case study 2: *Katerini* → Giorgos Valais (member of Blitz Company)

Case study 3: *Situation Rooms* → Daniel Wetzel (member of Rimini Protokoll)

An additional interview was taken from John Britton, director of the Duende Ensemble, physical theatre group. Although he is not related in any way to the specific case studies, his experience and knowledge on the subject were considered critical to be included and shared through this thesis. As a specimen of audience members, the interviewees were:

Case study 1 - **Fake Time @ Ariston Hotel**:

Fotini Kalle (Thessaloniki)

Panagiotis Chinidis (Thessaloniki)

Christina Papadopoulou (Thessaloniki)

Case study 2 - *Katerini:*

Fidel Talampoukas (Athens)

Angeliki Papathemeli (Athens)

Case study 3 - *Situation Rooms*

Angeliki Tomara (Athens)

Vasslilis Skarmoutsos (Athens)

5.5.5 Conducting the interviews

As previously mentioned, the interviews of the directors were firstly completed, and following the interviews of the audience members were conducted. In general, the overall process involved eleven interviews - specifically four directors and seven audience members - taken in the period between May 2014 and August 2014, with two exceptions (John Britton was interviewed in 24.11.2012 and Lela Ramoglou in 13.12.2012). In terms of the place, the media used and the type of the interview, six interviews were conducted through face-to-face conversation in Athens and Thessaloniki, four of them via Skype (principally because the interviewees live away from Athens), and one interview was done via email, as Daniel Wetzel was abroad working his next project and there was no time for an oral conversation. All the above information is included in the proceeding table:

Case Study	Person	Role	Interview	Date	Record duration
---	John Britton	Director	Face-to-face (Athens)	24.11.2012	[00:45:30]
Katerini	Giorgos Valais	Director	Face-to-face (Athens)	04.06.2014	[01:50:00]
	Fidel Talampoukas	Audience member	Face-to-face (Athens)	25.07.2014	[01:45:00]
	Angeliki Papathemeli	Audience member	via Skype	22.07.2014	[01:17:00]
Fake Time @ Ariston Hotel	Lela Ramoglou	Director	Face-to-face (Thessaloniki)	13.12.2012	[01:32:00]
	Panagiotis Chinidis	Audience member	via Skype	21.07.2014	[01:29:00]
	Xristina Papadopoulou	Audience member			
	Fotini Kalle	Audience member	via Skype	16.07.2014	[01:23:00]
Situation Rooms	Daniel Wetzel	Director	via email	08.05.2014	--
	Angeliki Tomara	Audience member	Face-to-face (Athens)	04.08.2014	[01:22:00]
	Vassilis Skarmoutsos	Audience member	Face-to-face (Athens)	05.08.2014	[00:55:00]

Table 1. List of the conducted interviews by permission to mention the names of the audience members.

Face-to-face interview

Most of the interviews were deliberately conducted face-to-face. Specifically, in six out of the eleven conversations I had the opportunity to be close to the interviewees and observe the expressions of their entire body, not only hear them speaking. This valuable immediacy was beneficial as more comfortable relations were created between us. My experience as interviewer was enriched as I had the opportunity to empathize with the interviewees and see their experience through their own eye. Respectively, when the interviewees had the opportunity to see my face and bodily gestures, they felt more open and relaxed to express their inner thoughts and feelings in contrast to other forms of conversation. It is not though a coincidence that these conversations lasted more and additional issues were discussed beyond the requirements of the interview, and therefore there was no need for these parts to be recorded. The distance between me and the interviewees was the principal reason other types of interview were conducted, specifically via Skype and email. Practically, every conversation took place in a public space in Athens and Thessaloniki and was recorded via digital voice recorder (with the agreement of the respondents).

Interview via Skype (video call and sound call)

Only three interviews were finally taken through Skype due to the distance between us. Our conversations were both video and sound call depending at the speed of the Internet connection, which varied not only from day to day but during the interview process as well, needing in this way to change in this way between the two modes. This fact sometimes interrupted the flow of the conversation, and also deprived our contact from visual information, but the objectives of the interview were always accomplished. Similar to the interviews that were done face-to-face, the conversations through Skype were also recorded through digital voice recorder (with the agreement of the respondents), and the material was later transcript and analyzed.

Interview via email

There was only one exception to the interviews done through a type of conversation - either face-to-face or via Skype – the communication with the director Daniel Wetzel, which was realized via email. The reasons were only practical; he needed to travel at that period constantly for work around Europe and the Internet once more was the only solution as interconnects people globally. In this case, the questions were sent via email and they were gradually responded the next few days in written text. The main disadvantage of this mode is that the immediacy of the conversational mode was omitted, but on the other hand the answers I received were more explicit, apt and taciturn and the time needed for transcription was omitted as well.

5.5.6 Transcribing and analyzing the material

All interviews (apart from one that was taken through email) were recorded via digital voice recorder and saved in my computer for transcription and analysis. In this way, all records are in digital form giving me the opportunity to keep as many copies as possible and

access their material as many times needed to analyse the content. After the completion of the interview process, the stage of processing the data followed, involving initially transcription to prepare the material to be analyzed. This process involved the attempt to designate the content of each interview, by taking into account non-verbal features as well, such as tone of voice and bodily gestures, and at the same time discard other parts like interruptions in the flow of the speech, due to external factors.

Finally, the stage of data analysis proceeded, which is crucial according to Kvale (1996), and involves association and interpretation of the all types of gathered information. During this process, I tried to group participants' responses in accordance to the research questions and initial theoretical assumptions presented in the theoretical frame earlier in this thesis. In addition, I tried to make meaningful correlations with aspects that were not considered in advance. The directors' perspective and audience viewpoints on the three topics of the interview (audience participation, multisensory experience, conducted and improvised interactivity) broadened my perception on enactive participation during the overall interview method. The results of this analysis process are presented in the following chapters.

6. Case studies and results

6.1 Introduction

The results of the research are presented in the sixth chapter of this thesis, as collected and analysed after the interview process was completed, as described in the previous chapter. The three participatory works under study are: *Fake Time @ Ariston Hotel* (Thessaloniki, 2011-2013) and directed by Lela Ramoglou; *Katerini* (Athens, 2010), directed by the Blitz Company; and *Situation Rooms* (Athens, 2014), directed by the Rimini Protokoll. They are described in the first part of the chapter '*Analysing the three case studies'*, according to my personal experience and perception. The report is based at the axles also set from the theoretical framework of *enactive participation* (analysed in the relevant part of the thesis – chapters 2, 3, and 4): fusion of conventional roles; fusion of digital and physical; fusion of real and imaginative; fusion of artistic experience and everyday life; fusion of public space and performance place; fusion of stage and hall – and mainly the consequences of these fusions to the overall structure. Following, the next three parts of the chapter contain the results concerning the research questions, also set in chapter five, based on the analysis of the answers both directors and audience members gave about their experience during the above performances. Specifically, the second part *'Enactive participation, when audience involvement is the performance'* involves the ways each director (or group of directors) approached and applied to incite the audience enactive participate. The third part '*The aesthesis of enactive participation {sensual and emotional thread}'* concentrates, as its title indicates, at the multisensorial and emotional aspect of interaction and experience of the participants, as well as the ways as well as the extent to which the directors of these live participatory works achieved to approach their audience in emotional and incorporeal level to incite their personal engagement. The fourth and last part *'The narrative structure of enactive participation {compositional thread}'* concerns the compound nature as well as features and potentials of the narrative structure of these works: it is interwoven out of parts acted out by performers and gaps where audience enactive participation is necessitated to complete the organized action. In this way, the research part of the thesis is approaching completion.

6.2 Analyzing the three case studies

"To participate in something is to cross the psychological boundaries between the self and the other and to feel the defining social tensions of those boundaries"
Allan Kaprow

6.2.1 *Katerini*

Director's scope

Katerini is a five-and-half hour performance taking place in six rooms and an open, public space at the terrace of a cultural space named Bios (figure 55)*,* near the centre of Athens. People are firstly gathered at the public space and then are asked to visit specific rooms in the building where one performer interacts with one participant or group of participants, according to the scenario. In each room a different story and condition unfolds. The first critical aspect is that there are no spectators, meaning no people watching others doing or acting out something, except from the public space where people relax and watch various small happenings while socializing with others. In the six rooms there are only people interacting with the performer (male or female) and with each other. In these rooms, individuals enactively participate as their personal involvement in cognitive, physical and emotional is indispensable for the stories to unfold. In *Katerini*, six performance events occur in parallel, in six different rooms, for five-and-half hours (figure 56). The Blitz Company are the directors of the performance who through tight structure and direction endeavoured to maintain the flow of the events according to the scenario, and decrease the amount of risk taken by incorporating audience participation in the overall action. In *Katerini,* the quality of audience participation is essential and affects the occurrence of each story (especially in one-to-one cases), but cannot determine the overall outcome, due to the consistent structure of the project.

According to Giorgos Valais, one of the directors of Blitz Company, they define their art work as '*staged reality'*, i.e. the audience is involved with a type of engagement that is interwoven out of osmosis with reality. Although every aspect of the overall event is directed and organized to the last detail, the final result feels real and spontaneous, like everyday life. The sense of 'staged reality' is introduced by the artistic group to describe the form they followed in *Katerini* to present a specific content to 80 people every night. They support the necessity of tight direction; as Valais states: "a work deprived from shape is not art but chaos". Directing such a project was a highly demanding work, he further states, as they faced numerous intricate situations, and improved their decisions as many times during the creative process. Regarding the name of the performance, *Katerini* symbolizes the bourgeois attitude in which they grew up, the television programs they saw in the 80s, the contradiction of being young and everything around them to be depressed. In his interview, Valais shared his view of provincial towns as places with a nostalgic atmosphere, where days pass by slowly. *Katerini* is also a provincial Greek town near Thessaloniki, not small neither big, and the performance is an attempt to describe this exact psychical geography. For the directors:

"Katerini is a town that lies away from the decision-making centres, and it's near the sea, between the two major cities, Athens and Thessaloniki. A town where time goes by slowly, where people live their small tragedies behind closed doors, at some point, they go out, to the square of the town, meet their friends, protest against the corruption of the politicians or the decadence of their area and then go back to their houses, to school, to the beach or in their rooms" (Blitz Theatre Group, 2009).

The performance aspires to raise further speculation on social issues through one-to-one and/or or one-to-many interaction with the audience. Initially, the sense of *'interval'* between two worlds is expressed, symbolizing a condition of waiting in a specific place for a future that is so delayed to come, even though anything old has been completed and ended long ago. In *Katerini* people are waiting for a change always postponed. Dramaturgically, the play was inspired by a relevant text of Stefanie Carp (the dramatist of the Swiss filmmaker Christoph Marthaler) who talked about the meaning of *'interval'*. In this text, Carp expressed that as humanity we live in a time when everything old is finished; we all sense it but nothing new has come yet. In social level, we experience an interval as everything has already happened, and still the future does not arrive. Her view reminds me of the heroes conversing under the willow tree, in the play *Waiting for Godot* of Samuel Beckett. This concept was in agreement with *Katerini*, i.e. feeling trapped in a provincial town where civilians' horizons and opportunities cannot open. In addition, the play explores how emotion is a powerful medium to contact and share our inner world. Emotions are used as means*,* as Valais asserted, to connect people and communicate on critical issues, like loss, separation and love. Through 'emotional traps' an inner process is aspired to be set in motion (e-motion), a short of displacement or awareness in terms of the audience. The Blitz Company are concerned at inciting an emotional activation or movement in a metaphorical way.

Moreover, political issues are also raised, specifically about the personal stance and responsibility on social matters. During the performance, performers ask audience members what is their position, what do they do to change the world, and political texts and speeches are read in the public space. The directors remark that the quality of public dialogue in Greece is constantly understated, due to the downgraded educational system and lack of respect in social encounters. But critically they want to put weight at a common denial of taking any type of responsibility, of getting involved with critical opinion in social practices, of taking the 'burden' of specific initiatives to improve a current situation; a denial that diminishes hope and provokes nihilism. In order for change to come risk needs to be taken; personal risks and social risks, which like any form of communication, may equally succeed, fail or even be rejected.

Past and present experiences and spatial trajectories meet within the rooms of *Katerini*. People share moments of their personal lives from the perspective of their present age and condition. Concerning the relativity and ever-changing nature of memory, Valais talked about a common Russian proverb, saying *"he lies like a witness".* With this contradiction, the fluidity of the way we recall an event is depicted, as it varies through the years, whereas the occurrences were specific and cannot change; the facts remain the same, it is our view that modifies them. When we narrate a story, memory provides us with details

that may have never existed, alter others, and/or put different emotional weight, making new associations in this way, and simulating facts in a different way.

Inciting participation

The public space is the place where the play begins and ends. People are initially gathered in the terrace of the building, where they are asked to complete a *questionnaire*. In this *questionnaire* participants fill their name and few personal details, and following are also asked questions relevant to the situations they are likely to experience in the rooms, for instance: *Which is your favourite song? How often do you meet your parents? Do you enjoy life? What is revolution for you? What have you learned from life? Do you pray? Do you believe in magic? Are you afraid of getting old?* According to the answers they give, a performer guides them to visit two Rooms out of the six of the project. Individuals remain in the public space, until they are announced through the speakers to go to a specific Room: "Spectator [name] is welcome to go to room 5 please". People return in the public space and wait there until they are announced again to go to the next Room. They return again in the end, and stay as long as they please. In the mid time, participants wait in the public space, eat, drink and watch several small happenings unfold (public speeches, dance lessons, music playing, etc.), as well as personal surprises for the audience members: one of the questions in the questionnaire is about their favourite song, and they will have the chance to hear it while waiting at the public space, even though they do not know that in advance. Hence, a different playlist is configured every time *Katerini* is performed according to participants' music choices. After they have visited two rooms, participants can stay in the public space, while new group of twenty people arrive. Every one and a half hours twenty new people are welcomed at the public space, visit two Rooms, meet with others, and leave at any time they please.

The *public space* (figure 57) is a meeting place of entertainment that changes continuously: people come every one and half hour and go when they want, they meet, talk and/or stay alone, while various announcements and public speeches take place during the evening, according to planned or current events. Participant 5 (audience member) remembers wine was served, and the atmosphere was very relaxed and very structured at the same time. Sometimes unscheduled interventions could happen: for instance, the death of Michael Jackson was announced, as transmitted by the media that evening, so several of his songs were played during that night, even though the initial plan of the evening was different. Besides, at that time – the performance was played at 2009 – the condition in Iran was crucial, so a young Iranian man got permission from the directors to speak about what was happening in his country. In her opinion, as *Katerini* is not a typical theatrical play but an ensemble of experiences, the public space played a significant role as the overall experience was started and completed there. It comprises the centre of interaction where all experiences in the Rooms merge together: participants could cross each other and meet with the same people that shared particular (even very personal) moments in the same Rooms, blended with strangers that just came by to have a drink. In public space, people that may have had common experiences in specific Rooms can meet again in new one-to-one or one-to-many encounters, unifying the whole experience for everybody. In this way, the Rooms were connected through the public space, by stepping into the Rooms and the interaction of the performance, and out again in the public space where people can

socialize; like an interval among encounters and movements, past and present, alone and together, stranger and acquainted, performance and everyday life.

Regarding the Rooms, each place comprised different scenery wherein a whole new story was narrated with the enactive participation of the audience. Specifically, the performance space and action is structured in six rooms: *the Room of Ulysses*; *the Room of all the Lost Letters*; *the Room for the Broken Hearted; the Room about Politics; the Room with View; the Room by the Sea.*

{Room 1}: the Room of Ulysses. This Room is a classroom of an ideal school (figure 58), rather than an actual one. There are desks and chairs where audience-students can sit down, and a mature calm and warm woman, the teacher, caring and tender with her pupils. She welcomes each time a group of eight participants to come and sit, takes their questionnaires (filled in the public space) and calls their names to check any absences, just like in a typical classroom, also to help audience members to know each other. Then she starts reading Odyssey, and especially Rhapsody L (Nekuia Rhapsody), describing the journey of Ulysses to Hades, where he meets many people, like his mother who were deeper related to him. While she is reading, she keeps walking around the desks really slowly, caressing the participants' heads. This gesture is an entirely delicate and maternal contact, as the story of the book unfolds. The hero meets his mother and gives her blood to drink. The teacher asks the pupils if they had lost someone from their family, and they reply one but one. Then they are asked by the teacher if they had gone to his/her funeral and how was this experience for them. Therefore, a dialogue starts among those present in the classroom. Following, the teacher goes on reading that Ulysses' mother recognized him and he tried to hold her (three times) but soon realized that was impossible. He asked his mother why she eluded, just like a shadow, and she replied that the dead ones have no bones; there remains only an image of them. At that point the teacher asks 'students' to take a piece of paper and draw a picture of themselves meeting this person who is has passed away and what they would say to each other. While people are drawing, she goes on reading that Ulysses meets Achilles, who says that he would prefer to be a living slave than a king among the dead, as well as Agamemnon and other heroes. When participants are finished drawing, the teacher asks each person to stand up next to her in front of the class and show everyone their sketch and explain the story it presents. Many people chose to share very intimate moments and deep emotions with others; many people were emotionally moved (even cried) while narrating their loss in a rather playful but essential way. After everyone shows their drawing, they stick all drawings on the walls of the classroom, the teacher reads the final part of the rhapsody and finally everyone is dismissed.

{Room 2}: the Room of all the Lost Letters. In this Room (figure 59) only women are asked to go one-by-one and meet the performer who is a man (Giorgos Valais – interviewee and co-director). In almost fifteen minutes two people, a man and a woman share few moments together, and at the end they break up; this is the room of separation. In the beginning they sit on chairs facing each other, without talking, taking time to feel comfortable. The man proposes a chocolate and if she accepts they eat chocolate, while sitting and watching each other without rush. He first writes his name in a rolling paper and sticks it on his forehead. The woman follows the simple choreography and writes her name in another rolling paper as well. In this way, they slowly start to converse and relax. After roughly seven minutes of (usually intense) eye contact, he suggests they both read a

dialogue written in a paper. In this dialogue, two lovers (Aliki and Pavlos) meet again for a last time, after a long time and break-up for good. This dialogue is actually taken from an old Greek comedy-drama film named *'The Counterfeit Coin'* (1955). The man (performer) and the woman (participant) read these lines and then both watch this scene of the film together in a laptop in front of them. In the end, the performer takes an envelope, puts all the little rolling papers they have written to each other and gives the envelope to the participant, before she lives.

{Room 3}: the Room for the Broken Hearted. In this Room the setting is a bedroom with a single bed and a bedside table, with a bedside lamp lit on it. Similar to the *Room of all the Lost Letters* wherein only women were sent, here a woman performer welcomes only men participants to sit next to her on the bed. In the *Room of the Broken Hearted* a man and a woman meet to (re)live an adolescent romantic love (figure 60). In the beginning, they sit down next to each other on the bed and meet silently. The performer offers him a gum (like the man performer in Room 2 offered a chocolate). They both chew the gum and look each other for a while (about four long and intense minutes) without talking. Following, she takes the pillow from the bed with a book hidden below it and places both between them. She opens and reads the book; an erotic and at the same time naïve and tender romance of a couple in their intimate moments. The performer keeps reading the text while spraying both of them with rosewater from time to time. The man is also given the book to read a part. Their reading continues for about ten minutes, and at the end they stand up and dance together the song *'Love me tender'* of Elvis Presley. A part of the book they both read follows:

> "His mouth stopped her cries, only this time, his kiss has lost its sweetness and sensuality. Now, there was only insistent lust. He lifted her in his arms, like a feather, pressing her against his body, holding her like a trophy while his mouth was devouring hers, awakening her senses. She didn't have to hold him back, he wouldn't let her go. But, for some reason, she felt the need to wrap her arms around his neck and cross his hair with her fingers rubbing her aroused nipples onto his chest, as she was coming closer to his mouth."

{Room 4}: the Room about Politics. The *Room about Politics* is the inside of an empty cinema, where the performer (man) waits alone, dressed like a clown, as the participant walks in (figure 61). The performer asks the participant to sit down in the front sits close to him, but when the other person does so, a sound of fart is heard, and they both laugh at it. The clown initially does a lot of tricks to make his small audience laugh and relax, and then suddenly asks him/her very important questions: if she loved more her mum or dad, and which song this person was singing to her as a child. The participant answers these questions and the performer ask her to sing a part of that song. Following, the performer asks if he could also play a childish song and the hymn of the Greek socialist political party (PASOK) is heard from the speakers with their logo (a huge green sun) projected, covering the entire screen of the cinema. The whole conversation is instantly turned into politics. The person is asked her opinion on how the world can be changed, what we can do if we want to change the world, if there is an idea she is willing to give her life for, if she voted in the last elections, what her friends and parents voted, if it was more important for her to be fine or

the world, and more on. Hence, a seemingly funny and relaxing occasion was turned into serious politic dialogue. In the end, the performer is reading from a paper a list of (unfortunately unrealistic) things he suggests must be done from now on to actually make some changes in the world, for instance: every private hospital from now on would be obliged to operate fifteen surgeries per day for free; from now on people diagnosed with cancer would have the opportunity to travel for a whole year to a country of their choice for free; every new mum would be entitled to a three-year psychotherapy. Lastly, the participant is asked to stand up and read from the same white paper which proves to be empty, so she is kindly asked to actually improvise, a list of their own, concerning what changes she thinks should be made to turn this world into a better one. The performer asks if the other person would like to take a picture together, so they stand next to each other to take a selfie. But the camera is a fake one which spreads water to her face and makes her laugh. At the end, they say goodbye and the participant leaves the room.

{**Room 5**}: **the Room with View.** This Room is situated on the roof of a building opposite at the main building of the performance. Three people are invited to cross the street, enter the old building and take the narrow elevator to the roof (figure 62). There, the three participants and the performer (woman) are stand in a circle, enjoying at first a magnificent view of Athens at evening time. The performer starts a small flare bomb while counting down from five to one. When she counts "1", she says "2007", which is two years before 2009, the time this performance took place. She briefly recalls and shares personal memories and events of that year, and then passes on the flare bomb to the next person to do the same. This chain of light and stories goes on while the flare bomb dies away. After the year 2007, another flare bomb is started; the performer counts again down to one and then says cheerfully "2000"; seven years before the performance present time. The three individuals share again moments of their lives, while also passing the flare bomb to one another. Once again for a third time, they are travelling back to the year 1983, but the next (fourth) time, the performer guides them to travel imaginatively to the future and specifically in 2020, and picture themselves by then. The fifth time they travel in the past again, in year 1945, when none of them lived back then, so they can only imagine stories of people that lived that time, like during the 2nd World War. The sixth time they go to the future again, in 2060 and image themselves and society at that time. By going backwards and forwards in time, in years that are more and more distant from the present, people share fictional stories of the future as well as personal memories they had lived at that time.

{**Room 6**}: **the Room by the Sea.** The Room is really spacious and dark at the ground floor of the building. In this darkness with a pleasant lighting, there are two deck-chairs, with a goldfish bowl (something fragile) on one of them, and a video-projection on a wall in front showing a sunset by the sea (figure 63). When the participant gets in this dark room, the performer is holding a camera shooting her while she is entering, and says that when he was a child his parents did not have a camera so he only had photographs of his childhood. Then the performer presents himself, his name was Hippocrates, asks the participant if she feels convenient with him shooting their whole experience. Then Hippocrates asks her to sit down next to him at the deck-chairs and keep the goldfish bowl in her arms. While both sat down Hippocrates continues to interview the participant on occasion of the projected sun setting in real time (fifteen minutes) in front of them. The performer asks if this sunset reminds the other person of something, she replies, and the following questions are about this particular

sunset she recalls: when it was, where, with whom, if there was a song they were hearing, why this memory is so important to her, etc. Yet, another person is hidden in the room as well, listens to their conversation, and plays that song through a sound system in the room, so they can hear it while talking. The whole interview is video-recorded and at the end is given to the participant. In this way, two strangers meet in a room with a fake beach, a sunset projection, a fragile goldfish, and participants are given the chance to talk about an important incident of their life, to share a probably sentimental memory, to the extent they feel comfortable and desire to expose themselves.

6.2.2 *Fake time @ Ariston Hotel*

Director's scope

The performance *Fake time @Ariston Hotel* took place in Thessaloniki the years 2011-2014. According to the director Lela Ramoglou (figure 64), audiences are considered co-directors of the whole event, and are challenged to contemplate on their life, as they step into fictional sceneries and pass through various conditions within the performance event. She asserts that the challenge is to give the audience the opportunity to contemplate their behaviour and face themselves, like in a mirror which reflects their image; a type of introspection through action. In this play, people are placed in the centre of interest, as they are given choices, which affect the overall experience for everybody involved. The impressive scenery and the performers' role were designed and organized to make people feel comfortable and free to make their own choices, even risky ones, even inappropriate ones, as the motto of the performance is: *"live the life you want not the one that wants you",* the director asserts in her interview. The critical issue, and at the same time the key risk taken, is that *"we all make the story",* responding at the consequences this endeavour entails.

The second significant aspect was to make people feel and act *as if* they are in a playground, meaning to make participants feel free, like children, to explore the potentialities of each floor, and feel hearty joy while discovering surprises made for them around the rooms of the place. The scenery was imposing and realistic (figure 66), giving the impression that we are immersed in another world with minimum use of technology. Each floor had a different environment constructed out of objects and elements, mostly taken from actual places: a forest, a mental hospital, a police station, a decadent aristocracy, a secret closet, and a house. The performers were inciting audience participation while maintaining a playful feeling in many ways: by asking people who is the suspect according to specific facts given in the police station, by putting people under therapy in a mental institution, clowns were performing acrobatics, and so on. In Ramoglou's words:

> "We want them to mesh around, to paint the walls; if something is broken we are more than fine with that, if you get on fire we will extinguish it… You're free to discover worlds. We want interaction; this is a playground".

Hence, the first challenge was to help people realize they have more options, and more levels of involvement, than in typical theatrical plays. The performers facilitate this endeavour by showing participants they can make their own way through the building and

not necessarily attend the story performed by actors throughout the floors of the Ariston Hotel (figure 65). The story was about a young business woman, who got pregnant, and unfolds in several rooms and floors during the performance event. This story is deliberately a very common one, not a shocking one - it could happen to everyone - and in that moment in her life she needs to make critical choices about her life. The objective behind this story is to help audience members realise they have the option to follow her journey and problems, meaning to be part of her life within specific rooms, or instead follow their own path and make their own story throughout the seven floors of the building. In every case, participants affect the overall event, but in a different way: as *spectators* of the story regarding the young woman, or as *participants* getting involved in various actions that emerge simultaneously at various rooms throughout the entire place. Either way, Ramoglou explained in her interview that the keystone was people to take the risk and follow their route, stay as long as they want in the different places, and actively shape their personal experience, by making choices. She was not concerned (at least not initially) at inciting people follow the performed story at any part of the event. Her artistic proposal is further described and discussed with three audience members.

Inciting participation

Initially the audience members are gathered at the foyer where they fill up a questionnaire, while waiting for the performance to start. All participants start climbing up the stairs of the Ariston Hotel and stop at the first floor, the Mental Hospital. There they give their questionnaire to the performers-nurses who according to their answers advise participants to go to a specific floor to receive the appropriate treatment. In this way, every participant is given different directions about the place to start their participation and then no other guidance is given throughout the play.

{1st floor}: the mental hospital. People who are sent there are diagnosed with identity crisis, according to the results of the questionnaire, because many of their answers are 'I don't know' or 'no answer'. Like in every floor, the audience undergoes specific treatments in various rooms (figure 67). For instance, people draw on a medical strip using their feet. Performers help them put plastic bags on their feet, which they use to paint their biography. At the end they discuss with each other what they have done. In another room, a crazy man is hung upside down from the ceiling and asks people to give him directions on how to accommodate himself in space in order to find his balance. Lastly the *retrospection room* has to do with the social drama of everyday life performed each time for one person: people enter a psychiatric room, where the walls are covered around with coating to prevent them from hurting themselves. Participants enter there and find a young woman dressed in white dress, tight up like a mad person. Participants can stay in these rooms for as long as their interaction continues and leave as they please.

{2nd floor}: the police station. This is the place of a realistic police station where this particular authority of power applies particular therapies in the rooms, meaning treatments, for those who do not confront with authorities (figure 68). In *treatment of recognition,* people are given the chance to become policemen, gain authority and give orders to other participants who are arrested for crimes. During the *treatment of questioning,* one participant becomes police commander for five minutes, ordering everyone around, raising issues of dependency and control. There is also the *security room* with monitors where the

participant can spy on every person on the floor. This is a game of power and introspection via live transmission. In another room, a policewoman can read people's palms, especially to the tough ones. She looks primitive and stupid, but as she looks at their hands, she finds very interesting things, like "when did you cheat on your wife?" and people are shocked. Lastly, the most 'anarchist' participants are locked in the cell, where they must stay for a while in a narrow place behind bars, with a huge crucified Jesus hanging on a cross on the wall. The director said that she was trying to make a small society with standard parts of personal moments and social events to show how controlled we are as civilians via the cameras that monitor us daily. In most of these cases the victim is not apparent that is the reason why participants are conducted through various worlds, to experience different roles and realize different perspectives.

{3rd floor}: the forest. After two fierce sceneries and places, the forest is a very relaxed and magical environment, raising issues like "how much free can you feel?" or "is there a possibility to be scared if you relax that much because we are not accustomed to this feeling?" In this floor huge trees traverse through the walls, breaking the civil landscape into pieces,; a small creek with rocks around invite participants to stay and relax; happy elves swing and give people money and take them back afterwards along with their megalomania; people can stay and swing under a tree, and more on. In a central place of the floor, a grey-haired man performer, who looks like a gravedigger, and reads Kazantzakis, a philosophical work on life and death (figure 69). People can stay as long as they please in this heaven on earth, before moving on to the next floors.

{4th floor}: the starting point. This floor symbolizes the personal space of everyone, and primary issues regarding childhood, sexuality, and the relationship with mother, are raised. In a big bedroom the performer (and director) invites people to discuss openly about their relationship with their mother (how do people call their mother, what are her expectations of them and their lives, how much pressure she puts in their lives with her manners and expectations, etc.). She is also peeling an apple while talking and shares the pieces with the audience members (figure 70). People can come and go in this scene but there were incidents where people stayed for long and shared their experiences in their daughter and mother or son and father relationships, in case of a man. Additionally, there are two more contradictory bedrooms, one pink and one black, reflecting different aspects of adolescence, childhood, school, and depression. People can stay in these rooms, listen to music, interact with the numerous elements included as in every child's room, draw images, and more other. There is also a bedroom with two can-can girls inside. The door is locked from inside and participants cannot come in, but can see the two young women dancing amorously through small holes on the door. Only from time to time the two can-can girls open the door and invite someone in this room to dance with them. A totally different situation is created with a nurse dressed as Jane Fonda and teaches aerobics in the depression room.

{5th floor}: the decadent aristocracy. On the fifth floor, a medieval scenery in the inside of a castle is created, presenting the rotten social system of today and the difficulty of contemporary people to find their place and fit within paranoid social norms (figure 71). With reference to the present delusion of grandeur, performers are dressed like members of upper classes of a medieval society, behave in a paranoid way, and invite audience members to participate in actions that will make them feel oppressed and resent specific social

behaviour patterns. For instance, a painter asks people to wear ridiculous clothes and sit still so he can draw their portrait. But he does not speak to them again, which makes people bored and eventually make them leave. In another room, a woman is teaching people how to behave properly but in an unorthodox way. She resembles a nanny for aristocrat families and stresses the superficiality of the norms and manners we are raised with and the patterns of behaviour we are supposed to follow in our adolescence.

{6th **floor}: the secret closet.** This is a place of liberation, of joy and careless youth. No treatments take place there, but rather a more pleasing message is hidden in a closet. When stepping into that floor, a small semi-dark corridor is the only thing there it is not clear. At first sight, the floor appears to be probably empty or even a bit scary, but few moments and steps later, an entire show is revealed behind the closet doors with acrobats, tightrope walkers, clowns, and circus performers (figure 72). The diversity of the entrance with the spectacle unfolding in rest of the place is likely to create joyful and relaxing experiences. In several rooms performers' actions along with the imposing scenery contribute to create an imaginative, unrealistic atmosphere: a beautiful young woman is doing aerial acrobatics hugging in the red room really close, you can feel her breathe; a small kind guy dressed like a clown is trying to find the best pair of shoes and feathers for you out of dozens of old shoes that have no pair, but his endeavour is so kind; two tightrope walkers try to fit in a small room and finally make to their way out of the window to the balcony, where they can finally find enough space to dance. I have personally kept the small feather I was given in that floor, because the small shoe-maker was so magical (in my eyes) when he found the perfect gift to give me.

{Ground floor}: Foyer. The first and final scene of the play takes place here. In the beginning people are completing a questionnaire and start climbing up the stairs. In the end, all audience members are guided and performers follow them on the ground floor as well. A final scene is played here with the death and rebirth of the young woman of the basic narration (figure 73).

{Action among floors}: Basic narrative. A single young and successful businesswoman has led a life according to her mother's guidance. Her mother stays always close to her side and keeps encouraging her to gain more and more money and power; a struggle that is never enough. The young woman meets a man and very soon gets pregnant accidentally. She wants to keep the baby despite her mother's disapproval and face the difficulties of raising a single-parent family. Her story is a parallel journey in the present and the past. She travels back to her life and memories and give the audience the opportunity to reveal her past life. From this point, the protagonist makes her journey to find herself through the seven floors of the Ariston Hotel.

In the beginning, she acts like she is one of the audience members. Gradually all audience members are sent to a specific floor according to their answers in the questionnaire they completed. Her story starts on the fourth floor, where she is given an apple by the performer - the good part of herself. This is the scene on motherhood, and the apple represents her choices to make and take the responsibility of a meaningful and happy life. Similarly, the audience members have a choice: to follow her story through the seven floors, or take their own route. In the beginning, the woman bites the apples and then tries to put the piece back, and stick it with a bandage, like a businesswoman, meaning that she denies making a choice. Then she goes to the fifth floor, where she faces many misfortunes

as the bureaucracy system doesn't accept her pregnancy, demands her compliance, and bit her until she loses her baby. This struggle with the decayed social system could also symbolize the inner struggle between conflicting parts or believes. After she loses her child, she goes back to the fourth floor to reclaim her right to choose the life she wants and symbolically eats the apple. She does not want to feel socially restricted anymore; she wants to be reborn. Her story unravels giving the audience the option to follow her or to follow their route in the building until the moment she kills herself in the bathroom. By this moment participants are kindly guided to follow the performers and all gather at the foyer of the Hotel.

As all audience are gathered together watching the battle between the good and the evil, death and rebirth, a performer takes a glass of water and pours some drops of water on the dead body of the woman. The audience members then are given the glass one by one asked to do the same. After all participants have followed this ceremony, the glass is empty and the young woman is reborn to her new life, like phoenix. With this symbolic action, all participants are communicants of the awakening from the modern way of oppressive life.

6.2.3 Situation Rooms

Directors' scope

Finally, the Rimini Protokoll is a German artistic group concerned with collecting real stories lived by real people. People have the opportunity to share their memories and experiences through the potentials of physical and mixed-reality environments with even very distant social groups and places around the world. Rimini Protokoll supports that all people are 'experts' in something and they deserve an opportunity to convey their knowledge. The group is concerned with stories passed over to other people orally or in a mediated way and creates a literal version of documentary theatre, following a certain procedure: firstly, the members of the group choose a critical issue of social life with global effect, and a long-term research follows until the content is gathered and organized. Although it pertains to the wide spectrum of theatrical events, the final artwork does not involve actors, but the very raw research material: the people they approached. Hence, all kinds of professionals, scientists, students, unemployed people, pensioners, elderly, and children have contributed to create this out of the ordinary theatrical condition of Rimini Protokoll, an amalgamation of human immediacy and mixed-reality environment.

Apart from *Situation Rooms,* their project under study*,* more projects of theirs like the *aporee radio* (see chapter 4.4) and *Prometheus project* are focused on learning from each other. By discovering and communicating the knowledge and experience of others, people can explore how it is to be them, learn from them, and see things under the perspective an expert. For Wetzel, every person is potentially an expert in something, or an artist as he expressed; the important matter is who is interested for whom, for which reason, and how we can connect them. For instance, the *aporee.com* is a radio station with incorporated project maps (see aporee.org/maps). Environmental sounds from all over the world are recorded and uploaded in a data base on the internet, in association with Google maps. It is a sonic cartography, as everybody with internet access can make a sound file of a place around the world and pin it on the appropriate place on the Google maps. Each archive is

marked with a red spot on the map and also includes meta-data of the sound (date, position, etc.). Numerous dots have been pinned on the map since 2006, standing as oral memory of these places in time.

Furthermore, *Prometheus in Athens* was also a project of Rimini Protokoll created in the framework of the project *100% City,* which has taken place in 25 cities so far. In this project, a specific question was set about the Prometheus bound, in an attempt to discover what Athenians know about it, what they think about the myth today, and how they relate themselves with it. For this reason, 103 Athenians were chosen as representatives of the rest of the citizens of Athens, according to certain official statistical data who had shown interest at the myth itself. Like in *Situation Rooms*, there are no actors, only audience members presenting their views and experiences. Again like in case of *Situation Rooms,* the Rimini Protokoll met these Athenians in one-to-one meetings and after they had built a relationship of trust between them they started working together. Each person expressed how he is related to the myth, how he identifies to the myth. Following, these real people addressed at real people in the *theatre of experts* in Odeon of Herodes Atticus (2010) in the framework of Athens Festival. The project *100% City* set in every city a different occasion for dialogue to emerge, a different matter was raised, to emphasize the multi-cultural character of modern cities: how many different voices / opinions / faces / aspects coexist in one city. The Rimini Protokoll wants to present the identity of the city, comprised by actual citizens, at the citizens who have come as audience to watch the play. This re-presentation of population, of real people, is a sharing of what they want to share in front of the population of citizens they represent; civilians present themselves and potentially represent the whole Athens.

The Rimini Protokoll was inspired from the 'theatre of war' to create the *Situation Rooms*. The 'theatre of war' arose in the seventeenth century and today is restricted within the Pentagon, as "a strategy for limiting actions in a spatial sense" (Rimini Protokoll. Situation Rooms, 2013). In essence, this theatre instead of protesting against the war enables military services to overview a war situation and turn complex strategies into simple operations. Moreover, the 'Situation Room' is a single room, constructed by J.F. Kennedy in the White House after a military disaster in 1961, as the American leadership decided they need real-time information to create coherent sequence of acts. In this room a 'situation' is created in order to make the appropriate decisions. As the directors explain: "simultaneous events are live-streamed into a room where various perspectives become a single gaze" (Rimini Protokoll. Situation Rooms, 2013). In case of *Situation Rooms*, the spatial construction is more complicated, expanded at seventeen rooms, and every room is a different world, where the stories of the twenty experts unfold. According to Daniel Wetzel, one of the directors of Rimini Protokoll, their work comes from performance art, and they are now concentrated on directing 'processes of communication' organized on stage, as he stated. He avoided defining any fields of art they meet as, in his words, "we Riminis never discuss art, only concepts, theatre, interest, and how to avoid misunderstandings", concluding that their "job is to organize this communication" (interview material).

Thousands of years have passed since Thespis stand in front of the ritual chorus to converse with them, creating the art of theatre. Ever since we have witnessed multiple kinds of abolishment of constants and norms, to the point that nowadays theatre may even constitute any form of organized live event occurring in any place as long as it is witnessed

by people (like installation, performance, and more). In the war theatre of Rimini Protokoll, there are no actors in sense of performers playing a theatrical role, but *actors in sense of doers* playing though a critical role by participating (figure 74). In Daniel Wetzel's view:

> "As far as I heard and read people were enthusiastic about this other way of being a 'theatis'. This is one of our artistic topics - to explore chances and nature of being this - a spectator. In the English word the spectacle, the sensation claim their roots, in the Greek origin (theatis) it's more the person that perceives, that joins from its own point of view. In both languages of course this includes a political dimension that does lead us as artists back to the roots of a legitimation of our artistic work - reflecting the moment of us experiencing something - yet, then some kind of academic sound disturbs as soon as you talk about this that distorts the much more simple truth that theatre makes you just a witness - it is a platform of witnessing that we work on, bit at the same time of interest - say that witness of an accident that cannot refrain from staring at what he otherwise would rather not look at - a combination of perception and reflection, fear and lust, open field and architecture".

Like a role-playing game within a mixed-reality environment, thirteen people presence and simultaneous participation is orchestrated in every detail, in a play without actors. In *Situation Rooms,* only participants enter the performance space actively occupied through the entire play. No spectator is watching anyone else doing something. Thirteen real people learn about the war industry through real stories, presenting the perspective and experiences of real experts. A significant risk was taken in terms of the directors, as Wetzel shared: can theatre be other than we know it? Is it still a theatrical play if no actors are involved? A game, a performance, or even an experiment, people become the protagonists performing in a common participation of storytellers and enactive participants.

Inciting participation

In *Situation Rooms*, 20 experts from all over the world, whose biographies have been shaped by weapons, share with audience members their stories in 17 rooms. Every time the event is performed, 13 audience members participate (figure 75), and each one has the opportunity to step into 10 stories out of the 20 of the experts. Participants enter into another world every 7 minutes. Hence, in every performance 20 stories are interwoven in 13 different combinations, inviting 13 people to simultaneously explore equivalent worlds, by stepping into the experts' shoes (figure 76). The sequence of roles is different for each spectator, but this is of no significance in terms of the directors as the "story of war has no beginning and no end" (Rimini Protokoll. Situation Rooms, 2013). The goal was to have as many narrations as possible for each participant, so they all have equal chances to meet as many real people and their stories as possible (figure 77). According to Participant 6, one of the participants and interviewee:

> "We interacted through groups of ten roles. For example I had to give a handshake, exchange the hat with someone of this group of ten people, etc. Although you could see others too, you did not have direct interaction

> with them, only with your group of ten… I remember during the first ten [roles] firstly I was the hacker. When I left the hat, I saw another girl dressed as hacker, wearing that hat; I interacted with her too. The next time I played ten other roles, and I just saw a hacker moving around; I had no interaction with him… As a hacker I left a memory stick in a pocket. Then I put on a uniform and made guns, using the memory stick I found in the pocket of my uniform. Later on, I was with the family of the immigrants; we climbed the stairs, we ate the soup and saw the story of the family…"

The Rimini Protokoll and their partners concentrated on the war industry expanded globally. Specifically, twenty experts were selected, related somehow to the war industry, and through the artistic event participants have the opportunity to learn their stories. In the end, through their personal experience participants shape a holistic overview, as different perspectives are combined, even contradictory ones, from different positions: a marksman (figure 78), a peace activist, a lawyer representing civilian victims of drone attacks, a security systems developer, a journalist from south Sudan, a war photographer (figure 79), a Mexican drug gang operative, a chief protocol officer, an activist against weapons financing, a manager of defence systems, a surgeon for doctors without borders, a refugee from Syria, a first lieutenant in Indian air force, one of the families from Libya stranded as boat refugees in Italy (figure 80), a cafeteria manager in a Russian arms factory, a member of the German parliament, a child soldier, a computer hacker, a factory worker in the weapons industry, a solider from the Israeli defence forces. These people are considered experts, meaning "people who bring a certain knowledge and/or expertise with them", according to Daniel Wetzel. The Rimini Protokoll met these people, discussed their expertise regarding the war industry and how they are related to it. They tried to comprehend how it is to be them (a soldier, a gun maker, a surgeon, etc.), how it is to do this job they do. All the above people personally narrated their stories and their narrations were filmed within the same rooms audience members are later invited to participate (figure 81). Hence, it is real people involved in a different way with weapons and wars, who share their own personal stories, their own memories and perspective actions, instead of actors acting out their roles.

The scenery is a complexity of places in realistic size, similar to a labyrinth where elements of a globalized puzzle have been connected together in rooms where specific 'situations' emerge (figure 82), regarding the war industry: a hospital room in Sierra Leone, a classroom in the Congo, the house a family of immigrants in Italy are accommodated, the cockpit of an Indian fighter, the internet cafe where a refugee from Syria monitors developments in his homeland, a rooftop within the warzone, conference rooms in government buildings, offices of official representatives, a hacker in the service of the Israeli government, and more. The thirteen audience members get in this intricate setting through different entries handling an iPad (figure 83). This up-to-date technological device guides, like the thread of Ariadne, participants in particular places with predetermined sequence and duration. Participants can watch and listen at the experts' recorded simple and direct narratives, and at the same time through the same screen, take the necessary instructions to move and interact through the places, and the experts' experiences. The audience is offered the significant opportunity to get involved in conditions very distant from the eastern life, like: raise the flag at school in war zone, serve soup for the workers of a weapons factory

(figure 84), drink tea with a family from Libya, carry the hacker's memory stick (figure 85), lay wounded in the surgical bed of a doctor *Without Borders* (figure 86) and let another audience person treat him/her well, put a bulletproof vest on someone else, get in a control tower, watch activists' speeches for global disarmament agreements and more on.

In *Situation Rooms*, physical and virtual aspects of reality are combined: as the virtual environment of the iPad is associated with the realistic scenery of the rooms. Specifically, while participants move around a place, the world on the screen is identical to the setting of the room, only augmented with additional potentialities: the expert's narration (heard through large headphone), instructions for the participants of remarkable precision (where to go, where to stand, what to do, when to move on etc.), and sketches to help audience visualize these instructions to avoid misunderstandings (figure 87). Therefore, a mixed form of reality is interwoven affecting audience experience in multiple ways. The aesthetic approach along with the technological affordances maintained a sense of flow as the parallel narrative sequences unfold without any remarkable setbacks. Participants' strings of interaction were organised in notable precision giving them the impression they can relax and rely on the system to guide them through a compound collection of events.

6.3 Enactive participation, when audience involvement is the performance

6.3.1 Audience and performers as collaborators

Fusion of conventional roles

In case of the three performances under study, the audience members are invited to leave their role as spectators, each time under a different perspective, and this transition was challenging but successful, at least to a significant extent. Specifically in *Katerini,* participants are incited to get engaged in one-to-one or one-to-many interactions, leaving them little choice to remain uninvolved or passive; a choice though that constantly stands and therefore is liberating. In *Situation Rooms,* participants have no spare time (actually only moments) to step out of the interactions instructed via the iPad and observe the surrounding environment and action. In *Fake Time @ Ariston Hotel*, participants are instructed only in the beginning of the performance to go to a specific floor. Afterwards they make their own decisions regarding the direction they desire to follow and the way they want to participate during the event. Similarly to *Katerini* and *Situation Rooms,* audience in *Fake Time @ Ariston Hotel* constantly has the option to remain spectators, but direction guidelines achieve to incite audience enactive participation, with different methods though and in different levels. As the option of remaining spectator is stable during the performance play, audience members take the risk, leave the hall and enter the stage, opening up their perception towards new modes of engagement within live participatory events.

A critical consequence of having only enactive participants and no spectators is the fact that there are no observers or listeners, only people too occupied to observe others as the story unfolds. Noticing that no one is watching you, none is judging your behaviour is

liberating, especially in case participants feel fear or exposed. In *Situation Rooms*, participants have exactly seven minutes to step into each expert's story. In addition, a significant amount of information is offered in most cases to investigate, requiring participant's complete attention and collaboration. Therefore, no time is given to audience to survey the current surrounding situation and action. Indicatively, one of the participants in *Situation Rooms* (Participant 7), wonders during the interview:

> "I think in this performance you were indulged from the beginning in a process to create something. It [the experience] may have been mostly guided but the fact that you were asked to do all the way, made it clear that you're actually the one who is going through the story. You were not just a spectator, or a performer… What is strange is that you were something in the middle, without being able to define or name it. I wasn't asked to play any role or merely spectate…"

In all cases, audience participation is essential for the stories to unfold, and according to the interview material the majority did not remain passive spectators, but affected the overall result with their presence and collaboration. Most of the audience interviewees testified they were facilitated to get involved simply by noticing other audience members were participating as well, feeling therefore that they are not observed or judged by anyone. Since there are no demarcation lines between stage and hall, the entire performance space is turned into stage. Participants proved to feel more relaxed and comfortable knowing there are no spectators, only people who are willingly engaged and exposed, not hiding in the safe darkness of the hall.

According to the roots of the term *theatre*, each spectator has the opportunity to experience the same artistic event from an even slightly different position, view, and perspective. In case of *Situation Rooms,* participants have the opportunity to experience the physical environment through their own eyes, and simultaneously perceive additional information and guidance through the iPad screen. The iPads managed to synchronise audience interaction and movement according to the directors' objectives. The digital experience is similar in every detail for every participant, though in different sequence according to the role they are in. Hence, there are no longer spectators, in the traditional sense, since all audience members have the same digital view of the performance while watching through the iPad.

Specifically, in *Situation Rooms* an extreme condition is created by the Rimini Protokoll. There are no spectators, only participants stepping in the shoes of experts, exchanging roles every seven minutes; literally nobody else. I recall the experience of my body navigating and interacting within the rooms of the performance space, through the eyes and narration of a soldier, a surgeon, an immigrant, and reporter inter alia. I act and feel like an expert, while I step into his/her shoes for a while. I have no time to judge the experts, or think about my experience, as I am in their feet (experiencing). I have no time either to think or judge other participants' behaviour, as I do not want to remain a spectator but get involved in this intriguing situation. I may see another participant passing by and I probably recognize him/her (as a role or as a person) as I was that expert before or interacted with him/her following instructions. Rimini Protokoll exceeded the traditional norms of theatre, creating a participatory event without spectators. In my opinion their

artistic project is also a social remark: there is no theatre without audience, but there can be theatre without spectators, meaning people who conventionally participating, as long as they are enactive participants, meaning individuals whose participation is the performance. Participant 7 also designates the audience role in such live participatory events, on occasion of *Situation Rooms,* as follows:

> "The project, I think, is like a domino: if one part falls to pieces, everything is fallen apart. If one [participant] does not complete his way [through the play], the overall project is not completed that day. It may have been completed by me or you, but it will not have been 100% completed if even one member of the group does not manage so."

In accordance with Participant 7 of *Situation Rooms,* participants of *Katerini* also remarked the importance of audience role in the flow of the performance they experienced. Participant 4 stresses that he felt more comfortable because in one-to-one interactions there were no spectators at all. In addition, in one-to-one interactions there are no other participants either, which helped to release even more tension and defensive behaviour and get deeper engaged in the creative process. Moreover, Participant 5 stated the connection between performers and participants was accomplished through participants' personal material: their memories, views, actions, etc. She found very interesting the fact that participants did not watch the performer experiencing a certain situation; the performer was more like a mediator following however a specific scenario. In her view, the audience role is central because members, not performers, undergo specific experiences. But it was the performer, as well as the rhapsody text, the classroom, the bed, the rosewater, and the 'kiss' (the name of the chocolate bar) that contributed to emerge those memories and interweave them with present experiences. It was not the performer's experience or emotions that moved people to get engaged. In her words: the performance appeared to be the audience's show, as weight was put at what happened to the participant, not the performer, who just did his job with structure and concentration, inciting people mainly in a neutral way. For Participant 5, it was the audience who was exposed, while the performer was there to support and guide them through the artistic process. In her opinion this journey, nothing like psychotherapy, was achieved since participants felt so protected to take the risk and get exposed. She had *the feeling of a safe condition, a shielded place, with specific structure, where she was invited to play an improvisational and leading role*.

Respectively, the three participants of *Fake Time @ Ariston Hotel* Participant 1, Participant 3 and Participant 2 had mixed miscellaneous views. Participant 1 reported her experience: "I mostly had the impression that I am the girl, that I am the victim or the hero", and later adds that accordingly other audience members took her for performer as well, because "I had the feeling that when I went on to say something to others, they distanced themselves". Respectively, she also considered other people as part of the project, meaning not spectators but 'heroes' as well, and did not associate with them either. Her view is evidence of the extension the boundaries of participant and performer were diffused during the performance. Nevertheless, Participant 3 describes her role to be quite discrete, also remote and aloof. She preferred to remain spectator of the event and justifies her attitude in accordance to her personality and the way she interacts within social contexts. Lastly, Participant 2 refers at a compound role, as he felt like a spectator and at the same time part

of the action, regarding how much he was affected by the overall interaction. He described many interactions he was involved: he was interrogated by the policeman, put a strait-jacket in the mental hospital, he danced closely on the floor with the decadent aristocracy, among many incidents he had. Participant 2 like Participant 3 seemed to gradually realise through personal experience that a different role emerges in live participatory events, apart from the established typical role of spectator. In my opinion, time and personal experience is necessitated, in terms of audience, researchers and directors, to comprehend and designate the thin demarcation lines and hues of audience participation; at least in the area this current research took place.

The roles are never equated: "you have the right to remain silent"

In case of *conventional participation,* audience are invited in live artistic events as spectators, while in enactive participation, both audience and performers are willing to move outside the typical boundaries of their role (as analyzed in details in chapter 4.4). The audience members have the *option* to experience the event as spectators, or collaborate with performers and contribute with their interaction at the flow and realization of the art work. Respectively, the performer also plays two roles, even simultaneously: as actor, acting out his character, and as facilitator of the interaction with the audience, according to the scenario. It is critical though to stress that audience members have neither the ability nor the opportunity to support any of these roles; the roles of performers and audience never coincide. Audience members need the safety of their role in the event, as they are not trained performers. Performers may at times step aside and incite the audience to become the protagonist, but they never stop being entirely responsible regarding the flow of the overall event. This thesis is in accordance with White (2013, p. 74) considering audience members as collaborators of potential interactions and performances, rather than co-creators of the artistic event, enlightening a different perspective in audience participation. Therefore, a complex situation is interwoven out of audience members who participate conventionally, those who participate enactively, and probably those who are not even engaged; as well as performers who act out their roles as actors and facilitators of audience participation as procedural story unfolds. All these changing positions are interrelated and influence each other but attuned in potential, desirable and meaningful, strings of interaction.

In an endeavour to define 'enactive participation', I associated in an early stage of this research the term with the right given to audience to *interfere* at the course of the artistic event. However, after the completion of the interviews and the analysis of the collected material, I conclude the sense of interference is not appropriate to describe their contribution in the play. Participants play a fully integrated and thought through role: they are incited to leave the spectators' seat and *collaborate* with the performers*, not interfere*, since maintaining the director's overall structure as the story unfolds is essential for specific performance objectives to be achieved. Specifically, in such participatory live performance events the narrative structure includes parts acted out by performers as well as parts that leave space for interactions to emerge among performers and participants. In the first case, the action is predetermined involving mainly the performers, whereas in more improvisational parts, audience participation is central for the performance. The improvisational parts are not fixed in advance as there are configured out of audience

participation. They have stable structure though, as these parts comprise the context for audience interaction to emerge; the frame wherein participants co-create in association with performers their common story. The overall scenario-based structure is necessitated to be predetermined and stable (as analysed later in extension in chapter 6.5), even in parts audience participation is incited, and any type of interference in this level is averted. Participants are incited to collaborate with and trust performers to guide them safely through the performance event. In essence, audience members never intervene, meaning they are not asked or allowed to alter the narrative structure, or in other words the general context, but get engaged and collaborate in all levels for the narrative structure to unfold.

Concerning the interviewees, they share the same opinion. Although most of them found appealing to stand next to the performer and gain the right to take initiatives, eventually maintaining the right to remain spectator throughout the process decreased their anxiety. Remaining spectator is identified with the comforting feeling my decisions cannot affect the flow of the overall event, releasing in this way any tension and defensive attitude, helping me to get gradually engaged in the live event in emotional and physical levels. Feeling that I cannot affect the performance in a negative way with my actions helps me as audience member to leave the spectator's seat and participate. It is essential to stress in brief at this point that this standpoint preconditions that mutual respect is shown to otherness, in any type it is revealed. Specifically, Participant 5 in *Katerini*, shared:

> "There was no anxiety in advance that you need to share something, do something, although the performance was essentially about that... I never felt I had to do something; something will be done by the performer. I can watch the actor within a condition, only me - just for me. His performance was made exclusively for me... You [as participant] are not asked to do something, in the contrary, so you finally come out, without noticing and without feeling stressful at all. You had not realized when all these had happen, effortlessly and naturally. The performer was mainly the mediator, and you were connected with him... without him having revealed anything about him."

Regarding the other participants, Participant 4 stressed that a distance between performers and participants was retained, because they were never friends or acquaintances, and most importantly because there was no need for them to become close, as he regards neutral behaviour to be appropriate on behalf of the performer. He stresses that from the beginning of the show a distance was established among participants, a sense of unfamiliarity, which was assuring them they need to be nothing more than spectators. This part was essential for Participant 4, meaning to feel comfortable as nothing more than spectatorship is required from him. As he supports: "I am here as spectator. I do not need to be a performer; this is my need", and justifies his view saying that as a spectator "it is easier for me to open up, to let go; I am moved deeper this way". He supports his right to maintain his role as spectator, which helps all audience members to relax, even if they are willing to participate more actively. In Participant 4 words, he was moved because he had the option to remain spectator:

"The performer is a performer, and the audience is audience, even in interactive theatre. This brings up more security and freedom to be moved. This is the reason I was so emotionally affected; I was deeply touched... We cannot become friends all of the sudden, we are in a performance place. The game is more honest this way."

Besides, Participant 3, another participant in *Situation Rooms*, reported that she did not want to take any risk and interact till the end of the performance with anyone apart from her friend. Under their perspective, audience members retain the right to remain spectators as long as the overall performance event cannot be negatively affected by the audience participation. The feeling that the performance coherence is secured and cannot be dissolved, helps the audience relax and many members slip from the role of spectator to enactive participant without even realising this transition. Participant 4 supports that performers and participants have not equivalent roles and this separation established among them is necessary to maintain the performance flow. Concluding, the audience needs to feel their participation cannot impair the overall event, partly by retaining the right to remain spectators.

I finally consider essential to stress that Participant 4 refers at a distance between performer and participants in two aspects: primarily to stress that the two roles can never coincide, and secondly to designate a demarcation line concerning the appropriate participant behaviour. Giving additional initiatives to audience cannot entail exceeding socially accepted patterns of behaviour during interactions and show respect to everyone involved. Participant 4 claims that behaving in a friendly way is not only unrealistic but detrimental as well. He stresses the necessity for respect and discreteness from both sides; otherwise the risk of turning the live event into a meaningless and superficial experience is apparent. His sense of distance is described as following: "it feels like being in the borderline of a certain situation - I am here, yet I'm not here – a distance and feeling of non-presence. As if you're invisible; as if you empathize with without affecting the situation". Eventually in all three performances, the majority of participants, with few exceptions especially in *Fake Time @ Ariston Hotel*, followed the instructions given and behaved following social standards of behaviour in order not to feel embarrassed among strangers.

In extension to the fact that the roles are not equated, the responsibility of the overall event is not shared either. Participants contribute as collaborators in the performance event, but are not responsible to support the art work; performers are professionally trained to do so. Carrying as participant the weight of responsibility may prove negative. Participant 6 describes her experience of the Situation Rooms when instructed to put a memory stick into the pocket of a jacket as a spy, and how this minor incident affected her experience:

"I was confused, in the beginning, because I was asked to put it [the memory stick] in a jacket I could not find, so I placed it somewhere else. But then I realized it is important for someone else to find it in his pocket. That made me anxious: when I realized I had to do it right. This is the only negative thing that distracted sometimes. The responsibility I had in the whole happening."

Nevertheless, Participant 7 is a dancer and choreographer and experienced in acting out roles. In artistic events, like *Situation Rooms,* he also feels confident when asked to be a spectator and not a performer, like Participant 4. Unlike Participant 6, he was not stressed to make everything right; he mainly followed the instructions consistently and enjoyed his journey throughout the play. Participant 7, as trained professional, realizes that, spectators do not need to take the responsibility of the event, so he felt comfortable when minor actions of his were not done perfectly and identical to the instructions. He acknowledges that weight is put at maintaining the flow of the event, and the root of any interruption is not any potential mistakes. The flow may be suspended mainly from hesitating to take any risk, or being critical about any mistakes made while participating, and still this is the performers' responsibility to overturn.

Concluding, even though in enactive participation the roles of performer and participant exceed their traditional definition their distinction is preserved. A demarcation line always stands defining the commitments of every role, even blurred in times. This line is more discernible when interactions between performer and participant emerge among strangers. When participants are not emotionally or socially related more than acquaintances (i.e. they are not friends, partners, and/or intimates) types of behaviour that could undermine their role in the performance event are avoided more easily. For example, Participant 2 knew in advance one of the performers of *Fake Time @ Ariston Hotel* and according to his narration: the first time he saw the show he followed his friend for a long time, missing in this way the opportunity to explore the place unaffected. The second time he also felt he needed to stay with his friend in start, but soon he followed his own path in the performance space, as this time he knew which parts he wanted to concentrate on. Both times though, his experience was determined, at least in an early stage, by his friendship with the performer. Similarly both participants of *Katerini*, Participant 5 and Participant 4 also knew a couple of the performers in advance; they were actually good friends.

However, both participants are professional actors, so they are trained to keep the appropriate distance in order for the performance to emerge, hence the interactions among them were not affect by this fact. They even find this theatrical condition liberating as their contact at these rooms were made as if they were strangers, as if they communicate for the first time and they need to introduce themselves. The crucial thing in this case, as I will analyse later in this chapter, is not to pretend to be strangers, an endeavour which is fake and superficial, but actually support a process of re-finding each other from the beginning – and both participants succeeded so as experienced performers. Concluding, as the roles of performer and participant need to be distinct, any form of previous familiarity among the people who play these roles can undermine the overall experience, in case adequate distance in their behaviour is not preserved.

6.3.2 Connection and sharing between audience members

So close no matter how far

Similar to the relation that emerges or already exists among performers and audience members, the relationship among audience members is also essential to be studied as proved by the interview material. Audience members had different opportunities in each of

the three performances under study: in *Situation Rooms* participants had only few moments of interaction with each other, as they were mainly concentrated on experiencing each expert's story, according to the instructions on the iPad. In case of *Fake Time @ Ariston Hotel,* participants had more opportunities to meet in joyful encounters (like dancing together and trying to find the suspect among them) as well as deeper interactions (like converse on personal and social matters), pursuing their motivations and desires. Also, the director of *Fake Time @ Ariston Hotel* Lela Ramoglou remarked in her interview her scope to incite numerous interactions among all present, professionals and non-specialists, as primary objective.

Likewise, the performers' facilitations as well the narrative structure of *Katerini* also aspired to bring audience members together in multiple and deeper levels. Participant 5 describes how people met and socialized in the public space, drinking and eating like a party with surprise happenings; how moved she was when she saw in the classroom the drawings of previous 'students', and especially one sketch she was unexpectedly associated with; how close she felt while all participants took this narrow-spaced elevator to reach the *Room with View* where suddenly they view opened up to the whole city of Athens. She also referred at the small parachutes people at the public space could see landing all over the place, pick them up and read the small texts written in them, knowing that at the same time somebody is probably reading their message as well. This unusual communication moved her a lot and in this way she felt connected with other participants. She also mentioned the feeling of meeting at the public space people who participated together earlier in a specific room, sharing essential personal matters. Even without talking to each other again, they were connected under this rather unconventional condition: these people may not even know each others' names, but they have already shared private details of their lives, probably only close related are aware of. For example, Participant 5 recalls how moved she was of a man who described the person he had drawn very emotionally; it was a girl who had passed away and played a crucial role in his life. Strangers come together in the performance event and through their participation they are potentially emancipated and brought unexpectedly close.

Intimacy with limits

One of the unanimous though unexpected results of this current research is how inimical can be for audience members to experience the play in accompany with the people that came together to see it (like friends, relatives, and partners), instead of interacting without any acquaintances around. The directors of *Katerini* and *Fake Time @ Ariston Hotel* are in accordance in this point: people are more open and more themselves when they indulge in interactive forms of participation with strangers. Intimacy and friendship in these situations do not contribute to unaffected, hearty behaviour and participation; participants most probably cannot be deliberated from social and interpersonal conventions when surrounded by their intimates. Probably, people are afraid to reveal hidden parts of themselves in front of those who are already involved in a deeper way in their lives. Notably, the directors Ramoglou (*Fake Time @ Ariston Hotel*) and Valais (*Katerini*) both stressed that performers were instructed to prevent audience members in multiple ways from experiencing the show in tandem with the people they had come to see the show together. Specifically, Valais one of the directors of *Katerini* asserted they realized during

experimentations and rehearsals that interactions within the rooms worked only among unknown people:

> "Because since people with certain familiarity meet, a certain distance has already been carried. We called several friends to rehearse, people we had already go out together, already laughed together, quarreled, talked about personal things. According to this social modesty among strangers, like we are now... there are things I am allowed to do and things that I am not allowed. On this social reticence among unknown we built the whole game."

In conformance with Valais view, Ramoglou reports that people dread criticism, and plenty of times performers witnessed participants who were willing to get deeper involved, to speak out their opinion, and they hesitated because of their fellows' presence. Therefore, participants were guided in advance to different floors so that groups are separated. On behalf of the participants, Participant 1 (participant of *Fake Time @ Ariston Hotel*) preferred not to get connected with the participants and experience everything mainly alone. In addition, she felt like "the only spectator and all the others part of the play" as her first reaction often was to consider them part of the action. She had gone to the show with her boyfriend but decided in advance to enjoy it separately:

> "In such a project, it is not only a matter of embarrassment for anything that might happen, but that everyone should follow his own way. One would like to stay longer in a scene, while another would like to leave sooner. I consider this very important; it shows respect although there may be moments of embarrassment of course... In such projects I always move independently... Otherwise I think you are restrained again within patterns of behavior established in your relationship. You are also restrained in a certain reality, since the other person reminds you of who you are while others who do not know you; their opinion is shaped at the time."

Participating in independent paths and strings of interaction proved essential, first as each person need different amount of time to live a certain experience, and second because apart from the matter of time, participants presented a more liberated behaviour; they seemed more comfortable to be themselves, when surrounded among strangers. Even if in times participants' trajectories met, their experiences were far differentiated and more qualitative when feeling that no acquaintances were near to criticise their attitude.

6.3.3 When spaces coincide

Fusion of public space and performance space, stage and hall

Space has been modified in two basic ways in all three performances under study according to the objectives of each scenario. The first configuration involves the spatial proximity of audience and performers, in extension to the redefinition of their roles in live participatory events. Participants are not sat in the hall but invited at stage, which covers the

entire performance area. Respectively, as long as participants entered the predetermined area of *Fake Time @ Ariston Hotel, Katerini* and *Situation Rooms* every room and floor is available for participation as part of the performance space. Once participants step into the performance space - even if extended at seven floors, like in *Fake Time @ Ariston Hotel* - no hall or seats can be found, the entire place is a stage. The only exception was the public space in *Katerini* where common social encounters took place, not performance interactions. Participant 3 describes how amazed she was by approaching performers for the first time in her life; notably when a woman performer was hit against the wall as part of her role so near (less than one meter) to Participant 3 - she became ecstatic. Since the entire performance space is turned into stage, realistic like movie set, participants get immersed into a fictional world including mainly physical and less digital aspects, except form *Situation Rooms*. Participant 1, although professional performer, describes how the scenery of *Fake Time @ Ariston Hotel* made a remarkable impression on her, although after three years she noticed a certain degree of decay:

> "Because of my specialty, I was naturally curious to touch the props, see them, press every button to see what would happen; to play with the surroundings… I remember that room with the tree, unlike other riotous places, it was covered with complete silence, and suddenly it was like you walked into another world… This feeling that each floor was another world, while there was music upstairs for example… Sound and space undoubtedly intensely condition the atmosphere… Feelings immerse automatically."

The second transition involved the fusion of public space and performance, which was realized only in case of *Katerini.* This was the only performance giving access to the outer social world through the 'public space' at the terrace of the building, and the *Room with View* open to the horizon of Athens at the terrace of the building across the main one. Participants were gathered in the public space when they were not occupied in the Rooms, socializing with other participants and visitors, attending small happenings. This contradiction of entering a performance place through an actual public space was interesting, according to Participant 4, especially in case of the proximity of one-to-one interactions with the performer, and then back to the crowd and music of the public space. Participant 5 was also touched by the small parachutes filled with messages and thrown from the terrace of the *Room with View* down to the street, like personal messages sent to the city of Athens. Moreover, when the performer was setting a specific year all participants recalled and shared memories that occurred by that time. Since most of the participants were Athenians, their memories were associated with this city they were now enjoying through this wonderful panoramic view on the terrace. Participant 4 remembers that when he was sharing his personal past experiences, he unintentionally looked roughly towards the area of the city these events had happened. He was fascinated by the juxtaposition of his memories with the image of the city from above.

Hence, the space of the performance has been transformed practically in two manners: firstly, the distinct areas of stage and hall have been uniformed into one as participants collaborate with performers as the event unfolds. This transition is not a contemporary phenomenon but derives from the history of performance art, since the

middle of the 20th century, as further analysed in chapter 3. This modification was apparent in three performances under study inducing audience members to move around and interact with the scenery and other people present. Especially in case of *Katerini,* the stage was not only integrated with the hall, but was further extended to cover a public space and potentially address the action even further to the city of Athens.

Physical boundaries

To this point, weight has been put at the boundaries required in human relationships during enactive participation among audience members, and among audience and performers during the course of the performance event. Fusion of roles and proximity among participants and performers in multiple levels has been convoyed by fusion of spatial limits between public space and performance space, as well between stage and hall. Hence, certain boundaries are also required in matters of space and time, configuring in this way a determinate spatiotemporal context, wherein potential strings of interaction and communication can emerge. Since stage and hall are merged into cohesive performance area, and in parallel the performance event is extended outdoors in public space, emancipated therefore from the theatrical space, apparent and well-defined spatial limits are necessitated. Participants also prefer to be aware of the performance area, or alternatively, be aware that a professional will be there in case they have exceeded these limits and bring them back in the game, just like in *Situation Rooms*. Crossing these discernible lines entails entering the performance world wherein audience participation is incited within limits – unless different direction objectives are served, for instance to increase mystery, inducing in this case unexpected results.

Respectively, time limits are also indispensable otherwise the overall work cannot be synchronised into a coherent narrative structure; it may be turned into an exhibition or installation for example, and spectators can enter to visit the place and leave as they please. Performance events are extended within a specific time period. The duration of participatory events necessitates thorough cogitation as an effective balance needs to be achieved between maintaining the appropriate rhythm as the action unfolds, and giving enough time to audience to realize and manage their new role as enactive participants. In live participatory events people need time first of all to realise they are no longer spectators, and especially the multiple ways they are incited to participate in the course of things. Experiencing in such events can be a demanding task: the quantity and quality of information given, in addition to the potential interactions in mental, emotional and physical level, may puzzle the audience, even prevent them from enjoying and engaging at the artistic process.

In case of *Situation Rooms* for example, participants have the opportunity to experience every expert's story within tight time limits. The instructions presented through the iPad keep in essence the rhythm of the overall event, which unfolds with complete concentration of everyone participating. In *Situation Rooms* there is no time to spare at all, especially in actions diverge from the frames set by the digital guidance. My personal feeling was that if I don't make every step of the way in time, I may influence in a negative way another participant's experience, as our experiences in these rooms are interlinked. Hence, I could hardly reflect on what is going on and see the whole picture, instead I was experiencing every moment with my mind free clear of thoughts regarding my

'performance'. I suggest this aspect may have been considered by the directors as essential for the kind of experience they aspired their audience to have. Nevertheless, after few minutes I started get familiarized with the way things evolve and realize I should follow the guided rules in order not to get eventually excluded of the flow of the events and miss vital parts of the event. I was on one hand giving me enough time to experience each story, this every time new *here and now*, and on the other hand follow the rhythm of the play, feeling comfortable and confiding at the iPad to guide me throughout the play.

In my experience, participants need time: time to realize the play and adapt to certain conditions and situations; time to realize they have options to make; time to perceive and process information given; time to trust the performers as well as the artistic process and get engaged in multiple levels; and finally time to reflect at their experience after its completion. According to the participants, there was mainly given enough time in all performances under study for all the above processes to be realized. Participant 7 referred at the time most participants needed to adapt to the performance situation. He describes that at first, all participants seemed like bodied moving as they are told, without identifying the experts' roles. People kept following the instructions quite mechanically, given although adequate time to interact and respond respectively. After some time though, after the experience of at least one expert, rules were clarified and the roles became gradually familiar. He additionally mentioned that probably he needed more time in few instances during *Situation Rooms* to realize the facts deeper, but at no time did this affect significantly his overall experience. He also noticed that in moments the flow of the action via the iPad was different from his own rhythm of participation, causing however minor complications. Moreover, Participant 5 stressed the effectiveness of the fact that sufficient amount of time was given in the rooms of *Katerini* to built trust among performers and participants before everything else evolved. She mostly appreciated the process of getting closer together, smoothly and steadily, establishing a basic form of relationship among those present, before more personal interactions were attempted.

Furthermore, another element that accrued from the interview material was the fact that a significant amount of participants mainly of *Katerini,* and *Fake Time @ Ariston Hotel* and less of *Situation Rooms,* saw the play more than once. Initially, because they enjoyed themselves and wanted to experience even more roles and rooms, they did not have the chance to see at first due to the instructions they were given and/or their choices. Nevertheless, apart from getting involved in interactions they missed the first time, people come to see the play again because of all the above reasons: it takes time to realise they have options, to make certain choices, and explore as many opened possibilities as possible. Since every experience is unique partly because different choices are made, none can be replicated (see subchapter 3.5.3). Therefore, a part (which cannot be estimated by this current research) of individuals participated in the show more than once, as the second (or even third) time participants were aware of the rules, the narrative structure, the choices they had; they were prepared of the challenges they would face, more focused on what they want to experience once more or avoid, so they got engaged more deliberately, probably opening up themselves even more. The next time people were more prepared and aware of what enactive participation entails. Hence, time is required for proximity and trust to emerge, to comprehend the overall context and my role in it, to make decisions, to make

mistakes, to relax and enjoy the action, and afterwards time to contemplate on the experience I had as well as the feelings and the thoughts that were raised or changed.

Finally, the matter of time is also associated with the fact that both interviewees asked for time to pass between our experience of the *Situation Rooms* and the day of their interview, to reflect and realize what happened. The interview took place two and half months after the show and both asserted they needed most of this time to prepare their thoughts. Time is needed to elaborate and share an experience, especially if new conditions and challenges were faced, changing our perspective even slightly, as art aspires to achieve. As Participant 6 told me it took her few days to realize her feelings as she had no time during the show to feel and process them. Participants need to time to comprehend their new (enactive) role, time to adapt by leaving their daily custom patterns of behaviour and come to the reality of the performance, time to trust, time to open up more private aspects of their attitude and share their inner thoughts, time to make choices, time to make other choices as well, time to take pleasure in their journey and time for their experience to reach a certain closure – all changes require time to be realized, and the affordances of mixed-reality technology fortunately cannot do anything about that.

6.3.4 Fusion of realities

Fusion of mixed realities: everyday life and artistic experience, digital and physical

The three performances under study comprise synthesis of realistic contexts and conditions, wherein audience can be immersed and participate enactively. In all cases, participants are transferred at 'places' on the borderline between fiction, simulation and reality, meaning worlds where daily circumstances are simulated and transcended at the same time; in conformance with Shaughnessy's view: "applied performance engages participants in a lived experience which requires us to be in the here and now" (2012, p. 39), referring at the time and space of performance. In these rooms, daily life and interaction is the frame of reference, augmented basically by the potentialities of the artistic experience and the realistic sceneries, and less by the affordances of mixed-reality technology.

The sceneries were in general terms aptly organized. In case of *Katerini* the set was more abstract, with few but essential props according to the scenario; in *Situation Rooms* and *Fake Time @ Ariston Hotel,* the rooms were mostly equipped with actual objects and furniture, not imitations of real, contributing at getting engaged within a realistic situation. Specifically, as Ramoglou (*Fake Time @ Ariston Hotel*) described that emphasis was put at making absolutely realistic sceneries, not theatrical or fake, as in theatre the audience is kept in a distance and many details can be omitted. She collaborated for this reason with sculptors and movie scenographers as well as professionals who managed music, video and lighting, and the result was impressive, as audience members unanimously commented. Similar to *Fake Time @ Ariston Hotel, Situation Rooms* were also shaped on the borderline between theatrical scenery and movie set, including various real objects actually used by the experts. According to Participant 7 and his experience in *Situation Rooms*:

"The scenery was fantastic, for me; props were huge, with so many spaces included; I was thrilled me by the architecture of the whole installation. I interacted with the space, the gravel, depending on time I had of course; even with small details in the area... This aspect helped me more to get engaged at the story, because I think observation helps a lot: the things put, the colour of the space, a sound that can be heard... all these matter".

The environment of the rooms were in majority imposing, especially in *Fake Time @ Ariston Hotel* and *Situation Rooms,* affecting participants' experience while surrounding them. Realistic scenery contributed to all cases at the diffusion of the boundaries between real and fictional worlds. Respectively, Participant 6 stresses her impression of the realistic performance place, which resembled more to a movie set than a theatrical scenery:

"What worked most of all for me was the fact I entered a very realistic space. Even if I had no interaction with anyone else I wouldn't mind. The fact I walked into such a realistic space - a living room with toys in the kitchen and a soup, the soldier sand, a real surgery, all helped. There, in the small terrace I felt I was taking a breath, I did not want to leave; it was so charming watching the skyline".

Moreover, the quality of performers' action – except the *Situation Rooms* where only participants were involved – along with participants' interaction also affected the authenticity of the context, and in extension the quality the overall experience. For Participant 1, the originality of the moment is intensified when the boundaries between real life and artistic action are blurred. She describes her experience in *Fake Time @ Ariston Hotel* with mixed feelings. In her opinion, there were aspects that worked towards this objective and elements that were not effective. Concerning the first, as the distance between performers and audience was minimised they were brought up together closer than any typical theatrical play; also, the surrounding environment was evocative and she was feeling immersed in a different world; and performers prioritized their interaction with participants than acting out a specific play:

"I think the actors were more occupied with us rather than narrating a story. For example, at the mental hospital they encouraged us to shout in order to get the feeling that we are in a real space: a mental hospital, a police station, a real environment. I felt that the scenario was more about that: to feel that you are in a real place rather than come up with a story".

The director of *Fake Time @ Ariston Hotel* also shared two incidents she witnessed designating how opaque the limits were at times:

"Another day was this sculptor, who... acted out like a junkie on the 2nd floor, and played his role so realistically that a lady was shocked and actually gave him a kick... She had been overwhelmed with junkies and could not stand even to face another one. He played so realistically within the overall scenery we had set up: he was saying 'don't hit me!', and in the end she stopped and gave him 50 cents".

"There was this man from Georgia – he is an art critic, one of the oldest ones in our city – and the second time he came, and wanted to act out, so he acted like a crazy person and drove everyone insane! People did not recognize him, they called him names, they give him the finger; everyone got mostly disturbed, pushing audience and performers to their limits!"

Another critical aspect was raised while interviewing Participant 2 and Participant 3, reflecting that sometimes in *Fake Time @ Ariston Hotel* boundaries were not only diffused, but even indiscernible. Initially Participant 2 was narrating how furious he became when a 'policeman' was physically putting pressure on him, but eventually managed to control himself and not respond out of anger. In extension, to emphasize how puzzled he was about his reaction, he also mentioned an incident that was similar to his experience:

"I heard an event of a young man who lunged at an actor and slapped him because his girlfriend was crying and devastated... Many diverse feelings were raised. Me, for example, I was so pissed off when the policeman was pulling me the second time, and when I had to pander the killer among the spectators. I really wanted to slap that policeman, but I did not, I contained my urge. I had mixed feelings. It depends; some people think it's even healthy to jump at a performer".

At this point, Participant 3 decided to interfere and share her view, expressing that no one has the right to cross the line and act like that in theatre or everyday life:

"Even in real life, I cannot accept as a principle to dash to anyone. Especially when you consciously go to see a show and this man is simply doing his job at the time. Dashing to someone who is doing his job either in reality or in the theatre, I think is frustrating".

Our discussion evolved in a very interesting way, as on occasion of the limits that may been exceeded by performers and/or participants, a certain remark was made, from another angle though, concerning the fact that the demarcation line between reality and performance play are even more blurred as the stage and the hall merge, in extension as artistic experience and everyday life coincide. The dialogue continued as follows, also proving how interaction among interviewees can be beneficial and enrich the research content:

Participant 3: "Yes but what you want to do is one thing and what you finally do another. If you were watching a [theatrical] show of Hitler would you go over there and kill him?"

Participant 2: "Yes but if this person was in front of you? What feelings would you have then?"

Participant 3: "But you are in a show and you know that you see an interpretation of a role!! You are a grown up person, can't you tell the difference between theatre and reality? It seems so irrational to me..."

Participant 2: "I do not agree with […] (Participant 3); many diverse feelings are brought up that moment…"

Besides, in case of *Situation Rooms* reality and theatre coincided as the experts were actual people and their stories not fictional but documentaries of their life and experience. Wetzel, one of the directors, explained in an interview posted in their website (Paridis, 2014) that he uses discourse to approach and open up people he associates with as experts. He analyzes the process they followed in *Situation Rooms*: he firstly discussed endless hours with this family from Soudan, or the Israeli soldier. Then he needed to turn the content into performance material, definitely nothing like a theatrical script, but quite demanding task. Dedicated at the kind of theatre they have chosen to serve, a form of documentary theatre, the Rimini Protokoll prefer, instead of actors acting out real situations, to bring on stage audience, as experts of their own way. Real characters meet real participants as their professional or social status makes them interesting and part of an artistic event beyond the framework of a theatrical play. He continues:

"Whenever I try to explain to a taxi driver what do – I usually talk a lot with taxi drivers - I simply say this: 'I'd rather work with you instead with an actor, because I find much more interesting what you would tell me, than the actor who would play your role. Perhaps, another director would find an actor ideal for the role of a taxi driver. For me, the ideal taxi driver is a real taxi driver".

On behalf of the participants of *Situation Rooms*, Participant 7 reports that he felt the stories were so real exactly because the people who had lived these experiences share them as well. In his opinion, watching and listening to the people themselves who had lived these situations, and specifically the timbre of their voice, their expression, every minor detail in their presence turned the whole event into real, rather than an interpretation of the real.

Furthermore, the affordances of technology have turned digital media into essential elements of live art and artistic in general works, and intelligent collaborators of interaction among performers and/or among performers and audience (see chapter 3.3). *Situation Rooms* significantly shoved the limits of mixed-reality theatre by omitting the role of performers as actors and facilitators of audience participation and replacing them by iPads. For Wetzel, "the dramaturgy is the technology", offering simultaneously a twofold perspective: a window to this 'otherness', i.e. the experts and their narration, as well as a mirror not of my reflection as participant but of the surrounding physical environment augmented though with additional information of the story and instructions, guiding me constantly throughout the work. Through the iPad: I was conducted in detail through the experts' stories and the rooms, I met ten experts and experienced their stories through the device, I listened to their voices and felt the tone of their feelings and thoughts, I became this other person for seven minutes (a soldier, a an agent, an immigrant), I get extra layers of information about the participants moving also guided around me and their action as experts, I shot someone as the iPad becomes a weapon, and more. The iPad gave me as participant an augmented perspective over physical reality, in the director's view:

 "With the personal narratives of the 'inhabitants', the images start to move and the audience follows the individual trails of the cameras they have been given. They start to inhabit the building, while following what they see and hear on their equipment. The audience does not sit opposite the piece to watch and judge it from the outside; instead, the spectators ensnare themselves in a network of incidents, slipping into the perspectives of the protagonists, whose traces are followed by other spectators."

Regarding Participant 7 and Participant 6, the participants of *Situation Rooms,* both found the constant guidance via the iPad very imposing, undemanding and practical throughout the work, and as they reported they faced no obstacles at its usage. They were impressed by the way additional information via the digital device supplemented in essence the experience within the physical environment. At first, that is roughly during the first story, they were absorbed by the affordances of virtual reality, but later on they paid as much attention needed to navigate around the place in time and followed the flow of the overall event. As Participant 7 asserted, it took time only few minutes to realize and get accustomed at the function of the iPad. Afterwards, his attention was no longer focused on the screen but shared between the two realities, having enough time to experience the physical world though his senses. Eventually the physical environment dominated over the digital one. Participant 6 also mentioned the advantages of this mode of guidance: firstly, she was so absorbed and engaged in the whole artistic process that she had no time to notice and feel embarrassed in case another was observing her 'performance'. Since everyone was occupied via the iPads, they were more interested at following the story as it unfold rather that the actions of other participants and how accurately they are performed. The iPad helped her concentrate on listening at the story within a place she also saw projected and augmented at times at the iPad screen. Participant 6 also felt confident with the structure and the effectiveness of the guidance given since every time she needed to do something here were only minor possibilities of making mistakes. Every detail was so efficiently synchronised and directed, participants could not miss any point of action or delay in any case the flow of the event. Participants relied on the digital guidance which guided them though strings of interaction throughout the play effortlessly and successfully.

 "The [performance] space was so realistic with the sounds, the smell of the soup smelled, our taking the appropriate posture to sit... when we went to the radio station in Congo, there was suddenly a bombing, and while chaos expands you raise your eyes and you see another man who is already on his knees next to you. So yes I have witnessed the bombing - I was so much into it. I do not recall all the details of the story but I experienced it quite intensely."

Participant 6 explains that the iPad contributed during her interaction with others as apart from giving instructions, also informed her about the identity and action of other participants in the role of experts. For example, when a person was sitting in a specific stance on the couch in front of her, another expert was sitting at the same place at the iPad with the same pose, and even the clothes and the colours were different that participant

identified with the expert during this scene. In extension, Participant 6 reported she also identified with her changing role as an expert losing a times track of reality:

> "I was watching myself being injured and I could see my feet covered with blood at the iPad. This is important; you see his feet in blood and cut off... I had to take the iPad aside to see if my legs were ok. At that time I was lying down, watching this picture, I felt like the soldier so intensely... for a moment, this strong image passed through his mind 'I'm fine?' I wondered. This frame of the iPad that narrowed down your peripheral vision, I think contributed as well."

Concluding, the realistic environment along with the immersion and participation in a mixed-reality world, wherein physical and virtual elements and layers of information are integrated and synchronised effectively, result at the diffusion of everyday life and artistic experience with impressive outcomes in all performances.

Don't perform, just play

As spatial and metaphorical boundaries between participant and performer have been displaced, new quandaries have been evoked regarding matters that in traditional theatrical plays need not be broached. As enactive participator, I am no longer mere spectator in theatrical plays, nor am I asked to be a performer either. I am incited to get physically, mentally and emotionally engaged with other participants in potential strings of interaction set by directors in the narrative structure, but I am also urged not to hide in my relationship with them. I cannot hide in the darkness of the hall, as it is vanished; I am invited to step into the stage, and participate. Immersed at the performance world, on the verge of daily routines and artistic experience, wherein social and cultural encounters take place in unconventional conditions, the role of audience member is more diffused than ever.

According to the interviewees' reports who participated at *Situation Rooms, Katerini,* and *Fake Time @ Ariston Hotel,* even though some of them are professional actors, were also bewildered in the beginning of the show. Two things have contributed to clarify what they are asked to do: the first one involves not to pretend to be something they are not, since they are not actors so they cannot act out any role; and the second refers at clear instructions – given by performers as facilitators or any other device, like the iPad in case of *Situation Rooms* – about specific actions participants may follow to collaborate in the story unfold. Clear instruction will be studied in later chapter concerning the narrative structure (see subchapter 6.5.3). Regarding the ability of being myself and not pretend to be someone else is essential as audience member, since I am not trained to act out any roles. Actors and performers are qualified to be present and authentic in the frames of their role, but a deeper approach at their training of performer exceeds by far the objectives of this research. Nevertheless, being present and authentic instead of pretending to be someone else is among the principles performers are trained to achieve through practice, according to John Britton. Participants just want to feel they can be themselves and act naturally, without any expectations or restrictions. And by just being themselves is just what the performance needs to unfold.

Specifically, the participants of *Situation Rooms* Participant 6 and Participant 7 both reported that initially all participants needed some time to realize their role in the event and until then participants seemed like bodies moving around and following the instructions almost mechanically, confused and sterile. Later on Participant 6 asserts she had forgotten her presence and participation as she empathized and identified with the experts to a great extent. She further adds she felt relief realizing she need not perform anything, unlike other interactive performances that make her feel embarrassed when suddenly she is told to get up from her seat, join them on stage and do something against her will. She was asked to raise a flag without pretending to be a soldier:

> "I did not have to give a performance, act something out. We had to lift the flag so another spectator could see it, and this was nice, even magical, but I actually felt like the soldier who raised that flag. I did not feel that I have to play the soldier, this is true and simple and it end there –there is no need to get into any kind of theatrical performance."

In conformance with Participant 6, Participant 7 also supports that they were never incited to act out any role in *Situation Rooms.* Participants were invited to broaden up their knowledge and horizon on war industry through the experts' information and experiences, not to act like experts and pretend to be them among other participants. And this target helped participants, for Participant 7, at stepping into the experts' shoes and comprehend his compound global phenomenon under their perspective. For him as well, audience participation was restricted at collaborating through specific actions rather than interpreting a role:

> "What I realized is that this was a process to undergo specific situations that these people have undergone and understand their personal story. I do not think you had the chance, neither was the project's aim to act out a role, as we mean it in the theatre… I walked through the process to see how these people could be but through me though; I mostly had contact with me I think; how I feel about what they have been through. I never walked in their own psychology; I had my purely personal perception of things."

Additionally, Participant 1 adds another parameter that in her view helps participants get involved in participatory events: by finding "yourself within a situation least expected, no one has prepared you for". In her opinion the ultimate integration in the work can happen mainly in cases when individuals are actually caught by surprise, and they need time to realise if they are attending a short of performance or the whole action is part of (a magical though) reality. The element of surprise was missing, according to her personal view from *Fake Time @ Ariston Hotel* as participants were always prepared in a way, and they had the time to gradually get involved in the process. Her perspective raises at this point issues beyond the aims of this research. By taking someone by surprise diffuses indeed the boundaries between reality and artistic event, but as clarified in earlier chapter, the case in which individuals are not aware they are participating at, or spectating, a performance event, is not included in this thesis.

Concerning the performers, being spontaneous, present and authentic is critical for their work giving the impression they carry and convey their own truth as if for the first time, and they do not follow a particular script as they have many times before. Since the distance between participants and performers is minimized, people can directly sense in every detail of such fragile aspects. Participant 5 stated that she was meeting a whole person in *Katerini*, rather than a role. In her experience the actors were not acting out any role; they remained neutral and present, they seems to be themselves, for participants to feel comfortable. Even for example a participant had felt the urge to cry, the performer would not cry with him too. For Participant 5 performers were just doing their job, they remained neutral, you could not witness something happening to them at any time, and this attitude of theirs helped participants to feel trust and let themselves get involved in an inner way as well. According to Participant 5, performers of *Katerini* felt like real people who want to interact with participants and not actors pretending to be someone they are not.

Nonetheless, Participant 1 claims that the interaction among performers and participants during *Fake Time @ Ariston Hotel,* and specifically the dialogue among them, was not effective but rather fake, according to her experience and opinion. In her words:

> "If there was something that disengaged me from the process was... the form of dialogue developed; it has not been prosperous, meaning that I was not induced to indulge in this condition. I may have felt the fictitiousness of the play, the fictitiousness of the role, the one you meet in baddish theatres, you know. Probably at moments when the performer did not handled it adequately - even in case of improvised dialogues... Many times I felt I couldn't get engaged, because the performers were not always adequately alert, or they could not find the appropriate words to lure me in it; I felt the fictitiousness of things. I felt that they were playing their role at that moment and I could not get involved in the process..."

Participant 1 mentions that when performers avoided to converse with participants but instead used physical or eye contact to incite participation, for example to follow them, was far more effective; in her opinion in this way you could become part of the play, rather than the dialogue. She continues that although in all cases the performer is playing a role, the discourse designates things a lot, "makes them more obvious in a way" as she said. Since she could not feel the performance intention, i.e. to make participants feel that they are in a real space, a real situation, she could feel the fictitiousness of the show, and once participants realize this fictitiousness, she asserts, they no longer take anything seriously and the whole event fails to open up people:

> "If you play the policeman, well I'll be the victim. Suddenly you recall all the films you've seen; you use all the lines you have heard... So it is not the personal aspect that is revealed; it is the funny, humorous one, and a more stereotypical participation. Stereotypical in the sense that you use stereotypical expressions; you don't let yourself go with the experience of the moment. You play with the other person's lines as well. There is always a safe distance; it doesn't get more personal".

As I earlier mentioned, the objectives of this research is not whether the performers of the plays under study achieved to perform in an effective way, but specify the ways audience members were incited to participate in enactive way. Therefore, I borrow the perspective of John Britton an experienced performance director, who supports that "all acting is both unreal and real, all dance is both unreal and real". He shares his experience as a performer:

> "*It's always a role... But by role what I mean is a structure placed around real experience...* My performance 'Echo Chamber' is a narrative, a story of a soldier, who is abused and in the course of it he murders his wife, he kills his young child, and by the end he is naked on stage, being bitten half to death by his superior in the army. And I'm naked on stage, and I'm biting myself up, while at the same time dancing with my invisible wife, and talking directly to the audience. It's really tough. It's real. I'm naked, my body is being looked up, there's a set of things that go emotionally with the exposure of the body. I'm hitting the floor when I fall over; I am smacking myself at the face; I'm sweating; I'm short of breath. *That's all real. But the role is not. The role is a story,* I have never killed my wife, I've never been bitten up by a soldier, I've never killed my child, I don't have a child, so of course it's a role, it's a story. The experience is entirely real, for me and for the audience... No acting - but it's still a role. There's still a structure placed around real experience" (my emphasis).

He further suggests that the critical thing is *not to perform but play*. By playing, he is talking about the serious aspect of finding my pleasure as the performance unfolds instead of trying to be somebody else out of a personal need to entertain or satisfy anyone. By pursuing pleasure I find meaning and value in what I am doing, I am simply me, and do not need to pretend anything. By finding pleasure I am authentic while participating. Trained performers are trained to do their job under this perspective, at least according to the philosophy John Britton follows in his training program, and respectively participants would benefit if they were incited not to please anybody watching but find their own pleasure. This definitely is a compound aspiration that does not depend solely on the performers or directors of the performance event. Considering people as collaborators who participate out of their own pleasure though can enlighten how audience participation is approached. In enactive participation, I borrow Britton's view on interactive theatre, audience is experiencing as a *doer,* rather than as an *observer.*

> "It's the heart of where interactive theatre sometimes fails horribly. Because it says 'let's pretend we are these people'... It means that people become self-conscious, so that even if they want to pretend, they never really pretend. But sometimes they pretend and say 'I'm really a pirate'; they go on and break the rules: 'I'm really a pirate and I'm gonna fight you'. And then [the director says] hold on 'Could you pretend in a way I want you to pretend?' at which point they have no freedom, they have no agency, they only have some very tight rules to perform to but they don't know what the rules are. So although it can be ok, it's generally an unsatisfactory

experience, except for very young children, who don't have that fearful awareness of self. They are not self-conscious in that sense. As soon as we become self-conscious, as really worried about the presentation of self to others, that kind of 'let's pretend' is really problematic."

Instead, he proposes another approach concentrated on the motto 'let's do', meaning invite people to do very specific actions they can handle and let's see together what happens then. In his opinion, giving manageable tasks is something that attracts audience to get involved:

> "I can only do things that seem possible at the moment that I'm doing them. So how does that go for an interactive performance? Offering the audience things that are there for them to do - so that they can have the experience of doing it".

> "Let's make a choice. Let's see what happens. Experience this. That seems to me that everybody can do, because it leaves people the freedom to respond to stimulus as they choose to, including getting really immersed in something or standing back saying 'I'm not gonna get fooled by you'. It gives people agency. It gives people the freedom to choose how to participate in the event."

It is critical though to ask audience to do things that seem possible at that moment *for them to do,* so they can have the experience of doing it, as I am analyzing later in chapter 6.5.3, so audience nor feels boredom or too demanding to achieve. In Britton's words:

> "You create a context in which the audience has tasks to do. I would say that the same is true for actors. I don't ask actors to pretend, I don't work with character and emotion, although they create characters and they feel emotions. I work with tasks. I ask actors to do things. [...] That's why in my training I usually start with the ball game; it is a task. The reason almost everybody loves it is because it is a task. It's an immensely complex journey for people when they go into the ball game. What is a task? We know what to do; we catch and throw the ball. And once we know the task everything begins to open up. Because the big question is ok this is a task: "Who I'm who is doing the task?" Exactly the same for the performer... *'Do the task'* then *'what do you bring to that task?'* Exactly the same to me within an interactive environment: I'm a director, you're an audience member; I set you a task. The experience that you have is *'who are you when you are doing this task?'* and watching what happens. *'What is your experience?'* That's another way to say *'who are you?'* Because *'what your experience is'* is who you are... if you feel anger you are an angry person, if you feel love you are a loving person, and most of us we feel both, we are both. That's why I have real problems as a director working with characters, because I don't think character exists" (my emphasis).

6.4 The *sensual and emotional thread.* The aesthesis of enactive participation

6.4.1 Fusion of senses and feelings

Enactive participation concentrates on the body as the sentient vehicle for sharing and interpreting human experiences in live socio-cultural participatory events. In all three performance plays under study, aesthetic experiences are offered to participants through multisensory interactions as, apart from vision and hearing, also touch, smell, and taste are stimulated at times. Inciting multiple senses is essential for the participants to get immersed in the performance world, producing more realistic results. Moreover, as proximity and encounters are incited among participants and performers, additional senses are motivated comparing to typical theatrical plays. For example, participants are invited to sit on a single bed next to the performer, who reads a book loudly and sprays the atmosphere with rosewater *(Room for the Broken Hearted - Katerini),* or to walk around the floor of the forest *(Fake time @ Ariston Hotel) smelling and touching the ground and the trees, while an elf sings a song, swings and gives money to everybody passing by. A fusion of sensations, immediacy and feelings is aspired to be evoked, culminating while passing to* one-to-one from *one-to-many* interactions*.*

Similar to the fact that designers cannot in essence design people's experiences, but prepare the conditions and the overall context for experiences to emerge, directors can only set the frame (scenery, plot, lighting, costumes, among other elements) for audience experiences and responses to occur. Directors and designers are responsible for their project, in terms of the surrounding environment (physical and/or mixed-reality context), the performers' presence and action, as well as the narrative structure and flow, but not for the participants' aesthesis throughout the overall experience. John Britton argues that any performance or artistic event offers 'a possibility for an aesthetic experience'. He further states that although he does not usually direct experiential pieces, wherein people are directly involved in the realization of the show, he regards the aesthetic aspect of audience experience essential; and describes his approach when he directs a piece:

> "I'm trying to open up a somatic experience for the audience which allows for audience members individually and collectively to encounter shifts in their state of being, a sense of really being present with the action of their presence and not sitting and observing as when they watch television or something unfolding across the street... a *somatic response*, i.e. within the body... it certainly *contains emotion but it's also broader than emotion; it is experienced.* The meeting point between this and emotion of course is very rich, but I am not really talking about trying to create an emotional journey for the audience, I'm talking about trying to create a somatic experience for the audience, which sometimes takes the form of the audience feeling a shift in their body, a sense of discomfort, or a warmth, or a shoulders' relaxing".

Similarly, the Blitz Company, directors of *Katerini*, created an emotional journey for the audience with performers to be their fellow travellers. According to Giorgos Valais: "we had in mind to touch each other", speaking both metaphorically, i.e. to affect and move people at emotional level, and literally, as in his words: "this was the most gestural performance we have made, with the literal sense of gesture". Even from the very beginning, participants are welcomed at the public space not by just waiting to be announced to enter a particular room, but by being offered free food and wine, while adapting to the place. Following, in the first *Room of Ulysses* people are invited to recall personal experiences of younger age. Eight participants sit in a classroom similar to a real one, hear the rhapsody L of Odyssey, narrated by the teacher (woman performer), and share with other students (participants) their memories regarding a person they love but has passed away. The teacher is reading the rhapsody L (Nekuia rhapsody) of Odyssey, while walking around the desks really slowly, caressing the heads of each one of the participants at the same time. This gesture is totally delicate, mark of a good teacher. Her maternal figure helps people relax and feel warm in order to open up themselves, as they are about to talk about their loss. Later on, the teacher also asks people to take a piece of paper and draw a picture of themselves meeting the loving person that has passed away and also write what they would say to each other. While people are drawing, she goes on reading that Ulysses meets Achilles, who says that he would prefer to be a slave and alive than a king among the dead. Later, when they are finished drawing, she asks each person to stand up next to her and show everyone in front of the class their sketch and explain the story it illustrates. Many people chose to share very intimate and deep emotions with others; many were emotionally moved, even cried, while sharing their memories of loss and death in a rather playful, but essential way. People's drawings are stuck on the walls of the classroom after they are asked of their permission. After a number of performances the walls of the classroom are filled with drawings of people meeting and talking to their loved ones that are no longer with them. As Ulysses meets in Hades his loved ones, and cannot touch or feel them, the people in this classroom share their emotions on the non-reversible absence of their loved ones.

Moreover, only women participants are invited in the *Room of All the Lost Letters* to have a multisensory experience by sitting in a plane room next to the male performer (George Valais). Near to a small table where there is a laptop, initially both the woman and the performer are eating together a chocolate pastry in silence as a way to gradually meet and feel comfortable together. They also exchange messages written on small rolling papers: their names and/or something sort they want to say to each other – but they hardly speak. They mainly look at each other in silence. Later, the performer suggests they read the lines of the movie: they are lovers, meeting after many years for a last time to break up for good. Many women are very touched, moved by the subject, and some even cry, according to the director (Valais). Before the participant leaves the room, the performer gives her an envelope with all the rolling papers they exchanged during their common performance. Their enclosed dialogue is kept and taken at home. In the end, they watch together the exact same scene played in a movie this time: two actors with costumes in a public garden somewhere in Athens, about half a century ago. Similar to the room of Ulysses, definite separation from the one we love is the core of both experiences.

In the third *Room for the Broken Hearted,* more than two senses are activated: two strangers, a man (participant) and a woman (performer) meet inside a bedroom with a

single bed and a bedside table with a lamp on it. They sit down on the bed and meet silently for a few minutes chewing a gum and meeting, like teenagers. Then the woman puts a pillow between them and reads out loud an abstract of an erotic though naive book. The atmosphere is intense and she often sprays herself and the man with rosewater, a scent that is pure and romantic, like adolescent love. The drops of the rosewater refresh the atmosphere and the skin. After both in turn read about two people making love, and smell roses, they dance close to each other the song *Love me tender* of Elvis Presley. They dance closely; they touch each other romantically and respectfully, like people used to dance in a younger age, or in the past. In this way, men participants can recall a love they may have had when they were younger, probably many years ago. Participant 4 described his experience in this room:

> "Angeliki [the actual name of the woman performer] was entering inside [the room]; you were watching her reading a viper, she told you to read, but not like Angeliki Papoulia or an actress. She was a girl; a girl in a room, in any city, and you are coming through the door as a spectator – like a camera that records this scene. You penetrate into a personal world... The rosewater, her reading the viper, this girl made you play a role: become fifteen again. There was a certain significance that moved me emotionally."

In the fourth *Room about Politics,* a clown is waiting for one participant to come in a cinema auditorium. Throughout their interaction, there is a strong antithesis between the tricks and laughs with the clown and the seriousness and significance of the discussions that follow: the moment they sit down a sound of fart is heard and most participants laugh. The participants firstly watch the clown playing and trying to make them relax and laugh, until the old hymn of the socialist party is heard. Suddenly quite important issues are brought up: participants are asked about their relationship with their parents, their political position, if they fight for their beliefs, if they take any actions to make things better, and more, which makes people quite serious and stressful again. At the end, the performer reads a list of rather extreme measures that should be taken to improve our world and the participant is asked to make and read his/her own list, right then on the fly. At that point the performer and the participant exchange their positions so the latter improvises his/her measures while standing on spot, and the clown is now sat down attending as audience member.

The *Room with View* is the only performance space that is not actually a room but the terrace of the building with a beautiful view of Athens. The performer puts on small flare bombs and passes them on participants, while sharing memories and imaginative stories, regarding different time periods. By setting every time a different year, from the past and the future, participants remember or imagine things that have happened or could happen in their personal lives, both sad and cheerful, while holding small flare bomb that soon while be off. A quite emotional experience emerged in a minimalistic place with wonderful overview of the city participants probably live in. Sharing our lives with strangers can be liberating. Starting from time periods that are close to present time (2009 is the year of the performance) in the past and the future, to more distant times, people start from sharing memories and imaginative scenarios for as long as the small flare bomb is on fire. Memories resemble small fire flames in that they are never stable in form, they are immaterial, and last so little.

The sixth *Room by the Sea* includes a fake sunset, a fake beach, two deck-chairs, and two strangers talking about vacations and memories of their youth, reflecting on the distance between the person they used to be and the person they grew up to be. As the person describes his memory of a favourite sunset, a song is usually related, according to the participant. This conversation brings up fragile issues, like the goldfish the participant is asked to hold in his/her arms while sat; issues about probably happy and careless years, and how things have turned up differently. The participant and the performer are talking while the sun sets on the sea in real time video projection on the wall, listening to the song that accompanies his/her memories. Emotions and feelings are incited in parallel in the rooms of Katerini bridging together different lives and time periods.

Similarly in *Situation rooms, realism is a primary objective as* Wetzel described, explaining that the Rimini Protokoll consider their work "a chance to explore and enjoy realism". And they were proved right, according to the interviewees: Participant 7 expressed that the performance activated his entire senses, feel in this way transferred each time to a different but real world. Participant 6 also recalls from her experience:

> "I liked the feeling of the coat over me, the smell of the soup so much, although I did not eat it of course... I liked very much a small yard and a terrace, with clothes hang to dry and a staircase you could climb and see a flag suddenly being hoisted far away. I really enjoyed this feeling at the terrace - the feeling I was outdoors at a real terrace".

Most of the props and elements included in each room seemed real. For example, they were worn enough to appear so, or there were cases, like the bulletproof jacket and gloves, which were actual equipment used in certain circumstances a life may be at risk, like in case of a spy. Concerning the senses stimulated, the first basic ones, vision and hearing were augmented by technological devices, as participants were equipped with iPads and headphones. Apart from the obvious interaction through vision with the other people, the surrounding physical environment and the digital world of the screen carried all the time, participants had the opportunity to: shoot with a gun, watch others not as co-participants but through the eyes of a spy, see other people in court as layers, or in the field as free shooters, see a flag being raised from a terrace, and more. Concerning hearing, besides the narrator and the instructions through the headphones, there were multiple recorded sounds, synchronized to the action of each story (for instance when the gun is fired, or bombs are sent to explode a place), as well as live sounds made by the ongoing interactions in each room. Respectively, smell was discretely stimulated in cases, like the hygiene environment of the hospital, and the steam coming from a train. A soup also waiting for participants to be served, smelled and even tasted made a great impression to everybody, in the room with the refugees. The experience of eating during the performance proved to be quite shocking for some people, like Participant 7. Finally, touch was also stimulated as many tactile actions were included: opening doors, feeling the sand on the floor or small rocks under your feet, use specific tools that experts work with, use the computer, put on to you or somebody else a coat and a hat, shake hands with other participants as instructed, and more on.

In all cases, participants had the opportunity to get immersed in realistic physical and mixed-reality worlds and interact with performers and sceneries in physical, emotional and

mental level, while opening critical social and human matters (war, lose, love, youth, and more). Their interactions evolved in many levels and many participants were eventually significantly affected, judging from the responses and descriptions of the ones interviewed. Sharing, like giving, though as communication practice may have many shades, as different needs and/or objectives are aspired to be fulfilled. Giving or sharing something that really feels like a gift to the receiver is a more qualitative approach, which definitely extends far beyond the objectives of this research to analyze in depth. I only mention it though giving in this way a warm shade to the human interactions designers and directors aspire to induce; interactions that sense and feel like a gift to those participating.

6.4.2 Trust is built in time through boundaries

Apart from spatial and temporal boundaries, personal limitations are also necessitated during social intercourses for meaningful and qualitative experiences to emerge. Especially, in interactive artistic events, audience members need to feel unbreakable limits are set in advance and kept during the show in order to feel comfortable and get engaged with the process. These limits refer to the social and personal norms people are accustomed to follow in multiple levels: physical, ethical, emotional, and more on, varying within different cultures, social groups, and time periods. However, anxiety can be valuable as concentrates attention, reducing distractions, e.g. some performers welcome a certain amount of anxiety to help them focus on their job. Beyond this limit, anxiety can evolve into fear and blockages are configured during our interactions with others. As long as people with different and personalities, needs, cultures, habits, desires, criteria, and more, come together to meet and interact in deeper levels, safe limits are required so individuals feel respected and comfortable to participate and unpleasant encounters are prevent.

Particularly in case of artistic events, the conditions created, although usually based on daily routines and situations, are aspired to be contexts for people to open up and express themselves. Audiences are invited to be themselves, even expose themselves, through (more or less) scenario-based experiences. People always fear of behaving in a socially unacceptable way and dissipate their social image. According to John Britton, most of human behaviours are based on different levels of fear. As audience members the main thing we are afraid of is to be made a fool of, although an "aesthetic experience offers us the chance to access in some safety emotional states that in a more interpersonal relationship we might be afraid of exposing, either because we are afraid of what other people might think of who we are". Nevertheless, the less we judge and respectively defend ourselves against social criticism, the more open we are to experience current situations and come closer to others. Directing an artistic event, especially a live one, involves organising actions and potential sequences of interactivities wherein participants can feel that they do not need to: defend their selves, act against their own free will, and/or fear of appearing ridiculous or asked to do things they cannot manage. In Britton's words, about his job as a director:

> "I have to make you feel safe. And safe means free of judgment. Free of physical danger of course but also of physic danger… I always suggest that the key answer is by being really clear about what they are expected of and

what they can expect. I'm not saying though that you should tell them what is going to happen".

In order to achieve so, he further describes that simple, clear and direct information is given to audience in advance, to built trust, make them feel relax and enjoy the show:

> "We blindfold them and suddenly make them more akin to something, or tickle them, or frighten them that they would be made a fool of. So I always say to the audience beforehand: 'nobody is going to make fun of you', 'nobody is going to make a fool of you, we are never going to touch you', or perhaps if it's necessary 'you are only going to be touched by pieces of cloth', or 'very gently', or 'you are never going to be touched on the feet' - so that the people know the rules... They can then sink into allowing their emotional reaction to emerge".

In case of the three artistic live events under study, personal boundaries were approached with similar views but specific differentiations were remarked as well. Initially, the general impression I had of all interviewees is that they felt comfortable during their encounters with the performers and the other audience members. Few moments of embarrassment though were common during the beginning of the event to comprehend the overall context, and few incidents were also noticed when specific limits were crossed (see subchapter 3.6.5). Particularly, in case of *Situation Rooms*, although the subject under search is dramatic, i.e. the war industry and those involved in many and different ways, the interactions incited proved to be pleasant and challenging, but eventually not risky or complicated in physical or any other level. Individuals had the opportunity to experience moments of the experts' lives, and step in their shoes in difficult situations (like heal a patient as a surgeon, move like a spy among others, wait for hours to kill people as a free shooter, and more). In Participant 7 opinion:

> "You were not made at any moment to do things that would have made you feel embarrassed. I think they [the directors] could have challenged people more, as the subject [war industry] is suitable, if they wanted... But I think that would be overwhelming".

As there are no performers, only participants, they were incited through iPads given in advance. In *Situation Rooms* trust is gradually developed through the effectiveness and reliability of the technological system guiding complex and parallel interactions throughout the role-playing event. As long as participants follow the instructions continuously given throughout each role, everything is orchestrated according to a perfectly organized - although compound - scenario and stress is gradually conciliated, as adaptation to the environment and the rules is developed. Participants are soon asked to follow very specific instructions, indicating that the people behind this artistic work know exactly what they want to incite and how to achieve it. Participants confide in the iPad to guide them through each room and role with clarity and respect via images and written speech, and as a result each story evolves as planned.

In addition, the amount and quality of information passed on from the experts to the directors, and eventually the participants, flourished out of trust. Experts share information

about their real life, far from our ordinary routines, as well as how they struggle to stand with dignity while facing adverse situations. The narrations involve indicative moments of being a soldier waiting prone for seventy hours to accomplish your mission, intercepting information as a spy, being a refugee from Syria, or a first lieutenant in Indian air force. Daniel Wetzel described their repeated meetings with the experts as fundamentally trust needed to be built in order for the experts to share real and important information of their experiences. This quality of the work of the Rimini Protokoll did not only bring into realization intriguing stories to share in a later stage with participants, but also enriched the overall result through its realism and confidentiality. When participants realise these are real stories happening by real people, in a much different and possibly distant place in this world and not fiction, the significance of the information gains more weight. Real people trust the artistic process to communicate their lives and perspectives on the war industry, to enlighten the issue and promote a human viewpoint from within.

Accordingly, the Blitz Company concentrated on creating trustful relationships with their participants as in *Katerini* the issues aspired to be raised are also almost impossible to approach without having first configured such a stable base. For Participant 4, the performers initially catered for making the participants feel relaxed and comfortable and be more prepared to open up and communicate, before proceeding any further. They helped so with several ways and particularly with small details in their behaviour that actually made the difference. Such minor things are difficult to describe in details, like in everyday interactions, but their quality has proved to be affected when experienced. In *Katerini*, performers kept calm, discrete and consistent eye contact during this stage of connection with participants, while keeping silence or asking simple questions, like the name of the other. In the Room of All the Lost Letters and the Room for the Broken Hearted participant and performer were eating a chocolate bar (named 'kiss') or chewing a gum together in silence before even introducing themselves. The approach is gentle and calm and basically needs time to evolve. In the Room of Ulysses, the teacher checks the names of everyone present, just like in a real classroom. Performers gave time to people to feel they can relax and even trust this process will not embarrass them or make them exceed their limits. Giving time can be quite abstract though or subjectively perceived; in case of *Katerini* though comprehensive research on the matter concluded in a firm but flexible time plan and balance in order to maintain the flow of the experience as well as the scheduled duration of each event and the overall work. Another critical aspect applied is the play throughout all interactions which contributing at establishing a joyful atmosphere in the rooms. For instance, in the Room about Politics, a sound of fart is heard the moment the participant is about to sit down before anything else has occurred, making him/her smile. Later in this chapter the play is further analyzed as essential component of interactivity succeeding in multiple objectives far beyond entertainment. In case of *Katerini*, contact is progressively established through the senses (like eye contact and eating something sweet), simple conversation, and funny incidents, giving space and time for trust and excitement to bring people few steps closer to each other for deeper interactions to be realized.

6.4.3 Emotional engagement

Human experience and interaction involves emotion as "a resource for understanding and communicating about what we experience" (Forlizzi & Battarbee, 2004, p. 264). Emotions are essential means not only during living through our experiences but also for expressing our views and memories. In the three performance events under study, emotions were incited in all cases, but different weight was put in each art work. The *Situation Rooms* of the Rimini Protokoll present aspects of the reality through the eyes of experts, regarding the war industry. Their intention was mainly to inform participants of the current compound - and partly revealed – situation, and to avoid dramatize this already cruel and inhuman matter. The general feeling after participating in the project was nothing but devastating; people had principally the opportunity to step into the shoes of the experts and empathize with them without having to lift the weight of the situation reflected. In *Fake time @ Ariston Hotel* participants were deeply touched in moments according to the interviewees, and moments when certain boundaries were crossed, resulting at intense expressions and circumstances. There seemed to be incidents people remained unaffected and certain instances that things seemed out of control, as analyzed later in personal boundaries (see subchapter 6.5.5). The wide spectrum of noticed behaviour - expected to unforeseen, 'appropriate' to 'unacceptable' - was nevertheless among the objectives of the director (Lela Ramoglou), and emotions worked as catalytic agent for such experiences to emerge. Thirdly, the Blitz Company concentrate on emotional journeys for their audience. Especially in case of *Katerini*, they created a very emotional art work, due to the subjects raised (loss of youth, of someone that passed away, of love, of values, etc.) and the gentle and respectful way performers approached and guided participants into emotional interactions. Three performance events with three different approaches on how emotion colourizes and affects our experiencing a situation (*experiencing* - present time) as well as a means to comprehend and communicate what actually happened (*an experience* - past and future time).

The directors of *Situation Rooms* consider audience emotional involvement to be critical during the seven minutes of each role, to understand how each expert is involved in the war, to feel like the expert does, to empathize with him/her. Therefore, the audience is given multiple pieces of information to experience how, for example, a surgeon feels operating wooden patients under a tent, near a war zone; or how a shooter feels when waiting for seventy hours prone hidden to kill people that may be the enemy, immigrants, or ambiguous figures passing by the field of target. But although participants might have been drawn to the horror of war, during their parallel journeys, they were never incurred the emotional weight of the experts. According to Participant 6, although participants were never directly guided to any emotional situation, even experiencing a realistic simulation of the conditions the experts faced is intense, even overwhelming, and capable of helping participants step in the experts' shoes:

> "I never felt I was guided to feel something in specific. It was on each of us to feel something or not; no emotion was forced to anyone. The stories though were structured in a way that appeared detached somehow... The expert was telling his personal story, but could not force any feeling to you, make you upset or cry... I do not need to feel like the soldier feels. It was like a process when someone tells you about a dream or an experience, for

example someone crashed his car, and you feel him crashing, you empathize with him… But if you are put in a car and experience how the control of the car was lost, then you can understand exactly how he felt".

Respectively, Participant 7 got emotionally involved in a couple of occasions he is more familiar with, but in general terms he was not engaged in a deeper level, as the rest of the cases seemed so strange and distant from his life to empathize with:

"I felt close enough with some [people]. I was touched by some people and their stories more than others… but as I love receiving and reflecting on information, this aspect was more activated to me than the emotional one, meaning to find more things about it [the war industry], to get more information… There were definitely few emotional moments - like the stories that took place in the room with the soup - which were more emotional than others, as they had to do mostly with people and their everyday lives, unlike other stories which dealt with more distant situations, i.e. how to make weapons, how to run an aircraft… Such situations do not probably stir up emotions as very distant from our lives… In contrast one can find details in most everyday stories that can trigger emotions. If my personal experience is closer to a particular role, for example the doctor, I will definitely experience this story more intensely than for example the Russian housewife".

In times all interviewed participants were touched by the stories they experienced to a greater or lesser extent. Specifically, Participant 6 shared regarding the free shooter an interesting point:

"Some stories were overwhelming and there were some things that I had never thought of, or knew. For instance, the soldier in Gaza who must remain motionless, lying prone for 70 hours – isn't that terrible? He [the soldier] says 'in front of me I see people I do not know who they are – they may be innocent civilians fleeing to migrate, or may be the enemy, and I have to shoot'. This shocked me. It shocked me because I was there and listened to the sounds of the night and the silence, and I was immersed in the state of madness this man may have been. *If you had not that much information…*"

As she further explained, she was more emotionally involved in situations when she did not perceive significant amounts of information. When experts were describing their work in a neutral way (making guns in a factory, or the woman activist fighting against the war industry), the interviewees seemed to be less emotionally engaged as they needed to process the information they received. In the contrary, other stories (like the immigrants' or the Russian housewife's) were more centred at the human aspect of the war, and this perspective helped participants actually approach the experts' feelings more, and come a step closer to them. For Participant 6, in specific stories significant quantities of information created a sense of distancing with the experts, as if there was no time to comprehend and

empathize with them at the same time, which along with the joy of play (analyzed in the next subchapter) helped participants avoid the emotional weight of the experts.

Furthermore, in Katerini, directors put the audience in the centre of action and coordinated 'emotional traps' to incite audience participation to share their views and stories with others present. As Valais asserted, on behalf of the Blitz Company, their emotional traps 'aim at the thyme', but also stress that there must be a "specific plan for the individual to fall into the trap". Valais explains that in interactive theatre certain 'traps' are put that are definitely real and not symbolical. For example, in the *Room of All the Lost Letters* a dialogue is read from the (male) performer and the (female) participant. This dialogue is part of the Greek movie *The Counterfeit Coin,* which later both watch on a laptop screen, as the man and woman in the movies break apart for ever. Valais remembers that many women were crying and he was also deeply moved when they read those lines:

> Woman: And my portrait? How about my portrait?
>
> Man: It is the only thing I have kept from you. And every time I am alone I always look at it and it tells me "I love you!"
>
> Woman: I love you too!

He also clarified that they intended to create a deeply affecting performance show, explaining: "when we refer at the loss [in the Room of Ulysses], the point is to transcend the story of Ulysses and his mother and use it as a means to talk about his [the participant] own loss, because this is why we are here for: to talk about *his* loss". This art work negotiates the loss in multiple ways, and experiments on how emotions are a powerful medium to communicate and share our inner world. Emotions are incited as a medium to set in motion and displace something inside the audience. The directors aimed at a short of awareness to be realized; an emotional and in extension psychical movement. Specifically, Valais talked about how they organized the flow of events in the *Room with View:*

> "There was a sunset by the sea projected on the wall; a fake sunset in a room with two sun loungers for two strangers filming each other, while the sun was setting in real time duration, approximately fifteen minutes. The performer asked the participant: "what does this [the sunset by the beach] remind you of?" and you may have answered "it reminds me of my vacations", "what vacations?" and the story starts unfolding. Then the performer asks "did you listen to any song back there?" and the participant may have replied "yes, it reminds me of when I went with my parents and we heard that song…" The emotional path we proposed was to talk to a stranger about your memory, about a related song on a beach, and simultaneously reflect on several matters. Besides, there was a person hiding near them all the time, whose job was to find and play this song [through a music player], so the participant could hear it in low volume. It was very touching indeed…"

On the other hand, Participant 5 recalls her experience in the room to be relaxing and tender due to the atmosphere created. She remembers the sea and the sun that was setting

in the sea in real time, and her holding the fragile goldfish in a ball in her arms, another calming and affectionate element. She was also deeply moved when she could remotely hear the song she had mentioned earlier on the speakers, as if a marvellous coincidence happened, something moving but random and very intense though. In accordance with Participant 6 and Participant 7 view that at no time during their experience in Situation Rooms did they feel conducted to enter a specific emotional state, Participant 4 and Participant 5 expressed the same standpoint for *Katerini*. They were both deeply moved and Participant 4 enlightened me saying that he personally was emotionally moved because he was never forced to do so. He supports that the performance gave him the freedom to move by his own free will. Although the directors set 'emotional traps' for the participants, the latter felt free to get engaged and not forced to get in a certain emotionally situation. And they were so moved, four years after their participation in *Katerini* still describe their experience as unique and astonishing.

Lastly, Ramoglou claims that in *Fake time @ Ariston Hotel* people were essentially moved in particular scenes even if they had remained spectators of the occurrences. Talking on behalf of all performers she said that they saw many people, especially women, crying when the young businesswoman lost her unborn child – some of these may have experienced a similar event in their personal lives. Ramoglou described the case of a student who started a personal dialogue with (the performer playing) the 'authoritarian cop' to communicate her problem: her brother kept beating her and also did not let her out of the house. Eventually their contact proved to be very helpful for her. She also referred to cases of women who wanted to divorce their husbands, or had certain issues in their relationship with the mother, and they spoke very openly about their problems on the floor of the starting point, and specifically the scene with the apple she performed.

The two interviewees also illustrated intense feelings to be emerged during their experiences as well to other participants around them, which are nothing but pleasant. Participant 2 told me he was really sad, almost cried, during the scene of the baby miscarriage on the fifth floor, and a feeling of revulsion for the decadent aristocracy who took the baby and grind it to eat. He adds: "I saw many girls next to me crying; I was really touched". Participant 3 remembers that she was shocked when a member of the aristocrats threw the businesswoman against the wall next to her. She said she was terrified as she felt the woman's pain while crashing on that wall only centimetres far from her. Participant 3 was also terrified when she saw the businesswoman being actually buried to the ground from other performers, and these two incidents were so powerful she can recall in details even after a long time.

Concluding, in case of the *Situation Rooms*, the two interviewees raised the following issues, according to the interview material: 1) experiencing a realistic simulation of a certain condition can be really intense and capable of stirring up not only cognitive but also emotional engagement; 2) the familiarity of the issues raised can affect the level of the emotional involvement; and 3) in case adequate quantity of information is delivered less emotions can be stirred up (at least consciously) as time is needed to process and become aware of the effects of the experience in emotional and cognitive level. In *Katerini* participants reported that the 'emotional traps' they experienced were mostly successful as they was not pressure put in any time in emotional level, during their interactions with the performers, and this freedom indulged them to get deeply engaged and emotionally

touched from the stories participating. In this point they are in agreement with the interviewees of the Situation Rooms, who reported the same parameter as effective. Finally, in Fake time @ Ariston Hotel the interviewees refer at the realism of the performers' play, as well as the small distance they had from the point of the action as they could literally touch performers, as factors that contributed to their emotional engagement, throughout the play.

6.4.4 Play, lightness and surprise

A common axis in all three performances is the significance of play. Most of the important issues are raised through play, making the interactions lighter, warmer and more joyful, without however turning them into superficial. Play is a very serious practice to do, although it is often associated with childish behaviour. John Britton prompts performers, while directing and/or training them, not to perform but play; *"don't perform, just play"*. By inducing performers not to perform he implies *no to pretend* (to be someone else, an action, etc.) but actually find and express their truth, out of their own pleasure, i.e. out of play. Respectively, there is no point in participants acting out a role they are given out of a sudden, as they are not qualified to respond under such conditions. It is essential though audience members participate not to conform to instructions or prove anything but to find pleasure, not in the mere sense of superficial entertainment, but in meaningful and qualitative experiences. Specifically, in *Katerini*, *Situation Rooms,* and *Fake time @ Ariston Hotel,* participants were emotionally moved, partly due to the playful way serious, depressing and painful matters are raised, according to the interview material. For example, in the *Room about Politics (Katerini)* the interaction starts with the clown-performer making tricks to make the participant laugh and feel comfortable, and continues with a conversation on childish songs. Following, the condition is overturned completely and unexpectedly towards the political status of the contemporary world, as well as the personal responsibility of each civilian. Moreover, in the *Situation Rooms,* participants are asked to relax and serve soup, while listening to the story of the immigrants to freedom, or lay down on a bed as if they are patients and let another participant treat them well as surgeon. In *Fake time @ Ariston Hotel*, a police officer asks participants in the police station to identify a criminal among other participants without any evidence, or spy other floors through cameras, or even being kept in prison for some time. Through such interactions participants can experience a simulated situation of having control and power to dominate over civilians. In all cases critical though different issues are brought into consideration and further speculation, through light-hearted and humorous interactions, maintaining nevertheless the significance of each situation and avoiding frivolous references.

On behalf of the directors of *Katerini,* Valais expresses their objective was to bring together people to share the matter of loss in a playful but substantial way, adding that life is not only serious and stressful. As he explains, the loss is a key issue for him: "you always lose; even when you are young you lose: you lose your childhood, you have lost your own mother, the meaning of motherhood. All life is a continuous loss in that sense". Hence, the Blitz Company approached the subject without any intention of creating psychodrama, or guide participants undergo drama therapy at all. Multiple issues of loss are raised, regarding a world that has long passed but is imprinted in each person in a different way. For instance, in the *Room of Ulysses* participants as students drew with pencils a sketch picturing them

and a person they love who has passed away and explained in front of the class what they would say to that person in case they met. All pictures were stuck on the wall of the classroom and next group of participants could see these pictures covering the wall with a bittersweet feeling. Participant 5 describes her experience in this situation with words like: childishness, innocence, maternal figure in terms of the teacher-performer, and tenderness when surrounded with sketches of other participants meeting and talking with the people they love and lost for good. She supports that the directors approached the matter of loss without the (psychical) weight it contains, in a way that moved people without forcing any emotions to be expressed.

Respectively, the director of *Fake time @ Ariston Hotel* asserts that in collaboration with her associates, "a playground is created for people to come, play and discover". They concentrated on the realism of the scenery as well as the guidance of the performers to make participants feel comfortable to play with the props, and others present; to realise they are 'free to discover worlds'. In Ramoglou words:

> "We want participants to mesh around, to paint the walls; if something is broken we are fine with that, if something gets on fire we will extinguish it... We want interaction; this is playground!"

An essential element of playfulness is surprise that maintains the magic of the game or the art work. When things happen that are least expected –respecting at the same time the boundaries of participants – curiosity and interest are raised increasing the involvement of participants as they feel intrigued to discover how things unfold. Participant 7 claims that the scenery of *Situation Rooms* along with the narrative structure guiding him through the different rooms made him curious and incited him to continue. As he describes, every time he opened a door, he was transferred to a realistic and different world, and he mostly enjoyed this quick transition. He felt like participating in a game or a movie, as suspense was raised every time new senses were stimulated from the surrounding environment, just by following the instructions of the iPad. As there was no information to prepare participants of the next role or story, every seven minutes the scenery and the action was unforeseen (especially in the first couple of roles they played) and participants could make a fresh start, interweaving at the same time the puzzle of the war industry through their personal experiences.

Lastly, both the interviewees of the *Situation Rooms* refer at cordial emotions in their experiences, which although quite short in duration (each role lasted seven minutes), the effect was rather significant as they describe. Participant 6 was impressed by the fact that although the stories were nothing but pleasant, instead there was pain, misery and war, when the participants exited from the event, all seemed very happy. She supposes that they may have been fascinated, like her, by the interaction through the iPad, which seemed like a toy for adults, and the interactions emerged: she was asked to do certain things while discovering the experts' world and she experienced every story unfold like a game. As I mentioned earlier in the emotional involvement (see subchapter 6.4.3), according to Participant 6 view, participants never experienced any kind of pressure to actually feel the (emotional, ethical, etc.) weight of the experts, especially in stories there was a significant amount of information delivered to participants and emotions needed more time to be realized and processed. She describes about a necessary distancing from the experts,

enough to empathize with them but adequate at the same time not to be oppressed. This distancing was achieved through long narrations as mentioned, and a feeling that their experience is actually a serious game, keeping them in this way light-hearted. Participant 6 also says that she spoke with other participants and conveys a common impression: this combination of serious playfulness is a result of people (directors) who have long experimented to bring such a successful result, know exactly what they want and how to achieve it. This impression may be subjective, and is quoted as so, but the significance of Participant 6 opinion is that it makes apparent how trust is built among participants and directors: through respecting the audience personal boundaries. There is no need for participants to carry the weight of the experts through their usually overwhelming experiences in life, but expand audience perception by presenting diverse perspectives on a compound issue, through play, joy, information and further contemplation.

6.4.5 When personal boundaries are exceeded

All audience members stressed the necessity of limits in the way they are treated to feel comfortable, trust the artistic process and get engaged. People need to feel respected, meaning no limits are crossed during performance interactions in any level: physical, ethical, emotional, among others. Since people with different personalities, needs, habits, and desires come together from different cultural and social backgrounds, certain boundaries of behaviour are needed to be set so that everybody feels respected and pleasant to participate. Audience also need to feel that the directors will not trap them into unexpected situations wherein they will feel embarrassed in any way. In many cases, audience members prefer to remain spectators during interactive forms of theatre and performance but avoid participate, to prevent unpleasant encounters and get exposed in front of strangers.

Nonetheless, an artistic experience comprises a specific situation directed to be safer than everyday life to express myself. An artistic creation is a protected condition probably to be myself. I do not need to defend myself, do something I cannot manage, do something I do not want to, I am safe to do as I please in certain limitations. There is an organisation of actions, interactions, events among which I can choose the way and the amount I desire to participate. Still, audience members always fear of becoming ludicrous, like in any social interaction, and unbreakable limits are needed to be set in advance. John Britton also trains performers of physical theatre, and in his lessons supports that the less critical we are regarding our behaviour as well as the behaviour of others, and the less we need to defend ourselves, the more open we are to experience things and come closer to others. Acceptance and respect are two keystones for fruitful and enjoyable interactions during artistic events.

The director of *Fake time @ Ariston Hotel* Lela Ramoglou further acknowledges that personal boundaries are not evident hence performers should not put much pressure on audience members, especially since there are many parts of the performance that are based on improvisation. Nevertheless, the directors' objectives determine how much pressure is adequate in accordance with the result they aspire to create. For instance, her work *Fake time @ Ariston Hotel* challenges participants to find their limits, and in occasions, certain limits were crossed with desirable but still unexpected consequences. In Ramoglou's words, "the limits are so thin, but we want to challenge them, because in order to make the

transcendence one has to overcome these limits, up to a certain extent". According to Participant 1, in *Fake time @ Ariston Hotel* audience members had the opportunity to simply refuse to participate and remain just observers of the overall event. However, she also associates the fact that she did not feel awkwardly at any time with her professional experience as actor, otherwise she is not positive of what her feelings would have been. For Participant 1, nobody was made to do anything against his/her will; "somehow it was always your choice whether to get engaged in the process or not" she said. Still, there were incidents during the *Fake time @ Ariston Hotel* the limits were not only found but exceeded as well: Ramoglou remembers that on the floor of the police station, during the action the policemen took the policewoman in their arms and carried her out of the sudden, without having agreed on that development in advance. The performers-policemen did not know she does not want to be touched, and she started losing her control and shout. She added that "as a director you should expect such things to happen and you are responsible for everybody to be all right". She also recalls how a participant suddenly gave a woman performer a prod and told her: "let me go, I cannot stand this anymore!", while they seemed to have gone along fine with each other till that moment. The performer was shocked and complaint at the director about the incident and the risks they take in every performance. Things were made even worse: as Ramoglou also asserts that two students came in the performance space and actually broke things purposefully, like a video camera, and another woman participant sued a male performer for abuse. On the other hand, certain incidents were fruitful for the participants exactly because certain limits were pushed. As Ramoglou portrays:

> "I had once an interaction with a person, who had just been at the police station, and there he lived a certain incident, he came and talked to me about. He told me: 'thank you for giving me this experience in the police station, although initially I didn't like it at all'. He told me he had a very bad experience before in a police station, so in first he wanted to leave, but eventually things evolved so differently, he was grateful of the experience he had".

Respectively, from the eyes of the participants interviewed, two incidents were reported the first one in the police station area and the second one in the decadent aristocracy area, described by Participant 2. While interviewed, what was remarkable was the change in his mood. At first, he was delineating how smoothly everything occurred, that he participated in joyful interactions, how comfortable he felt during the show and only made a small deference about an unpleasant incident at the floor of the police station. As our interview continues and more details are enlightened, he reluctantly started sharing his real feelings about this incident. A few moments later, he was describing how shocked he was about the fact that the aristocracy abused the businesswoman (performer) and made her loose her unborn child. At this point the discussion was about the fact that what is happening on stage can affect the audience so deeply to lose any track of reality and believe the actions of the performers are real and not part of their role.

> "This year [the second time he participated in the show] I was really angry at the policeman with his insistence in pulling me around the place. He did

that quite violently and I wanted to beat him up at that moment. I did not feel comfortable staying that long in a room or point at the killer but I did that too".

Apparently, while experiencing these performances participating were sometimes gently incited to break their defensive lines and open up even slightly to the world of another person, distant (like in case of the experts in the Situation Rooms), or so close you could actually touch (*Fake time @ Ariston Hotel* and *Katerini*). In both *Katerini* and *Situation Rooms,* directors did not intend to put any pressure on people in physical or emotional level, therefore participants at no time felt they had to carry the emotional weight of the stories they were involved. However, in Fake time @ Ariston Hotel certain incidents were reported indicating that specific boundaries were crossed, some deliberately, according to the direction and the objectives of the play but some emerged during improvises interactions with the audience with unexpected and intense results.

6.5 The *compositional thread.* The narrative structure of enactive participation

6.5.1 One coherent synthesis of stories evolving simultaneously

The narrative structure of a live event that embraces enactive participation is fundamentally differentiated from one that merely incites conventional participation. In case of interactive work, directors and designers are 'authors' of usually remarkably complicated 'scenarios' as they endeavour to include and associate an element that is fleeting and unforeseen by definition: human interaction. The interactive participatory work includes gaps in its narrative structure, parts which are also thought through, but open up to audience participation (White, 2013, p. 30). Performers, as actors and facilitators of audience participation, are mediators of this creative process unfolding differently every time performed according to audience response and collaboration. Participants' interaction with the scenery, with other audience members and performers fill these gaps - also structured and scenario-based - forming a unique outcome every time performed. In such events, a group of audience members enter the event place simultaneously and participate collectively and personally at the ongoing work. Participants' engagement, in emotional, mental and physical level, necessitates space and time to emerge within the environment of the performance, and boundaries to evolve according to the narrative structure. Enactive participation requires physical and behavioural boundaries to unfold without irritating or troublesome results (as analyzed in the first part of this chapter) exactly because of its evanescent and unpredictable nature. Designing enactive participation involves a structured story that incites audience personal engagement and interaction, meaning one story comprised of many stories that happen simultaneously combining scenario-based and audience free performance (see also chapter 4.6).

All works under study include stories associated with a particular thematic that evolve in separate rooms in parallel or even simultaneously. Particularly, in *Katerini* participants were instructed to visit two rooms and remain in the public space for as long as they please.

On behalf of the directors, the overall event is a compound and demanding project: for five and a half hours six performers in six rooms welcome audience members to enter and get involved in one-to-one and/or one-to-many interactions. Six performers are engaged at the performances that take place in the equivalent rooms, as well as at the small happenings at the public space. Few more performers are responsible only for the action at the public space, like in case of the questionnaire and how people are guided to go to specific rooms according to the answers they gave. Valais recalls he had five and a half hours to perform with (women) participants in the *Room of all the Lost Letters* and to also read out a text in the public space during his twenty minutes break. Regarding the *Room of all the Lost Letters,* a main key string of possible interactions was configured through numerous changes and rehearsals by the Blitz Company, and this structure was sustained during the interaction with every audience member. This main string of interaction though was open and responsive to audience participation, leaving the performer the time and space to behave naturally; not like an actor acting out his role while someone is merely watching him. For example, in the beginning Valais offered women a chocolate bar and they usually ate it together, but there were cases that part was omitted as some of the women did not want to eat it. In the mid time, in the *Room of Ulysses*, participants are asked to draw a picture of them meeting someone they loved and had died. Some people chose to present their work in front of everybody present but few of them denied doing so. Some people talked about their cat they loved dearly, some provided their audience with multiple details of that person and some referred only at few basic elements. At the same time, in all of the six rooms an action was evolving, and participants responded accordingly, shaping with their collaboration the overall event. In case of *Katerini*, there was not a single story to interweave all stories together. Nevertheless, people did not feel any gap or dissociation when passing from one room and story to another or as an overall experience. Each story was so thoroughly and aptly organized people felt safe and comfortable. People had the appropriate time, the space and the condition to feel comfortable and open to the performers in one-to-one relations or one-to-many interactions. The majority of participants, according to the interviewees, were actually incited to get involved in the individual frames of interaction, contemplated on issues raided and shared their view and memories with the performer and other participants.

Similarly, in *Situation Rooms* thirteen audience members were given ten (out of the twenty in total) roles, followed simultaneously in the seventy minutes of the event. Each participant followed a different sequence of roles (totally thirteen different sequences were directed), all related to the war industry. When Daniel Wetzel was asked he could even memorise all the sequences played at the same time of the thirteen participants – nobody present in that conversation could easily keep track with such quantity of information. Directing all aspects and possibilities of interaction in live participatory events can definitely be a challenging and demanding task. All incited and possible encounters need to find their place in the main string of interactions, organized and appropriately synchronised (to the extent that is feasible) to create meaningful and qualitative experiences, according to the scenario of the event.

However, in case of *Fake time @ Ariston Hotel* the cohesion of the overall interactivity and experience seemed to be faint, according to the participants' view. Specifically, even though the seven floors of the former Ariston Hotel were turned into fascinating scenery

shaping seven mostly realistic environments, these worlds were hardly connected in a coherent story. As Participant 1 stated the floors were made very different, each one entrance to another world; they seemed as if they were actually created separately and independently (in terms aesthetics, navigation, and more) and they were associated afterwards. In her opinion there was hardly any correlation among the seven floors, or any intention on behalf of the directors to make a type of association. Participant 1 felt she was living within an entirely new condition in each floor, participating in a different story, unlike any other. She found though very demanding and motivating to associate the police department of contemporary lifestyle with the medieval aristocracy. Besides the sceneries, the narrative structure also was not expedient to contain and associate the strings of interactions that potentially took place on each of the seven floors. The basic narrative comprised the story of the young pregnant businesswoman to provide the context with consistency throughout a narrative structure, since as Ramoglou asserted the performers as well as the audience need a story to follow. For Participant 1, just like the coherence among the floors is vague, the association of the scenery with the basic narrative could not facilitate her to comprehend the story of the young woman as well. In her eyes, the director was more trying to satisfy the audience requirement of having a story, rather than making a clear artistic proposal in which this story was indeed serving specific direction objectives.

In terms of the other participants, Participant 2 was deeply moved while present at certain scenes of the story, but he did not follow the actor for long; he did not pay any more attention at the story throughout the performance. Participant 3 revealed she did not understand the story at all; she needed time and help to realize the coherence of this project. She was amazed by the audience participation and interaction as something unique in her experience, so she was overwhelmed by this new challenge: to overcome her natural shyness and step into the action. But she could not see either the connection among the multiple incidents and actions covering all seven floors. In my personal opinion, the impressive sceneries along with the numerous occasions for interaction managed to conceal the fact that there was actually no coherent narrative structure around which all interactions and individual happenings evolve, and this was one of the reasons this story was modified plenty of times and still could not fit with a definite structure.

On the other hand, the director Ramoglou in her interview reported that in the beginning there was no story; the whole project was initiated and configured as an installation. In the meanwhile, she decided to involve audience participation. A story was required to be made, for both the performers and the participants, but that happened after the sceneries were complete. Ramoglou stressed though she intended to put weight at the interactions among performers and other audience members, and not at the story itself. She included this story as required but her objective was people to leave aside this young woman and follow their own route in the performance experience. The director's scope proved to be successful; a significant amount of participants mainly followed as spectators the businesswoman for some time and then moved around the performance space, where individual incidents incited audience in usually one-to-many interactions. However, the thread that would correlate all incidents into a coherent narrative was though indiscernible, leaving participants quite bewildered about the scope of the interactions, an aspect that becomes apparent later when I study the way the performance in completed at an end.

All three participatory works comprised synthesis of stories and interactions that emerged on fly in the several rooms and areas of the performance space. Participants are given the opportunity to experience a part of the interactivities happening in each room (*Situation Rooms* and *Katerini*) or move willingly and decide their own route throughout the play (*Fake time @ Ariston Hotel).* According to the interviews material, directing live participatory events, like performances, is a demanding task and involves creating a compound but coherent structure all potential strings of interaction spring and correlate with, according to specific direction objectives. The more concrete the subject of the work and the notions negotiated–not apparent or revealed but coherent – more meaningful and qualitative experiences are likely to emerge among those participating.

6.5.2 Dynamic stability and framed action

Live participatory events, like performances, are synthesis of props and people, material and interactivity, probably digital and physical aspects; they are organic wholes: 1) consisted essentially of space and time, 2) with dynamic stability, and 3) all their components are self-responsive, and interact as a single unit while retaining their identity. Similar to the *Fourth Order of Desig*n (see subchapter 2.2.3) (Buchanan, 2007) directing live events that incite enactive participation is about creating the context within which interaction takes place. Ho, describes the *stability of organisms*, which "depends on *all* parts of the system being informed, participating and acting appropriately in order to maintain the whole", as *organic* as each commuting part "changes in response to all the others and to the environment" (1997). For Ho organic stability identifies with the *dynamic integrity* of the whole. Likewise, inciting enactive participation entails giving audience members literally and metaphorically space (and time) to enter the performance stage and collaborate with performers, according to specific narrative structure. Nonetheless, audience participation is not embraced unconditionally; it needs to be framed, not constrained though, meaning to be liberated enough to be authentic and guided enough so the narrative structure is sustained. Therefore, a fragile balance is necessitated for the narrative structure between pliability and consistency: the scenario needs to be *pliable* to embrace and adapt at participants' response, and at the same time *consistent* so no intervention can modify the overall content or disorient the overall experience from the direction objectives.

On behalf of the audience, participants need to feel secure and respect to rely on a system or another person, i.e. to feel trust. I have approached the sense of trust from different angles so far, in terms of the participants. Regarding the event structure, trust is partly provided by feeling the narrative structure is concrete, stable and oriented according to a particular scenario, through the guidance and instructions given. Although audience participation or even emancipation is incited, a primary axle is sustained around which every aspect functions, moves and is developed. Unless the direction objectives needs otherwise, audience experiences are not random incidents but planned frames opened though to the unforeseen.

As member of the audience I need to feel I have a choice, getting personally involved is something I choose to do not a responsibility thrown to me all of the sudden. Similarly, Participant 7 (*Situation Rooms*), Participant 4 (*Katerini*) and Participant 5 (*Katerini*) characterised the performance events they had participated as thoroughly structured, and

this ascertainment made them feel the directors behind these events knew exactly what they wanted to achieve, so they relied at the performers to guide them through the event, maintaining at the same time the right to respond out of their own will. Since, enactive participation is a matter of choice (within certain criteria and frames of respect), the overall live and organic whole will be sustained and unfold even if I choose not to participate in this way and remain spectator of the event. Live events, as organic wholes, are definitely influenced by audience decision on the way they want to get involved, but they also maintain their integrity under any circumstances.

Guiding as giving options

Entering the performance space as potential enactive participant involves encountering a bundle of choices. Designers and directors are offering the opportunity to audience members to experience their work in enactive way, but it is the people who decide *when and if* they attend as spectators or enactive participants of the work. This viewpoint is in accordance with Goffman's 'central understanding' as described in his *Frame Analysis:* "the audience has neither the right nor the obligation to participate directly in the dramatic action occurring on stage" (1986, p. 125). Audience members may feel uncomfortable or relaxed, shy or confident, overwhelming or energized; they have alternatives to choose in any case. A critical issue that demands further consideration is that such cultural live events may demand much of their audience, especially in case the audience has no past experience of participatory works (Machon, 2009, p. 60). Machon explains "the audience is expected to experience and interpret a whole stage picture that interweaves live performers with design elements, which may involve various technologies, pre-recorded and live soundcores (including verbal texts)" (2009, p. 60). Having the right and the choice to come in and out of the actual action is liberating and distressful, giving the benefit of a wilful and meaningful experience based on the personal way each person is willing and able to experience the world.

Another important issue concerns the opportunity given to participants of passing from one mode of participation to another. At the beginning of the event, individuals realize their options and usually waver between, following a personal route out of their options, and trying at the same time not to miss the general action. Personally, in all works under study, firstly with embarrassment then more decisively, I was on one hand giving me enough time to live the stories that emerged on the fly and participate without criticising my 'performance'; I was giving myself time to experience this new here and now. On the other hand, I was going back to follow (what appeared at the moment to be) the main stream of action and to the comfortable feeling I would not miss any important incidents of the event. As participant, the challenge about enactive mode is to make choices from available and/or desirable options: as participant I choose the kind of experience I want to have, considering the information I was given every moment throughout the event. Likewise, Participant 3 described her experience of *Fake time @Ariston Hotel:*

> "According to [my answers at] the questionnaire I was sent to the 3rd floor of the recitation. It's been a long time, but I remember that afterwards we moved with my girlfriend up, on the 4th or 5th floor. In general terms, I did not understand the overall meaning. It is impossible to understand what

exactly is happening when you go out of the sudden to a specific floor from the foyer. So I followed other people who were also going up... I was trying to be in many places because they important things were happening and I had no time to interact, to talk to someone else, to exchange views."

At any given time during the live event, a part of the audience participates enactively, while others choose to step or remain outside the frame and attend the whole event as spectators, and the next moment the situation has changed dramatically. A compound and efficient narrative structure is necessitated incorporating and adapting at the audience choices, as well as their right to change these choices as the event unfolds, and in parallel retaining the flow of the work, which is influenced by the individual changes but continues without obstacles.

Respectively, John Britton as director and teacher of physical theatre urges performers to give other performers and audience members the chance to discover what they need for themselves and not decide for them. In his view, being helpful to others is not effective in performance training, as by guessing what other people may want or need, we prevent them from the chance to discover their real desires and/or needs. Borrowing his standpoint and adapting its value in inciting enactive participation in live (performance) events, participants need to be given options to realise they can leave their seats as spectators as well as the ways they can collaborate in the event. They need to acknowledge the overall context (space, time, conditions) as well as the frame of interaction they are induced to choose and follow. Directing participatory works, similar to experience design, involves setting the dynamic context, meaning strings of alternatives options, for audience interaction and enactive participation to emerge.

As previously mentioned in physical boundaries of live event, people need time to realize the available choices can be made. This time depends partly on the experience they have with interactive forms of theatre, and definitely on personal factors. Individuals need to apprehend the differentiality of this type of participatory works, face their fears, and decide it is worthwhile to take the risk to participate, and this process is personal and time consuming, and affects significantly the overall experience of everyone present. According to the interviewees' reports, a significant amount of audience members decided to come and see the play more than once. Many individuals saw *Fake time @Ariston Hotel, Katerini* and *Situation Rooms* more than once out of curiosity and desire. They wanted to experience things they did not have the chance to participate in the first time, due to the limitations given by the narrative structure. In case of *Katerini* and *Situation Rooms* audience members had the opportunity to only access a specific number of rooms and step only in a part of the available stories. So people participated more times to get engaged in more stories, to explore more choices and eventually to shape new experiences through the actions that unfold simultaneously. Indicatively, Participant 6 stated in her interview, she regarded *Situation Rooms* a work that continued to affect her for a long time after the show, especially after her second and more liberating experience. As she had the general picture of the rules and the way the experts' stories evolved, and therefore she was less stressful. She estimates her second experience to be superior to the first as she indulged in the flow of action.

Nevertheless, in case of *Fake time @Ariston Hotel* all rooms and actions were available and open to audience participation. Since individuals needed time to understand the spectrum of different things and situations they could experience the first time, they apparently chose to participate more than once to concentrate on specific actions they enjoyed or missed the first time. Participant 3 explained that the first time the work got her full attention as she had no evidence of how the event unfolds, "what to watch out for, what to see" and was alert of missing important happening. Besides, Participant 2 expressed the second time he was notably more relaxed, and:

> "I realized that you had to go for a second and third time to have a complete view of the play, because you miss quite so many things the first time, as something different is happening on each floor all the time… The second time I saw it I already knew a lot of things and I finally saw it as a complete work from the beginning to the end".

As enactive participants and not performers audience members do not have 'neither the right nor the obligation' to take responsibility of the live event, although they influence with their presence and collaboration the final outcome. Participants need to feel they do not share the responsibility of the event with the performers, as proved by the interview material. Audience members are not trained or invited to support the event as performers; only trained professionals are capable to support and hence responsible for their art work. Participant 4 participated at *Katerini* and described the effectiveness of the specific scenario in giving audience the freedom to choose their role in the performance without sharing responsibility of it:

> "The performance was never interrupted, under any circumstances. Your own action was not indispensable to continue the whole spectacle. The flow of the show is not impeded, [like in case] somebody addresses at you, and suddenly the responsibility falls on you. Now I have to say something. Suddenly a flow is interrupted and you become the centre of action. In the performance, you are a part of a play that continues even if you do not participate… You are given this freedom to make your own choice."

Giving options vs. taking initiatives

During my personal experience at *Fake time @ Ariston Hotel,* at the floor of the decadent aristocracy, I noticed an extended hole on the wall that seemed to separate the room where participants were coming and going from a place where performers were acting out: they were sitting on a big table eating the young businesswoman's unborn child, like cannibals. As I was the first who got into this room, before any other participants came, I supposed I could cross this hole and get near the table the aristocrats were having their dinner. As I was standing literally at the hole and almost on their dinner table, I was preventing almost all participants from watching the scene taking place in the other room; one of the basic scenes of the event was missed for everyone but me. Realising so, the aristocrats were apparently astonished of my initiative and continued their performance considering my presence there an unexpected outcome they could not handle. Eventually nobody removed me from my place at the hole and, without noticing, my presence at the

hall became an impediment for the evolution of the story for both performers and participants.

The next day, I was interviewing the director Ramoglou and she referred at an individual who almost crossed a wall where the aristocrats were gathered, causing trouble at the flow of the event. The interesting part though is that she was enthusiastic about this incident as the limits were crossed reflecting how performers were not adequately prepared to handle a situation like that. When I told her it was me who accidentally caused this incident, she was even more excited, telling me she needed as director to evoke such unexpected and 'inappropriate' actions so that people (performers and participants) have the opportunity to realise and extent their behaviour beyond social norms. In my opinion, this was a minor incident implying there was no frame of action in this performance, partly because the director deliberately intended to challenge not only the participants' but also the performers' boundaries in terms of social norms and accepted behavioural patterns, by facing situations they never expected, even though they are professionally trained. Eventually participants missed a basic scene and could not associate the action followed with previous information. Nevertheless, I was literally given permission to act as I consider best, and realise a posterior how my choices affected the overall live event. My experience was definitely liberating and quite unique, but impeding others with my actions even made me later on hesitant without noticing, blocking my free participation. I mention this occurrence as an occasion reflecting the fluidity and interdependence of the trajectories of participants and performers and how demanding task is to direct a live interactive work; even impossible to control.

I discussed my thoughts with Ramoglou who shared another relevant occurrence: the 'mental hospital' room was a room in the first floor with protective cushions all around the walls. A woman performer was at the centre with a white dress acting out her role as mental disabled. Suddenly a male audience member, who had come for the second time, entered the room and started to sing and stayed in there for a long time. Nobody could understand their relationship; there was no apparent connection between them, but people seemed to wonder about his role in the performance. Is his actions part of the scenario or personal initiatives? Ramoglou reported that this was the reason the audience is so important in her work: to step in no matter the cost and speak out their truth, especially in Greece where audience members are not familiarized with interactive types of participation, at least not in a broad level[72]. Ramoglou was consistent to her objectives, even though in certain points appeared as lack of consistency, in accordance to the interview material and my personal experience.

Opening the scenario to the unexpected may cause unpredictable though interesting results. As participant I initially felt I had more freedom than I should, by bringing performers clearly to their limits and impeding participants' attendance. People need to feel

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[72] It is important though to take this fact into further investigation, considering the time and the place it was observed, as almost 2 years have passed since the time of the interview and the performance. Since then many artistic attempts have been made, not only in Athens but in Thessaloniki as well, to involve audience during the performance of theatrical and performance plays, changing this ascertainment. Besides, the two biggest Greek cities, Athens and Thessaloniki, give more opportunities to the people to have such experience, comparing to other smaller Greek cities. Therefore, her statement is a personal opinion that may be confirmed only by thorough and systemic research.

there are frames of action where they are all protected, but challenging these limits through the experience at *Ariston Hotel* also raises critical issues. I had more the impression of experimentation on the limits of those participating, either in the role of performer or the participant, and this experimentation, although vague and fluid comprised the direction goal. Giving options involve unconditional participation in terms of the audience? To what extent is *clear guidance necessitated for the overall event to evolve smoothly and meaningful experiences to emerge?* How emancipated is actually a participant who is asked to follow certain frames of action? Where are the crossing lines between respect and domination, flow and chaos?

6.5.3 Guidance and emancipation

The three participatory works under study followed different approaches on the level of guided and/or free collaboration in terms of their audiences. In case of *Situation Rooms* the action of each participant was conducted to a significant extent by the iPad (given before entering the performance space), giving only moments for free exploration and interaction. In the contrary, participants were induced to move and get involved without any instructions in the interactions evolved in all seven floors of *Fake time @Ariston Hotel.* As the director asserted, a notable part of the audience, especially those who came more than once and younger in age, took the opportunity and collaborated interacting with performers, other audience members and the physical environment mainly improvising on the fly. An intermediary view was adapted by the directors of *Katerini*, as there was always a discrete frame of action for them to follow according to the scenario, but as the participants interviewed stated, they constantly had the feeling they are free to make their own choices of their role in the process.

Specifically, participating in *Situation Rooms* entailed discipline in terms of the audience, as in order to get fully focused on and physically engaged at the instructions given by the iPad to indulge in the reality of the war industry. As Participant 6 reported she felt she had no choice but follow a guided journey of changing roles, but at the same time this lack of freedom was beneficial as no person had to find their own way of participating in the work. She said she would have felt very embarrassed and lost if she was not guided through these rooms, hence she had no reason not to follow the directions given. In her words:

> "Initially, it was too easy for me to get lost in the space… This was a problem I fortunately overcame quickly as I was constantly leaning towards the iPad to see the video, which although showed the same space I was walking in - exactly the same – I was sometime disoriented because I was so absorbed in what I was doing and eventually I was lost for a while. If I had not noticed the instruction given in full attention, I would have been lost. Once I realized this is important I had my mind on trying not to get lost".

Participant 6 also described that although she was given the chance from time to time to interact with another participant, like shaking hands or putting a coat on somebody else, her actions had to be very precise and attuned with the iPad instructions, leaving no space for stepping out of your role as an expert. Even though she was participating with her sister, they only had the chance for a rapid eye contact and then followed the directions again.

Both participants interviewed (Participant 7 and Participant 6) felt they were given no room *Situation Rooms* to collaborate freely, as a live interactive work with very precise and constant guidance, otherwise they would have missed the trails, gotten easily lost, and been excluded from the action.

Nonetheless, both audience members felt very comfortable by the discipline required from them and the fact they had no other choice. Participant 7 stated that guidance reassured him he would be safe guided through the work, and intriguing as well of the next unpredictable incident. He asserted he would feel awkward only in case performers would also have been included in the action. Participant 6 also considered the tight guidance facilitating not to get lost, not to lose her focus and not to feel embarrassed. She stated she felt at no time the need to free herself from the guidance line and follow her own way. At this point, I have to mention their opinion though is indicative but not in agreement with everyone participating, at least the day we all three participated in the *Situation Rooms*. When all co-participants, including myself, were gathered to discuss with the director Daniel Wetzel, I personally remember people expressing the opinion the work felt like 'a perfectly tuned German machine', stressing from one hand the perfection of all aspects of the work were associated and synchronized, and on the other hand the lack of any plasticity in terms of the participants collaboration; many participants felt like a gear of a perfectly functioning mechanism.

On the other hand, Ramoglou shares a different perspective applied in *Fake time @Ariston Hotel:* although a type of incitement is considered necessary – and is actually given in the beginning of the performance – the audience members are free from this point on to move and collaborate as they please. Her objective was to help people realize they can make their own choices during the performance event, and take that risk to follow their own route, even though a basic story (about the pregnant businesswoman) unfolds attracting their attention. In her opinion, the audience can make them feel embarrassed; a short of guidance though that is not tight, otherwise the whole concept of this performance would have been missed. For Ramoglou the ideal participant is not a follower but a doer – a free doer actually. She directed a performance work wherein the boundaries of the scenario and unforeseen action are blurred for those participating, unlike *Katerini,* since the limits are protected through 'emotional traps', and *Situation Rooms*, as the chance of anything unpredictable to spring is minimized).

Experiencing now

Guided or left free to explore and their limits and desires, audiences in the three participatory works under study were immersed in live events. As John Britton explains in his trainings *performance happens now* and urges performers to *pay attention to the experience of now.* By paying attention only to the present, I am *experiencing* a certain situation, I am not thinking about, or evaluate or communicate in any type *an experience* of mine. As analysed in subchapter 2.3.1, the term *experience* is both noun and verb; the difference between *experiencing* and *an experience* is that the first involves evolution, while the second a complete or potential event. *Experiencing* involves a present situation, one that is developing right now. While experiencing a situation we are in the course of a dynamic process; we are concentrated on 'subjectively living through' (Mansfeldt, Vestager, & Iversen, 2008) the current situation and not contemplating on it. Moreover, *an experience*

concerns a complete story, an organised event, a potential but thought through narrative, usually with a definite beginning and ending. It describes a course of affairs, which is already completed or may happen in the future, or in a fictional world. As complete and/or already thought through, an experience pertains to the sphere of *being*, unlike experiencing which expresses the notion of *becoming*, meaning change and development in space and time; occurring here and now. Both in experience design and the art of performance, designers and directors create overall contexts (environmental, cultural, artistic, narrative, etc.) *for* experiences to occur. They do not design and/or direct specific experience as personal and fleeting in substance, but the environment along with the appropriate conditions and potentialities *for* meaningful and qualitative experiences to emerge for those *participating*.

The benefit of subjectively living a current condition, i.e. of *experiencing here and now*, is that no time or attention is given at thinking and analysing the situation. Experiencing what is happening refers to *now*, whereas *stepping out of a process to think about my experience refers to past, future or potential events*. Having no time to reflect over a situation, my experience, my performance, your reaction to it, I keep myself in the flow of action. I act and respond without criticism. Audience members are not trained to respond in this way during a performance, performers are. Participants need time to adapt to the performance situation, realize their options, and probably fight with their fears before taking any risk and get enactively involved in the action. Urging audience members towards *experiencing* the live event, rather than thinking about their experience, prevents them from paying attention and criticizing what they do and instead *doing* it. In *Situation Rooms* participants had no time to think about their actions as they needed to follow the instructions every minute of their way, and soon the desire to experience through the eyes of every expert dominated over their opinion on how they respond to the instructions of the iPad. In *Katerini* trust among performers and audience members was gradually built through joyful interactions or playful and unexpected actions the performers made to reassure participants the weight is not put on their reactions since the flow of performance is maintained; there are no 'appropriate' responses only our common desire to interact and communicate. In *Fake time @Ariston Hotel* participants had absolute freedom to step in every situation occurring in all seven floors in any time they please and feel comfortable or step out and continue their way throughout the performance space.

In order to take the risk and get involved in the action, participants need to feel fully accepted, without taking the responsibility of the performance flow and result. Performers are trained to explore the otherness, to embrace the different and incorporate them in their performance. Participants are not prepared for the interactions they are incited to participate, as rehearsals involve only performers. The aim is to facilitate audience members to concentrate on the moment and their actions and not on their thought about them that could potentially make them feel comfortable or embarrassed about. By experiencing in the moment (now) they let themselves free to get involved in physical, mental and emotional level without even realising how it happened. Indicatively, both Participant 4 and Participant 5 asserted that they found themselves fully engaged in *Katerini* without realising when they transcended the initial part of hesitation and defence. Participants need facilitation from the performers and the narrative structure to respond naturally, be open to cooperation, trust the artistic process and ideal let it change them; they need help to *experiencing* the moment.

On balanced and clear guidance

Experiencing the moment requires a balanced guidance, meaning one that balances the abilities of the audience with the requirements of the performance. The audience members are more likely to get engaged in interactions that challenge their abilities, challenges that are interesting enough they do not lose their interest and demanding enough they still are feasible to achieve. In this way the level of anxiety is retained in normal levels: as participant I accept the challenge to get engaged with the precondition this challenge is interesting and feasible, so I am comfortable to take the risk and step into an interactive situation.

This standpoint is borrowed from John Britton's perspective on training performers as well as proven by the interview material. In physical theatre training, Britton shares his perspective: in order for an artist to be creative he needs to find his pleasure and work from this core. As already mentioned, for Britton (and my perception) pleasure is found through play but does not identify with convenience and mere entertainment; it is sincere joy out of finding inspiration through my personal truth and desire, and communicating my pleasure to people through my performance. To find pleasure a certain balance is also required: as performer, I protect myself from getting involved in tasks too effortless to accomplish, as boredom will probably make me lose my attention and connection with pleasure, or too laboured I am so anxious and worried about my performance, I probably lose my centre and pleasure once more.

Respectively, only one audience member (Participant 3) out of the seven interviewed reported that she did not take any further risk than being a spectator of the action in the performance she participated *(Fake time @Ariston Hotel).* The other six interviewees participated enactively in the three works under study and asserted that firstly the way they were invited to participate appeared achievable, not too demanding or simple to lose interest. Regardless of the general impression they had of each work, i.e. the pleasure they found in the overall performance, they stepped in the interaction the moment they felt (usually without noticing this transition, according to the interview material) something interesting is about to happen now, challenging me in a way, I want to be part of it, I want to have the experience of it. Performers are trained to create this condition out of which "something interesting in front of my eyes" and they take their audience in a journey with them. For example, Participant 4 and Participant 5 participated in *Katerini* and both remarked how in start they were not asked to do anything demanding, but the performer's action and facilitation as well as the atmosphere of the each room, incited them steadily to indulge in the story; an experience they described more like a dream than real occurrence. From this point and on, one-to-one and/or one-to-many interactions among participant(s) and performer were progressively becoming warmer, deeper and more demanding especially in emotional level; a strategy the Blitz Company named 'emotional traps'.

In addition, guidance given to participants needs to be clear as well. Direct or indirect, the more unambiguous the guidance given the less time is required in terms of participants to comprehend the way they are invited to get involved in the live event. Clear guidance prevents any misunderstandings and therefore hesitation, even rejection, to participate. Participant 6 and Participant 7 both agreed the instructions given in *Situation Rooms* via the iPad were clear, facilitating their experience through the experts' stories and relevant rooms. They appreciated the effectiveness of this digital guidance and multiple moments of

embarrassment were avoided as the directions were fully apprehensible and easy to follow. Participants, especially in enactive mode, need facilitation to reach that point of personal engagement – even without realizing so – and this facilitation necessitates balanced guidance; a guidance that respects (even appreciates) the abilities and limitations of audience members in physical, emotional and cognitive level, as well as challenge them to achieve a task together, to live through a journey together created for them to enter and participate.

Control and flow

Finally, it is essential to stress that there are no indispensable and golden rules how to incite audience enactive participation as human interaction and relation are always deep affected by the small details, the fleeting conditions of the moment, unconscious factors, the thin and imperceptible. The director's role, like the designer's, is to control the experience of the participants from the moment they enter the event space, throughout their overall journey according to the scenario (narrative structure), till the moment they leave. John Britton, from his position as director of physical theatre performances, states that paying attention and embracing the audience energy and behaviour is essential to communicate with them; he asserted:

> "As a director, I also work very clearly with trying to sculpt, to take control of the entire experience of the audience, from the moment they enter the building through the moment they leave the building, of which the performance is only a small part. What is the music in the foyer? What is the relationship of the theatre and the people when they come in? How are they greeted? Are they kept waiting outside or they are encouraged to come in to see the stage before it starts? I often hung around and chat at the audience before I perform so I create informality…"

Nevertheless, there are always limits to the things a director can control. The primary one and the least expected is how the audience response to the participatory event. In Britton's view "all the experience is unexpected and the ultimate unexpected is how your experience is received by your audience" and this is the ultimate thing a director and performers has to embrace. In the end, no matter how thought through and well organized the overall context is for meaningful and qualitative experiences to occur, only through the realization of the live event and especially the audience contribution and interaction the overall event is shaped and complete, as well as unique every time performed. The director is responsible for the creative process of creating and preparing the conditions (place, time, people involved, props, technologies, etc.) so that the audience are mostly likely (always on his perspective) to have the experience he aspires them to have. They are not exclusively responsible for the audience experience though, as experiences are personal and fleeting and unpredictable.

> "I think it's very hard for an artist, but it's very liberating in the end to end up going 'I'm not responsible for the show you saw'. 'I created the show that I created but you saw the show that you saw'. Ultimately, to embrace that liveness, to say 'I did the best job I could', and you are going to see

what you are going to see. And maybe if you had an argument with your boyfriend just before the performance, you will see a different show, but if you come to the performance having just won the lottery… you have no control… and that's the ultimate live experience. You don't control the show that you make. And I think you are a real fool if you try to. And I think you really insult your audience if you try to control their experience. Guide their experience, yes. As a director when I'm working with actors, I guide them, and in fact I direct very tightly. Find this moment, not now, now. I am a very tight director. I often direct a quarter of seconds of attention. Because I believe in precision, but it doesn't mean I control the performance. The performer will have the experience she is gonna have. My job is to guide. The performer job is to do the work. My job is to make the show; the audience's job is to experience the show".

Directing performance plays, similar to experience design, cannot determine audience participation, as compound inner processes need to be made and each person will eventually shape his/her own experience throughout the event. Britton urges his performers to concentrate on the elements they can affect concerning a physical theatre performance. I borrow his perspective and apply it at experience design, addressed at the practitioners who create and organize live events. Since human attention is limited and focused every time on specific aspects, therefore concentration on the things we can affect have more possibilities to provide us with a successful result. Any effort is doomed to fail as long as it is concentrated on things we can do nothing about. We cannot design human experiences; we can organize the conditions and the overall context for them to occur. We cannot control human interaction or participation; we can be prepared for them. Instead of trying to control the fleeting and unpredictable nature of human interaction and participation we can embrace the otherness and facilitate audience through clear and balanced guidance to find their role in the live event. The opposite of chaos is not control but flow…

6.5.4 Finding an end

The final part of the interview concerned questions set to directors and participants regarding the way each performance reaches an end. Since conventional forms of narrative structure (like the Aristotelian one) have been rejected, such artistic live events reach a totally different point of completion. Additionally, such live participatory performances, like experience design projects, stage the appropriate conditions for desirable interactions and behaviour to occur. They involve people and props within a certain physical and/or mixed-reality environment, wherein human presence and participation evolve. Such artworks comprise *sequences of events*, and are in accordance with the Deleuzian notion of *objectile* (Deleuze, 1995), i.e. a piece of work containing elements embedded with functions and behaviour, capable of changing into potentially multiple variations in time (Carpo, 2004), and therefore entails continuity and evolution (Deleuze, 1995) (see subchapter 2.4.4). Respectively the three performances under study share common ground having the above features and each one finds closure in a different way. The three directors suggest each another way of help audience realise their experience is about to finish and mainly let them

go with a particular taste and/or feeling, according to the objectives of their live participatory work.

Particularly, in case of *Fake time @Ariston Hotel,* audience members were gently and silently urged by performers at a certain point to leave the floor they were and gather all together at the foyer where all performers also arrive as well. So at the ground floor, the final scene of the play unfolds: the young business woman commits suicide and is reborn in her new self like phoenix. The audience attends her rebirth and also contributes by pouring some drops of water on her lying dead body, from a glass of water that is ritually passed over from one participant to another till the glass is empty. After the young woman is reborn she is free and capable to follow the path of life she desires and the performance is ended with hope for a better future we can create by letting go of past impediments we put in our way.

The general impression audience members had concerning the final part of the performance they participated were in agreement for each case. For the director of *Fake time @Ariston Hotel,* Lela Ramoglou, the final scene is indispensable for practical reasons: so that the audience leave the place approximately at the same time. According to her perspective, the last scene (involving the young woman's rebirth) is necessitated as "we don't need to wait for people to take their time to see everything, so the whole project is not considered an exhibition; and especially to connect everyone together, to gain consistency. Otherwise, you would have to erase completely the existence of the young woman and leave it open". Nonetheless, participants interviewed appeared to be puzzled from this ending as in their opinion was difficult to associate with the rest of their experience in the performance. Although the final end had on Participant 3 a significant impact, she also found it fragmentary in relation to the rest of the performance. She explains she needed plenty of time to realize the basic story, and by the end she felt the whole performance lacked cohesion. Although she indulged herself in the mostly exciting though separate interactions occurring at each floor, she could not finally connect the actions into a coherent whole. Participant 2 is in agreement with Participant 3, stating his first experience was vague as well, and he needed a second and third time to fully comprehend the project, participate at all actions available, and realise the way everything ended.

Participant 1 felt the final part is a separate one, unconnected with the action taking place at the other floors. She also opinions there was no necessity to actually connect those different stories since each participant makes sense out of his own experience in the end and subjectively associates the performance parts. Hence, she felt this connection was made hereupon to give at this point the performance a closure, otherwise the audience would continue to move around the floors and enter into the different stories without any time limitations. Participant 1 supports the final end was mandatory, inducing participants to connect their entire experience around the floors with the story of the young business woman. Instead, she mostly had the impression that she was woman; the victim or the hero as she mentions. She could not understand or even empathize with the basic narration, so she actually considered this scene of transformation detached from the rest of the play; she had the impression of a separate performance. In her opinion:

> "(…) the story was quite abstract, and suddenly it comes to an end in an attempt to make all very clear. But I do not think there is such a need in

these projects. As viewer I don't find it necessary. It seemed to me in the end it became a typical theatrical play. (…) As if someone was endeavouring to narrate in retrospect what happened, just to confirm there is a story behind it; to make sure I understand a story, while the entire process was already complete for me. They tried to link a traditional theatrical form with a completely open and interactive one, and these parts were linked bit fragmentary, meaning without flow between them. Nothing was naturally leading you eventually something in this place [the foyer]. Someone came and told you 'go now down to the bar'. It was not the action itself that gradually lead to the bar, where the project was ended. It was a bit mandatory and therefore [the participant] was clearly put in the position of the spectator. And for this reason I think it was not successful".

My personal view is in accordance with Participant 1: just like the action among the floors was disconnected, though impressive, from each other, the final ending was also another separate part that could be experienced as such. I also had the experience I am a spectator in a spectacular scene wondering what happened and is happening to that woman I had not met for almost two hours and suddenly I am watching her dying and regenerating with every performer (nurses, clowns, can-can girls, aristocrats, policemen, etc.) gathered around her. I also had the chance to pour water on her lying body in this final participatory ritual, but I could not empathise with her. I found myself just realizing this work is about to end.

Respectively, in *Situation Rooms* participants followed a specific route along the connected though different situations and places, guided by their handled iPad. Thirteen audience members are given the opportunity to each get immersed in a different string of ten stories related to weapon industry and financing out of the twenty developing during the performance. After the audience have stepped for seventy minutes in the shoes of ten experts and their perspective regarding the weapon industry, they are all gathered for the first time all together at the conference room in a circle. While facing each other, participants also turn their iPads towards the others in front of their chest. In this way, we could all see for the first and last time the people we interacted with earlier, through so many different roles and situations and look at them, while our iPads play in sequence the roles each person played throughout the work. We had the chance to see each person in association with the roles we initially met him in the condition of the play and probably recall memories of our experiences together.

Since *Situation Rooms* is a project without performers, only participants who fill up the basic roles, the final part is centred at this essential aspect: when the iPads are rotated towards the others in the conference room, every participant is juxtaposed with the ten roles he was guided to take for a short period of time through the actual faces of the experts which appear one-by-one on the iPad screen. For the first time during our experience we were not guided any more by the iPad and at the same time we had the chance to look at each other as real people in correlation to the experts' role we met earlier in the performance space. Participant 6 mentions that this scene gave the opportunity to be an observer without a role and made a significant impression on her. She observed the faces of

everyone present and recalled the moments she interacted with the other 'experts' and the stories they shared together in the different rooms. By exchanging glances and recognizing one the other, Participant 6 felt like knowing each other and already sharing common experiences and codes of communication. Hence, it came natural for everybody to come outside the performance space after the iPads went silent and socialize enthusiastically (about their experience, their names, what happened between them in particular moments, etc.) as if they knew before. In her opinion, all participants were overwhelmed to a lesser or greater extent by the overall experience and most of them needed to share with other participants as well after the project was over.

Nonetheless, Participant 7 shared a different opinion regarding the way the project ended. He felt the way participants came out of this space and experience was too curt for him. He mentioned the final scene was the only part he expected some short of interaction among participants and instead the project came to an end. For Participant 7, the succession of the experts' real faces on the iPad screens seemed more like credits, associating the real faces of the experts with those of the participants. He finally stated that at this point he was more fascinated at the experts' images than the participants' since the gaze of these photographed people was more intense than the audience members'. According to my experience, the final scene gave me the opportunity to relax for a while after an intensive seventy-minute play in the various rooms and situations and contemplate at moments, pieces of information and feelings that were risen. The whole experience was rather speedy and overwhelming and watching the faces of participants and experts gave me a brief chance to reflect on the performance and realise how rich and powerful it was in physical, emotional and cognitive level. I did not need any more interaction with others like Participant 7 stated, but I would like some more time together to help fade the experience out smoothly (probably share our memories) just as Participant 6 described participants did after exited the performance space.

Unlike *Fake time @Ariston Hotel* wherein people could move around the seven floors of the performance space in any way (i.e. as spectators or enactive participants) and sequence they desire, the other two case studies, *Situation Rooms* and *Katerini*, had prearranged a certain string of stories and interactions for each participant. Specifically, in *Katerini* participants were in advanced informed of the rooms they would visit and they were kindly informed via the speakers of the public space to enter a particular room. Apart from the time participants are in the six rooms of *Katerini*, they are all gathered at the public space, drinking, eating and socializing, where multiple events (music, dance lessons, pantomime performances, brief speeches, and short shows of any kind) also occur during the whole five hours of the performance. In this way, audience members have the opportunity to stay for as long as they please at the public space and visit two rooms during the evening. Hence, their experience ended like it started, at this public space at the terrace of Bios building along with other visitors and participants. Participant 5 stressed importance of social interaction in the public space before and after the show as an introduction and integration of the whole experience.

At this point I would like to put emphasis at the after effect of such participatory and unconventional artworks, which one way or another were impressive and absolutely unique, at least for the time (2010 until 2013) and space (Athens and Thessaloniki, Greece) they were presented. They all gave (me) the impression of a game, a joyful and even magical imaginary world far beyond ordinary performances that needed time after to realize the changes brought in my perception about this new type of live artworks which incite enactive participation. Participant 6 confirmed she needed time (a couple of weeks actually) to realize the feelings she shared with me and what each story was all about, stating:

> "It needed time. Coming out [of the show] I can tell you that I could not remember any story. I remembered all of them more or less but initially none of them shocked me that much. Nevertheless, from the time I started getting back home and days after that I couldn't stop thinking about all the stories I had experienced".

Impressive unprecedented performances are not complete the night they are performed or experienced by audiences, but stay in our memory bringing up thoughts and emotions for days or even years. I stress the enthusiasm of the interviewees of *Situation Rooms* when describing their participation four years after the performance took place. Specifically, Participant 4 emphasized during our discussion at the importance of the feeling you are left with after a show is over. He also believes the questions raised, the following conclusions, the after-sensation, are more essential than our response as audience during the show:

> "This is the essence of a play; the after part. At that time [during the show] you may say whatever spontaneously comes to your mind, even nonsense, or an intelligent thought to soothe your anxiety, since you feel nervous to say something, or even something really profound. What is important, however, is to reflect on what you saw and how it affected you. I was 17 and it is wonderful to be 17... I thought I could change the world, I really believed that. Now why have I stopped thinking about that? This is what the show is all about, not the answer you give at that time".

Our experience of such live events is not ended the time we exit the performance space but takes time to reveal all aspects that made an impact on and/or even slightly 'moved' our perception on audience participation. Live participatory events give audience the opportunity to experience mixed-reality worlds, meaning places and conditions that unfold on the verge between artistic and everyday experiences, associating fiction and reality, physical and virtual surroundings, scripted and improvised interactions, multiple artistic disciplines, stage and hall, public space and performance place, as well as corporeal, cerebral and emotional perception, in a fusion of conventional roles (audience / participant and performer). Standing up from the hall seats and entering the performance world as participants involves plenty of risks and at the same time giving meaningful and joyful (even extraordinary) events the chance to unfold through audience contribution and collaboration. Inciting enactive participation entails taking the risk to break conventional theatrical norms and time is also needed to study relative contemporary artistic initiatives and educe qualitative conclusions.

7. Conclusions

7.1 Introduction

Concluding the presentation of this research route, I review in this seventh chapter the key issues I chose to concentrate at and study in the context of creating live participatory events through a performance perspective and apply this knowledge at the field of experience design to specifically safeguard intangible forms of culture. The structure of this last chapter of the thesis focuses on the presentation of the standpoints deriving initially from the theoretical basis concerning the aspect of design and particularly the experience design in organizing live events (chapter 2), followed by live art and performance studies that specialize in creating artworks that incite audience participation in multiple ways (chapter 3), to associate together and observe two types of participation with emphasis at the enactive mode (chapter 4). The theoretical approach led to the study of three case studies that incite enactive participation, through personal participation and observation, as well as interviews of both directors and audience members, who shared their experience regarding each performance. The following sections will attempt to raise the main issues for discussion, to highlight the key observations, set specific conclusions and open a discussion on them.

7.2 Review and conclusions from the theoretical approach of the field

Culture is created and safeguarded by social members, inherited from one generation to another through collective practices. Every culture, incorporating socially learned and transmitted patterns of behaviour, emerges out of the interaction between tangible and intangible elements. The tangible culture involves the material, corporeal aspect, whereas the intangible culture encompasses ideas, norms, customs, values, beliefs, and ways of communication (both verbal and non-verbal), knowledge, and skills, manifested among others in: oral traditions and expressions; performing arts; social practices, rituals and festive events; knowledge and science; and traditional craftsmanship. Nevertheless, for many scholars this partition is rejected, as one embraces the other, stressing at the 'symbiotic relationship' between the tangible and the intangible, suggesting that "the intangible heritage should be regarded as the larger framework within which tangible heritage takes on shape and significance" (Bouchenaki, 2003).

A principal way to attenuate this diastase is to embrace the collaboration of scholars and non-specialists, meaning artists, scientists and audience, in developing and safeguarding culture. A fertile dialogue is necessitated among people and experts on studying and creating intangible culture in particular, in a process that everybody is engaged; there are no

experts, only participants. People and scholars are collaborators in dialogue, sharing perspectives through democratic participation. Specifically, UNESCO also focused, in the Article 15 of the *Convention for the Safeguarding of the Intangible Cultural Heritage 2003*, at *participation of communities, groups and individuals* and the covenants to guarantee the widest possible participation of social groups and individuals. This mutual reconciliation and partnership empowers every voice to be heard, every opinion to be expressed.

Intangible culture is principally about events, narratives and experiences people share in the course of time. Intangible forms of culture are associated to a type of live performance (live event) for their existence, presentation, and preservation. They are narrated, addressed at and experienced by people who participate in various ways. And every time performed, Intangible forms of culture are re-created by those who live them through, meaning practitioners, artists and audience members. Experience design is an evolving design landscape where art, science, and technology meet to study, ideate and create meaningful interactions and experiences among those participating. Experience design emphasizes at experiences and stories/memories people make out of the events that have lived through, and less on the design outcome. Elements like change, experience and sense of becoming are inherent in experience design thought over products, functions and matter, offering a fresh and appropriate perspective on studying preserving and presenting immaterial culture forms and practices.

Cultural practices and products are unbreakably bound to human activity and interactivity, as well as symbols that give meaning and value to their intercourse. For example, oral tradition (like stories, myths and legends) need to be narrated to people; rituals and ceremonies require to be realized and attended by individuals; customs and social mores can only be preserved by repeated human performances. The intangible forms of culture are always addressed at an audience through a live event. Cultural practices are never repeated the same, they are changed and evolve every time performed. Since human interaction is necessitated in intangible forms of culture, the principal element is the sense of *becoming*, i.e. emerging on the fly for the first time every time. Similar to intangible culture, the notions of event, identity, experience and design also comprise processes that are "not in the past to be found but in the future to be constructed" (Hall, 2001). Different people shape together different experiences; they attribute events with personal meanings and emotional filters. Hence, different memories and different stories are moulded and interwoven. Intangible culture is experienced and conserved through practice encompassing change and alteration. Intangible forms of culture are constantly re-formed, always evolving, through personal stories and collective experiences.

Typical research methods adapted from sociology, anthropology, geography, and environment-behaviour studies, already concentrate at the relationship and interactivity among social unities and places in time. But safeguarding the intangible culture involves amalgamating events and memories into texts, recorded archives like video and images, to further study and preserve; a demanding process eventually not adequate to conceive the variability and fragility of the content. Scholars apply concrete data to document, analyze, display, and promote the intangible, but the ephemeral remains ungraspable. Scientists and scholars retain a version, an instance, of these cultural products as experienced and collected under certain circumstances and research objectives. A book, an online database, involve a single version of the cultural product, chosen among numerous ones, as it still

evolves in time, as it has been evolving since its often unknown commencement. Intangible culture is ceaselessly as inherently depended on factors that constantly evolve in time. For example, when myths, fairy tales, and/or legends are addressed to others, they are not reproduced but actually recreated at that moment while transmitting to others. Personal experience is a powerful method of apprehension and appreciation, especially in case of human relationship and interaction.

Contemporary strategies in art and design are also oriented towards creating live events. Experience design is about setting the frame for experiences and events to emerge. Since information is conceived as a production of events, the notions of artwork, design, and object-event are relatively considered as events. More recently, scholars from relevant fields have also approached this transition. Design thinking has been detached long ago from the Cartesian and perspective grids of the classical tradition, and now benefits from the opportunities of the digital media in morphing, as well as setting the conditions for potential interactions and behaviour to occur. Design as open, undetermined process is conceptualized and developed; design as *sequence of events*.

This thesis stresses intangible forms of culture comprise processes associated with a short of live performance, and as (live) events and performance they are studied and preserved to a profounder level when personally lived and *experienced.* Live processes are organised *for* people *with* people and evolve in time: change prevails over matter, and the sense of becoming over stabilized shape and form. Therefore, intangible culture necessitates an alternative approach and methodology to encompass and study its live and ephemeral nature; one that essentially embraces people's participation, interactivities and performances, in a context that is open to the unforeseen, deliberating human encounter from scripted activities to study alternative patterns of behaviour. This research primarily proposes live participatory events as a means of preserving, studying and promoting intangible culture.

The fields of art and design (similar to language and religion among others) reflect and convey cultural values to social groups and future generations. In the frames of digital age, design practice and thought no longer focus merely in objects and services, but rather at experiences delivered to people, and specifically at aesthetics of experience, altering our perception regarding form and communication all in all. Contemporary notions on design concentrate at the impact of design outcomes (objects, services, environments, experiences, systems) on people's life and interactivity. Designers and scholars emphasize at the conditions and affordances of a particular context wherein people can enter and interplay, rather than its production per se. According to contemporary trends, designers are concerned with setting the context for experiences to emerge among people and system(s); they *stage* experiences integrated in (physical and mixed-reality) space and time, inciting audience participation in emotional, cognitive and physical level.

Experience design is a contemporary multi-disciplinary design approach that concentrates on the creation of products, processes, services, events, and environments, aiming to set the frame for meaningful and pleasurable experiences to take place, in physical and mixed forms of reality. Even though experience design is so novel its definition is in flux, it is already applied in a spectrum of domains, covering a wide spectrum of cultural practices that extend from technologically-mediated indoor and outdoor activities of everyday life, to creative fields of the arts, for entertaining, educational, and commercial purposes, among

others. This innovative design field aspires to merge everyday routines with artistic experience, the physical with the potential (i.e. virtual and imaginative), while at the same time concentrates at attenuate past discriminations, like spectator and creator, looking and participating, participant and artwork, performance stage and experiential space. Experience design embraces a holistic approach on the content and context wherein audience interactions and performances emerge, by organizing the overall context and conditions for experiences and events to occur.

Meanwhile, the notion of experience has a twofold import, as being both noun and verb and expresses a notion of evolution. As a verb, *experiencing* involves a present ongoing situation, something that is developing right now, and expresses a sense of becoming. As experiencing is evolving right now, it cannot be described, nor communicated, therefore it is non-transferable to anyone. On the other hand, *an experience* as noun indicates a static entity, an organized event, a complete narrative with beginning, body and ending, which humans communicate, describe to each other and/or design, meaning organize for others. An experience is space-situated and time-related. Every potentiality has already been (or may be) transformed (literally or metaphorically) into specific events distant from the present condition, and therefore it pertains to the sense of being. Similarly, design also has a twofold meaning, used both as verb and noun. A design, like an experience, denotes a complete process, a concept that belongs to the past, the future or resides in the realms of imagination. In contrast, designing underlines the evolution of a situation, a creative procedure, the course of an event. Design as noun, refers to the artefacts that derive from a deliberate creative process; the result of a creative procedure, involving products, processes, events and environments (sense of being). Alternatively, design as verb reflects the creative procedure itself, the opening of all potentialities, in order to organize the demarcation of space, and pertains to the sense of becoming; on open process that has not reached completion yet.

Every design approach is a process of setting the context for experiences to occur. But literally, design of experiences is unfeasible to achieve, since experiences emerge from a variety of potentialities which cannot be organized and predetermined by the design procedure. It is impossible to shape experiences as they evolve in people's esoteric sphere, but we can we can design *for* experiences; designers can only design contexts and tools that people can interact within; they design *for* the possibility of interaction. Nobody can foresee how an experience will unfold and the value each person will assign to it. Designers actually suggest prospective strings of interaction in space and time, i.e. bundles of potentialities, and participants decide how their experiences unfold. Neither designers, nor participants can predetermine the final result, as things constantly evolve on the fly, but the former can be prepared and organize those factors and conditions that may deliver desirable actualizations. We design *for becoming*; we propose an aggregate of potentialities to be actualized in space and time, and participants respond and interact respectively. The role of the designer and the participant are not as distinct and fixed as they used to be. The design result is considerably depended on matters beyond its design, and according to the objectives this thesis emphasis is placed at people and the multiple ways they mould their own experiences out of given circumstances. Their role has become central, as they contribute to the aesthetic outcome, not merely with their presence, but with their interaction and participation in the course of events, co-creating their experiences.

Contemporary strategies in art and design involve the liberation of the process and the final result from the static physical features of materiality. Instead, the design outcome is conceptualized and created to emerge while experienced by people on the fly; its procedural character is conceived to be interwoven by individuals. As emphasis is put on transformation and change itself, form and shape is of less significance. Abstraction is regarded a principal feature of contemporary design and more dynamic patterns of communication and expression have been generated, exploiting interactivity as medium. In terms of designing abstract notions, like interactivity and experience, the design result is not concrete but rather flexible, ungraspable, and phenomenal. Therefore, a general shift has been stated from materiality to abstraction, utilizing interactivity among people objects and environments as the medium to interweave meaningful and satisfactory experiences.

Additionally, the notions of *fold* and *object-event* express the idea of continual process rather than a materialized product; of progress and not necessarily of actual visual or tactile folds. The aggregate of these terms, like objectile, implies a sense of motion from *continual variation*, *perpetual development* and *form 'becoming'*. By extension, a design work that is also modulated in time, moulded out of human interaction and participation, can be named work-event. The notion of folding inherent in object-event entails certain characteristics: *heterogeneity* and *intricacy*. Concerning the first, the object-event as a whole continuous system, involves the incorporation of disparate elements. For Deleuze, the *fold* is a synthesis of different segments and planes merged in unremitting lines and volumes (1995, p. 9), whereas for Lynn the integration of dissimilarities is the very manifestation of fold (2004). Nonetheless, this otherness is not negated in order for a unified pattern to occur and sustain; different identities are maintained within the network of disparate elements and joints. Furthermore, *intricacy* involves that there is actually no sense of scale. In case of micro-scale and macro-scale of components, structure, form and characteristics are identical and interwoven. Therefore, an object-event is an organic whole consisted of different elements incorporated together in a complexity where each part conserves its features and functionality and respectively collaborated with the others, independently of the scale of observation.

Respectively, live art organizes the overall context for events and experiences to occur, like experience design, experimenting on different media of expression, and challenging the notion of change and presence, the role of the artwork in the contemporary digital culture, and the artist-audience relationship in the course of the event. Live art is procedural and moulded in the place where and the moment when interactivities and performances among people and artists emerge. In addition, live art is not a particular art discipline, but rather a cultural strategy to incorporate creative processes and hybrid practices with artistic content. Similar, experience design is not another field of art but rather a theoretical approach of embracing the notions of live, event, and experience in the design thought concept, process and result. As a term, *live art* does not comprise an art form or discipline per se, but a cultural strategy and practice. Art live events involve interactive projects, bodily expression and performances and entail social interactivity among artists, designers, production teams and the public, located both outdoors (galleries, museums, exhibition spaces) and indoors (social places). Borrowing Shaughnessy's standpoint, I prefer 'performance' (2012) as term rather than live art or performance art, "to embrace the fullest range of practices originating in theatre and visual art and to demonstrate affiliations with

the academic field of performance studies" (Pearson M. , 2010, p. 1). It is also essential to stress that for the objectives of this thesis, live art (involving performance and performance art) is the contemporary context, while performance studies the established method and theoretical base for live events to emerge and audiences to engage as participants.

Meanwhile, the value of applying performance in cultural management has already been acknowledged in relation to social interaction and education, as well as matters of identity and memory. As Shaughnessy supports applying theatre *to* something exceeds the objective of producing an artwork to serve matters of *change* and *learning* (2012, p. 7). Performance event is a 'shared field of experience' (Ellsworth, 2005, p. 55) as spectators leave the auditorium to enter the performance space and become participants, configuring a 'liminal, inter-subjective space' is (an 'in-between zone', the 'lucid third'). Performance practice is an agent of remembering and sharing common experiences; a participatory, live and socially engaged method, bounded with the ephemeral, the elusive, the present time, change and the presence in physical level. Due to its interactive qualities, applying performance methodologies for social and educational purposes generates contexts in which the participants are considered collaborators of the overall experience actively engaged in the live participatory process of knowledge and identity production. Borrowing Lehmann's words, "the turn to performance is… always a turn towards audience as well" (2006, p. 24). The areas of theatre and performance coincide in sharing the same objective: to empower people as participants, even collaborators, in live artistic events that involve change and learning.

The typical notion of audience involves at least one person or an ensemble of people the live artistic event is addressed at. All audiences participate in a way during live performances. No theatrical or performance play ever fulfilled its objectives unless addressed at and experienced by an audience, incited to participate in different ways. Consequently, in live art and experience design events, the boundaries of daily life and artistic experience are opaque. Similarly, the borderline between stage and hall, public space and performance place, materiality and referentiality, digital and physical, real and imaginative, participant and the artwork, performers/designers and spectators/participants becomes less discernible narrowing the dichotomy between the observer and the observed. Audience and performers (in case of live art events) or practitioners (in case of experience design projects) are spatially and metaphorically separated in case of *conventional participation*: the professionals are to remain at the stage whereas audience at the hall. They are also given discrete roles to hold throughout the play, which entail different patterns of behaviour and control over the event. During a typical play (for example theatrical and dance performance) performers (actors, dancers, etc.) keep control of the overall event and action, while the audience keeps the right to attend and remain inactive, meaning to mainly watch, hear, comprehend and feel as action unfold. *Conventional participation* is lucid and stable, involving all typical audience reactions: outward actions and manifestations (like laughter, weep, and applause), as well as necessary movements (like sit and make themselves comfortable on the chair) along with inward processes, meaning engagement in emotional and cognitive level.

In the context of this research, I suggest the term *enactive* to describe the particular mode of participation that preconditions and at the same time exceeds conventional participation, meaning emotional, corporeal and cognitive engagement, constrained within

the usual frames of audience response (i.e. laugh, applause, etc.) to the extent of audience collaboration in the live event. Audience *enactive participation* is a critical axis approached from the fields of experience design, performance (live art). *Enactive participation* involves audience personal engagement and involvement in the course of live event, especially in corporeal level, turning spectators into embodied interfaces and collaborators. Integrated mixed-reality technologies, along with contemporary design strategies incite audience members to get involved as collaborators. Enactive participation challenges traditional forms of scenario, form and materiality of the live event, as well as extends the participants' role, presence and interaction, aspects that become even more enhanced and complicated in case of immersive experiences in mixed-reality environments.

My proposal is based on the juxtaposition of *cognitive science* (Varela, Thomson, & Rosch, 1993), as well as *Cognitive Psychology* and *Cognitive Learning Theory* in *Educational Psychology* (Bruner, 1990), applied in the fields of experience design and designed live events for artistic and cultural purposes. Under the perspective of cognitive sciences, Varela, Thompson and Rosch describe as *enactive* the *approach* focused in *embodied action* and *cognition* in cognitive sciences (Varela, Thomson, & Rosch, 1993), putting emphasis at the incorporeal experience in the lived world. Under this perspective, any system involves a network of multiple levels of interconnected sensimotors sub-networks that comprises a part of an ongoing existing world, or shapes a new one (Varela, Thomson, & Rosch, 1993, pp. 205-207). Additionally, based on the developmental psychology of Jean Piaget, Bruner developed the *Constructivist Theory* and particularly the *Optimal Learning Process.* He names *enactive* one of the *stages of knowledge* in the process of meaning-making (Bruner, 1990) centred at propositions rather than objects, gives ideas a hierarchical structure and considers possibilities in a combinational way (Spencer, 1991, pp. 185-187). For the purposes of this thesis, the notion of *enactive participation* is proposed to challenge audiences' passivity by firstly, involving corporeal, emotional, cognitive and experiential engagement with other individuals and practitioners and the surroundings, with emphasis at bodily interaction during the performance event, and secondly by giving them the opportunity to get personally involved in the course of the event.

In an endeavour to borrow and apply a theoretical frame from performance and live art field to experience design domain, this thesis mainly embraces Ervin Goffman's *Frame Analysis* (1986) combined with contemporary approaches of relevant studies. Goffman's *Frame* includes a detailed terminology at the way social interactivity is moulded in routine activities and artistic experiences, involving: the *natural framework*, meaning events constructed without human and social agency, and *social framework* encompassing the "will, aim and control" of humans to generate events; the *keyed frames* as the patterns of behaviour that pertain to theatrical acting and storytelling involving imaginary and/or 'non-serious' behaviour; the different types of connection between activity frame and the surrounding world within live events ('episoding conventions', 'appearance formulas', 'resource continuity', 'unconnectedness', and 'the human being'); and the *episoding conventions* (distinguishing four types of incitements: *overt*, *implicit*, *covert* and *accidental*) meaning incitements risking in this way to induce invited and uninvited behaviours.

In addition, Goffman considers the audience 'unpractised players' (1990, p. 78), meaning participants that improvise on the fly as the event unfolds. Hence, a significant amount of risk is always taken when audience members are invited to leave their seats and

participate beyond conventional frames, so unwanted or unforeseen behaviours may emerge. Unlike performers, who are capable of handling unpredictable behaviours and inconvenient occasions and raising the suspense, turning an unexpected situation into a challenge and captivate the audience. Similarly designers can only get prepared for the unexpected when organizing live - hence never the same - events. Lastly, the range of potential behaviours perceived by the audience waiting to be actualized by their participation in a performance is called by White 'horizon of participation' (2013, p. 57). The horizon of participation both in case of live art and experience design events is applied to cover the overall context of limits, opportunities and choices offered to and perceived by audience members to become collaborators of the event. A crucial aspect about horizons though is that designers (in case of experience design) and directors (in case of live art) cannot predetermine the overall result as people interaction will realise the live event, but set the context for this interaction to emerge; they merge out of people interaction during the live process.

In the context of this thesis, experience design and live art are associated as both oriented towards incorporating audience enactive participation within cultural events. The first part of the thesis concerns the theoretical basis, and specifically the social, scientific and educational value of audience participation is studied in case of designed live events and applied performance practices. Contemporary design thought and practice tend to incorporate collaboration among artistic and scientific fields, among art and design domains, and also incorporate individuals' contribution not only after the completion of the design process (meaning interact with the design result), but during the creative procedure as well, offering feedback in the middle development phases. Accordingly, in performance and theatre practices, spectators and performers are collaborators sharing power as the event unfolds. My viewpoint is based at Rancière's emancipated spectator from passivity, and personally involved and co-creator of potential epxeriences (2007). I also borrow Shaughnessy's standpoint about actively engaging the audience and transforming them into participants as core principle of the applied theatre (2012, p. 7) and extend it to the field of experience design live events. In essence, spectators are not turned into performers; they are not trained professionals, but protagonists of their own stories. Both performers and audience members become participants collaborating from different positions and backgrounds for the co-creation of live artistic events.

The broader field of contemporary design strategy, and experience design in particular, are creative participatory processes with educational extensions as well, where art and science, practitioners and audience, everyday life and artistic experience meet. Audience, designers and practitioners collaborate and co-create (physical and mixed-reality) systems and environments wherein events and experiences unfold. Designing for experiences to emerge necessitates a holistic view to comprehend and envision the whole context wherein people enter and mould their personal and collective experiences. Hence, the expertise of informatics has long been associated with artistic, design and scientific fields (like mathematics, physics and architecture) as well as cultural theory and social sciences, configuring an interdisciplinary perspective over creating meaningful and substantial experiences.

Experience design embraces a participatory and democratic perspective when designing with the people for the people. Although designing experiences is an ancient

practice, recent research has stressed the fulfilment people feel when accomplishing a task on their own, or when personally get engaged in substantial and meaningful experiences. Further studies have also remarked a general tendency towards the experiential aspect of things over their materiality. Accordingly, designers are more concerned than ever about the experiences they deliver through the design objects, and the impact they have on people mood and daily actions. Contemporary design strategies involve establishing a fruitful dialogue with the people the design result is addressed at, by listening carefully to their experiences, needs and desires and design in relevance to this knowledge. Moreover, people are incited to get personally involved and collaborate with designers during the design process playing an essential role by sharing their opinion at different stages of the creative process. Audience is invited to experience and evaluate not only the final design result but also intervene in the different phases and influence the design development. Giving people the power to participate also during the creative process is the key standpoint of contemporary design thought and practice.

Following, performance (involving in the frames of this thesis the fields of live art, as well as performance art and studies) concentrates at live artistic participatory events involving "empirical time-based and process-oriented work of conceptual 'body'" (Brentano, 1994, pp. 31-32). Perform is a compound notion expressing as verb both 'to do' and 'to act out': in the fields of art *to perform* means to put on a scenic play (i.e. theatrical play, dance show, musical concert); in everyday life, is associated with the intention emphasize at an action for those who are watching; in the area of business and sports with a short of achievement and success; whereas contemporary approaches on social studies, the term suggests any event, activity, item, space and behaviour may be examined 'as performance' (Schechner, 2002, pp. 22, 167). Similar to experience design, performance is more about evoking meaningful experiences, strings of interactions and relationships among participants and performers, than object-oriented strategies. Performance practice also pertains to the intangible forms of culture, since time, space, and audience are essential constituent elements, requiring a type of live or recorded event, to be presented, documented and preserved. All the arts require a performance to be realized and conveyed to people and societies. To study past performances artists and researchers need to gain access to recorded parts or arbitrary registered archives, a valuable method that cannot be compared to personal experience though. The endeavour to safeguard such time-related and interaction-oriented processes is also essential and constantly challenging.

Performance comprises a cultural corporal practice aspiring to convey meaningful aesthetic experiences, just like experience design. The artist's body plays an indispensable role performing time-bound and space-related bodily actions in front of an audience. Four elements are fundamental in live art events and experience design projects to occur in (physical and mixed-reality) environments: *space, time, designer(s),* and *participants,* equal in number to the walls of an ordinary edifice. Additionally, traditional theatrical plays, performance practices, and live art, also include four similar elements: *space, time, performer(s)/actor(s),* and *audience*. The role of each wall is crucial semantically and ontologically, as it backs each element and action included. I associate the four vertical walls of the theatrical space with the four factors of performance practice and experience design projects to enlighten the contemporary tendencies in art and design as well as the contribution of mixed-reality technologies, regarding audience participation.

As soon as a wall is placed within any space, the area is divided in two sections: front and back, front-stage and back-stage, primary and background activity, concealed and exposed, each one resulting at respective forms of performance, behaviour and interplay. Crossing the threshold from one partition to the other entails a transition from one situation/position to another. Reconstructing symbolically a standing wall not only facilitates access from one place or condition to another, but also aspires to surpass conventional conceptions that traditionally bond each element (space, time, participants, designers or performers) with certain features or role. All four elements have been significantly affected partly by the integrated mixed-reality technologies, opening up new horizons for audience participation. Audience participation is definitely enhanced through technology, a contemporary and intelligent co-participant and performer, since space and time have been transcended beyond physical limitations in mixed-reality environments. But technology is not the sole factor that has affected performance event in terms of space, time as well as audience participation.

The *fourth wall* is a theatrical notion, involving initially the stalls, and in extension any form of interaction between performer and audience, fiction and reality. Audience is immersed in a place where hall and stage are merged, a place where artistic and everyday experience coincide, becoming participant and collaborator of the live artistic event. In this case, the audience is not spatially and actively separated from the action evolving on stage, but is rather invited to get engaged into the poetic world. When Brecht aspired to demolish the fourth wall (1977, p. 52) he commenced a bi-directional relation between audience and actors; the audience has ceased being an impersonal viewer ever since. Within the context of this thesis, the *fourth wall* is applied as metaphor for audience participation during live events. Deconstructing the fourth wall is the key point minimizing the dichotomy between designers and participants, performers and audience. By reconstructing the fourth wall, I suggest transcending the notion of *audience conventional participation* experienced in a typical theatrical play to study the qualities and potentials of *enactive participation.* The term *enactive participation* is introduced to involve audience engagement in emotional, intellectual and basically corporeal level beyond the typical audience response (involving for example sitting in the hall, laughing, and applauding), and entails collaboration with performers (in case of live art events) and probably with practitioners (in experience design live events) for the live events to be realized.

In a theoretical basis, the first step was made by poststructuralism supporting everything is in flux, involving any definite, fixed perceptions and narratives. Every social reality is moulded out of encounters with the *other*, i.e. of interactions among individuals, which evolve and change constantly, resulting in personal behaviours and cultural practices. Meaning is no longer fixed; it rather reflects personal and social perspectives, moulded out of interrelations in flux, i.e. complexes of interactivities in incessant cultural processes. Therefore meaning is always performed, and so is social life, involving all human codes and cultural practices. Every text is a palimpsest of impacts already enounced; every culture is an amalgamation of performed processes and subjectivities. The notions of culture, tradition, identity, audience, and participation are culturally and socially constructed therefore constantly variable, as everlasting developing processes. In accordance, Derrida's sense of *deconstruction* affirms any sense of reality is created of discourse. Following, the *performative turn* considers all individual and cultural-social practices 'as performances'. Any

activity is therefore studied as a public presentation of the self. Under this perspective, emphasis is put on human practices in relation to their contexts, contributing to a systemic approach of human experience, using representation in a contemporary, poststructuralist sense.

Similar to meaning and tradition, the role of the audience is also reconceptualised, in modern times more rapidly and broadly than ever. Art has been shifted from object-oriented to event- and interaction-oriented, collapsing the binaries of subject and object. Audience and performers/practitioners are associated in an 'autopoetic feedback loop' (Fischer-Lichte, 2008, p. 39), meaning a self-engendered relation in which audience feedback is part of the work. Participants gradually realise increasingly *meaning is not transmitted to but brought forth by them* (ibid, p. 150). Turning spectators into participants and 'active producers' of meaning, of the live event, entails inciting them to engage in creative activities with educational, social and community content, aiming at social transformation. Change is associated with power. In a performance event, everybody involved (artists, practitioners, audience, etc.) share control of the live situation, to a different extent though. They share control of what strings of interaction are realized and the qualities of experience that emerge. Audience takes over an amount of power as collaborators in creating meaning when invited to participate enactively in a live event.

Additionally, in live artistic events and performances the boundaries between artistic experience and everyday life are diffused. This merge of physical reality and the reality of the play has been exalted by the affordances of mixed-reality technologies. Hence in experience design projects and performances, realities are mixed in terms of the physical and the virtual, as well as everyday interaction and artistic experience. Consequently, a *literal and metaphorical fusion* has been made in the fields of art and design between the subject (participant) and the object (live event), the artist and the audience (like the designer and the people), artistic experience and everyday life, the fictional, the potential and the physical. The design space has changed from an artefact-centred to an experience-centred space. This convergence also entails spatial proximity in performance space and experiential space, since the stage and the hall are unified. Concerning the third (performer) and fourth wall (audience) of a live event that incites enactive participation, performers are not separated from participants in space, as principally there are no spectators or listeners, only the unified event space hosting audience collaboration and participation.

Experience design projects and performance events also entail the configuration of a set of still objects placed respectively at the (physical and/or mixed-reality) event space. The scenery is shaped by their position, distance, action, as well as their behaviour in space and time in accordance with participants' interaction in case of mixed-reality environments. The technologies incorporated enrich the included props with enhanced abilities, like to incite actions, to respond to audience interaction, and trigger events in the frames of a designed narrative form. Performance studies can enlighten designers regarding this compound animated scenery as directing a performance play involves organizing material elements (both static and mobile, physical and virtual), as well as human performance (actors, participants), along with the interaction emerging among audience, performers and the surroundings. Mise-en-scène is a term borrowed from the theatre, meaning the required orchestration of the environment and the conditions for desirable experiences to occur. Explicitly, the notion originally expresses the direction of both the scenery (i.e. scenography,

set design) as well as the actors' performance on stage, or in front of a camera, in the context of a theatrical and/or filmic production. Experience design embraces a contemporary form of mise-en-scène, in the frames of this thesis of directing a live event, organizing the context as well as audience performance and participation in space and time.

Following, inspired Brenda Laurel, who applied in her *Computers as Theatre* the Aristotelian *Four Causes (material cause, formal cause, efficient cause* and *final cause)* at theatrical plays and Human-Computer Interaction, I further these four causes with live events, and the results are presented in Table 2. Under the perspective of live art works and experience design projects, I associate the *material cause* with audience enactive participation, involving audience interaction and collaboration with practitioners (artists, designers) in live events. Respectively, the *efficient cause* of live events involves the designers and practitioners who organize the *mise-en-scène* of the project, meaning not only the props and surrounding environment but also audience collaboration and participation to emerge according to the design objectives. Accordingly, the *formal cause* of live events, meaning the form and scenario of live processes, comprises synthesis of experiences, strings of interactivities and sequences of events, characterised by fluidity and variability. Designing for audience experience extends staging a scenic play and includes the organization of sequences of events and interactivities, among practitioners, participants and the surrounding physical and/or mixed-reality environment. And experience design concentrates on the arrangement of static and dynamic aspects in space and time, involving not only the surrounding environment but principally potential sequences of interactions and events interwoven in a compound but stable narrative structure.

Consequently, live events can never be stabilized during the design/making phase. As open artworks, live events are differently configured each time performed and experienced. Besides, unlike theatrical plays and movies, live events are not linearly structured. They include bundles of stories which unfold through audience (enactive) participation simultaneously or sequentially, as alternative scenarios are prepared for the audience to discover and make their choice on how the event evolves. Above all, audience are given the opportunity to contribute even beyond any directing lines and improvise, opening the work to risky and unpredicted results. Therefore, live events do not have any fixed ending or catharsis. A certain common point is though decided in advance when individual interactions and consequently the whole event reach completion, delivering every time different experiences to different audiences. In this case, weight is put on the entire journey, on the actual personal and collective experience, not on a particular destination; on the aesthesis of the every-time-unrepeated journey moulded out of audience enactive participation.

THEATRICAL PLAYS	
Material cause	Actors' enactment according to the script.
Formal cause	Form and plot of the play.
Efficient cause	The set of actors and practitioners involved (director, scenographer, sound manager, inter alia) along with

	their skills and props used.
End cause	Catharsis.
HUMAN-COMPUTER INTERACTION	
Material cause	Users' interaction via mainly digital means.
Formal cause	Alternative scenarios given to users as well as the form of the entire project.
Efficient cause	The designing and developing team as well as the media and tools incorporated.
End cause	Issues of usability and functionality.
LIVE EVENTS (experience design and live art projects)	
Material cause	Audience enactive participation.

Formal cause	The narrative structure of live participatory events:
	• involves a synthesis of manifold stories that unfold simultaneously and/or sequentially.
	    • comprises a variety of alternative scenarios the audience can discover and participate.
	    • all strings of interaction reach a certain point of completion; catharsis is not necessitated.

Efficient cause	The team of designers and collaborators who organize the surrounding context and conditions as well as audience participation for meaningful and desirable aesthetic experiences to be delivered (mise-en-scène).
End cause	Audience members are given the opportunity to participate, communicate and collaborate with practitioners (artists, designers) and with each other on the occasion of an artistic framework.

Table 2. Applying the Aristotelian *Four Causes* in theatrical plays,
Human-Computer Interaction, and live events.

Aesthesis is a compound notion involving manifold esoteric processes concerning corporeal and material aspects, emotions, and contemplation. For pragmatism, experiences are firstly proven to be more valuable and satisfying when aiming to fulfil needs and desires

of the individuals participating. Under the pragmatic perspective, aesthetics is not an inherent attribute of the artefact, but depends on the outcome of human interaction with it (aesthetics of interaction). Thirdly, the sensual and emotional aspect of experience is brought into designers' attention when setting the appropriate contexts for meaningful and gratifying human interaction to emerge. Fourthly, the social and cultural framework has also a strong impact at the aesthesis civilians have of daily and/or aesthetic experiences, manifested in personal physical, emotional and intellectual responses, and extended even beyond the duration of the actual experience. Moreover, contemporary notions on aesthetics focus on the impact design results have on individuals, their perceptions, emotions, moods and behaviours when interacting within particular cultural contexts, rather than concentrating at standardized and objectified artistic qualities. Finally, aesthetics as *aesthesis* extend beyond the fields of the art to embrace the multi-sensorial aspect of daily experiences. Aesthetics is inherent in our everyday interactions within the world and not in tangible properties. Therefore, aesthetics is not a priori but potential aspect of life, which emerges in use and experience, released in dialogue with the world.

Contemporary tendencies on aesthetics, like pragmatism, are more concerned with aesthetics of interaction among people and the surrounding world. *Aesthetics of interaction* concerns the *aesthesis* of the surrounding world. Therefore, the roles of the designer as well as the participant are fundamental to events and aesthetic experiences to occur. In accordance to pragmatic aesthetics, experience design considers experience *before* product, oriented towards people's interaction and participation, instead of focusing on the product's features, appearance and functionality. Although experiences are designable, designers cannot predetermine participants' experience and involvement. In case of *aesthetics of interaction,* the material aspect of the work is hardly tangible. Especially integrated digital and mixed-reality elements are by nature flexible, ungraspable, and phenomenal. This *mixed reality* aspect of materiality has affected immensely human life and communication. Technology as well as information has been both embedded in daily basis, affecting the aesthetics of interaction in interpersonal, social, cultural and artistic events.

McCarthy and Wright's theory of pragmatist aesthetics supports aesthetics of experience is directly interrelated to the analytic mind, the senses and the emotional reaction. They approach experience through a holistic perspective involving four core threads of experience (2004): *sensual*, *compositional*, *emotional* and *spatio-temporal thread*. The *sensual thread* refers to human multisensory engagement while present and interacting within a particular environment and situation, similar to Norman's *visceral* aspect regarding human sensory perception (2005). The *compositional thread* concerns the way an event unfolds and how people that participate make sense of the whole event; it refers to *our internal thinking* concerning an experience. Moreover, the *emotional thread* concerns how certain conditions influence people's relationships in emotional level shaping their overall experience. Finally, the *spatio-temporal thread* regards to space and time as determinants of communication, converse and interaction. The architectural, physical, and socio-cultural environment is not merely the container of human experience but a significant factor contributing at the aesthesis of the event. For the purposes of this thesis, emphasis is placed on audience *enactive participation* in live events with artistic and educational character. Therefore I primarily concentrate at the sensual and compositional aspects of audience experience, when personally and physically engaged at the course of things.

In the context of this thesis, the notion of *enactive participation* is introduced to involve audience engagement in emotional, intellectual and basically corporeal level beyond the typical audience response (sitting in the hall, laughing, applauding), and entails collaboration with performers (in case of live art events) and designers (in experience design live events) for the live event to be realized. As stressed earlier, *conventional participation* is not discarded as opposing mode, but is considered prerequisite basis for enactive participation to emerge. Specifically, *enactive participation* has twofold meaning: firstly, this type of participation incites individuals to stand up literary and metaphorically from their seats, cross the hall, enter the event space, and interact in somatic level with the surroundings and with others: audience, performers, practitioners, facilitators, and everyone involved in the live event. Secondly, the audience role exceeds spectatorship and includes actual and organized collaboration for the event to unfold. The first aspect is associated with the *sensual thread* and the second with the *compositional thread* of experience of McCarthy and Wright (2004). The notion *enactive participation*, proposed in this thesis, supplements and simultaneously transcends *conventional participation* (involving somatic, emotional and intellectual interaction within a particular physical and/or mixed-reality environment), and comprises the *material cause,* i.e. 'that out of which' live events, like performance events, are made of.

Concerning the *sensual thread* of *enactive participation* in live events, I borrow Machon's *(syn)aesthetics* (with parenthesis) to identify both a 'fused sensory perceptual experience' and a 'fused sensate approach' to artistic practice and analysis (2009, p. 14). To experience (syn)aesthetically means to perceive somatically the details. To experience a performance (syn)aesthetically involves fusing 'the somatic and the semantic' to incite a visceral response in terms of the audience (2009, p. 15). Both Machon and Cytowic (1995). emphasize at the experiential nature of understanding through the senses and concentrate on *synaesthesia*. Similarly, Shepherd refers to 'kinaesthetic empathy' between spectators and performers via their musculature (2006, p. 46) so the effects 'bypass the intellect' and are 'felt in the body' (ibid, pp. 336-337). This proximity and contact in terms of space, embodiment and feeling evokes meaning and interprets the intangible in a mode of *connected knowing* as aptly expressed by Field Belenky, McVicker Clinchy, Rule Goldberger, and Mattuck Tarule (1986, pp. 431-446). Also Kester, concentrating at the durational character of aesthetic experiences, talks about a 'somatic epiphany', which evolves through a cumulative process of exchange and dialogue (2004, p. 79). All referred viewpoints meet in the fact that aesthetic experiences enable through incorporeal interaction emotional engagement and semantic comprehension, in participatory live performance practices.

Applied theatre and performance focus on audience participation, and particularly on human understanding and response, not only in emotional and cognitive level, but *through the entire active body.* Enactive participation regards the body as sentient vehicle for sharing, interpreting and contributing at live socio-cultural and performance events. In the context of this thesis as well, weight is put at the human body during experiencing live events, since the body is the principal place immediate perception is located (Machon, 2009) inducing 'other kinds of knowing', like 'intuitive knowledge' (Cytowic, 1995, p. 167). The human capacity to make sense through the senses, to make meaning through the somatic experience, is inherent and educed out of the limbic system. Therefore, the semantic is generated through perception and remembrance, functions that emanate from experiential

memory of the embodied self (the somatic). Since perception of ordinary reality is altered, the power of imagination is essential during synaesthetic experience, blurring the sensation of corporeal and fiction (Luria, 1969, pp. 138-144). In this way, a synaesthetic experience feels like an individual lives in "two worlds at one, like being half awake yet still anchored in a dream" (Cytowic, 2003), similar to experiencing a live performance as performer or participant, as the borderline between the world of the performance and the everyday experience is blurred.

This thesis concentrates on intangible forms of culture through enactive audience participation in live events with socio-cultural and artistic content, with entertaining as well as educative extensions. Specifically, the intangible aspect of culture involves not only cultural values and practices (performances, events), but also notions, like, beauty, emotion, pleasure, thought, meaning, story/structure, virtual, becoming. The objective of this thesis transcends the production of artefacts, to safeguard and design the intangible by turning it into tangible through the somatic aspect of audience participation and the incorporated 'tangible' elements: scenery, props, characters, spectators, visual design, interfaces, sensations, mixed-reality technologies and performances. Regarding the way the intangible is turned to tangible, Machon describes through his (syn)aesthetic approach that memory of past experiences *is* tactile since "*the original visceral experience remains affective in any subsequent recall*" (2009, p. 18) (my emphasis). The performing sentient body is the core of communicating and preserving the *unsayable.* The somatic aspect of experience instils a 'primitive sensitivity' (Luria, 1969) and turns the elusive and immaterial into perceivable and understandable. Accordingly, the (syn)aesthetic performance style can make the unpresentable and inarticulable presentable or *'the intangible tangible'* (Machon, 2009, p. 67) (my emphasis). Based at the corporeal aspect of experience, a visceral cognition is developed through the amalgamation of reason, sensations and emotions, giving sense to and safeguarding the intangible and inarticulable.

Accordingly, the *formal cause* of live events coincides with the *compositional thread* of *enactive participation*, meaning the narrative structure, which differs from conventional scenarios and past modes of human-computer interaction, since opened up to audience participation embracing the unexpected. A live event (even thoroughly organised) is still fluid and variable, as synthesis of collective experiences, interactivities and parallel stories, resulting in different outcomes every time experienced. Live events do not comply with the Aristotelian narrative structure: firstly, as open artworks live events are not stabilized in form during the creative process but during experienced and performed; secondly they reach a predetermined point of completion according to the agreed objectives; thirdly, there is no longer a single linear narrative with sequent parts/episodes, but rather parallel stories evolving even simultaneously in equal points of action, within a certain time period; fourthly, participants are offered choices to decide their own way through the whole event. Principally, they are given the opportunity to walk on the borderline of scenario-based interaction and improvised behaviour, opening the work to the unpredicted.

In this way, a complex narrative structure is interwoven as at any given time during the live event a given spectrum of roles interact in relation with each other: 1) people who conventionally participate, 2) those who enactively participate, 3) audience members who may not be even engaged at that point, 4) performers who follow scripted behaviour as characters of the play, 5) and performers who facilitate the audience participation so the

story unfolds. All these roles are interrelated and interchangeable, during and between frames of action. Evidently, all roles and encounters are not directed in a linear - always the same - relation to each other, like in case of a film production, but attuned in potential strings of interaction that may be actualised in multiple variations and combinations. Murray introduces in his *Hamlet on the Holodeck* the notion of *procedural authorship* (1999, p. 152), meaning writing not only the text (scenario) but the context the text is presented, involving the interactors' involvement as well as the surrounding conditions that derive from and influence at the same time this engagement. The *procedural author* creates narrative structures with 'gaps' waiting for an every-time-different ensemble of spectators to fill them up with their every-time-different interactivity and participation.

Nevertheless, live events that incite enactive participation are scenario-based works and not entirely improvised projects, linking series of (aspiring meaningful and desirable) interactions and stories under a complex narrative structure, offering people the opportunity to collaborate and at the same time maintain the overall flow of the event. Specifically, the value of stories is appreciated by designers and sholars, considering content as 'tool for conversation', and experience as 'the message not the content' (Hostyn, 2010). Stories are essential constituents when designing for live events as they: 1) *create meaning*, applied to organize the content and create order out of chaos; 2) *incite remembering, togetherness and sharing,* by bringing people together inciting companionship and self-expression; 3) *help create results with long-lasting emotional impact, and* bonding is an essential element to create memorable and gratifying experiences; 4) *give us a deeper understanding of what is important to us,* by giving narrators and listeners the chance to observe their thoughts and feelings regarding a given situation; 5) *help designers elucidate their goals,* since sharing stories help designers specify the type of experiences they want to deliver people; 6) *are associated with personas to make them complete,* as designers endeavour to understand these imaginative people behaviour and motivations by making meaningful stories about them; 7) *are triggers for conversation, analysis, and feedback,* used at the beginning of and during the design process to set the goals and improve the overall outcome; 8) *reinforce participation,* as the most elementary and natural way to initiate interaction with the audience; 9) *raise expectations and surprise,* and surprise is a key element when designing experiences; and finally 10) *reflect and create culture,* by transmitting the histories, values and beliefs of social groups to other groups or generations.

Stories are not conduits to convey knowledge, messages, values and identity matters, as cultural principles and values are continuously, even slowly, reformed in time and history. Storytelling contributes to 'cultural reconstruction' (Glassie, 1995) by unceasingly moulding and modifying cultural content every time performed (e.g. narrated) and experienced in any way. Stories are common means to convey and at the same time create cultural contents, passing them from certain social groups and generations over to others. Stories are also familiar means to create participatory contexts with educative contents and objectives. Passing on information and cultural values through sharing stories is an established performative mode, since ancient times when people were narrating myths, fairy tales and other forms of codified knowledge. Stories have educative potentials, as scholars and scientists have affirmed their connection to understanding, communication and intelligence. Moreover, information and experiences conveyed through narrative form are easier perceived and memorisable when passed over to others. Since primordial times people have

instinctively used stories to share their past experience, tradition, values and knowledge and come together on a common social and cultural basis interwoven out of social interaction.

In enactive mode of participation, the essential element is to experience stories through audience engagement interlaced in a certain narrative structure, coherence and relevance on the fly, meaning without any previous rehearsals. Designing potential experiences situated in real time and space, may take inspiration from the capabilities of and the risks taken from actors/performers while improvising during live performance events to create meaningful and substantial results *with the people for the people*. Improvisation entails alertness and spontaneity; everything is happening *right here and now for the first time ever*. Spontaneity is essential factor of every work of performing arts as any actor without this quality lacks presence, and most importantly lacks authenticity. Spontaneity carries absolute truth – e.g. babies are always truthful and impulsive. Likewise, the audience needs to have the feeling the play they are attending is occurring for the first time ever, and they are lucky to be there and witness it. Every performance is spontaneous, fresh, never repeated the same. Performers focus every time on their present never the same performance. In live designed events, also participants and practitioners are engaged in the moment, incited to feel safe and respond spontaneously to current conditions. The way we are prepared for potential interactions, and manage spontaneous changes and responses on the fly, creates a successful flow in the whole experience, constructing a cohesive evolving scenario and an interesting result.

Nevertheless, involving audience collaboration in the flow of live events entails taking a significant amount of risk, in terms of both the role of the performers and the audience members. Similar to live art, experience design also embraces a participatory and democratic perspective designing *with the people for the people*. By involving enactive participation, performers take great risks as all kinds of audience responses are possible to accrue: people may not respond to the incitements of the performers, they may respond in an unsuccessful way, or they may accept the incitement and still do nothing, and none of these situations are ideal for the story to unfold. However, audience members have the right to choose their experience and mode of participation, so none of the above responses should be overruled, but accepted as part of the live performance event. The keystone is to avoid conflict and chaos by keeping the flow. Although control and flow seem similarly effective and capable of keeping disorder and chaos out, they are different. It is impossible to control a situation (like a live event) where numerous unstable factors (like audience enactive participation) may affect the overall work in unpredictable ways. Performers are not trained to control situations, but to go along with all kinds of developments, expected or not, desirable or not, invited or not. Performers are not in position to control audience reactions, but embrace the unexpected and manage to keep the flow of the event according to the narrative structure.

In order to accept and enactively participate in a live event, audience needs *feel* safe in three levels: in relation to the surrounding (physical or mixed-reality) environment, to the other audience members, and to what they are asked to do. People avoid negative criticism, especially if they share personal thoughts and feelings. They do not want to feel embarrassed in front of strangers and more importantly among people they value their relationship with. Besides, people feel less motivated when asked to undergo stressful and awkward conditions, physically or emotionally demanding experiences, to achieve tasks

beyond what they (think they) can face, or unpleasing in any way. Most importantly, taking the risk is not an objective issue but rather a subjective one: it is about *how much I feel I risk* by enactively participating today in this particularly live event. Therefore, members of the audience need to be encouraged that although they take a risk by stop being spectators and expose themselves, this risk is worthwhile and small comparing to the experience they may eventually have in the given context.

The first section of the thesis, concerning the theoretical framework of my research is extended in four chapters. In the *first chapter*, I define the subject regarding people participation in live events for cultural and educational objectives, and set the overall frame and perspective involving the experience design, as well as the research strategy which is the convergence of experience design and live art, under this scope. In *chapter two*, I analyze the spectrum of people participation during the creative design process in general, and experience design method in particular. Following *chapter three* concentrates at audience participation in performance practices, as shaped through contemporary theories, philosophical perspectives and turns (poststructuralism, postmodernism, performance studies and performative turn inter alia), and the incorporation of mixed-reality technologies in live art events. The third chapter is completed with the common ground of contemporary design strategies and performance fields, regarding the participation of individuals and social groups in live participatory events. Lastly, audience participation is studied in chapter four in theatrical and performance plays, and a new form of participation is proposed that exceeds conventional forms of spectatorship. My proposal (enactive participation) is based on the juxtaposition of Cognitive Science (Varela, Thomson, & Rosch, 1993), as well as Cognitive Psychology and Cognitive Learning Theory in Educational Psychology (Bruner, 1990), applied in the fields of experience design and designed live events for artistic and cultural purposes. This first section aspired to: identify aspects of the chosen issue, which have been investigated by other scholars and artists as well; to develop the theoretical framework regarding specific concerns; to make associations and comparisons with multiple standpoints of other researchers and scholars; to anticipate difficulties when approaching the research issue; and to designate and present new views and results deriving from my research.

7.3 Review and conclusions from the methodological approach of the field

The second section of my thesis concerns the methodology and case studies I chose to approach and study enactive participation in live events under the perspective of art and performance. The research questions raised from the first section and the theoretical framework are focused at three thematic axles, inquiring specifically: a) the ways each director (or group of directors) conceives and applies to make the audience feel relaxed and comfortable to participate enactively, as well as the effectiveness of their approach, through the eyes of the audience members, and my personal experience; b) the reasons and the ways multiple senses are stimulated in particular parts of the event, as well as the audience opinion regarding the multisensory interaction they experienced; c) the narrative structure

configured in each case interwoven out of scenario-based parts and gaps where audience enactive participation were invited, forming each time a unique overall experience for everyone involved.

In order to research particular instances of audience participation in live events with artistic content, three case studies were chosen, all performed in Greece (Athens and Thessaloniki in particular). These case studies are: i) case study 1, *Fake Time @ Ariston Hotel* (Thessaloniki, 2011-2013), directed by Lela Ramoglou; ii) case study 2, *Katerini* (Athens, 2010), directed by the Blitz Company; and iii) case study 3, *Situation Rooms* (Athens, 2014), directed by the Rimini Protokoll. The choices cover certain criteria: firstly, the different qualities of enactive participation incited during these performance events, turning the audience from spectators to collaborators of the overall experience and performance and vice versa. Secondly, in order to study physical engagement beyond the level of conventional participation, in each case more than two basic senses (specifically hearing and vision) are stimulated, involving the other three senses as well as physical action and interaction within the performance space. Thirdly, covering in this way the proposed definition of enactive participation, the three performances do not comprise a single narrative, but rather a compound narrative structure interwoven out of a bundle of stories that occur in parallel throughout the play.

The three performances offered the opportunity to study the different applied views and ways enactive participation was incited by in each case, and conclude to specific advantages and disadvantages accrued. The theoretical framework of *enactive participation* in the context of this thesis is based on one hand at Machon's *(syn)aesthetic* approach (2009) in terms of physical engagement and interaction, and on the other hand at Goffman's *Frame Analysis* (1986) along with the extensions of White in audience participation (2013). In extension to Machon's *(syn)aesthetic* perspective, the selected case studies comprise artistic contexts aspired to achieve and/or incite *fusion* in multiple aspects. This sense of fusion impacting variously the performance result is organised and examined in the frames of the three cases studies according to the three axes of the research questions: a) enactive participation, b) sensual (and secondary emotional as accrued in retrospect) thread, and c) compositional thread, as following (table 3):

A) Enactive participation

- *Fusion of conventional roles* among participants and performer(s) and among audience members.

- *Fusion of space:* when public space and performance place, stage and hall coincide.

- *Fusion of realities:* merging the digital and the physical, the real and imaginative, artistic experience and everyday life, as well as various artistic disciplines.

B) The sensual (and emotional) thread

Fusion of corporeal, cerebral and emotional perception: aspiring to deliver meaningful and holistic experiences to the audience, involving the body, mind and feelings.

C) The compositional thread

Fusion of scripted and improvised interactions: since the narrative structure is a combination of directed parts and gaps potentially filled by people enactive participation.

Table 3. Organising the results in the three basic research axes*.*

Respectively, the methodology followed (analysed in chapter five) includes three methods of qualitative research: *case study, participant observation* and *interview*. In particular, the three artistic events (*Fake Time @ Ariston Hotel, Katerini* and *Situation Rooms*) were selected as *case studies* and evaluated in relation to the subject by personal *participant observation,* and through the *interview material* collected from both the directors and audience members. The interviews of the directors were completed firstly, followed by the interviews of the audience members. The research process involved in general eleven interviews (four directors and seven audience members) taken in the period between November 2012 and August 2014. In terms of the place, the media used and the type of the interview, six interviews were conducted through face-to-face conversation in Athens and Thessaloniki, four of them via Skype (principally because the interviewees live away from Athens), and one interview via email for practical reasons.

Concerning the first and key subject under study, meaning audience enactive participation, it is analysed in terms of the relation and interaction among participants and performers, as well as among the audience members, secondly in relation to the merge of space (stage and hall, performance space and public space), and thirdly the mixture of realities (physical and digital, real and fiction, art and life). The sense of fusion regarding the roles of the audience and the performers aspires to transcend conventional participation and turn strangers into collaborators of the live participatory event. When audience involvement *is* the performance, like in case of the three art events under study, the primary conclusion I came up through my research is the need of boundaries literally and metaphorically speaking. Just like chaos needs a frame to expand and evolve in order to be a fountain of creation and not demolition; just like the tree roots expand deeply in the ground to make the bole strong to reach significant heights; just like conventional participation is prerequisite to enactive participation and not an opposite quality; just like any converse notions that complement instead of contradicting each other, fusion requires boundaries and structure: physical (in space and between bodies), emotional, and intellectual. In essence, fusion requires boundaries in the following aspects:

- *Stable structure:* The feeling the performance coherence is firmly secured, helps the audience relax and get engaged, even pass from the role of

spectator to enactive participant without even realising this transition. My **decisions** as audience member on enactively participating or remaining spectator cannot negatively affect the flow of the overall event, releasing in this way any tension and defensive attitude of mine.

- *Boundaries in responsibility:* the responsibility of the overall event is not actually evenly shared. Participants contribute as collaborators, they are qualified or responsible to support the art work; performers are professionally trained and prepared through rehearsals to do so.

- *Boundaries among participants and performers* in two aspects: primarily to secure the two roles do not coincide, and secondly to designate a demarcation line concerning the appropriate participant behaviour, meaning mutual respect.

- *Boundaries between among participants*: unfamiliarity contributes at being more open and sincere while interacting with other people and the surrounding environment.

- *Boundaries in the context, meaning space and time,* to designate the thin demarcation lines and hues of audience takes place.

- When realities are merged, *don't perform, just play.*

Specifically, although the roles of audience and performer tend to coincide, they are actually never equated. Firstly, due to the different background, since performers are trained professionals who rehearse on their artistic work for a significant time period to be prepared to conduct the event towards a desirable outcome. Secondly, because even though the responsibility of the final result may seem to be shared to everyone present, and control over the action is given to the audience as well, the audience members cannot easily carry the weight of this responsibility, at least not comfortably, even though they are (or suppose they are) open to experience these boundaries. Audience members need and deserve to have the right to choose if they feel ready to cross the threshold of spectator. Additionally, they need to feel this threshold is open for them to return whenever they choose without this coming in and out of the action to affect the performance result. Their collaboration and participation is more emancipated and they become more engaged in the flow of the event when performers constantly maintain consistency of the overall performance so it is not negatively affected by their behaviour and contribution.

Consequently, in contrast to my initial definition of 'enactive participation', according to which the audience is given the opportunity to *interfere* at the course of the artistic live event, at this point of my research I conclude interference is not expedient to define audience contribution in the play, but *collaboration*. Audience members never intervene, meaning they are not asked or allowed to alter the narrative structure, or in other words the general context, but get engaged and collaborate in all levels for the narrative structure to unfold. Although participants play a fully integrated and thought through role, as incited to leave the spectators' seat, they essentially *collaborate* with the performers*,* they do not interfere in the performance structure, as it is necessitated it is maintained as the event unfolds. In this case chaos is contained rather than dominate the course of things.

Even though in enactive participation the roles of performer and participant exceed their traditional definition their distinction is preserved. A demarcation line always stands defining the commitments of every role, even blurred in times. This line is more discernible when interactions between performer and participant emerge among strangers. As the roles of performer and participant need to be distinct, any form of familiarity among the people who play these roles can undermine the overall experience, in case adequate distance in their behaviour is not preserved. Even if audience members encounter with performers they are familiar with in everyday life (friends, family, partners), acting like they are strangers help them both by giving space to different experiences to emerge out of their interaction, unlike any patterns of behaviour they are both accustomed to follow in the frames of their established relationship.

Another point my initial position on enactive participation needed to be reconceptualised is that participants and performers both agree they feel more comfortable and capable of opening up to the flow and action of the event when surrounded by strangers rather than familiars. It has proven that even audience members who experienced the event attached to with someone close to them (friend, family member, partner) admitted their experience was not eventually liberating enough because of this choice. Participants seem to be more comfortably themselves when surrounded by strangers, so they indulge themselves more easily in interactive encounters with strangers. It has been proven that intimacy and friendship in these situations do not contribute to non-defensive and hearty behaviour since participants most probably cannot be deliberated from social and interpersonal conventions when surrounded by their intimates. Hence, both directors of *Fake Time @ Ariston Hotel* and *Katerini* stressed performers were instructed to prevent audience members in multiple ways from experiencing the show together with the people they had come to see the show with.

An applied though extreme method to minimise any feeling and impediment of familiarity is to eliminate the chances of having spectators during the live event, only enactive participants too occupied to watch others (like in Situation Rooms). The feeling that nobody is available to observe other people and therefore probably criticising their behaviour is liberating for audiences, helping them to concentrate at the action and let themselves go with the flow of the event. This condition wherein there are no spectators, organised in advance or happening by chance during the live event, is mostly like the feeling of *duende,* in accordance to Lorca's definition in his lecture *In Search of Duende* (1933), meaning a heightened state of emotion, expression and authenticity, where audience and artists are overwhelmed. Contemporary tendencies in art experiment on the idea that although there is no theatre without audience, there may be theatre without spectators, meaning people who conventionally participating, as long as they are enactive participants, meaning individuals whose participation is the performance.

Similar to the fusion of the roles, conventional spatial separations also tend to be abolished as well. Participants are no longer sat in the darkness of the hall but are incited to step into the stage, which may even cover the entire performance area. Like in the art events under study, as every room and floor is available for enactive participation, the entire performance space is turned into a realistic and at the same time fictional stage. The fusion of roles and the following proximity among participants and performers in multiple levels is followed (or respectively resulted) by fusion of spatial limits between public space and

performance space, as well between stage and hall. Since stage and hall are merged into a cohesive performance area, even extended outdoors in public space, the performance space is emancipated from the theatrical space (the edifice). Still, apparent and well-defined spatial and time limits are necessitated, as participants need to be aware of the spatial boundaries, wherein they can get immersed, and probably even be aware that a professional will be there in case they have exceeded these limits and bring them back in the game. Respectively, time limits are also indispensable so the overall work is synchronised into a coherent narrative structure, and is not turned into an exhibition or installation for example, where spectators can enter and leave the place as they please. Crossing the discernible boundaries entails entering the performance world, wherein audience enactive participation is incited to interact with certain amounts of freedom and restrictions. Therefore, discrete boundaries are also required in matters of space and time, configuring in this way the spatiotemporal context, wherein potential strings of interaction and communication can emerge.

The final point concerning the audience enactive participation concerns the fusion of realities, meaning both the incorporation of mixed-reality technologies in the physical environment, as well as the blur of the boundaries between everyday life and artistic experience. Regarding the first, digital media have long become essential elements of contemporary art and intelligent collaborators of interaction. As Wetzel shared, for his work (*Situation Rooms*) 'the dramaturgy is the technology', offering a window to the 'otherness', i.e. an augmented perspective over physical everyday reality. The integration and effective synchronisation of physical and virtual elements and layers of information result at the diffusion of everyday life and artistic experience usually with impressive outcomes.

Beyond the incorporation of any technologies, in the three case studies, like any artwork, participants are transferred to this 'other place' on the borderline between fiction, simulation and reality, where daily circumstances are simulated and transcended at the same time; in another 'here and now, at the space and time of the performance. These artistic events comprise synthesis of realistic contexts and conditions, wherein audiences can be immersed and participate enactively. In these imposing in majority performance places, daily life and interaction is augmented basically by the potentialities opened up by the artistic experience and the realistic sceneries, and less by the affordances of mixed-reality technology. In these sceneries, the originality of the moment is intensified as the boundaries between real life and artistic action are blurred. Audience members found themselves in situations they could not discern their own reality from the one of the performance, resulting even in intense incidents and expressions over the limits, as analysed in chapter 6. As soon as the audience enters the stage, there is no darkness of the hall; the demarcation line between reality and performance play are more blurred than ever and in extension artistic experience and everyday life coincide. Immersed at the performance world, on the verge of daily routines and artistic experience, wherein social and cultural encounters take place in unconventional conditions, the role of audience member is more diffused than ever.

According to the interview material, two things have contributed to clarify what audience members are asked to do during a live event. The first one involves there is no need to pretend to be someone they are not, or do something out of obligation; audience are not actors so they expected to act out any role. Being asked as audience member just to

be myself and not pretend to be someone else is essential and comforting, releasing the stress of my 'performance'. Participants just want to feel acceptance, the freedom to act naturally, without any expectations or restrictions of their actions; knowing that just by being themselves and enjoy the play is what the performance needs to unfold. The second refers at clear instructions given by performers as facilitators, and/or any other device (like the iPad in case of *Situation Rooms*) about specific actions participants may follow to collaborate as the story unfold.

Similarly, stepping in the stage and interacting in this small distance from the performers is challenging for them too. People can instantly sense if they are spontaneous, present and authentic. Participants stated that performers' neutral presence made them feel relax and comfortable; they were just doing their job, without being negatively affected or distracted by the audience interaction, helped participants to feel trust and let themselves get involved in an inner way as well. Otherwise, if the performance intention is lost, i.e. to make participants feel that they are in a real space, a real situation, participants could feel the fictitiousness of the show. According to John Britton, the critical thing is *not to perform but play*. By playing, in terms of both the participants and the performers, he is talking about the serious aspect of finding my pleasure as the performance unfolds instead of trying to be somebody else out of a personal need to entertain or satisfy anyone. By pursuing pleasure I find meaning and value in what I am doing, I am simply me without any need to pretend anything. By finding pleasure I am authentic while participating. Trained performers are trained to do their job under this perspective, at least according to Britton's philosophy, and respectively participants would benefit if they were incited not to please anybody watching them but be free to find their own pleasure.

Furthermore, the somatic aspect of enactive participation is another delicate factor that aspires to surprise and offer pleasure to the audience, especially in case of designing for multisensorial experiences to emerge. Inciting multiple senses is essential so participants get immersed in the performance world, and feel the reality of the surrounding spatiotemporal context. While passing from one-to-one or one-to-many interactions, a fusion of sensations is aspired to evoke their incorporeal engagement, which surpasses the physical level and has a strong impact on their feelings and overall perception as well. A somatic response entails more than senses and emotions; it is a complete experience involving every level of awareness, in conscious and subconscious level. A multisensory experience is more than feeling through the body, just like an emotional journey is more than feelings; the body, the mind, and emotions are communicating vessels of perception and response and each one affects and passes on information to the other. Feeling warmth in my hands, for example, may make my fingers warmer and more comfortable, but *may* as well make me smile in a cold winter day (just by holding a coffee mug) and by extension even help me concentrate on my writing project. Carrying a delicate goldfish in a jar while talking about the best sunset I had in my life, *aspires* to open up a more sensitive part of me. Intentionally I stress the possibility of these conditions as it is always *my* decision how I will respond, as participant.

The essential notion of boundaries returns again at this point of emotional thread. Apart from spatio-temporal boundaries, personal boundaries are unquestionably necessitated during social intercourses for convenient and qualitative experiences to emerge. Especially in live participatory artistic events, audience members need to feel the existence of firm limits kept during the show in order to feel comfortable and get engaged

with the process. Personal boundaries involve a compound set of social and personal norms people are accustomed to follow in physical, ethical, and emotional level inter alia, varying within different cultures, social groups, time periods, and principally depends on the individual's personality. Although a certain amount of anxiety can be a precious factor as concentrates attention, reducing distractions, beyond this limit, anxiety can evolve into fear and block our intercourse with others. As long as people with different personalities, needs, cultures, habits, desires, criteria, and backgrounds come together and interact in deeper levels, safe limits are required so they feel respected and comfortable to participate and get engaged to the flow of the live event.

Emotions colourize and affect our experience of a situation, helping us to comprehend what actually happened. Audience engagement and interaction entail direct, willing and undisrupted personal involvement in emotional, cognitive and/or incorporeal level. Emotional guarantee is an important factor, meaning to feel free and safe to participate during the event. This emotional guarantee is aspired to be achieved through various techniques: for example, by inciting the audience to feel joy and playfulness; by offering the right to have a choice whether to do or refuse to do something, through a plethora of possibilities ('as-if' scenarios); by making them feel they can rely on a system/event/structure under given circumstances and expect no unpleasant or risky consequences; by giving them the opportunity to experience directly the live event without mediation, inter alia. Emotional guarantee is a crucial aspect as performers and designers aspire to make their audience *feel* comfortable and get unambiguously engaged to the action, go along without disruption, and avoid conflict and blocking from and to others; in other words to *feel the flow*.

Audiences always fear of behaving in a socially unacceptable way and dissipate their social image. Most of human behaviours are based on different levels of fear and audience members mostly fear of others' criticism. Nevertheless, an "aesthetic experience offers us the chance to access in some safety emotional states that in a more interpersonal relationship we might be afraid of exposing, either because we are afraid of what other people might think of who we are", according to John Britton. Nevertheless, the less we judge and respectively defend ourselves against criticism, the more open we are to experience current situations and come closer to others. Directing a live artistic event, involves endeavouring to eliminate fear and defence; involves simple, clear and direct information given to the audience, to built trust, make them feel relax and enjoy the show. It also involves asking the audience to do things that seem possible at that moment *for them to do,* so they can have the experience of doing it. Directing emotional engagement entails inciting meaningful and challenging interactions, not too risky or complicated in physical or any other level. Directing emotional engagement necessitates gentle and calm approach and clear guidance.

Emotions are a powerful medium to communicate and share our inner world. The directors aimed at inciting emotions to set in motion and slightly displace something inside the audience; a short of awareness to be realized; an emotional and in extension psychical movement. This endeavour though needs time to evolve inside each person. People need time to realise, to relax, to even trust this process will not make them feel embarrassed or exceed their limits in any way. Besides time, the familiarity of the audience concerning the issues raised can affect the level of the emotional involvement, meaning how 'close' or

related they are to the subjects, for example love, war, loss, social matters, like in case of the three artistic events under study. A third factor involves the amount of information delivered to them. It has been proven that an adequate quantity of information, evokes too much intellectual process, so less emotions can be stirred up (at least consciously), again because more time is needed to process and become aware of the effects of the experience in emotional and additionally cognitive level. Last but not least, audiences need to feel they are not conducted to enter a specific emotional state, interviewees stated they were more emotionally moved when they were not forced to feel in a specific way, as the performance gives them the freedom to feel and respond out of their own free will and not a certain emotional weight. Directors can approach the matter (for example loss) without the (psychical) weight it contains, in a way that moves people without forcing any emotions to them. Although the directors set 'emotional traps' for the participants, the latter need to feel free to get engaged and not forced to get in a certain emotionally situation.

Another critical issue is the significance of play, making the interactions lighter, warmer and more joyful, but not superficial. Play is a very serious practice to do, although it is often associated with childish behaviour. John Britton prompts performers, while directing and/or training them, not to perform but play, he implies *no to pretend* (to be someone else, a character, etc.) but actually find and express their truth, out of their own pleasure; that is out of play. Respectively, there is no point in participants acting out a role they are given out of a sudden, as they are not qualified to respond under such conditions. It is essential though audience members do not feel they have to conform to instructions or prove anything but to find pleasure, not in the mere sense of superficial entertainment, but in meaningful and qualitative experiences, through play, joy, information and further contemplation. An additional essential element of playfulness is *surprise* that maintains the magic of the game or the art work; a feeling their experience is actually a serious game, keeping them light-hearted. When things happen that are least expected – respecting at the same time the boundaries of participants – curiosity and interest are raised increasing the involvement of participants as they feel intrigued to discover how things unfold.

People need to feel respected in their social and interpersonal intercourses, meaning no limits are crossed literally and metaphorically speaking. An artistic creation and event is a protected condition: unlike daily life I do not need to defend myself, do something I cannot manage, do something I do not want to, I am safe to do as I please in certain limitations; a set of potential stories and interactions is available to choose the way I desire to participate. Nonetheless, the necessity of boundaries (physical, ethical, and emotional inter alia) during performance interactions is indisputable in terms of the audience to feel comfortable, trust the artistic process and get engaged in the flow of the live event. Since people with different personalities, needs, habits, and desires come together from different cultural and social backgrounds, certain physical and behavioural limitations are needed to be set so all participants (and performers) feel respected and capable to collaborate; in no way trapped into unpleasant situations, feeling embarrassed in any way.

Designing *for* enactive participation to emerge, also entails a compound narrative structure to incite audience personal engagement and interaction, meaning one story comprised of many stories that happen simultaneously combining scenario-based structure and improvised parts performed by audiences. At any given time during the live event, a part of the audience participates enactively, while others choose to step or remain outside the

frame and attend the whole event as spectators, and the next moment the situation has changed dramatically. A compound and efficient narrative structure is necessitated incorporating and adapting at the audience choices, as well as their right to change these choices as the event unfolds, and in parallel retaining the flow of the work, which is influenced by the individual changes but continues without obstacles. The narrative structure of a live event that embraces enactive participation is fundamentally differentiated from one that merely incites conventional participation. In case of such interactive artwork, directors and designers are 'authors' of usually remarkably complicated 'scenarios' as they endeavour to include and manage a fleeting and unforeseen element by definition: live and usually direct human interaction. The narrative structure of such interactive participatory works include 'gaps', meaning parts, which are also thought through, but open up to audience participation. Participatory events, like performances, is a demanding task and involves creating a multifaceted but coherent structure all potential strings of interaction spring and correlate with each other, according to set direction objectives.

Live participatory events (like experience design projects and live art performances) are synthesis of props and people, materiality and interactivity, probably digital and physical aspects; they are organic wholes: 1) consisted essentially of *space and time*, 2) with *dynamic stability*, 3) all their components are *self-responsive,* and 4) they interact as a single unit, retaining their coherence and identity. Like physical organisms, their *stability* is contingent on all constituents in the way they are associated together and participate appropriately in order to maintain the whole. Every even minor change affects all the others. Therefore, audience participation is encouraged but not embraced unconditionally; it needs to be framed, not constrained though, meaning to be liberated enough to be authentic and guided enough to sustain the overall organic stability in conformance to the direction objectives. Consequently, a fragile balance is required between pliability and consistency in terms of the narrative structure: the scenario needs to be adequately *pliable* to embrace participants' response, and at the same time *consistent* enough*,* so no intervention can modify the overall content or disorient the overall experience from the direction objectives.

I have so far approached the feeling of trust from different angles, in terms of the participants. Regarding the event structure, trust is firstly provided by feeling the narrative structure is concrete and stable following a specific scenario, although open to audience collaboration. As enactive participant I need to feel audience experiences are not random incidents, but dynamic planned frames, opened to the unforeseen; I need to feel the live event comprises a flexible balance between stability and pliability regarding the narrative structure. This equilibrium is prerequisite to the second vital factor audience participation is based on: enactive participation is a matter of choice. Participants are free to choose the mode they want to get involved in the live event, ideally within certain criteria and frames of respect, and also change this mode throughout the event (conventional to enactive and vice versa). Having the right to decide when to come in and out of the actual action is liberating and distressful, giving the benefit of a wilful and meaningful experience based on the personal way each person is willing and able to experience the world. In any case, the overall live and organic whole must be sustained and continue to unfold as planned regardless the participants decisions. Live events, as organic wholes, are definitely influenced by the ways audiences choose to get involved, preconditioning their integrity is maintained under any circumstances.

The third matter also involves a balance this time between guiding audience members to available interactions and giving them the opportunity to discover what they need for themselves without deciding every detail for them. Being helpful to others (in this case audience members) is not a value per se; by endeavouring to guess the way (even the majority of) people think or what they need, is doomed to fail after a certain point, since there is a possibility even audience members not to be sure of these answers. By trying to cover every possible attitude and response, directors and designers prevent audiences from the chance to discover their real desires and needs and act accordingly. Participants need to be given option and the time to realise the fact they can leave their seats as spectators, and acknowledge the overall context (space, time, conditions) as well as the frame of interaction they are induced to choose and follow. And then to decide on the ways they can collaborate in the event, in balance with the guidance they are given. This balance involves the plasticity between giving audience clear guidance, and also the opportunity to discover what they want to do, so participants do not feel like another gear in a perfectly functioning mechanism. Eventually the ideal participant is not a follower, but a doer – a free doer actually.

Enactive participation is nothing but simple to design and incite. Audiences need time to realise the overall conditions and decide on the alternatives they are given, based on their pleasure. Nonetheless, the very process of contemplation entails stepping out of the evolving *experience* to make essential decisions, jeopardizing potentially the sense of flow by interrupting my *experiencing* here and now. The benefit of giving myself to the flow, i.e. of *experiencing here and now*, prerequisites no (extra) time or attention is given at thinking and analysing the situation. As analysed, *experiencing* refers to *now*, whereas *stepping out of a process to think about my experience refers to past, future or potential events*. *Performance happens now.* By paying attention only to the present, I am *experiencing* a certain situation, I am not thinking about it, or evaluate neither communicate in any way *my experience*. Consequently, having minimum time to reflect over a situation, my experience, my performance, others' reaction, I keep myself in the flow of action; I act and respond without criticism. Urging audience members towards *experiencing* the live event, rather than thinking about their experience, prevents them from paying attention and criticizing what they do and instead *doing* it.

Both in experience design and the art of performance, designers and directors create overall contexts (environmental, cultural, social, artistic inter alia) *for* experiences to occur. They do not design and/or direct specific experience as personal and fleeting in substance, but the environment along with the appropriate conditions and potentialities *for* meaningful and qualitative experiences to emerge for those *participating*. The parameters and factors are numerous to consider in order to incite enactive audience participation, and apparently there is always a limit to the aspects that can and cannot be predetermined in live participatory events. Everything seems a matter of balance: fusion and boundaries, chaos and order, flow and awareness, conventional and enactive participation. The results lead to a much broader discussion on how chaos needs a frame to expand and evolve in order to be a fountain of creation and not demolition; on how converse notions complement instead of contradicting each other. It's only a matter of perspective; even a performative one...

7.4 Suggestions for future research

A research thesis also needs boundaries and specific objectives to be structured and evolve. In the creative process though multiple aspects are additionally raised that would enlighten the overall content from different though complementary perspectives, that succeed the set points. In accordance to this ascertainment I suggest a number of ideas as future research goals approach, to bring knowledge to the specific field under study. Specifically:

- Although the influence of mixed-reality technologies was among the initial goals to study in association with enactive participation, my research in this field was eventually limited to a theoretical basis. The contribution of enhanced systems of presence and interaction has already established technology as intelligent participant and performer, with pros and cons that incessantly evolve offering constantly new perspectives to human interaction and participation.

- Secondly, the sense of space (mise-en-scéne in particular) is a critical aspect of organizing audience participation, including people and props, materials and digital elements, interaction and action, spectators and enactive participants, performers and facilitators, feelings and thoughts. The spatial context, although partly approached in the frames of this thesis, comprises an individual essential factor to study and bring light to the way audience interaction is incited through space structure and organization in live participatory events.

- Thirdly, the matter of time is essential to be studied, especially in terms of the balance between giving time to people to decide how they want to proceed and collaborate within the live event, but not enough to step out from *experiencing* here and now and contemplate over their *experience*. Audiences need time to realise the overall context and conditions, the alternatives they are given, the boundaries they need to keep; they need time to trust and get personally engaged in the flow in physical, emotional and intellectual level; a quantity of time I can personally mainly feel than measure. Nonetheless, the flow of the live event and the overall experience also need to be sustained and not interrupted in any way.

- Fourthly, the notion of ethical and personal boundaries is definitely a subjective aspect, with social and cultural extensions and origins though. Different personalities and social groups have different spatial and behavioural limits of approach during their public, social, interpersonal and intimate relationships, and all have the right to be treated with respect especially in case of somatic interactions. People need to feel respect in the way it is adequate from them, without judgement.

- Fifthly, I would be mostly interesting to study the matter of the senses in a more profound level and examine the contribution, especially of the least

given ones (touch, hearing and taste) in audience engagement and participation within live events.

- Last but not least, on occasion of studying live participatory events in Greece, which is facing a severe economic and social crisis the last years, I believe it would provide significant information of the affects of these conditions not only in terms of the cultural industry but, in accordance to the objectives of this thesis, to audience participation. What is the profile and behavioural patterns of Greek people experiencing difficult daily circumstances and how this is expressed through participatory artworks?

Appendices

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II)   Tables and figures

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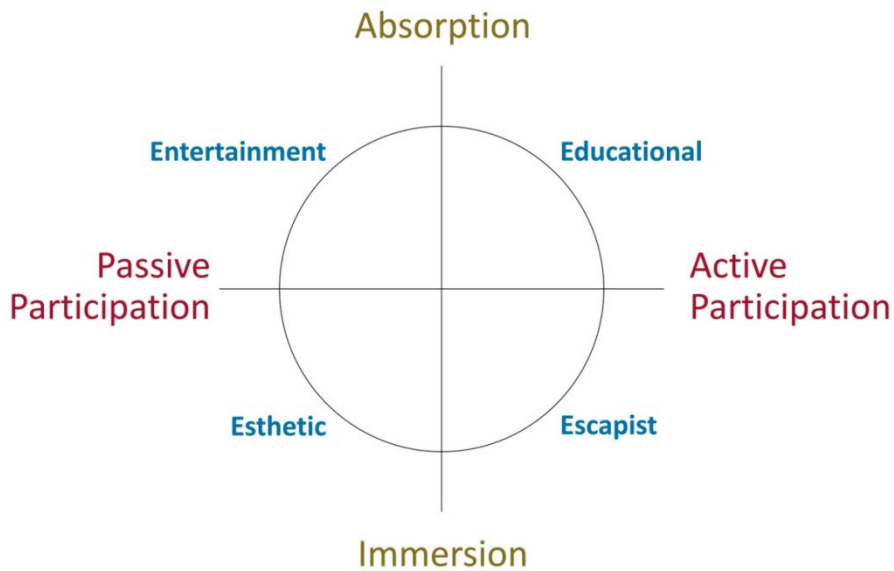
Figure 1. The domain of experience (Pine, B. J. & Gilmore, J. H., 1999).

Chapter 2

	COMMUNICATION Signs & words	CONSTRUCTION Things	STRATEGIC PLANNING Action	SYSTEMIC INTEGRATION Thought
Inventing	Signs, symbols, and images			
Judging		Physical objects		
Deciding			Activities, services and processes	
Evaluating				Systems, environments ideas and values

Figure 2. Design principles (Buchanan, 2010, p. 21).
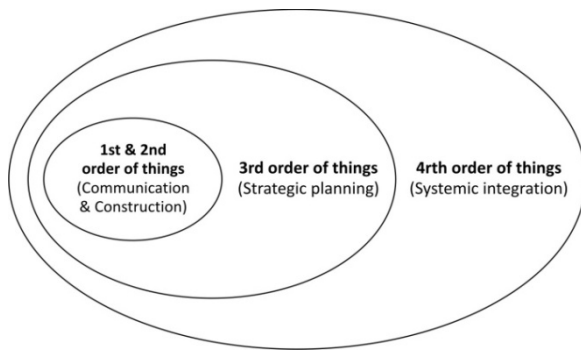
Figure 3.
Golsby-Smith viewpoint
on the four orders of things.

MECHANICAL SYSTEM	ORGANIC SYSTEM
Static, deterministic	Dynamic, evolving
Separate, absolute time, universal for observer (process)-dependent observers space-time frames	Absolute space and space-time inseparable, contingent all
	Delocalized organisms with mutually entangled space-times
Inert objects with simple locations in space and time	Nonlinear, heterogeneous, multi-dimensional space-times
Linear, homogeneous space and time	
Local causation	Non-local causation
Given, non-participatory and hence, impotent observer	Creative, participatory; entanglement of observer and observed

Figure 4. The spectrum of technologies and applications (Smart, et al., 2007).

Academic Disciplines ⟶
Ergonomics
Psychology
Informatics
Engineering
Computer Science
Social Sciences

INTERACTION DESIGN

⟵ **Design Practices**
Graphic Design
product Design
Artist-Design
Industrial design
Film Industry

Interdisciplinary Fields
Human Factors (HF)
Cognitive Engineering
Human-Computer Interaction (HCI)
Information Systems
Computer-Supported Cooperative Work (CSCW)
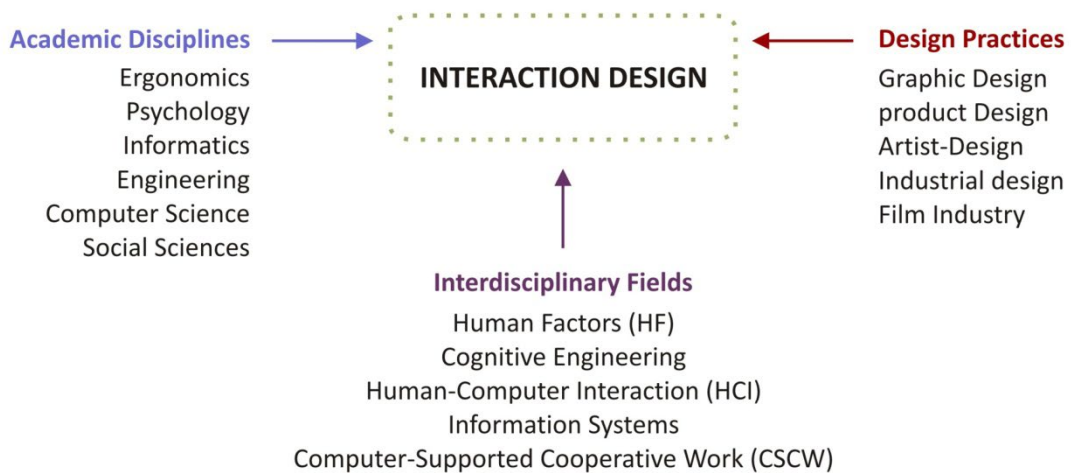
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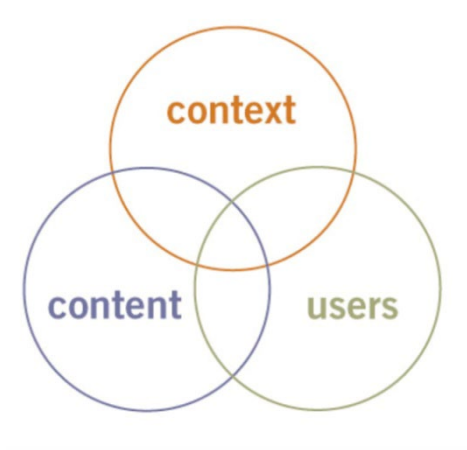
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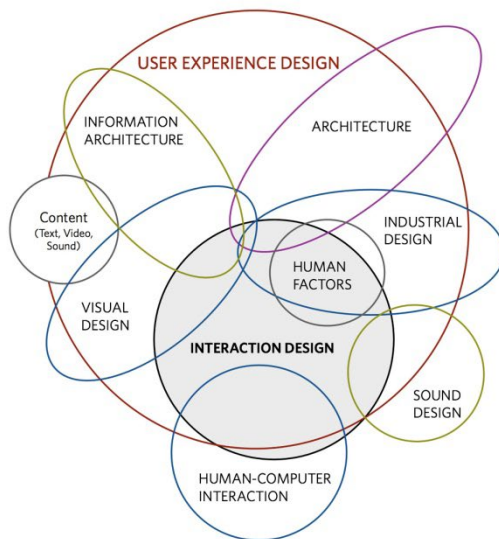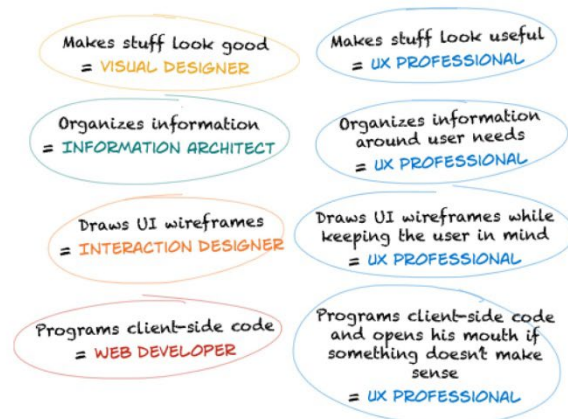
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User-Experience Design (Montparnas, 2005-2010) (right).
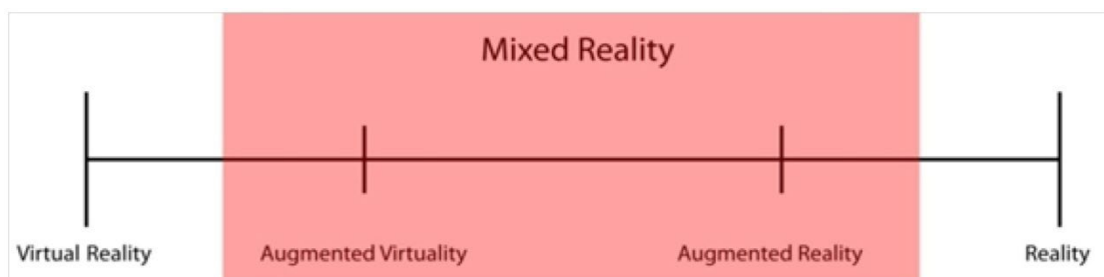
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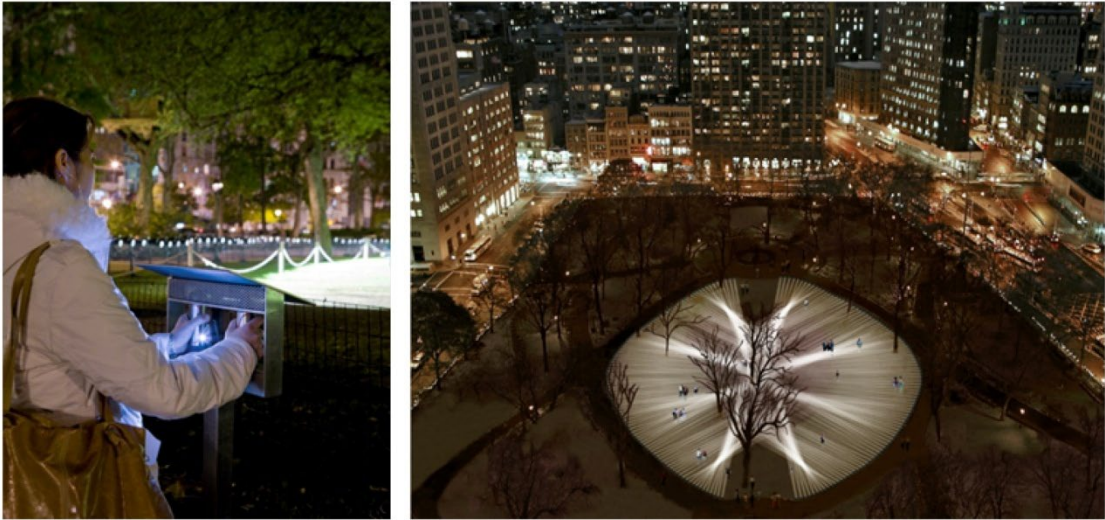
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Figure 11. *Under Scan. Relational Architecture 11,* Rafael Lozano-Hemmer, Trafalgar Square, London (2008). Photo by: Antimodular Research.
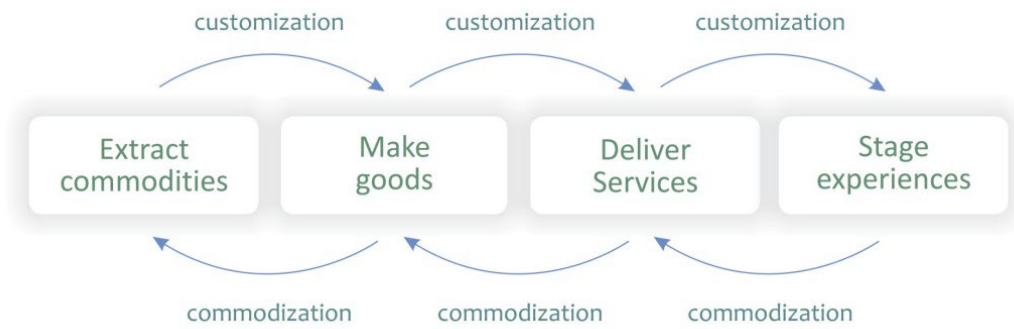
Figure 12. The progression of economic value (Pine & Gilmore, 1999, p. 22).

ECONOMIC OFFERING	Commodities	Goods	Services	Experiences
Economy	Agrian	Industrial	Service	Experience
Economic function	Extract	Make	Deliver	Stage
Nature of offering	Fungible	Tangible	Intangible	Memorable
Key attributes	Natural	Standardized	Customized	Personal
Method of supply	Stored in bulk	Inventoried after production	Delivered on demand	Revealed over a duration
Seller	Trader	Manufacturer	Provider	Stager
Buyer	Market	User	Client	Guest
Factors of demand	Characteristics	Features	Benefits	Sensations
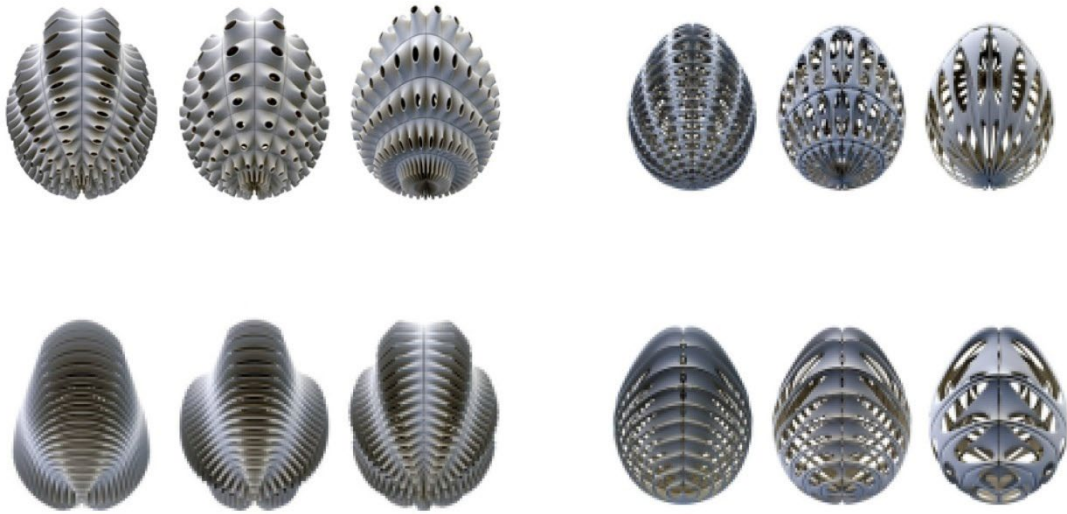
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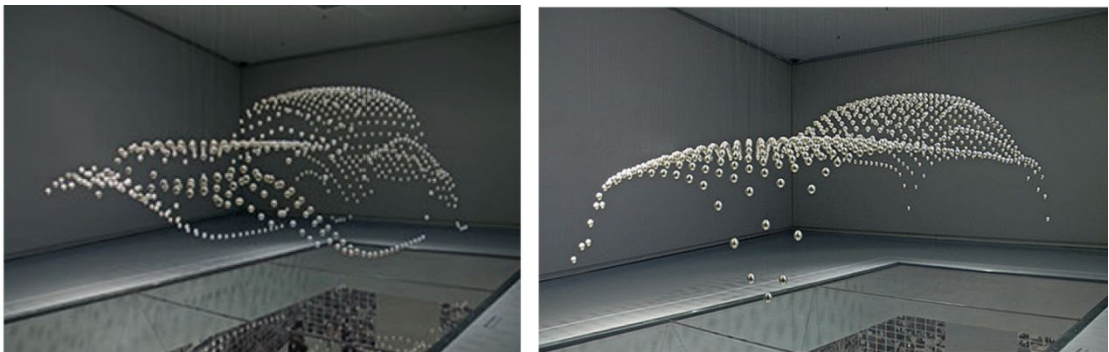
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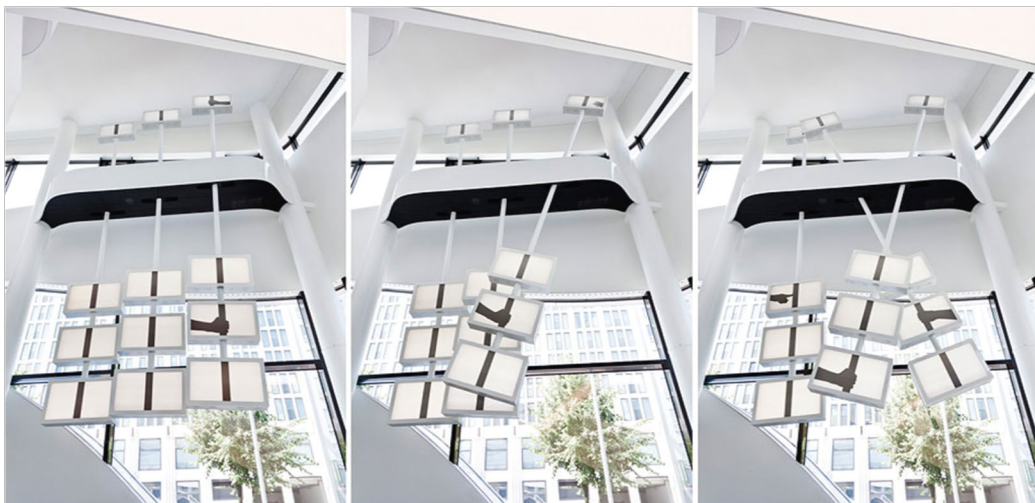
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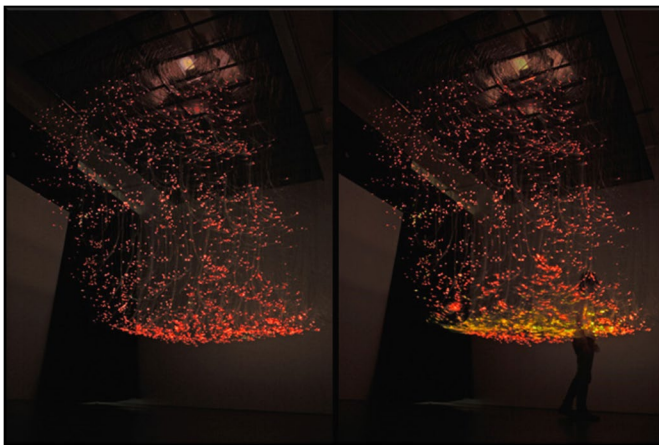
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Chapter 3
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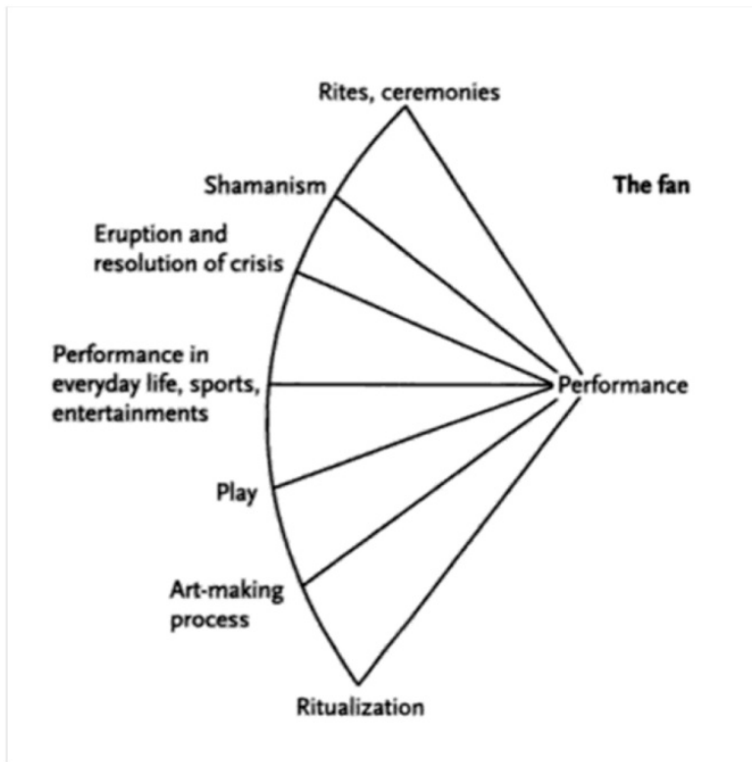
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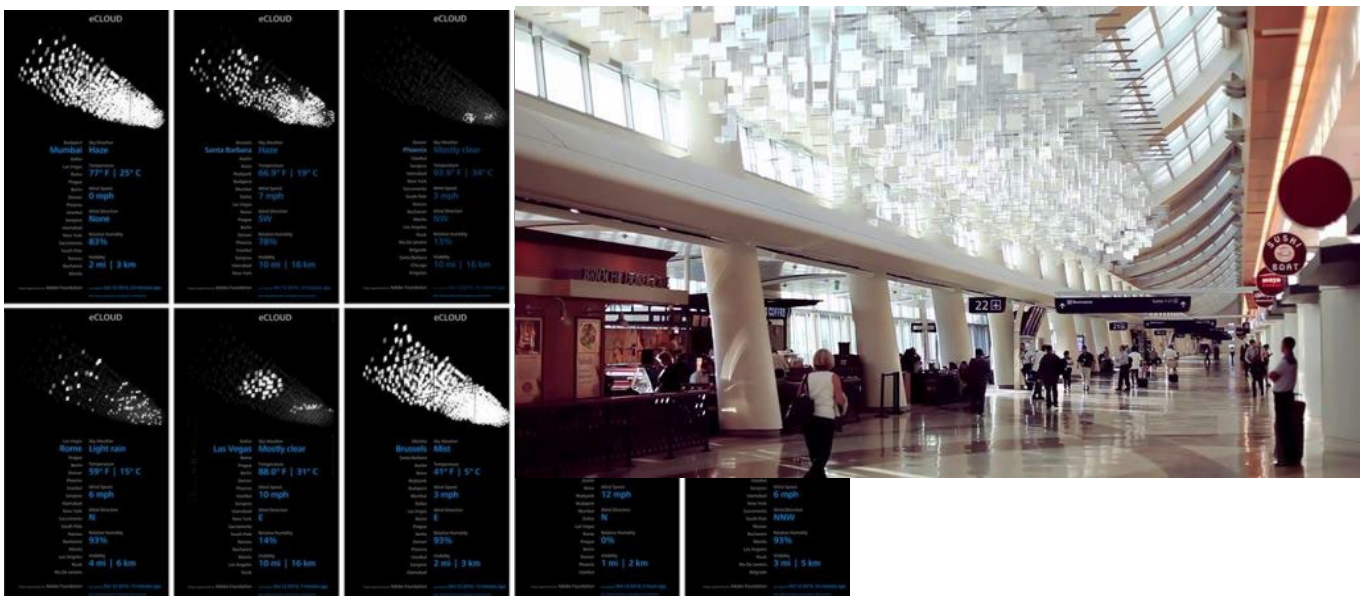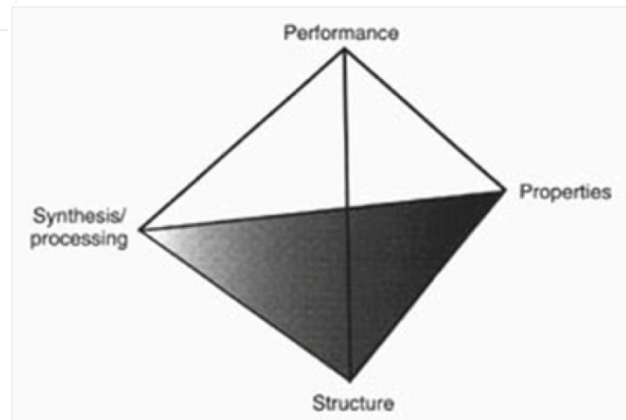
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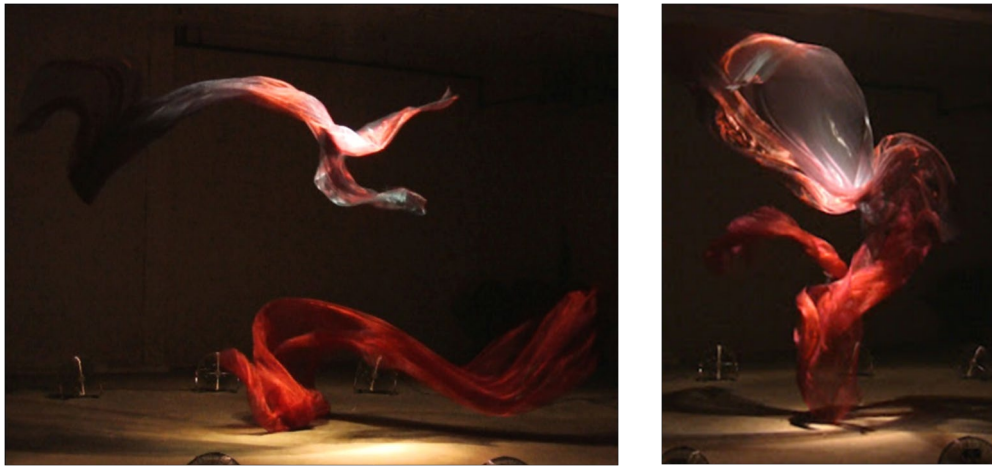
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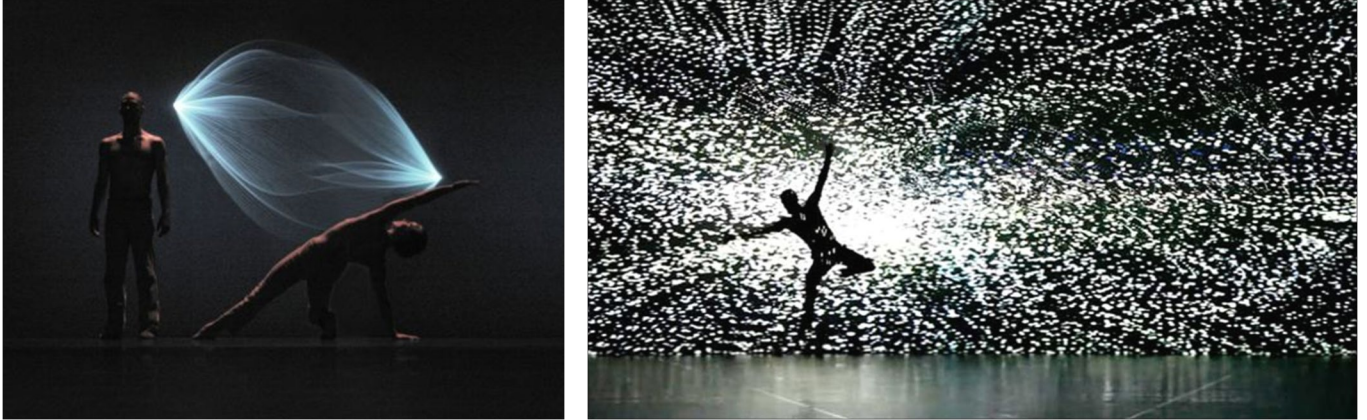
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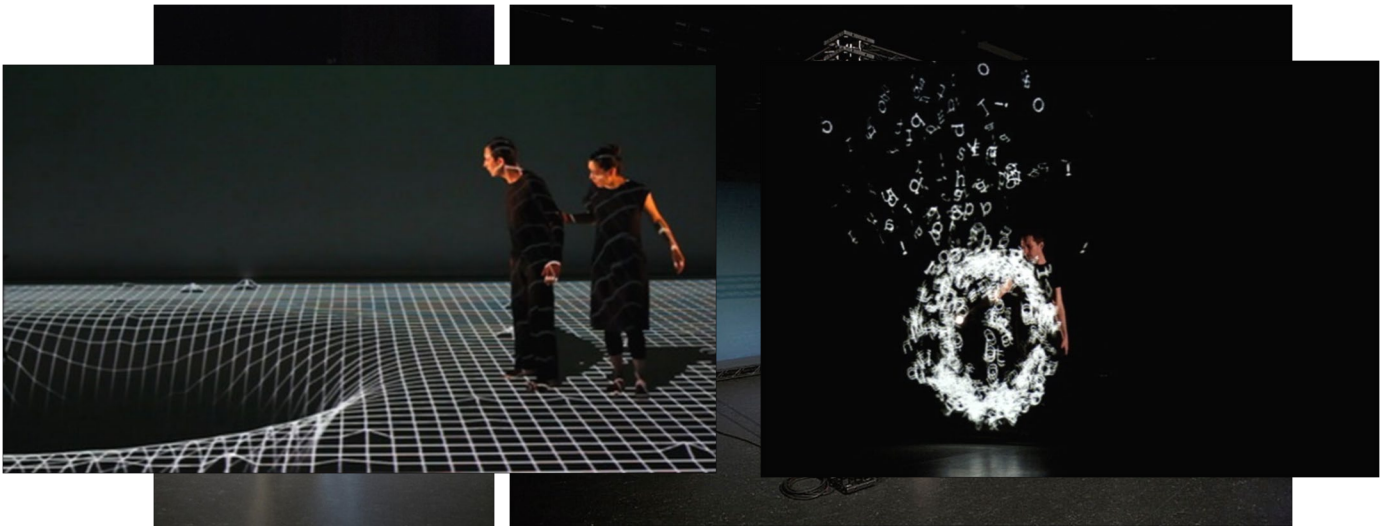
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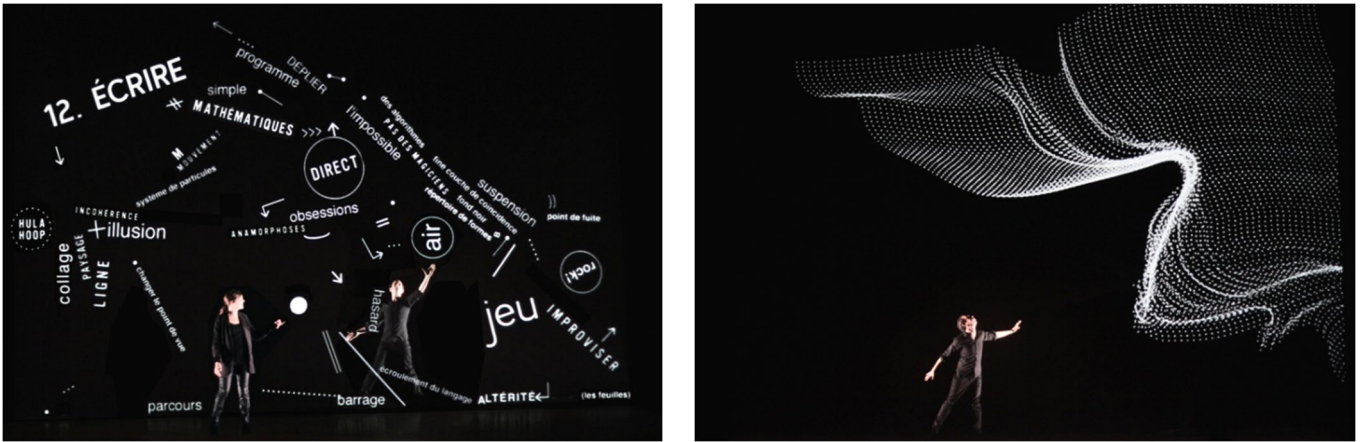
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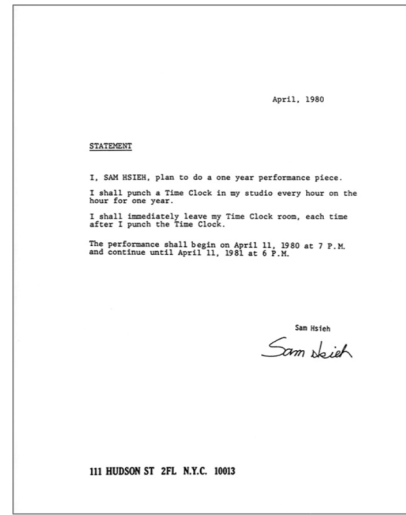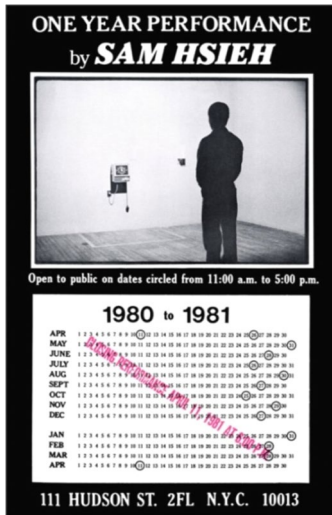
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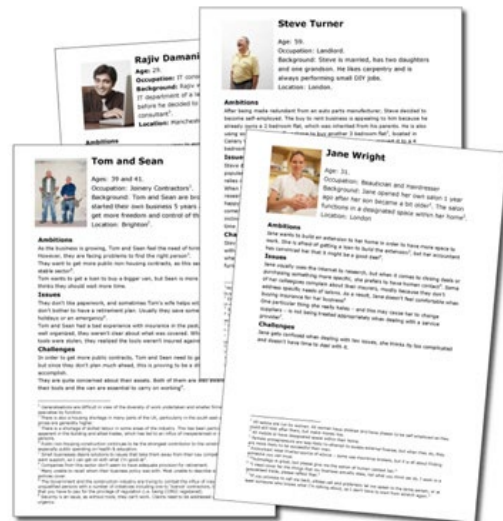
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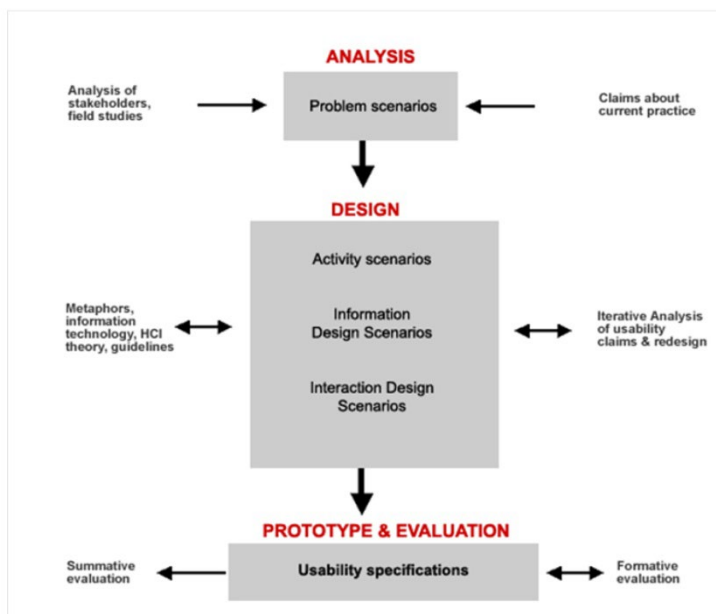
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Computer Interaction.
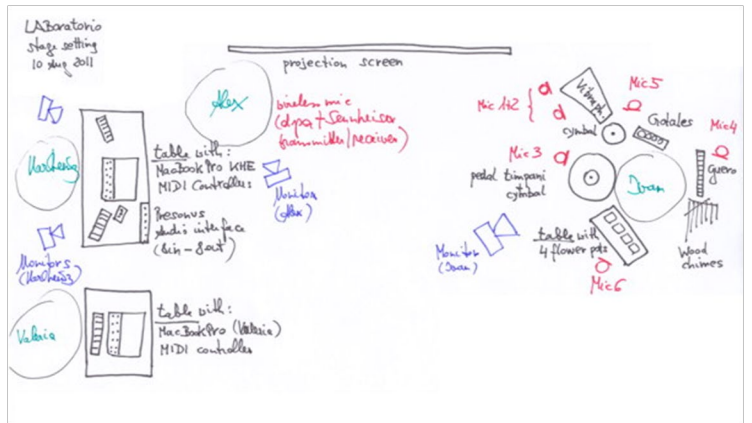
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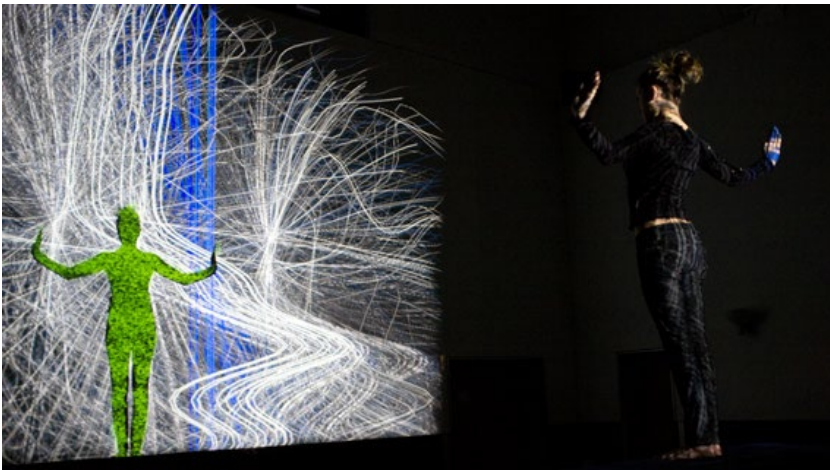
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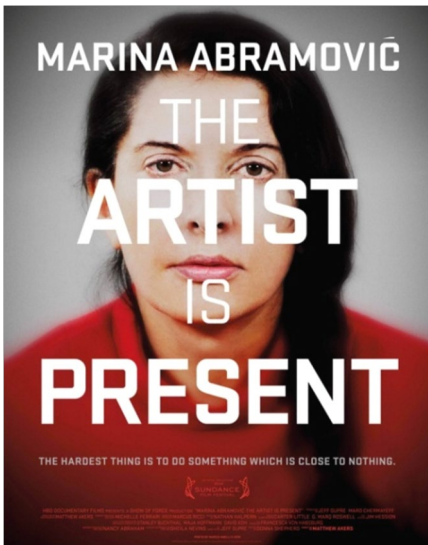
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Chapter 4

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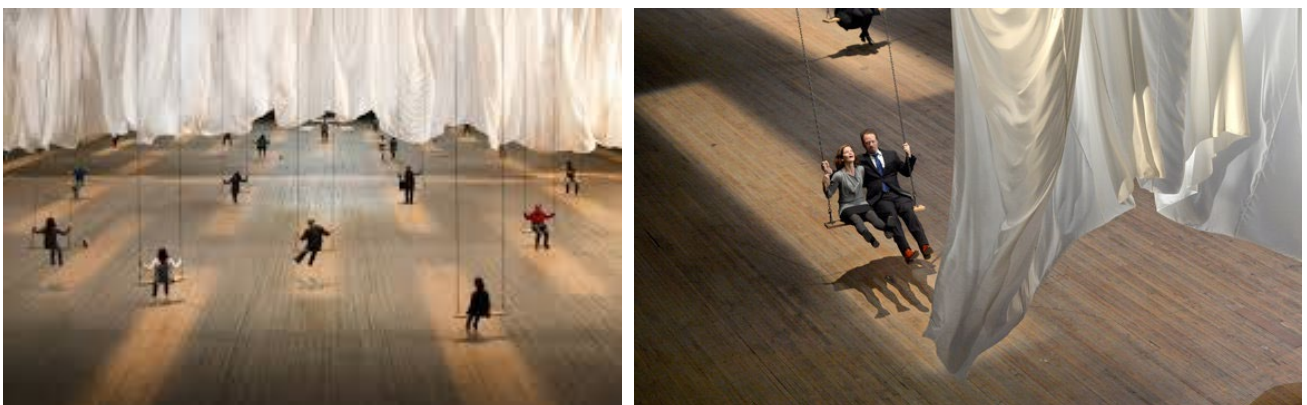
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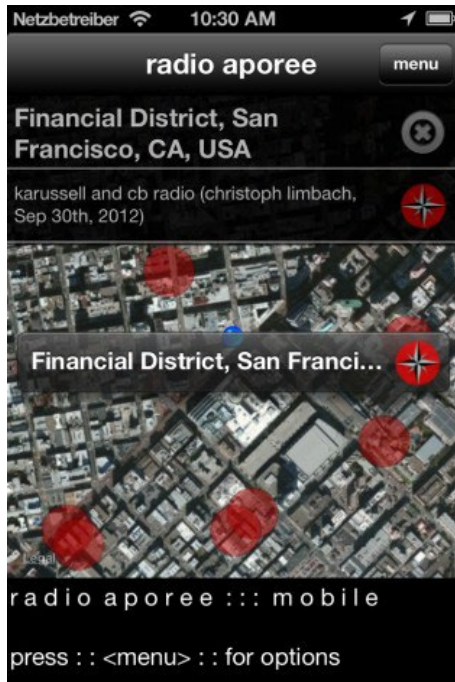
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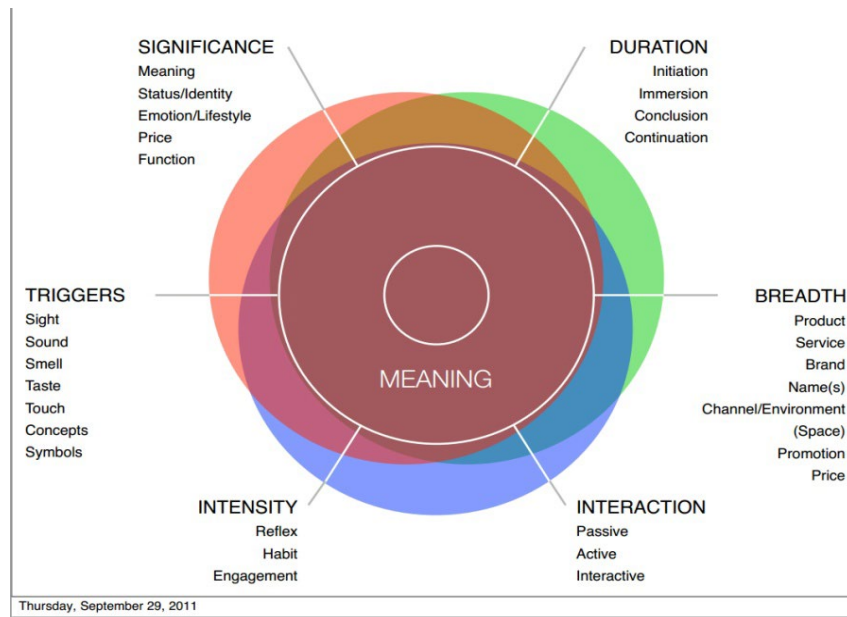
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Chapter 6
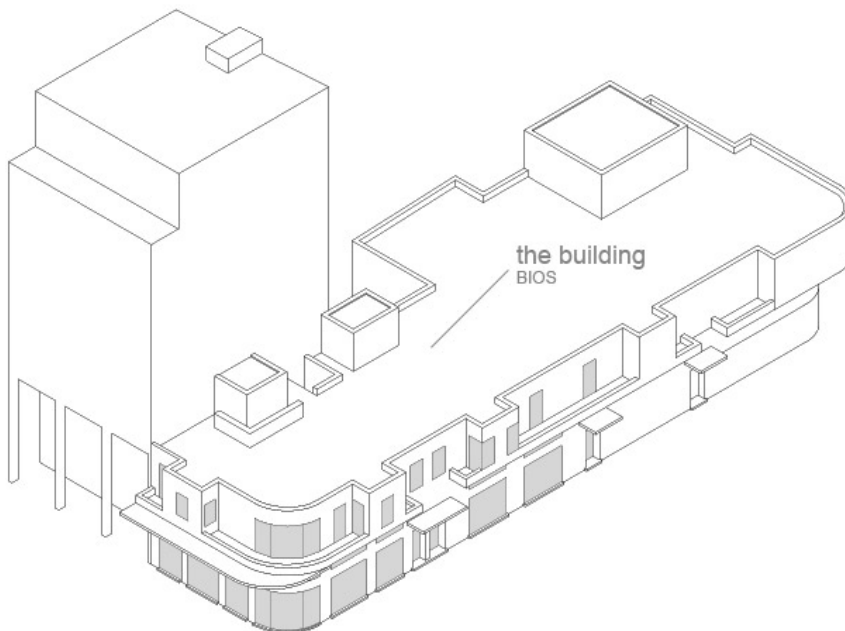
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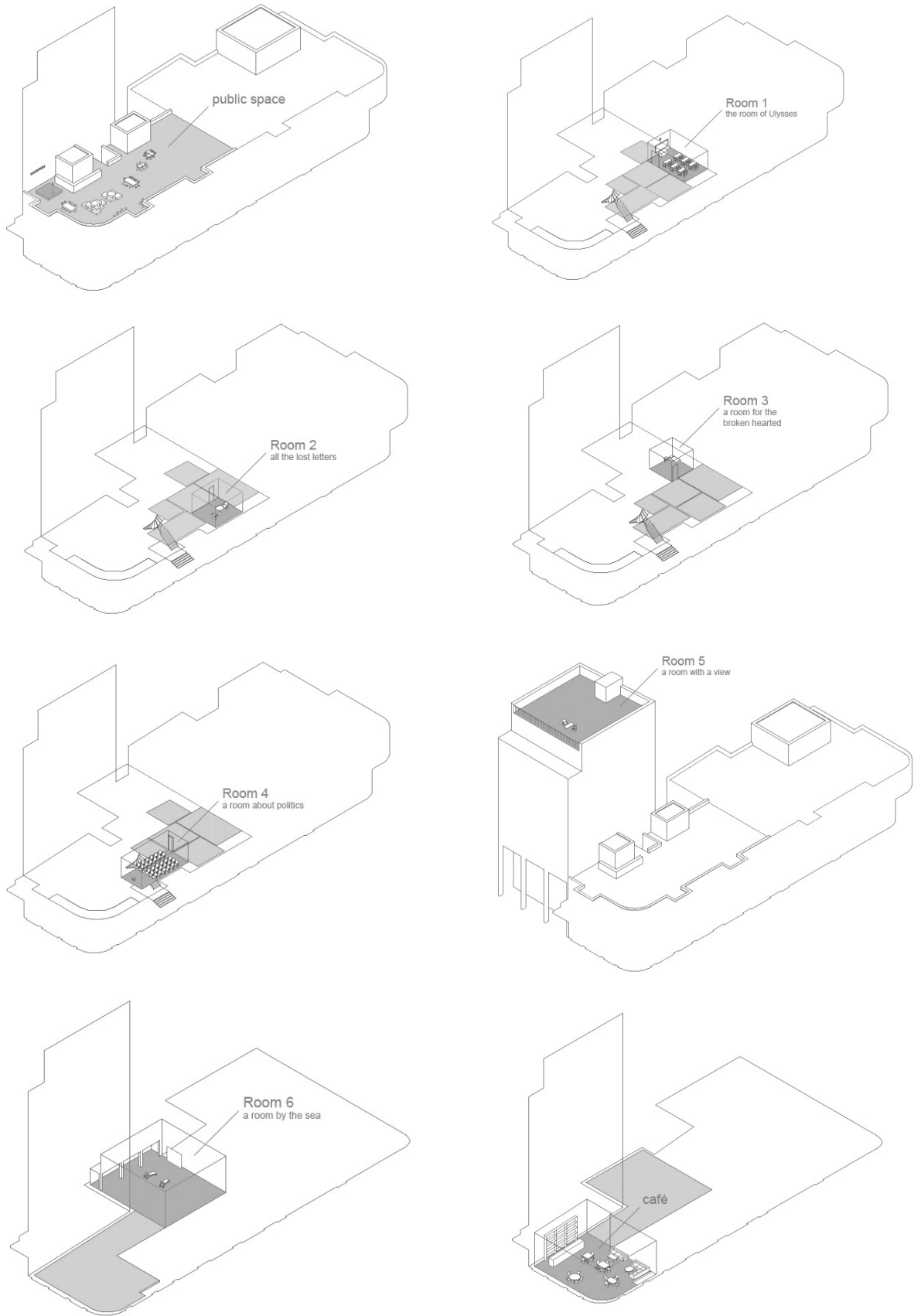
Figure 56. The structure of the performance space.

Figure 57. *Katerini*, the public space.

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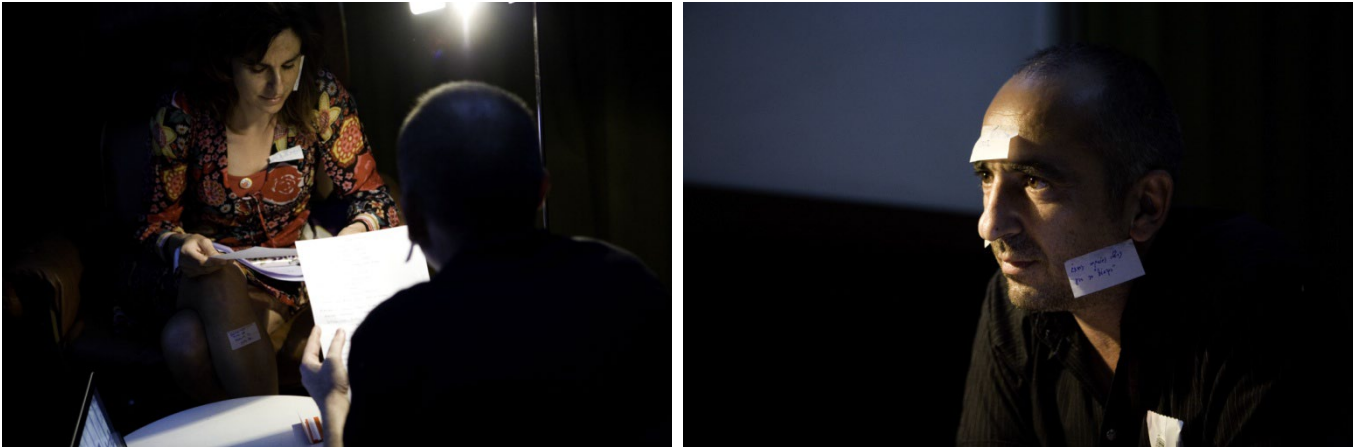
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Figure 66. The impresive sceneries of *Fake Time @ Ariston Hotel*.

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Figure 72. *Fake Time @ Ariston Hotel,* {6th floor}: the secret closet.

Figure 73. *Fake Time @ Ariston Hotel,* {Ground floor}: Foyer.

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Figure 74. *Situation Rooms,*
13 sets of iPads given to
equal participants.
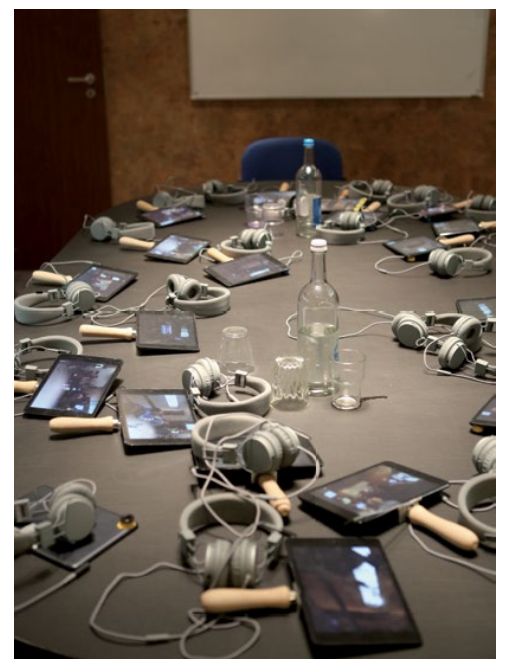
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Figure 75.
Participating
and interacting
with each other in
Situation Rooms.

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Fi**gure 76.**
The Rimini Protokoll.
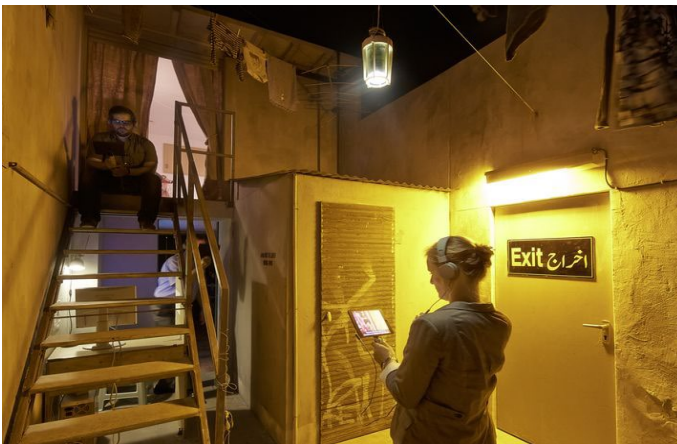
Figure 77. Situation Rooms, parallels stories and narration.

Figure 78. Situation Rooms,
the marksman (Andreas
Geikowski, Germany).

Figure 79.
Situation Rooms,
the war photographer
(Maurizio Gambarini, Germany).

Figure 80. Situation Rooms, one of the families from Libya stranded as boat refugees in Italy.

Figure 81.
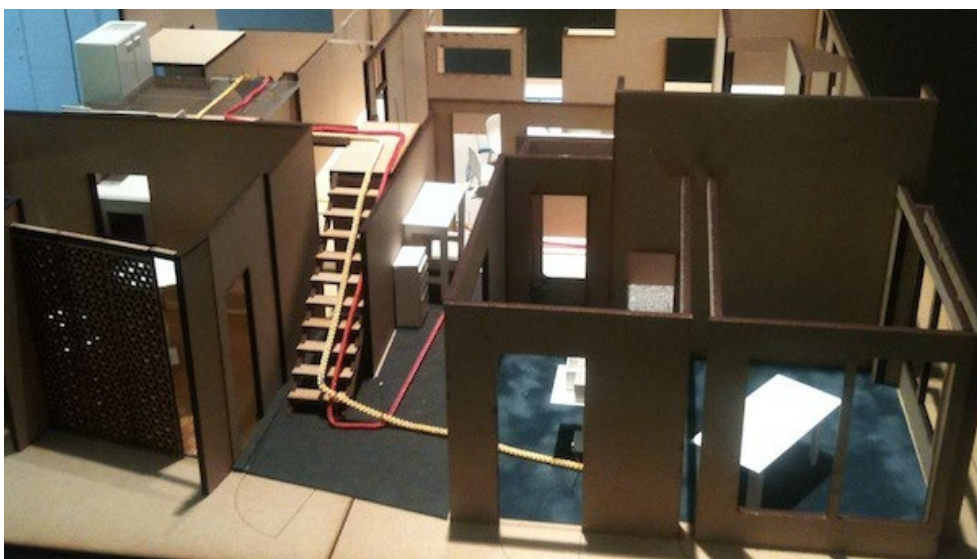Real people were filmed narrating their stories in the *Situation Rooms.*

Figure 82. Situation Rooms, the architectural structure of the twenty rooms.

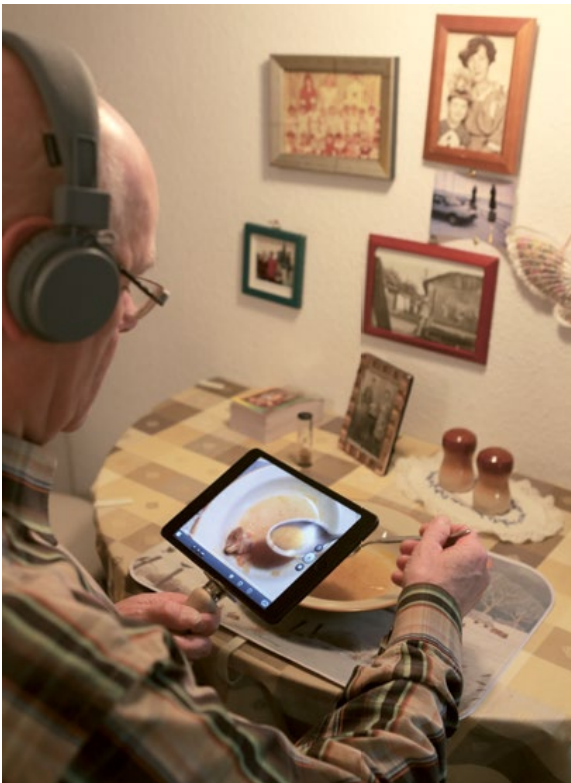**Figure 83.** Situation Rooms, interacting throygh the iPads.

Figure 84. Situation Rooms, serving soup for the workers of a weapons factory.

Figure 85. Situation Rooms, Carrying the hacker's memory stick.

Figure 86.
Situation Rooms,
lying wounded in the
surgical bed of a doctor
Without Borders.

Figure 87.
Situation Rooms,
experiencing and
participating within
the 'theatre of war'.