UNIVERSITY OF NOVA GORICA GRADUATE SCHOOL

ACCESSIBILITY AS A NON-PREJUDICIAL APPROACH: IS CULTURE BACK TO NORMALITY?

Exploring the emotional narrative of interactive andimmersive exhibitions.

DISSERTATION

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"Every step forward is a correct stumble made at the last second"

I still remember my fears at the beginning of my doctorate studies, and I remember the key words I received from a very dear friend.

Yes,

a journey of three years, not always simple, and necessarily not an even or constant one; a journey made of tracks held at different speeds, but also of obstacles and breaks to get around them or catch a breath.

A life journey

that has seen essential stable points of reference at my side:

my father and my mother,

to whom I owe most of what I am today;

my brother,

with his reserved presence and questions asked on tiptoe;

and my lifetime friends.

A moment of changes

that brought along beautiful surprises:

Marco, curly, patient,

and able to support, or better withstand, everything with a smile.

A niche in life that has been nourished by both emotional and working relationships and encounters:

Luisa and Michele, a continuous spur and term of comparison and stimulation;

Xavier, a source of learning and knowledge;

Sasa and Marco, constant support;

Luigi, kind and sharp in his thinking.

All the PP (Politecnico People),

Claudia, Martina, Midori, Peter, Vanessa, Michela, Marco ... with a special mention to Umberto and Gabriele in particular who have been of precious help and support.

The Piccolo Teatro and all its beautiful people,

Alessandro, Andrea, Eleonora, Emilio, Marco, Sabrina, Silvia ...

And last but not least, Paolo R.,

who guided me and accompanied me even in his absence,

thanks to the treasured chats held at Studio Azzurro

and to his personal writings that I received ad a gift a while ago.

Thank you,

to each and every one of you.

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INTRODUCTION and summary

Slovenian ABSTRACT

DOSTOPNOST KOT NEPREJUDICIRANI PRISTOP: ALI SE KULTURA VRAČA V NORMALNO STANJE?

Ta raziskava raziskuje splošno in dejansko dostopnost kulturnih prostorov in organizacij, s poudarkom na mreži odnosov med vsebino, inovacijami in udeležbo. Raziskuje, kako je mogoče kulturo zaznati kot normalno doživetje, ki lahko dejansko omogoča bogat dialog z vsakim od nas, običajnimi navadnimi ljudmi/potrošniki. Normalnost pomeni vključitev in delitev. Predlagana raziskava temelji na triadi interakcij med kulturo, ekonomijo in oblikovanjem.

Ob predpostavki, da kultura ustvarja svojo vrednoto s kognitivnim pristopom ali iz dinamične in kontekstno odvisne verige vrednot, ki je predmet kognitivnega razvoja, ta raziskava potrjuje, da je **kulturna izkušnja podvržena dvojnemu vprašanju dostopa**:

- *Horizontalno* vprašanje je povezano s komplikacijami, povezanimi s strukturo. V prepričanju, da je "kultura posebna", se razkorak med kulturno ponudbo in družbo postopoma povečava. Kultura je "zaklenjena" na določenih lokacijah, velik del svetovnega odraslega prebivalstva pa še ni vpleten v kakršne koli kulturne izkušnje.
- *Vertikalno* vprašanje nastane, fizično znotraj kulturne strukture, zaradi težav pri vstopu v stik z ponujeno vsebino. Ta raziskava se osredotoča le na muzeje in multimedijske razstave, v katerih se je učni proces spremenil: raziskava se predstavlja kot pogovor, kjer tako "tisti, ki vedo" kot "tisti, ki se učijo" igrajo enako aktivne vloge v relativnem procesu razumevanja.
- Na podlagi obstoječih procesov, oblik, predhodnjih študijah in študijskih primerov in sistematizaciji le teh, je cilj raziskave oblikovanje inovativnoih modelov. Proces, od teorije do prakse in obratno, presega tradicionalni mehanizem dedukcije: prehaja iz posebnih kontekstov v abstrakcijo ponavljajočih se pristopov.

Vprašanje, kako naracija nastaja, nas vodi v novo metodo analize, študije in katalogizacije; shematizacija, ki lahko preizkuša ne le znanje, ampak tudi obiskovalčev "kognitivni metabolizem" (kako se pridobiva znanje) med multimedijskimi izkušnjami; inovativno večnamensko orodje, uporabno tako za muzejsko institucijokot za oblikovalca. Poleg tega raziskava ocenjuje in upošteva dejanski eksperiment, katerega rezultati so koristni za krepitev teoretičnih posledicpreko empiričnih izkušenj: **RovelloDue - Piccolo Spazio Politecnico**, začasni multimedijski prostor.

Ključne besede: razvoj občinstva, kognitivna dostopnost, kulturna dostopnost, kultura, človeštvo, čustva, imerzija, inovacije, interaktivne razstave, sodelovanje, naravni vmesniki, normalno stanje, tehnologije

0.

ABSTRACT

brief presentation

This research explores the general and actual accessibility to cultural spaces and organizations, focusing on the network of relationships between contents, innovation, and participation. It investigates how Culture can be perceived as a normal experience, actually able to set a rich dialogue with each of us, normal ordinary people/consumers. Normality means inclusion and sharing. The proposed investigation is based on a triad of interactions among culture, economics, and design.

Assuming that Culture generates its value from a cognitive approach (Chapter 1), or from a dynamic and context-dependent value chain that is subject to a cognitive evolution, this research acknowledges that **the cultural experience is subject to** *horizontal* and *vertical* issues of access:

- The *horizontal* question is related to complications associated with the structure (in terms of space from social, economic, and urban perspectives). Believing that 'culture is special' implies the risk of progressively widening the gap between cultural supply and society. Culture is 'locked' in specific sites, and it does not intersect the map of our everyday personal movements and urban paths. By giving it a unique status, we locate it in, and relegate it to, a 'noble nowhere'.

According to the last *Special Eurobarometer data*, a big slice of the world's adult population has yet to be involved in any cultural experience. Why is the cultural audience not present? Why does it tend to neglect cultural options? The reasons for this discouraged participation are various and are often traced back to the presence of barriers and obstacles that prevent access (in a material, physical, and financial sense, but also in a cultural and symbolic one).

The state of audience knowledge is still quite limited, and information on the behavior and orientations of cultural consumers is often ignored (Chapter 2).

Awareness of the importance of scientific studies and researches in the field has grown enormously over the past decade, but the potential of these resources are not fully exploited yet.

- Once physically inside the cultural structure, the *vertical* issue (the core dimension) is generated by the difficulty in entering in contact with the offered contents. Therefore, this research focuses only on museums and multimedia exhibitions (Chapter 3 - 4) in which the learning process *has* changed: the research presents itself as a conversation where both 'those who know' and 'those who learn' play equally active parts in a relative process of understanding.

Exhibits are therefore equivalent to the creation of new meanings, particularly those that have recently changed towards a more visitor-centric approach and that can be considered laboratories of experimentation aimed to foster innovation. As in any emerging realities, there are many ways to frame, categorize, and label innovative advances in the specific field. The descriptive lexicon evolves over time, generating various approaches to the theme and emphasizing every different aspect of the design or consumption process. In this regard, this research offers a critical analysis of the existing methodological paradigms, frameworks, and previous studies; it compares different research results, revealing gaps, weaknesses, and strengths, but also mapping out current trends and significant practices.

This research aims to highlight the value of a multi-disciplinary approach, based on reciprocal appraisal, cross-fertilization, and strategic cooperation. The purpose is to demonstrate how the use of technologies and natural interfaces can contribute to the extraction of cultural value by part of heterogeneous visitors. Starting from the existing processes, forms, and case studies, the survey yearns for their systematization in innovative models. The process, from theory to practice and vice versa, goes beyond a traditional mechanism of deduction: it moves from specific contexts to the abstraction of replicable approaches.

The question of how the narration emerges guides you toward a new method of analysis, study, and cataloguing; a schematization capable of investigating not only

knowledge, but also the visitor's 'cognitive metabolism' (how knowledge is acquired) during the multimedia experience. Far from being a mere repository of the research outcomes, the proposed pilot project is conceived as an innovative multipurpose tool, useful for both the museum institution and the designer.

The research finally assesses and takes into account an actual experiment, the outcomes of which may prove to be useful in feeding theoretical implications with empirical experiences: *RovelloDue - Piccolo Spazio Politecnico* (Chapter 5), a temporary multimedia space resulting from a fruitful encounter between the *Piccolo Teatro di Milano - Teatro d'Europa* and the *Politecnico di Milano*. The experiment allowed us to investigate a crucial issue: how (and how much) technologies facilitate content accessibility and/or foster the cultural experience, as well as how visitors behave inside the museum installation.

We may consider the experiment as a pilot experience, both in terms of the chosen design, technologies, use of natural interfaces, methodology, and of the adopted evaluation strategies.

SUMMARY

1. Meanings of **CULTURE**.

foreword

This first introductory chapter outlines a detailed picture of previous research and of the thoughts and reflections that follow further on in the presented paper. It explores how the role of Culture has been theoretically interpreted, perceived, and measured analytically. The investigation is developed in the awareness that the term in question (Culture) is a confused and confusing word. Therefore, its use throughout this specific paper requires to be clarified.

2. AUDIENCE spectrum ·

horizontal issues of access

The second chapter explores the actual accessibility to cultural experiences, investigating horizontal issues of access to cultural institutions. In order to analyze this complicated approach to the cultural structure, becoming familiar with who attends cultural institutions and what it means when we speak of 'audience' becomes necessary.

In fact, the 'audience', together with 'cultural institutions', can be considered as the protagonist and key element of a vital and essential equation that risks being brought out of balance (for instance, if the audience itself is not present).

The chapter includes a review of the extensive bibliographical corpus of Audience studies, as well as new visualizations that may be useful in the elaboration of an original theoretical-interpretative model, where cultural audience is not perceived as a homogeneously set block. A gradually more and more complex picture is then sketched out starting from existing processes, numbers, approaches to the matter, and subsequent reflections.

3 - 4 · experiential **IMMERSION** ·

vertical issues of access

In facing *vertical* issues of access (once inside the physical cultural structure), it may be difficult to actually get in contact with the offered cultural content. By acknowledging that a uniform examination of all kinds of cultural institutions is difficult and inaccurate, this research focuses only on museums and exhibitions.

At this point, the main focus of the study is multimedia exhibits, particularly those that have recently changed towards a more visitor-centric approach, becoming experimentation laboratories that foster innovation.

Technologies inside museums have introduced new time dimensions and new exhibit paradigms with high sensory engagement. Museums are a new typology of place where design meets humanities.

A review of literature on the matter, together with info-graphics of the first results, has been carried out to promote specific in-depth investigations within a unitary framework, drawing on problematic issues and common aspects. The question of how narration emerges has in fact given rise to a new method of study, analysis, and cataloguing.

5 · pilot **PROJECT** ·

RovelloDue - access opportunities

Exploiting a practice-based research methodology and testing the theoretical outcomes is then useful in verifying the state of the progress up to this point. *RovelloDue – Piccolo Spazio Politecnico* sees the involvement of two historical Milanese institutions — the *Piccolo Teatro di Milano / Teatro d'Europa* and the *Poitecnico di Milano* — in the creation of a common project: a temporary multimedia space.

RovelloDue is a video installation that approaches experiential dimensions and typologies that are most used in museums, while also referring to other ones (like the world of theater). It tries to discover how technologies facilitate content accessibility and foster the cultural experience, as well as how visitors behave inside the installation. Collecting evidence through visitor surveys has been a crucial activity and has involved several actions. In particular, a quantitative and qualitative questionnaire, as well as staff observation, has revealed positive feedbacks and opened up a number of meaningful considerations.

6 · CONCLUSIONS ·

The conclusions focus on all the salient considerations presented in the preceding chapters; these considerations were tested by *RovelloDue*. The conclusion also establishes a parallelism with some extracts from David Carr's intense and meaningful quote:

"A museum is not about what it contains; it is about what it makes possible [....] It constructs narratives that help us to locate our memories, passions, and commitments. The museum illustrates irresistible new thoughts and stimulates revisions of former ones [...] The gift of a museum for every

user is an appreciation of complexity, a welcoming to the open door of the unknown, the possible, the possible-to-know, and the impossible-to-know".(Carr D., 2006 - Mela Project, 2012).

Back to the initial question: is culture back to normality?

The answer is positive, in the acquired awareness that the cultural consumer is not outside the reality and does not belong to a special group of experts and cultural initiates. Going to the theater, to an exhibition, should become a norm: a pleasant normal custom. The centrality of people should become indispensable, to the detriment of the varied dogmatism of the institutions.

1.

CULTURE meanings

1.

Meanings of CULTURE

This first chapter outlines a detailed picture of the research that preceded this final writing and of the thoughts and reflections that will follow further on in the reading. Although the main aim of this study is to assess and open a debate on cultural experience — and its issues with access and audience requests and desires — it is necessary to begin with a conceptual explanation of the meaning(s) of the term Culture in all its multidimensional levels.

This introductory chapter explores how the role of Culture has been theoretically interpreted, perceived, and measured analytically. The investigation is developed in the awareness that the term in question – Culture – is a confused and confusing one. Therefore, its use during this specific research requires to be clarified. It is no coincidence that Johann G. Herder considered Culture¹ as one of the most indeterminate and deceptive words, and that Alfred L. Kroeber² compiled a roster of 164 different definitions for it.

According to William Morris³, its meaning can be classified according to a simple few aspects, attributable to two main approaches. The broader one interprets Culture as an intellectual construct used to describe human behavior, as a lifestyle and a system of knowledge, formed and shared by a group of people. It gathers "the set of values, norms or benchmarks that define the state of social relations, shared goals, cooperative behaviour and reciprocity among individuals and communities within a given society" (Greffe X. & Pflieger S., 2005). The more sectorial approach makes use of intellectual work for the creation of new meaning through artistic activities. This approach explains Culture as what allows interpreting, representing, and spreading new values in artistic activities (Greffe X., 2010).

From these premises, a different analysis of the concept is proposed starting from a historical point of view (from Antiquity to the 19th Century). In this digression, although showing different aspects (cathartic, cognitive, moral, aesthetic, and intellectual), Culture begins to be defined as a process.

¹ Goldman, L. (1993). Misconceptions of Culture and Perversions of Multiculturalism, Interchange 24(4), 397–408

²Kroeber A.L. & Kluckhohn (1952): 181; cited by Adler, N. (1997) *International Dimensions of Organizational Behavior*. 3rd ed. Ohio: South-Western College Publishing.

³ Morris, W. (1966 [1886.]) *The Aims of Art*, in The Collected Works of William Morris, New York: Russell & Russell.

Nowadays, its value as a process is vital to the definition of the term itself. If we rough out some of the key widespread, misused, and abused characteristics and definitions (for example, Culture as a state, both an individual construct and a social construct, manifested at different depth levels), all reasoning and arguments recognize that Culture is not a thing or static concept: it is, again, a process; it is subject to a cognitive evolution. Culture is a value chain, it has dynamism.

Each point that is developed in this assumption carries out to consider Culture as a cognitive approach. Culture is ascertained; it is the result of a learning process and is not inherited. It is subjective, a revelation of an immediate and emotional feedback, and subject to social interaction and gradual change. Culture is clearly context dependent, and is not mummified in a 'comfortable' homogeneous system.

"To value something is to have a complex of positive attitudes toward it, governed by distinct standards for perception, emotion, deliberation, desire, and conduct" (Anderson E., 1993).

$1.1 \cdot MULTIDIMENSIONAL$ CONCEPT. MORE THAN THE A SUM OF ITS DEFINITIONS

The word "Culture", certainly central to this debate, is 'confused' and used in a confusing manner: it is more than a sum of its definitions. We are asked to refer to paradigms, concepts, and criteria of different disciplines and worlds. Culture is among the words whose meaning is being progressively weakened, contradicted, and certainly overused. It holds different significances — according to the period, language, the analytical approach — making the concept a very complex one (Eagleton T., 2001). Johann G. Herder, in his work *Ideas on the Philosophy of the History of Mankind* (1784: 91), argued that "nothing is more indeterminate than this word [Culture], and nothing more deceptive than its application to all nations and periods". In 1952, the American anthropologist Alfred L. Kroeber 4, compiled a list of 164 different definitions of the term, critically reviewing concepts and definitions of Culture.

"There's a sign on the wall, but she wants to be sure, 'cause you know sometimes words have two meanings" (Page J. & Plant R., lyrics to Stairway to Heaven).

The word "Culture", certainly central to this debate, is **more than a sum of its definitions.**

⁴ Kroeber A.L. & Kluckhohn (1952): 181; cited by Adler, N. (1997) *International Dimensions of Organizational Behavior*. 3rd ed. Ohio: South-Western College Publishing.

Each time we use this term, we are inclined toward one of three main, quite different, aspects of its meaning:

- Toward Culture that is imbibed through osmosis, or learned in Cultural Institutions, as a process of **individual enrichment**⁵ (e.g. when we say that someone is 'cultured');
- Toward Culture that simply inducts you into a **group**, ⁶ Culture as a particular way of life (e.g. when we speak of French Culture, company Culture, or multiculturalism);
- Or toward Culture as an **activity**, pursued by means of museums, concerts, books, and movies (Williams R., 1976).

In other words, we could identify the main contemporary appropriations of Culture as:

- A developed state of mind and knowledge a 'person of culture';
- The process of developing it as in 'cultural activities;⁸

⁵ "Because the consumption of high idiosyncratic creative goods [...] and unique goods (such as Art works) is embedded in an experience which is highly personal, the whole process is very subjective and depends on a unique object-viewer interaction" (Caves, 2000).

[&]quot;Culture [...] is that complex whole which includes knowledge, belief, Art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society" (Tyler, 1870).

[&]quot;Culture consists of the derivatives of experience, more or less organized, learned or created by the individuals of a population" (Schwartz T., 1992).

[&]quot;A Culture is a configuration of learned behaviors and results of behavior whose component elements are shared and transmitted by the members of a particular society" (Linton R., 1945). [Emphasis added]

[&]quot;Culture has been defined in a number of ways, but most simply as the learned and shared behavior of a community of interacting human beings" (Useem, J., & Useem, R., 1963).

⁶ "Most social scientists today view Culture as consisting primarily of the symbolic, ideational, and intangible aspects of human societies. The essence of a Culture is not its artefacts, tools, or other tangible cultural elements but how the members of the group interpret, use, and perceive them. It is the values, symbols, interpretations, and perspectives that distinguish one people from another in modernized societies; it is not material objects and other tangible aspects of human societies. People within a Culture usually interpret the meaning of symbols, artefacts, and behaviours in the same or in similar ways" (Banks J.A., Banks, & McGee C. A., 1989).

[&]quot;Culture is the shared knowledge and schemes created by a set of people for perceiving, interpreting, expressing, and responding to the social realities around them" (Lederach, J.P., 1995).

⁷ "Culture [...] consists in those patterns relative to behaviour and the products of human action which may be inherited, that is, passed on from generation to generation independently of the biological genes" (Parson T., 1949).

⁸ In this sense, in line with the more sectorial approach, Culture is what allows interpreting, representing, and spreading new values in artistic activities (Greffe X., 2010). This approach makes use of intellectual work for the creation of new meaning through artistic activities.

- the means of this process – as 'the arts' and 'the human intellectual works' – and the construct of the social system – 'a whole way of life' (Williams R., 1981).

These widely accepted definitions incorporate factors that are both external to people (such as social values or similar cultural dimensions, social practices, and artefacts) and internal (such as an independent/interdependent self-construal or other traits, including the overlooked aspect of language).

It is no coincidence that Sharon Shavitt (2008) asserts that Culture includes "shared elements that provide standards for perceiving, believing, evaluating, communicating, and acting among those who share a language, a historical period, and a geographical location" (quoted by Markus H. R. & Kitayama S., 2010). He also contends that "the word Culture is a stand-in for a similarly untidy and expansive set of material and symbolic concepts... that give form and direction to behaviour [and that] Culture is located in the world, in patterns of ideas, practices, institutions, products, and artefacts".

-

This approach concerns an intellectual construct used to describe human behavior. It gathers values, references, and behaviors that define the relationships between individuals and communities: "the set of values, norms or benchmarks that define the state of social relations, shared goals, cooperative behaviour and reciprocity among individuals and communities within a given society" (Greffe X, & Pflieger S., 2005). Here, Culture is understood, in a broader sense, as a lifestyle and a system of knowledge, formed and shared by a group of people, fostering a sense of identity transmitted from generation to generation, fruit of symbolic communication and imitation processes reinforced by local institutions.

Shavitt, S., Lee, A., & Johnson, T. P. (2008). *Cross-cultural consumer psychology*. In C. Haugtvedt, P. Herr, & F. Kardes (Eds.), *Handbook of consumer psychology* (pp. 1103-1131). Mahwah, NJ: Erlbaum. [Emphasis added]

1.2 · CULTURE. CHANGING NOTIONS: A HISTORICAL LENS ·

What do we mean by the 'Arts' and 'Culture?¹¹ What are the Arts? These are questions that have been puzzling theorists for centuries, bringing to different outcomes and ways of thinking: an exploration of idea trajectories, which very rarely evolve in a straight and easily traceable manner but risk becoming commonplace beliefs.

The period of Ancient Greece was fertile for drama and significant literary works. Plato's *Republic*¹² offers the first powerful rejection of the epistemological role of the Arts, arguing that the poet and the artist have no privileged access to superior knowledge; no form of intellectual or moral teaching for artworks. Instead, Aristotle interpreted the Arts as a respected and honored source of understanding, explaining that "experiencing pity and fear through the events witnessed on the stage has a cathartic effect on the audience" (Belfiore, E., & Bennett, O., 2007: 17): an

11 'Culture' and 'Arts' are terms that are usually given the same meaning, although Arts are at the center of cultural conceptualization and Culture surpasses the artistic domain by emphasizing themes of education, religion, history, values, beliefs, and information (Greffe 2010). As Dunlop et al. say: "Many different terms are commonly used to refer to cultural activities, including the arts, the cultural sector, the cultural and the creative industries. But even the meanings of these terms are shifting, context specific, and, therefore, ambiguous" (Dunlop et al. 2004). A premise is necessary before proceeding further into a historical analysis. Culture and Arts are often used here as synonyms. As technicians, we are not called to establish what Art is. The Swiss economist Bruno Frey (1994) simply states: "Art is what people think art is". There is no unanimous conception of Art. Just think of the disagreement of opinions and critical points of view around street art, for example. Arts do not refer to a homogeneous collection of objects or actions. Contrarily, they refer to an eclectic universal

What we should be most interested in, and what we should most carefully consider, is how much Arts are able to allow an extraction of cultural value. If we consider man as a perceptive receiver of the cultural action or artistic activity, every interaction and detection of such activity must be able to transform itself into cultural value. In turn, the extraction of cultural value leads to the formation of preferences, of a 'taste'. You need at least one seed and some soil to grow anything; likewise, there cannot be a process of cultural value extraction with only a work of art and without at least one person holding sensory, emotional, cognitive, and intellectual investment in it (what is called 'cultural text' or 'cultural discourse').

collection of subjective views, with the most deliberate and casual keys of interpretation that only become more

so as time goes by.

¹² "An image-maker, a representer, understands only appearance, while reality is beyond him" (Plato 1993, 352) (quoted by Belfiore & Bennett 2007:14).

emotional, intellectual, or ethical process of 'catharsis', able to nourish successive theories of a therapeutic¹³ and educational role of the Arts.

Horace, in his *Ars Poetica*, stressed this concept, arguing that poets can either be useful – *prodesse* – or bring delight – *delectare* – with their works. For one of the first times, he introduced the idea of cognitive process: "the intellectual interpretation of the cathartic process postulates that catharsis ought to be viewed as a cognitive process (as the purgation of intellectual confusion), whereby the aesthetic experience results in clearer understanding and in the acquisition of knowledge". (Belfiore, E., & Bennett, O., 2007: 19 [Emphasis added])

A few centuries later, philosophers of the French Enlightenment moved the focus of Art's influence from the individual to the entire society, as a more positive and moral influence. Whereas the Romantic theories associated to Culture later asserted that the value and importance of the work of art resided firmly in the aesthetic sphere, and that artists were independent from society and free from any obligation to perform any moral or didactic function. The artist becomes the only one permitted to analyze his work and enjoy the benefits of his acknowledged contribution to the Arts (Greffe X., 2013).

In the present cultural debate, this argument has been often labelled as "Art for Art's sake" (Belfiore E. & Bennett O., 2007); even if "a better expression would have

Emotional and physical wellbeing, today commonly accepted, able to contribute to man's happiness. This emotional interpretation is also connected to William Morris's description of the 'aim of art', presented at the end of the 19th Century: "The Aim of Art is to increase the happiness of men, by giving them beauty and interest of incident to amuse their leisure, and prevent them wearying even of rest, and by giving them hope and bodily pleasure in their work; or, shortly, to make man's work happy and his rest fruitful. Consequently, genuine Art is an unmixed blessing to the race of man" (Morris W., 1984) (quoted by Belfiore & Bennett 2007:144). Moreover, the intellectual interpretation of the cathartic process alleged the cognitive effect of Culture, an effect that is also claimed in today's literature (Corrigall & Trainor 2011)(Southgate & Roscigno 2009).

Many authors have presented arguments in favor of 'Art for Art's sake', where the aesthetic meaning is far superior to the non-aesthetic considerations: "where the fine-arts system rises as a social instance independent from any utilitarian function" (Greffe X., 2013). This vision encouraged the rejection of 'instrumental logic' and

been 'art for the artists' sake', because it maintained that artists alone had the right to judge the quality and evolution of their works. Further, it was a way of putting an end to the growing antagonism between an art admired by society and artists despised by the same society" (Greffe X., 2013).

Immanuel Kant, in his *Critique of Judgement*, attempts to identify a sphere of autonomy for Arts, declaring that "neither does perfection gain by beauty, nor beauty by perfection", and defining Arts as "purposiveness without a purpose" (Belfiore, E., & Bennett, O., 2007: 22). The quintessential cultural value of a good is its ability to evoke an experience of the sublime. It has a quality that brings awe and "stirs the soul".

Kant purports that this quality is disinterested; it does not serve a social or economic goal. Such ideas, in the course of the 19th Century, were developed into theories proposing a separation between Art and Morality, as well as a rejection of any educational function for the Arts: "nothing is really beautiful unless it is useless" (Grieve A., 1999).

In parallel, Arts moved from being shared entertainment (as they used to be in the 19th Century) to an intellectual game **reserved for initiated people.**

"The prevailing view in the cultural world is still keeping the approach, the method and the mechanisms typical of the Nineteenth Century when Culture was the shared decoration of the ruling class in a Euro-centric society" (Trimarchi M., 2012).

In the manufacturing economy, Culture (a special and almost ineffable concept), was standardized as the object of social and economic exchange. Binary labels - "highbrow" and "low-brow" Culture, or rather "educated" and "uneducated" - have tried to dominate the cultural realm.

the emancipation of an autonomous and aesthetic movement that "developed into theories of l'art pour l'art" (Belfiore E. & Bennett O., 2007).

Only in recent years, the pillars of that wisdom have become progressively weaker. We have started to understand that various misuses of the word 'Culture' are related to prejudicial positions, to some atmospheric bias, and to convenient ethical features. These misuses risk hindering instead of easing the fertility of the term, which can generate multiple meanings and interpretations.

1.3 · CULTURE. KEY FEATURE OR COMMON PLACE? ·

Culture: "It may be a bridge, a piece of wood. Or a temple, a windmill, a painting, a piece of furniture, a mask, jewel, bead. It may even be a language, a ritual, or a practice. Whatever it is, it differs from other goods because people may consider it a symbol of something — a nation, a community, a tradition, a religion, a cultural episode — and endow it with various meanings over and above its usefulness. They may ascribe to it artistic, aesthetic or sacred qualities. They may draw inspiration from it, or value it because it gives rise to hatred in some and antagonizes others. Let us say, then, that the good has cultural value in that it is a source of inspiration or symbol of distinction" (Klamer A., 1996 [Emphases added]).

To define Culture is quite a difficult task. We may argue that a definition is not necessary, and that the many and various possible perspectives exclude any suitable outcome. After several papers, articles, and quotes on the meaning of Culture, we found and extracted some constant or emerging features, often repeated in the huge variety of different approaches. We may rough out some **key characteristics:** we open the following arguments with some widespread definitions, but always in the awareness that Culture is not a thing or static concept. Culture is a process, subjected to a cognitive evolution. It is a value chain; it has dynamism. Therefore, each of the following points is developed with this assumption.

_ Culture as a state

Our notion of Culture is too often considered as something belonging exclusively to certain members and not related to society as a whole. It is interpreted as "a sin of narcissistic leisure and decay by those who fear any critical thought, such as dictators, extreme right-wing politicians; and as the most powerful sign of identity by the clever milieu of left-wing intellectuals who try to transform the bourgeois club into an active and responsible think-tank. Many teachers and a wide majority of society ended up to consider Culture the mere dimensional symptom of the pedantic accumulation of notions: it's erudition, not certainly Culture, nevertheless it appears to be the prevailing interpretation of the word" (Trimarchi M., 2002 [Emphasis added]).

According to this interpretation, Culture is often linked with terms and concepts – such as 'civilized', 'well-educated', 'refined', 'cultured', etc. – and is therefore directly associated with the results of this refinement (the art, literature, music, etc. of a society).

Moreover, the temptation is to overcome the difficulty in defining the term with a simple list of forms and sectors: a roster, compiled by gathering heterogeneous goods and activities analyzed under simplistic labels. This approach may seem proper at first sight; however, it is instead sadly agonizing.

"It is not that some Cultures are advanced and some backward, some more civilised and polite while others are coarse and rude. Rather, they are similar or different to each other" (Trimarchi M., 2002). We end up establishing a sort of competition among Cultural Institutions and organizations where financial and budget aspects clearly prevail on strictly cultural values.

Culture is not a thing or static concept. Culture is a process; it is subjected to a cognitive evolution. It is a value chain; it has dynamism.

_ Culture as both an individual and social construct

"When people pay a visit to a museum, they are said to consume the services of the museum, i.e. the exhibition. Yet, what actually happens? They may visit the museum with their family, so the outing may actually be important for the life of the family. They may have used the visit to have a nice lunch in the museum or to enjoy being in the building itself. They may have gone to the museum in the hope of meeting certain people. They may experience something in the museum that has a long time impact. They may have conversations about their experiences afterwards so that the museum visit may have a longer life than the mere visit. People may have learned something;

and they may have to account for what they did. So, it is not immediate obvious what the consumption is all about. It is obvious, however, that the evaluation of the museum visit, that is, its consumption, is an entirely different matter and subject of again different conversations, other than its economic evaluation".

Again: "a museum has so much more to offer. People may like to be part of it; they would like to call the museum theirs. They like the atmosphere, they like to have art in their life, and they like to socialize with artistic people. A museum has social value, therefore. The social logic is most effective to realize such values. <u>This logic involves reciprocity</u>, and the making and receiving of contributions" (Klamer A., 1996 [Emphasis added]).

Culture is often perceived as a 'members only' club, although it exists entirely in our relationships with others. Culture and Arts have a shared character:¹⁵ they own dialogue capabilities.

Conversation means enjoying company and appreciating the ability of having a discussion with another person. Conversation is 'ours': it belongs to 'me' and to the 'other' person I am discussing with. It matters to me that the other enjoys the conversation too. "We do not only produce the conversation together, we also "consume" it together. Its enjoyment is mutual. Our conversation is what he and I have in common. It is a common good" (Klamer A., 2004).

Conversation cannot be a 'private good': I cannot claim ownership of it or exclude

With 'notion of shared or common goods' we intend "goods shared by a group of people without a clear legal definition of ownership. In the rule, no single person or legal identity can claim ownership of a common good. The members of the group enjoy the fruits of their common good; they cannot exclude other members but usually exclude non-members. Rivalry is conceivable both inside and outside the group". In the field of Economy, we usually differentiate private from public or collective, based on the idea that the private sphere entails the market and is supposed to take care of the 'private'; and the public sphere entails the government, which should take care of the 'collective'. Common goods are shared by a group of people, in consumption and possession; their dominant role in our lives can account for cooperative behavior, altruistic actions, loyalty, and a sense of social responsibility.

the other member. It is not divisible. I cannot take my part. You cannot exchange conversation as a private good. At the same time, however, conversation is not a 'public good' either: I may not be able to exclude the other member but 'we' are able to exclude the rest of the public. Not only do I benefit from this, but other involved members do as well. "We all benefit from that. So the external effect that my participation generates does not remain external to my private sphere, but becomes an effect on something that I have in common with others" (Klamer A., 2004).

In this sense, we can affirm that: "Art is a conversation [...] a piece of Art exists as such only if it is recognized in the conversation of Art. People may play music and paint what they like, in order to qualify as artists and their work as art they need to be in the conversation of art somehow" (Klamer A., 2004).

Culture is often perceived as a 'members only' club, although it exists entirely in our relationships with others.

Culture as manifested at different depth-levels

It is certain that Culture is not a thing: this would lead to a deceptive notion that, as a 'thing', it can act even independently from human actors.

"When one enters an organization one observes and feels its artefacts. This category includes everything from the physical layout, the dress code, the manner in which people address each other, the smell and feel of the place, its emotional intensity, and other phenomena, to the more permanent archival manifestations such as company records, products, statements of philosophy, and annual reports" (Schein E., 1990).

The superficial level of these "artefacts" is tricky because the data is easy to obtain but hard to interpret. We can describe how a group constructs its environment and what behavior patterns are discernible among the members, but we often cannot understand the underlying logic – why a group behaves the way it does.

Behavior reasons risk remaining concealed or subconscious: it is imperative to delve into the underlying assumptions, which are typically subconscious but that actually determine *how* people perceive, think, and feel. These same assumptions, however, are also learned responses that originated as espoused values.

Therefore, we face two main issues. The first regards what we define as cultural and non-cultural goods (services, projects, activities, etc.); in relation with time, above all, since what we label as Culture is inevitably exposed to various changes through time. The other issue regards the need to analyze the 'degree' of Culture in products that are defined as cultural (recognizing the level of 'culture concentrate' in these products, and how their cultural characteristics are understandable, perceived, and treated). In other words, understanding whether a product is cultural even in its relation with time-driven changes; and understanding the actual amount of Culture in products that are defined as cultural.

Culture seems to rely upon people's decisions. As Bruno Frey suggests, Culture is what people believe it is. ¹⁶ Such a perspective implicitly points at a crucial issue: <u>the proper entitlement of including something in (or excluding something from) the realm of Culture.</u>

Culture is not a thing. It cannot act independently from human actors.

¹⁶ Frey, B. S. (1997). *Not just for the money. An economic theory of personal motivation*. E. Elgar, Cheltenham.

1.4 · CULTURE AND ITS COGNITIVE COMPONENT ·

_ Culture is acquired

Culture is acquired, ascertained, and learned from the people you interact with when you socialize. Culture is the result of a learning process and is not inherited. Its term clearly evokes a process of cultivation.

"The idiosyncrasy of such a process implies that the personal experience of cultural consumption leads each individual to form his/her own stock of knowledge, pursuing — with various degrees of awareness — a sort of "specialisation", and therefore addressing his/her own future consumption towards the units which he/she believes most effectively able to increase the value of his/her stock. This is reflected in a progressively higher willingness to pay for cultural consumption (for those units that appear to be consistent with one's own stock), and in a demand for higher quality of supply: given the nature of this taste formation process, quality must be considered the sum of heterogeneous characteristics that allow each individual consumer to derive high informational value from cultural consumption" (Trimarchi M., 2002).

The process comprises all past cultural experience. It is an accumulation – not a mere sum – of resources; an accumulation of knowledge and a progressively deeper ability to elaborate critical judgments. Culture is a revolutionizing process as it is able to generate something that differs from the pre-existing cultural experience background. The cultural experience always adds something new. The first time they are exposed to Culture, individuals perceive a <u>foggy emotion</u>, a heterogeneous and subjective reaction; but repeated exposure leads to an accumulation of information that is able to grow technical appropriateness and taste awareness in time, ranging from pure emotion to intellectual elaboration.

Such a view of the concept of 'Culture' has several implications. Firstly, cultural consumption is strongly – yet not completely ¹⁷ – **subjective**: when two individuals

¹⁷ A cultural product, having its own artistic characteristics, is not only made of subjective features. It has some objective aspects as well, such as its uniqueness (reproductions have the same value of the original and are

are exposed to the same artistic product (painting, movie, poem, etc.), they can either like it or not. They may or may not appreciate it and have different reactions to it. Whether such product can be included in the cultural realm is affected by, at least in the beginning, a simply hedonistic impact of artistic consumption: a revelation of an immediate and **emotional feedback**.

Once the accumulation is activated, individuals are free to elaborate a subjective and effective way to form their own taste, extracting the maximum benefit from their stock of knowledge. The more the individual experiences Culture, the more he will know his preferences. The more we are addicted to Culture, the more external certification becomes less relevant in our choice. Therefore, expert certification does not influence 'consumer' appreciation.

At this point, by taking a useful step backwards, we could venture out and look for the meaning of the word 'Culture'. Enciclopedia Italiana (1986) offers a rather clear definition: "The set of intellectual knowledge and information that a person has acquired through study and experience, elaborating it profoundly and personally so as to convert the notions from simple erudition into a constituent element of his moral personality, of his spirituality, and of his aesthetic taste. In short, into the awareness of himself and his world. Other meanings are connected to institutions and practices (Italian culture of the fifteenth century), or to values, beliefs, and models of behavior (anthropology)".

We can also reconstruct the simple and eloquent etymology of the word. 'Cultura' derives from the Latin verb 'colere' (to cultivate), which indicates the practice of taking care, paying attention, investing energy: you can cultivate a terrain, but also an interest, a passion, a friendship, a love.

produced in limited number) and its 'uselessness' (since its function is not practical). These two aspects can be assessed or known without any subjective evaluation.

¹⁸ Personality and cognitive studies have all shown that creativity - far from being spontaneous, innate or untrained - requires intense and time-consuming investment in the knowledge of the specific and adjacent domains of application.

Individuals become their own experts. You become your own expert. The Culture demand becomes more and more migrant: stratified commonplaces – of which the cultural system is victim – are about to vanish.¹⁹

This is a process without predictable outcomes. The same cultural experience may bring two different individuals to two different cultural chain reactions: diverse results both in emotional knowledge accumulation, and in stimulus to other cultural experiences.

The binary path — is this Culture, or not? — branches out in a huge variety of possibilities: how much of these goods or experiences are cultural? And how are they perceived and observed by both present and potential consumers?

> Culture - 'Cultura' derives from the Latin verb 'colere' (to cultivate), which indicates the practice of taking care, paying attention, investing energy.

they are able to discriminate between typicality and novelty more finely than non-experts (Hekkert et al., 2003).

 $^{^{19}}$ The consensual method has been used to identify the possible factors that outline differences in judgments between experts and non-experts (Hekkert et al., 1996). For example, some studies have shown that, in rating artworks, experts tend to equate creativity with originality (Kozbelt & Serafin, 2009), and that - unsurprisingly -

_ Culture and identity

Usually, the experience of Culture shows the presence of two vital characteristics: *understanding* (acquired through legibility, clarity, and experience) and *exploration* (from mystery to complexity, novelty, and variety), which is dominated by socially mediated preferences (Berlyne D.E., 1950). Thus, Culture — the accumulation of knowledge — may be conceived as a process of **social interaction**, not only as cognitive one.

At this point of our argument, the issue of cultural freedom of individual choice is linked with both a democratic setting (their evaluations and opportunity to select must be considered equal) and with the concept of identity. Identity, identification, is necessary to allow individuals to either refuse or accept some product as cultural. Individuals tend to exclude a product from the cultural realm if they do not recognize its relationship with any **identity**.

"This implies that the content of any cultural product should convey to its consumers some information about specific characteristics of a nation, a period, a group of people, even an intentional or imaginary mix of these, in a symbolic but quite direct and explicit way" (Trimarchi M., 2002).

Cultural value is likely to decrease when the identity of artistic products is not respected. Of course, we could question the subjectivity of such a concept. Again, the idea of identity is controversial: certainly, identity does not coincide with Culture but it is vital in recognizing it.

Culture is much broader then identity: "Identities consist of people's answers to the question 'Where do I belong?'. They are based on mutual images and stereotypes and on emotions linked to the outer layers of the onion, but not to values. Populations that fight each other on the basis of their different "felt" identities may very well share the same values. Examples are the linguistic regions in Belgium, the religions in Northern Ireland, and tribal groups in Africa. A shared identity needs a shared Other: At home, I feel Dutch and very different from other Europeans, such

as Belgians and Germans; in Asia or the united States, we all feel like Europeans²⁰. (Hofstede G., 2001).

Then again, it could be a more challenging argument: people from different groups may use Culture as a tool in an effort to enhance individual and group identities. We could argue that Culture is a social construct that mirrors 'us' in opposition to 'others'. The dominant class uses this shared cultural capital as a criterion for membership and in order to maintain its identify by excluding others. Therefore, we should share the same Culture with 'others' (Di Maggio & Useem 1978): identity may be influenced by its role (played by fashions), inducing people to passively conform to others' expectations, in the formation of collective tastes (Bianchi M., 2014).

_ Culture is subject to gradual change

"Identity is the evolutionary outcome of an indefinite number of dynamics: the value of Culture rises progressively in exchanges, networks and synergies fed in a chaotic humus where things change continuously and the relationship between roots and orientations describes identity as a self-raising feature" (Trimarchi M., 2012).

As previously said, Culture, rather than being an iconic and 'set' beauty (source of spiritual value, therefore objective and eternal), is cognitive and instinctive: its approach is a sentimental process of incomparable and unique individuals who personally and critically appreciate its heterogeneity.

This heterogeneity (in form, place, and time) reveals the ability — and tendency — of Culture to change: Culture is not mummified in a 'comfortable' homogeneous system; its audiences are not cloned masses. Culture presents a hyper-textual approach, full of links, skills, cross-references, and multiple chains of thought, experiences, and intuitions.

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²⁰ Hofstede G. (2005), *Cultures and Organizations: Software of the Mind*. 2nd Edition, McGraw-Hill, USA.

Culture, rather than being an iconic and 'set' beauty, is cognitive and instinctive.

Culture — always conceived as a snapshot of one particular time — is progressively losing its static stiffness, revealing its ability to evolve and its powerful horizontal width, based on multiplicity and hybridation. It is strictly connected to society in a mutual relationship and endless dialogue: society radically and periodically changes, and Culture answers by reshaping itself. They feed off of each other reciprocally.

"Recently what we define culture has become too fast: spectacular, superficial, devoted to mass-tourists prepared to buy nights in hotels and meals in restaurants. Fast culture cares about income" (Trimarchi M., 2012).

It is now transforming.²¹ Again.

1

Digital "is a multimedia language that makes it possible to tell a story in a smooth, coherent and absorbing way; but above all it is the language with which we communicate today, it captures our imagination and expresses itself in new forms of behaviour. It has led to the inevitable influence that the media has exerted over us for years but, if inverted, allows us to potentially reconnect with a shared feeling, a vehicle for dialogue between different people from far and wide, in a way that has not happened for centuries. Its language has a certain similarity with the oral culture on which the characteristics of discursive thought were based on: indeterminacy, repeatability, immediacy, simultaneousness, fragmentation, and connectivity" (Rosa P., 2011).

In a process of ongoing osmosis, we witness the birth of new languages, able to inspire innovative productive and cultural forms (and vice versa). The contemporary scene always more clearly shows how active and interactive technological elements mark the development of everyday events. While the media experiment explosive and unsettling languages, the entire social and cultural connective tissue we move in experiences great pressures with unpredictable results. Image and data detectors generate an ever-expanding network: the area of information where each of us deposit our traces (bank transactions, food choices, internet exchanges, road routes, health status, phone calls, etc.). An infinite container of sensitive data from which we can reconstruct our tendencies, orientations, desires, preferences, and habits. New cultural paradigms are emerging. Technology is therefore an inevitable challenge, as better explained in Chapter 3 and 4, but it also offers an extraordinary opportunity. The interactive process is always more the central focus. Interaction, which has always existed and is at the base of all experiences, has always been a direct process, even if sometimes helped by complex tools or mechanisms. Today, it managed by systems with great processing capabilities. These systems can no longer be qualified as mere means or tools: they are reacting devices with the ability of amplifying, transforming, and memorizing.

1.5 · TASTES AND **NOVELTY**. NOBODY KNOWS ·

"We have to understand how aesthetic preferences work, what triggers them and what shapes them into enduring interests. They are neither purely objective – and therefore assessable with certainty – nor simply subjective – and therefore not assessable at all. Rather, they arise from our active engagement with goods and activities. In order to allow for this active engagement, goods must be open-ended, providing for both understanding and exploration, for legibility and complexity, for familiarity and novelty" (Bianchi M., 2014 [Emphasis added]).

Culture is in constant change, and forms of radical uncertainty surround creative products.²² The feature of this uncertainty is the *Nobody Knows* characteristic (Caves R. E., 2000): "a state of affairs that signals the existence, not so much of asymmetric knowledge as of symmetric ignorance". Uncertainty is not simply a necessary evil that should be taken care of, but a necessary aspect that should be constantly recreated if it disappears.

Moreover, in the cultural cognitive process, non-consumers are simply individuals who never had any cultural experience. It is clear that neophytes need some proper encouragement; they should be seduced. For cultural goods, **novelty** (the ability to surprise) and ambiguity, may be the 'right' ingredients: a dance, music piece, show, exhibition or poem all have potential stimulus, and their power to engage and attract depends on their complexity.

Cultural seduction could be seen as <u>a balance between the 'known' and the unknown:</u> a novelty check appraising something as new, unfamiliar, complex, inchoate, mysterious on one side; and a coping-potential check aimed at understanding the new, unfamiliar, complex thing that was identified during the first appraisal on the other.²³

²³ "Interestingly, confirmatory findings come also from the field of evolutionary psychology, and in particular from studies focused on the formation of landscape preferences, such as those of Kaplan and Kaplan (1989) and Kaplan (1992). In their experiments, subjects were presented with sets of images of different natural settings, and

The cultural experience is therefore **clearly context dependent**. Any factor that increases the knowledge of a creative good, and helps its users to identify and interpret it, can also somewhat help to dissipate uncertainty. Styles, genres, identifiable trends, authorship, fashions, reputation, and historical pedigree all are, as we shall see, tools in the hands of consumers, producers, and experts that can help single out the characteristics that may orient choice-making by better informing it.

Daniel Berlyne,²⁴ for instance, when identifying a specific group of variables responsible for our emotional responses to art, stressed the presence of three distinct sets:

- The "intensive or psychophysical variables", which involve the sensory intensity of a stimulus (like the volume of sound, the brightness of light, size, chromatic colors);
- The "ecological variables", which refer to the external conditions, biologically noxious or beneficial.
- And the "collative variables", which always involve the 'collation' or comparison/contrast between two or more sources of stimulus.²⁵

four variables emerged as systematic predictors of preference: coherence and legibility (allowing for understanding), and complexity and mystery (allowing for exploration). Natural settings that presented uniform and unmarked configurations – highly legible but low in mystery – as well as intricate, dense and impenetrable settings – high in mystery but low in legibility – ranked poorly in preference orderings. The most consistently liked were those environments with open, but partially screened views, incorporating winding and bending paths that suggested mystery and elicited further exploration but short of inducing fear and insecurity" (Bianchi, 2008). This experimental research has been extended also to features of urban spaces, housing locations, architecture and landscape paintings (see Orians and Heerwagen, 1992). [...] They evoke the feeling that there is always more to be learned'" (Bianchi M. The allure of novelty and uncertainty in Art Consumption, chapter inside Dempster A. M., Risk and Uncertainty in Art World, Bloomsbury Publishing, 2014).

A pioneering figure in the 1960s and 1970s studies of aesthetic preferences. He was the psychophysicist whose development of a "new experimental aesthetics" (1960, 1971, Berlyne & Madsen 1973), involving laboratory research based on behavioral-science methods, still represents the reference point of much contemporary research on art.

More precisely - in the case of novelty, variety, and change - the comparison is between the actual and the previously experienced event; while - in the case of surprise - the contrast is between the actual and the anticipated event. Conflict and uncertainty either arise in the presence of simultaneous responses to an event, or when there are simultaneous expectations of an event.

The balance is delicate: "its success can rarely be explained even ex post by the satisfaction of a pre-existing need" (Bianchi M., 2014). In order to be seductive, Cultural goods require a serious amount of appropriateness and sincerity, and must provide novelty, variety, and complexity. They have to surprise without losing the feeling of familiarity and personal comprehension of the experience. Without the proper surrounding conditions and measured variables, every potential consumer is evidently discouraged, and therefore this acts as a powerful obstacle against any experience.

Cultural seduction could be seen as a balance between the known and the unknown, familiarity and novelty.

2.

AUDIENCE spectrum

the horizontal issues of access

2.

AUDIENCE spectrum

horizontal issues of access

Having laid out the importance of exploring the multidimensionality of the concept of Culture and its declensions, the second chapter explores the actual accessibility to cultural experiences: it investigates horizontal problems of access to Cultural Institutions.

In order to analyze this complicated approach to the cultural structure, becoming familiar with who attends Cultural Institutions and what it means when we speak of Audience becomes necessary. In fact, the Audience, together with Cultural Institutions, can be seen as the protagonist and key element of a vital and essential equation that can risk being brought out of balance (for instance, if the audience itself is not present and 'disobeys' its own arrival).

The chapter includes a review of the extensive bibliographical corpus on Audience studies. A gradually more and more complex picture is then sketched out starting from existing processes, numbers, approaches to the matter, and subsequent reflections.

At first sight, all examined researches seem to show a general decline in Audience participation in most activities. Using Special Eurobarometer report data, we employed a cross-national comparative perspective to investigate the extent to which demographic and socio-economic characteristics influence the decision to make visits and the number of visits itself, focusing only on museums and galleries, and choosing three main cases.

But knowing the Audience does not mean limiting ourselves to a record of pure numerical data and core values (gender, age, education, and income). Some cultural practices elude official statistics (such as new channels and home-based digital platforms), and other potential disputes (regarding which products are "cultural" and which not) make the problem even trickier. Specifically, reading the picture as a whole requires an overlapping of qualitative and quantitative analyses; a dimensional approach is not sufficient. Morris Heartgrave McIntyre, made an initial effort with the application of Audience segmentation in the cultural sphere: a pragmatic alternative that grouped individuals in sets (easier to manage and recognize) in relation with their needs, desires, attitudes, and distinct reasons.

A method that is often problematic and reductive but that is able to present common traits (with other models of interpretation) in its tripartite division of Audience: central, occasional or potential users,

and non-users. This subdivision is proposed and accepted even by more recent Audience development theories and strategies.

The term AD - Audience Development - describes activities that are undertaken specifically to meet the needs of existing and potential audiences and to help art organizations develop on-going relationships with them.

It is perceived as a transversal phenomenon that does not only crosscut specific cultural policies addressed to support access and participation (going beyond possible barriers, both physical and cognitive): it recognizes audiences as active interlocutors that may be involved through a range of practices, from the occasional consultation to "empowerment-lite" forms of engagement, and from collaborative meaning-making to participatory planning.

Nevertheless, even the AD may face some risks. Egil Bjørnsen, in line with Nobuko Kawashima, illustrates possible AD limitations. Those who mean to develop a new Audience want to establish contact between new Audience groups and existing art products (known as 'product-led perspective'): this practice is part of the cultural policy goal of democratizing Culture. Instead, an Audience development strategy, working to achieve cultural inclusion, must be target-led in order to meet a new Audience on their own terms.

Therefore, there is much literature on the issue. The most relevant documents have been further reviewed in synthetic visualizations, providing a set of summaries composed by key information and authors. These visualizations are useful both to elaborate an original theoretical-interpretative model (where cultural Audience is not perceived as a homogeneous solid block) and to stress the importance of another logical phase, the "hold/keep" one (in order to substantiate the relationship between the organization and its current Audience).

2.1 · IT IS EASY TO SAY 'AUDIENCE': A TRANSIENT DEFINITION AND COLLECTIVE SUBJECT ·

"Audience has the power to 'back out': to come by and stop, enter, and visit. It has the power to activate itself. The audience is the author of a text, a play, that is returned to its original acts. The audience has the power to realize if something is happening, in what has assumingly been presented; in that place between custom and disregard. Only what was not thought to be actually happens. The rest was already there" (Scalfi A., 2014).

An Audience at a theater performance, at an exhibition, at a concert: Audience, in every declination, can be understood as physically present, potentially interactive, indifferent or distracted. Audience can be measured as a volume of attention, a substance of silence, rarefied or compact (Scalfi A., 2014). However, together with the Cultural Institution, the Audience remains the protagonist and key element of a necessary, vital, and essential equation, which can risk being brought out of balance in the event that the audience itself is not present and 'disobeys' its own arrival. The reasons for a discouraged cultural participation are various and are often traced to the presence of barriers and obstacles that prevent access in a physical, economic but also cultural sense (Da Milano C.). The visit is often supported by expectations, personal agendas, and social contexts. We do not enter a museum or a theater 'naked': we are in the company of our life stories every time.

The knowledge of the Audience is thus a favored point of view by part of the institution. However, it is not a simple matter. The state of knowledge of a Cultural Audience is a complex and discordant reality. Awareness of the importance of scientific studies and researches in the field has grown enormously over the past decade, but the potential of these resources are not fully exploited; in most cases, the surveys are conceived as a purpose, and not as a practical tool.

The Audience of Culture can be perceived and analyzed from various angles. John Holden talks about it, explaining that it is a collective term, encompassing a multitude of different and often opposite points of view. Doing so, the question

becomes complex and conceals intense psychological implications: "Subject to frequent sentimental appropriation ("my audience", as claimed by a lot of entertainers and professionals in the field), the audience is generally considered a kind of homogeneous and stable block" (Trimarchi M. 2014). Conversely, it is uneven, multiple, and unstable in every aspect. It defines a group, or rather a set of distinct elements: spectators, visitors, users, customers (defying the semantic modesty of many insiders), consumers, participants, paying subjects, attendance, and (more rarely but more precisely) people (Bollo A., 2014). With the spread of radio and TV, Audience is then transformed into Audience-rating, and consequently into goods. Doctors of the official statistics have named this 'Audience', and measure its 'health conditions' periodically.

More in general, on the one hand, the Audience outlines a museum-user profile that is "socially located", almost crystallized, segmented, pigeonholed and portrayed in traditional socio-demographic descriptors (level of education, profession, age, gender). On the other hand, the Audience appears like a mosaic, a *Pointillist* painting: the closer you look at it, the more it shows its fragmentary nature and elusiveness in the motivational component. Thus, it reveals itself as an impulsive, yet not naive, user able to listen to both the cognitive component and the emotional one in the overall experience evaluation: it is oriented toward *'de-ideologizing'* the act of cultural consumption or toward connoting it as a status symbol, mentally appropriating it or socially exchanging it.

The knowledge of the Audience is optimized by establishing a "toolbox" that can clearly identify the analysis dimensions (the tools to use and the most suitable methods) with the awareness that different disciplines, if conducted independently, might overlook cross-connections and detailed studies on the subject. Therefore, we need a 'modest' approach (Jonsson A., 1996), or rather a study policy able to listen and understand both the views of others and the different professional traditions involved. A study policy able to consider the expansion of the term into its denial: Non-Audience. Generally, we tend to see Audience in terms of recipients who 'stick to a pact' and are more or less implicitly part of a community. Consequently, by contrast, we must consider that there is a definitely larger and more diverse group

(<u>far from being monolithic</u>), consisting of those who do not take part in it. Understanding why an individual decides to not consider a visit to a museum (from the alternative uses of his free time) would be extremely useful. It shows <u>the need for more awareness not only of the 'known' Audience but also of an almost unknown one, the non-visitors</u>; a mental mapping of the audiences that we should address.²⁶

In this direction, even the evaluation of cultural organizations (and especially the "Relational Capital") is crucial: putting people, territory, sensitivity, social exchanges, relations, and cooperation back at the center of focus. In our country, a dominance and fundamental support of the supply, and not of the demand, in audience policies still resists: "what resists is the logic of seeing the cultural consumer as 'immature', a novice that must be formed, educated, and made literate; the cultural consumer is where the cultural program exercises its intellectual domain, instead of considering him as social actor who not only seeks to determine his own choices but is equipped with more knowledge".

Audience is a collective term,

encompassing a multitude of different and often opposite points of view. It can be measured as a volume of attention, a substance of silence...

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We typically distinguish between 'central' audiences, occasional users, potential users, and non-users. Central audiences have the custom of accessing the cultural offer and their involvement does not require tackling cultural or social barriers. Occasional audiences make sporadic use of the cultural offer ('blockbuster' events, visits to museums in holiday destinations, etc.). Potential (or 'lapsed') users are those who currently do not visit cultural institutions, but who might be interested in doing so. Such 'distance' may be rooted in a wide series of factors (cultural, social, financial, and physical barriers). Finally, non-users are the furthest removed from cultural institutions.

The interactions between supply and demand are extremely low and completely dynamic-less. The cultural offer is identified in an objective, in an incontrovertible, almost sacred, way. The demand is forced to embrace the offer in a compact manner.

The relationship with the Audience must be essential in making Culture. The cultural institutions should hope to be "places where social processes of construction of knowledge are developed" (Da Milano C., 2014). Culture contributes not only in creating a sense of identity and belonging, but it also reflects the different ways of co-existence within society, promoting social inclusion and/or exclusion processes. Participation is one of the mechanisms that characterize social inclusion in the cultural sector: the other two fundamental elements are Access and Representation. The combination of these elements produces benefits, in personal and social terms, like capacity building.

2.2 · ELUDING OFFICIAL STATISTICS, SOME NUMBERS ·

Special Eurobarometer | Data in Europe

In November 2013, the European Commission released the results of the latest *Special Eurobarometer* ²⁷ on access to Culture. The survey was carried out six years after the previous one (before the financial and economic crisis), and established an index of cultural practice and participation, arranged on a scale of four levels: "Very High", "High", "Medium", and "Low" (Cicerchia A., 2014).

Comparisons between EU countries cannot be exhaustive: even though customs can greatly differ from one country and the other, many national approaches co-exist under the European umbrella.²⁸ The main findings of the survey can be summarized as follows:

- The most common form of participation in cultural activity is watching or listening to a cultural program on TV or on the radio²⁹ (72% of Europeans do so at least once a year). The second common activity (68%) is reading, while ballet, dance, and opera are firmly set at the bottom of the list (only 18%).
- However, compared to 2007, there has been a general decline in participation in most activities. The most significant decrease is precisely related to radio or TV cultural programs, which decreased by 6 percentage points (from 78% to 72%). Cinema, however, has grown by one point, while ballet, dance, and opera numbers remain unaltered. This general decline might partly be an effect of the financial and economic crisis.

²⁷ Results are analyzed in terms of the European average throughout the entire "Special Eurobarometer 399" report, followed by a breakdown by country and, finally, by some socio-demographic variables. Where possible, the results are also compared with those of the 2007 "Eurobarometer Cultural Values survey 278". http://ec.europa.eu/public opinion/archives/ebs/ebs 399 en.pdf

²⁸ Results for cultural and artistic participation show that behavior in this area is diverse in nature. This reflects the complex cultural mix within Europe itself, which is something that seems to be recognised by many respondents as existing alongside a degree of cultural commonality.

²⁹ In the "Special Eurobarometer" documents, TV and radio are considered inexpensive and therefore accessible to people of all income levels.

Northern European countries seem more engaged in a series of cultural activities: for example, 90% of Swedes, 86% of Dutch, and 82% of Danes have read at least one book in the year preceding the survey. The highest share of participation indexes ("Very High" and "High") are reached by Sweden (43%), Denmark (36%), and the Netherlands (34%). The lowest scores of the index of cultural participation are measured in Greece (5%), Portugal and Cyprus (6%), and Romania and Hungary (7%). <u>Italy has a predominant profile of low participation (49%)</u>, compared to a EU average of 34%.

The two main reasons for non-participation to cultural activities are "lack of interest" and "lack of time". Cost reasons are also cited in in countries most affected by the economic crisis.

Economic and socio-demographic factors (such as age, education level, employment status, and ability to pay the bills) are all related, to some extent, to participation in cultural activities. For example, reading is strongly influenced by the interviewee's educational level; watching or listening to radio or TV cultural programs is more frequent among people aged 40 and over. But, the two main reasons for non-participation (or low participation) to cultural activities are "lack of interest" and "lack of time". Cost reasons are also cited in Eastern Europe (Romania, Bulgaria, and Hungary), and in countries most affected by the economic crisis (like Greece, Portugal, and Spain). In general, a reduction in the frequency of consumption of the detected cultural activities also includes the non-expensive and free ones. 30

³⁰ Internet has transformed things considerably, catalyzing all possible forms of consumption and experience in accordance with the different types of users and means available to them. "Under the influence of technological innovations, particularly after the advent of the Internet, processes related to the production and consumption of

- Only a minority of respondents is engaged with another country's culture. Obviously, the most frequent activity is reading books by an author from another European country (reported by 31%), followed by vision of cultural TV broadcasting or by listening to radio of another European country (27%). However, only 19% claims to have visited a monument or a historical site, and 10% to have participated in a live show, exhibition or other cultural activities in another European country.
- Compared to 2007, <u>individual involvement (understood both as performing</u> and production of cultural or artistic activity) <u>has declined greatly</u>. Consistent with the aforementioned national results, the interviewees in northern countries are more willing to actively engage in artistic activities.
- More than half of Europeans use the Internet for cultural purposes; at least once a week for 30%. It is useful to distinguish between direct and indirect uses of the Internet for cultural purposes. Indirect use includes using the Internet to find information on cultural products or events, or to make purchases of cultural products: overall, 54% of Internet usage for cultural purposes is indirect.

artistic goods and cultural products have changed. [...] What has happened is that in the name of freedom of information, artistic goods are treated as 'information' and are supposed to be provided free of cost, with music and probably audio-visual entertainment in the near future, being a perfect illustration of this new economic context". Spaces have been broken up and dismantled: traditional public and institutional spaces where cultural consumption normally takes place do not exist anymore. Cultural consumption is split "into specialized and private spaces, like a young adult's room, where the computer, the USB port, and the mobile phone constitute the basic cultural setting" (Greffe X., 2016).

The change is evident and the subject is delicate, but we must consider that, concerning the relations between analog and web supports in Culture, digital/web support configures a further dimension of content production and exchange. In fact, looking more closely, digital channels do not conflict with analog ones.

Special Eurobarometer | Italy's data, in-depth

Within a community framework, overall rarely integrated or open to the circulation of ideas and cultural products, Italy ranks as an even more closed and isolated reality than the average. But what are the stated reasons for this weak Italian participation? Take the museums in the last 12 months, for example;³¹ the reasons for non-participation are, possibly, clear:

- 35% of Italians indicates a lack of interest;32
- 31% a lack of time;
- 8% an insufficient supply;
- 15% too high a price of admission.

This last statement, however, should be interpreted with caution, especially in light of the fact that, in the same survey, 8% of Italian respondents complained the expensive entrance (usually known free) to audience libraries. Effectively, 40% says that they almost never encounter difficulties (compared to 28% of the European average), reiterating that cultural participation depends only marginally on economic comfort.

Italians are, however, more assiduous than the European average in three aspects. The first is the publication of their cultural content, for example on social networks (Italy: 14%, EU: 11%). The second is, conversely, reading or viewing cultural sites (Italy: 24%, EU: 21%). The third, finally, is represented by the online game, in which our country excels, with a practice declared by 29% of respondents, compared to 24% of the average.

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 $^{^{31}}$ In the "Special Eurobarometer 2013" report, in the table QB2.7 - page 28 $\,$

³² "lack of interest" should not be confused with "I don't know", being two different alternatives in the questionnaires

_ ISTAT | Data in Italy

All data collected through the most recent surveys head towards the same direction: Italian cultural participation, which has never been particularly strong, became even less so in recent years. So much so, that media, newspapers, and many cultural institutions speak of an **escape from culture** 33, of cultural decline, and of widespread ignorance.

Once again, the term Culture is used, only specifying the specific cultural area (theater, museum, cinema, etc.) in a second stage. This does not imply considering Culture as one rigid block, as we already discussed in paragraph 1.4, risking to atrophy its value. It could be useful to make it clear that the features of cultural consumption are shared by the various fields of the cultural system, showing a common approach which is being strengthened by the growing evidence of a migrant (i.e. non specialized) demand.

It is not by chance that the term 'cultura' is the future participle of the original term 'colere', meaning 'the things that will have been cultivated'. It outlines a plural process. Study and experience involve a path that may present systematic elements, but that is inevitably exposed to chance and therefore to the incomparability of different subjects. The public chooses the show and not the theater, the exhibition and not the museum, although the reliability of the producer is relevant. However, it is the quality of the show that prevails, especially if we consider it as the capacity to activate and stimulate a critical dialogue rather than a sort of conventional certification.

An unpredictable eclecticism thus characterizes the general qualities of cultural consumption. Thus, while the number of subscribers and specialists decreases over time, the institution generates an increasingly versatile audience. The intensification of the addiction process grows, further stimulating the direct experience thanks to the mediated one, also by extending cultural products to a digital dimension, which offers denser sharing and exchange opportunities.

Attempting to identify the cultural demand according to specific categories that share similar paths and actions can be quite risky. The cultural product, and the same cultural enterprise, in turn also becomes plural and interconnected. A single producer (theater or museum) cannot answer this unstable question in a comprehensive way: the cultural enterprise is presents an effective joint action of different producers and activities. "Although it may sound blasphemous in an economic and cultural system that tends to emphasize competitive individualism in an attempt to emulate the manufacturing paradigm, it must be said that a cultural enterprise aimed at success should result from the strategic synergy of different producers, each of which can help to strengthen the value - and in this way the solidity and sustainability - of every other". (Trimarchi M., 2017)

The dialogical capacity of the cultural offer is a crucial point, as it pushes to create further cultural experiences of a various nature (literary, theater, visual arts, audiovisuals), confirming the migratory nature of the demand for culture. It also encourages social relationships, stimulating subsequent experiences and consolidating them by sharing them. The fallout of cultural experience is not easily categorized into watertight compartments and manifests itself in various forms of sociability that intensify its impact.

In 2010, according to ISTAT (National Institute of Statistics - Italy), out of 100 Italian residents:

- 30 visited at least one museum or exhibition;
- 23 visited a monument or archaeological site;
- 22 had been to the theater and cinema 52
- 10 had attended a classical music concert and 21 other types of music

The financial crisis worsened the situation, both in participation and Italian family expenses; in 2013, we reached (according to ISTAT and Federculture) nearly 40% of Italians who did not participate in any show or cultural event throughout the entire year (Cicerchia A., 2014).

Europa Nova database | Ad hoc investigation and case studies

We still remain with some unsolved questions: are there really any significant cross-country differences in the frequency of visits to cultural sites? Are the socio-demographic and economic correlates of visits to cultural sites similar across all EU countries? Is income more important than education in determining frequency of visits to cultural sites?

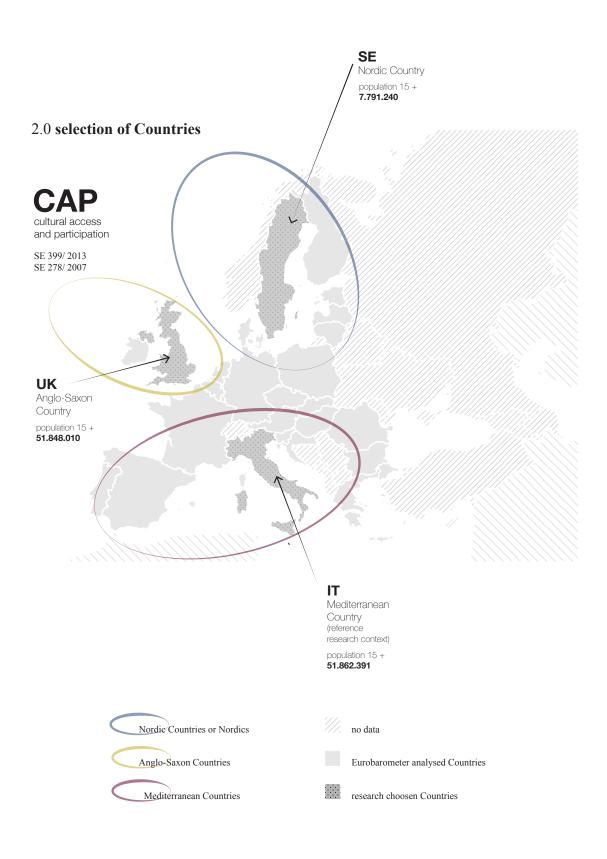
Using "Special Eurobarometer" data - ES 399 and ES 278 - and the Accademia Europa Nova "Explorer for cultural participation" dashboard,³⁴ we employed a crossnational comparative perspective to investigate the extent to which demographic and socio-economic characteristics influence the decision to make visits and the number of visits, focusing only on museums and galleries and choosing a few main cases.

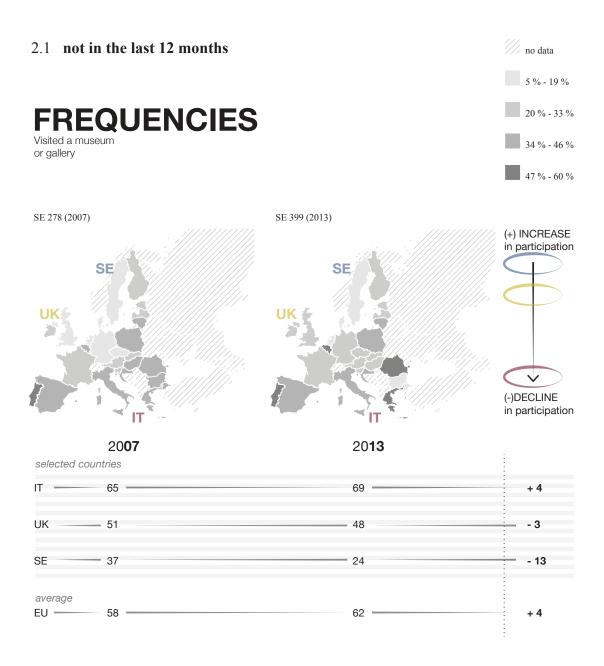
The choice was aimed at three countries: **Italy (as** both main reference and a country of the Mediterranean Area); **United Kingdom** (as an Anglo-Saxon country); and **Sweden** (as a Nordic one).

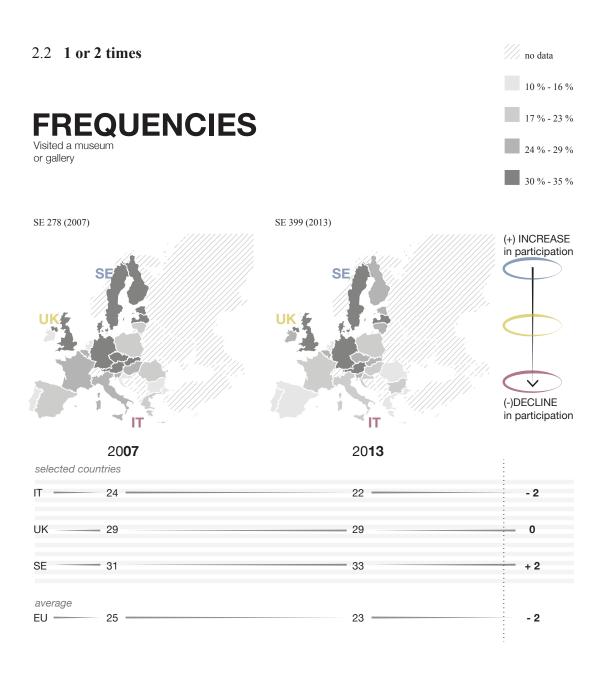
As mentioned above, there has been a general European decline in participation in the visits of museums and galleries. The probability and number of visits are significantly higher in Nordic Areas (Sweden, Denmark, and Finland) and among Anglo-Saxon countries (United Kingdom). The lowest level of participation, in the cases at hand, can be seen in Italy. This trend is evident in all types of annual frequency - not in the last 12 months, 1 or 2 times, more than 5 times.

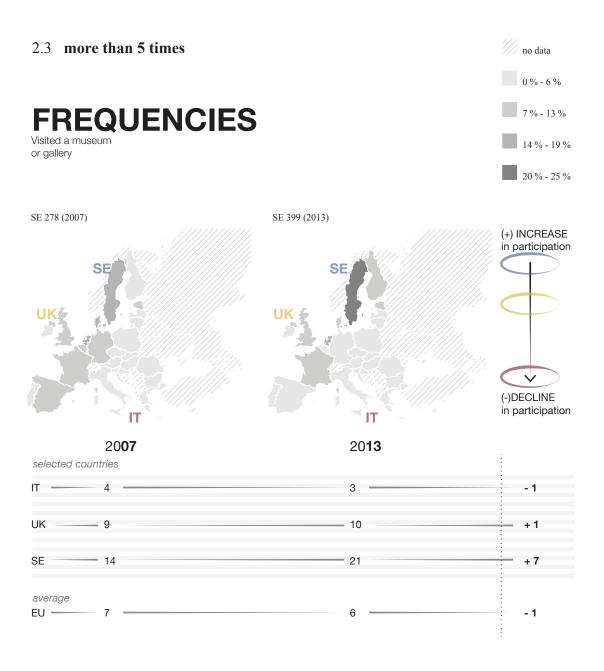
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the dashboard data is based the open source data of the two latest Eurobarometer surveys on the topic. http://www.europa-nova.eu/europa-nova/?page_id=58









2.3 · WHY DO WE MEASURE? DO AVOIDING DANGEROUS DEDUCTIONS

Michel De Certau, in his text L'Invention du Quotidien, says that "the consumer should not be identified or defined in relation to the product he consumes... but it is rather how he uses these products that must be analyzed in itself. Instead, we usually only take into account what is used and not of how it is". A central issue of cultural enjoyment emerges, defining not only a matter of quantity but also a matter of quality.

The above-mentioned information deserves to be further, if only briefly, analyzed. Assessing the Audience does not mean limiting ourselves to a record of pure numerical data: only an overlapping of qualitative and quantitative analyses can allow a certain degree of detail and provide a more defined and less 'embalmed' framework of analysis.

Let us keep in mind that the proposed results are closely linked with certain defined cultural fields, with limited portions of consumption and participation, and therefore do not provide an exhaustive overview. "An ancient conception of culture divides involved genres, modes, and places from the excluded ones. It makes it difficult to understand both the diversity and complexity of today's cultural world and the identification of suitable instruments to collect, analyze, and evaluate" (De Biase F., 2014).

Reality is quite different, since it presents a much more complex picture. Reality has increasingly expanded the range of <u>cultural practices</u>, <u>eluding official statistics</u> (think, for instance, of new channels and home-based digital platforms). Moreover, the same nature of consumption is turning toward **more participatory**, relational, and experiential models. It becomes increasingly difficult to untangle the digital component from the real one, and the boundaries of the categories of **producer and consumer** are blurry. Even the philosophy of knowledge sharing (wiki and commons), the protection of copyright, and the experiences of widespread patronage (like crowdfunding) are all elements that deserve to be taken into account. This means we must <u>begin with a definition of cultural participation</u>, and define how it is

measured. Such a narrow range of activity types does not give account of today's plurality of fruition modalities.

"The progressive de-materialization and de-localization of many cultural contents is gradually making the identification of places, objects, and practices of consumption or cultural participation less automatic. A film can be seen in places that are different from the cinema house: from the screen of television to that of a smartphone, from an air flight screen to the one of your home laptop. A literary or poetic text, similarly, can be known, appreciated, and even reused (modified in form, content or context) in many ways, of which the book is just one of the possible examples. If possible, it is even more compelling for images and music: measuring only the access to traditional cultural places and mediums (by means of which art and culture are made available) means reaching only a part, and not necessarily the main one, of today's overall culture experience" (Cicerchia A., 2014).

The issue is made trickier by other potential disputes that raise when you want to determine which products are 'cultural' and which are not, especially in the light of the purely subjective nature of these assessments (Trimarchi M., 2002). Therefore, the culture demand can apparently only be known 'by approximation', without giving the analyst the job of independently determining which potentially cultural products (museums, theaters, books, records, etc.) actually possess some cultural characteristics and which ones are mere entertainment. This liability of definition and approach continues with evaluations on cultural content: do we all agree that listening to a classical music concert is a cultural consumption? Is there still a margin of dispute between jazz and rock? The same reasoning could (more or less consciously) be applied daily to everything else (cinema, reading, drama, dance, museums, etc.).

Secondly, the measures of cultural participation not only tend, as we have seen, to be punctual and unsystematic (individual behaviors in various sectors are measured independently from each other), but they do not even enjoy (in Italy as in Europe) from the benefit of optimal reference values. We are used to believing that "more is better", and to take such average values, or alternate paradigmatic and comparable

situations, as example. Often, we stumble into the naïve assumption that more visitors automatically stand for more culture, without wondering about the dynamics of perception or understanding the work or initiative.

Does the number of visits (consumptions) equal the number of visitors (consumers), or does it simply indicate a higher consumption by the same elite? High presence does not prevent the risk of low participation. In essence, Audience analyses focus on the socio-demographic profile of consumers, and particularly on four core values: **gender, age, education,** and **income** (values that are not direct sources of cultural consumption motivation). These analyses are often animated by a dimensional approach, built on a mechanical method that conceives culture as a "homogeneous block aimed at a selected audience of clones" (Trimarchi M., 2011).

Does the number of visits (consumptions) **equal the number of visitors** (consumers), or does it simply indicate a higher consumption by the same elite?

We should note that **gender** is a proper value to consider, but attributing it any meaning is not something we should assume as obvious: it is <u>not very explanatory</u>. The prevalence of female Audience reflects nothing more than the relative proportions of the entire society, without containing any other interpretative suggestion.

The same aspect of the <u>level of education</u>, usually detected without references to the specific study field, is not sufficient to justify the choices of a cultural consumer: high school or graduation diplomas do not imply a mastery of knowledge, not even of our own mother tongue. At most, education can lead to patience and to some level of cultural familiarity.

Investigations show a predominance of visitors with medium-high educational qualifications. However, if we refer to the low presence of art history in high school education, the issue becomes more complex. Also, we could assume that individuals with higher degrees have more free time and, above all, tend to have more flexible hours. "The economic theory (Stigler J.S. & Becker S.G., 1965) suggests that the volume of the current cultural consumption depends on the volume of the past cultural consumptions, or better on cultural experience that becomes knowledge and thereby triggers the need of more cultural consumptions, in the awareness of a growing marginal satisfaction". Therefore, what is missing is not education in the conventional sense, but the direct experience of cultural consumption. In fact, this experience, especially if activated in early years, would be able to shape consumers in the near future (Sacco P.L. & Trimarchi M., 2003).

"The breaking up the demand into age groups is the only data deserving some attention" (Trimarchi M., 2012). This is an obvious proxy of experience duration, which leads the individual to replicate the cultural consumption in order to enrich its impact on his own cognitive sphere. It merely involves a longer cultural experience (the access point of which is usually premature). But this is no surprise. "The prevalence of adults and elderly is usually interpreted as a symptom of an emerging sort of anxious barbarism in the new generations, characterized by a low attention threshold and a strong propensity towards spectacular and superficial experiences. This reveals a total ignorance of childhood and adolescent realities, which sometimes even registers as pedantic in nature and science studies, taking the value of cultural experience seriously only when transmitted in the right way. But the attention threshold is not necessarily low: for example, "The Lord of the Rings" lasts more than a Symphony by Gustav Mahler, and an episode of "Twilight" is longer than a Brandenburg Concerto" (Trimarchi M., 2012).

Regarding the aspect of **income**, the belief that individuals who are economically affluent are better able to face higher costs of culture is a cliché and not actually correct. There are rich people who are not at all interested in cultural consumption: their income (as such) does not explain or spur cultural consumption. Instead, we could speak of 'loosened constraint': privileged people have life-long easier access

to cultural information; they have more time, they are looking for status consumptions, and are generally educated. Income can therefore only soften the budget problem, and not create valid or new motivations. "Defining culture as 'expensive' is false; except opera tickets and certain prose Theater, live shows as well as cinema and museums are actually cheap. Therefore, saying that culture costs³⁵ more than going to eat a pizza is often inappropriate. The point is that, in the case of a pizza, we have a reliable ex-ante perception of the relationship between price and quality; in the case of culture, the fundamental aim of the experience is precisely the discovery: its actual dimensional predictions are impossible" (Trimarchi M., 2011).

The overall effect is simplistic and the approach is unrealistic. It does not consider the wide variegated group of mature, rich, and educated people who consider cultural experiences tedious, fleeting, and unproductive. Such a rigid view risks drawing the same viewer/visitor identikit, which has been identical for several decades: adult, highly educated, and with good income; a man who, only thanks to a sort of conventional *cursus honorum*, is able to access museums and theatres. A crystallized society, founded on the classic dichotomy of high/low culture, as Pierre Bourdieu³⁶ suggests (Cicerchia A.): in *The ghost of the distinction*, Bourdieu distinguishes elite

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We have to distinguish between prices and costs: price represents only a part of visitors' maximum budget and their normal willingness to acquire artistic goods or services, their willingness to pay in order to enter the Cultural Institution. Particularly, if we considered cultural fruition as an experience, or a personal relationship, skills and knowledge matter but their quality cannot be fully predicted in advance. In this sense, pricing is more difficult. Instead, cost is amount that has to be paid or given up in order to get the cultural experience or activity. Entering a Cultural Institution implies various costs in efforts, time, transportation, parking, and accommodation; various costs, not only in monetary terms but also in intangible dimensions (like the security and pleasantness of the place).

³⁶ P. Bourdieu and A. Darbel (1991/1969) concluded that class was a paramount factor in both the enjoyment of art and in explaining non-visiting. They argued that "museums for all is in practice a false generosity, since free entry is also optional entry, reserved for those who, equipped with the ability to appropriate the works of art [through their middle or upper class upbringing], have the privilege of making use of this freedom".

culture from mass culture, *class A* from *class B* culture, *high-brow* from *low-brow*³⁷ culture, educated from uneducated.

The analysis of cultural consumption requires a different approach. A rigid relationship between social groups and cultural demand is anachronistic. It plays a comfortable role and has an unbreakable 'alibi', a clear incentive to maintain the cultural offer as it is. It belongs to the **manufacturing society**, not ours, which is multidisciplinary and full of hyperlinks. Bourgeoisie has transformed art, archaeology, and entertainment: from a widespread and daily experience, they have been converted into objects for trade exchange. Archaeological remains started being collected, aristocratic palaces were turned into museums, and ordinary bench seats in theaters were substituted with lines of armchairs for the Bourgeoisie itself.

Culture was made sacred in order to give the manufacturing Bourgeoisie a heritage that it could not steal from the aristocratic counterpart. Therefore, the Bourgeoisie compiled a sort of 'user manual' with a few clear rules: presence in cultural places is organized as a ritual and follows specific conventions; cultural choices begin to belong exclusively to experts, actual hermetic initiates; and places of culture have to be exclusive and special.

The old high/low discrimination seems to have transformed, according to different opportunities of access and maneuver within a multi-faceted and chaotic offer. No spiritual benefits of the culture experience but 'just' new emotional and cognitive impacts. Culture rises progressively in exchanges, networks, and synergies fed by a chaotic humus, where things continuously change and the relationship between roots and orientations come to describe identity as a self-raising feature. Cultural Identity is an evolutionary outcome of an indefinite number of dynamics and integrations of different needs and cultures, showing their plurality and diversity.³⁸

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³⁷ Levine, Lawrence W. *Highbrow/Lowbrow, The Emergence of Cultural Hierarchy in America*, Harvard University Press, Cambridge MA. 1988.

This non-prejudicial approach is widespread in the age of migrations and settled in the concept of Cultural Diversity. The term describes the existence of different cultural groups within a society. Diversity simultaneously refers to differences and variety: group membership based on language, behavioral norms, values, life goals,

But what happens if we abandon a linear and segmented vision and try to study the "life cycle" of participation?

We risk entirely ignoring the distinction between Presence and Participation, disregarding the chain of cultural experiences that would require upstream and downstream investigations in the survey. It is not possible to carry out an evaluation considering visitors as an undifferentiated entity. As shown by several studies, there is an obvious difference in visiting patterns, interests, behaviors, and 'roles' (Kelly L., 2007).

Often, we are faced with a visitor who acts on impulse. Many people declare to have decided to visit a museum on the same day. In some cases, the cultural institution is literally discovered and enjoyed 'at the moment', out of curiosity or interest in the subject or activity, or because it is an interesting and unforeseen stop in a city tour.

The immediate 'here and now' gratification, which amplifies the role of emotional and affective components in the selection process, should not be read as a lack of depth or unawareness of the contents or communication possibilities of the cultural institution. However, we are dealing with a prepared person "equipped to cope with

ways of thinking, and world-views. In their political declarations, both UNESCO and the EU speak out in favor of preserving Cultural Diversity and promoting cultural dynamism and development.

http://www.ne-mo.org/fileadmin/Dateien/public/NEMo documents/Nemo Museums Migration.pdf

Moreover, "the possibility for contemporary museums to develop more effective and rooted relationships with new audiences first of all relies on the acknowledgment of their increased complexity and heterogeneity. In this "age of migrations", museum audiences are becoming more and more differentiated, multi- (or trans-) cultural, multi-ethnic, multi-lingual, etc. as a consequence of accelerated mobilities and their impact on the composition of local and national communities, but also resulting from a renovation of the experience of migration (through greater access to global media and cheaper travel, which allow to uphold the connection with 'home'), the high-speed and self-selecting access to information and imagery, and the evolution of visual culture deriving from the diffusion of digital technologies. In order to better address the renovation of their policies and practices, museums should improve knowledge and awareness of new audiences through an in-depth investigation of their composition, cultural background, needs, and expectations. These are factors that influence their perception and understanding, in journalistic media, political discourse, and social media, as well as the impact of increasing cultural diversity" - Final report "MeLa - European Museums in an age of migrations", April 20

the emergency": a user who makes use of prior knowledge to guide his interpretation of the place and the offered meaning (Bollo A., 2013).

The museum, more than the theater, is found 'by chance'. This is true, but it is only discovered by those who are able to 'deal' with it, to make a good estimate of its risk/benefit ratio, and to see it as one of the possible tiles of the 'mosaic' that forms our leisure time. In fact, the museum seems to take part in a consumption process of the 'available time', free from labor and housework, to be combined with other activities like shopping, evenings out, and visits to other institutions or to discover the surroundings (Bollo A., 2009).

Europa Nova database | Ad hoc investigation and case studies

Starting from what has been addressed in the previous chapter, in order to make the analysis of the involved case studies (Italy, United Kingdom, and Sweden) as complete as possible, we continued to keep the focus on museums and galleries, avoiding the involvement of cultural practices eluding official statistics.

We compared the probability levels of museum and gallery attendance (as well as the number of visits itself) of the case studies, basing our approach on demographic characteristics (age, gender, country, origin) and socio-economic factors (education, income, labor market status, occupation) of respondents across the 27 EU Member States in 2007 and 2013.

"Education is slightly more important than household income in increasing both the likelihood and frequency of visits to cultural sites" (Falck M. & Katz-Gerro T., 2016).

Age is only significant in some countries. In Italy, ages between 15 and 24 (period of compulsory education) is 50% more likely to make at least one visit. The age categories of 25-39 and 40-54 instead show more active participation in the United Kingdom and Sweden.

The age aspect has an average positive effect, indicating that the older a person is the more likely he or she will visit museums and galleries more frequently. Again, it is a proxy of past experiences and cognitive sphere enrichment: the longer the cultural experience, the **stronger the cultural 'addiction'**³⁹.

In the framework of the theory of addiction it is therefore possible to reconstruct the path of each individual who comes into contact with culture in the most varied ways and forms. Although it is easy to show how listening to a CD is not like going to a concert hall, it is equally true that almost all consumers, unless they have concert relatives in the concert music business, usually make their entry into the galaxy of classical music (or any

³⁹ Gary Becker (1965; 1976) analyzes the choices of the cultural consumer and connects them to the subjective and incremental construction of a path of experiences, each of which allows the satisfaction of previous experiences and pushes towards a more intense enjoyment of subsequent ones, thus creating cultural addiction, a form of dependence governed by the same mechanisms of hard drug consumption.

However, we also find a negative effect for the age category of 65 years and older, in Italy most of all, indicating a non-linear relationship.

Predictably, **managers and students** are the occupational categories with the highest values. Managers, followed by self-employed and white-collars register as most likely to go to museums (more than 65% in Italy, more than 70 % in the United Kingdom, and about 80% in Sweden), having visited a museum at least once in the past year. Understandably, manual workers affected by fixed working hours, have fewer possibilities to do so.

Even a **higher degree of urbanization** has a positive influence on participation and number of visits, indicating that cultural opportunities and preferences differ greatly between rural and urban areas. Individuals living in larger cities are more likely to visit museums and galleries, reflecting both demand and supply factors.

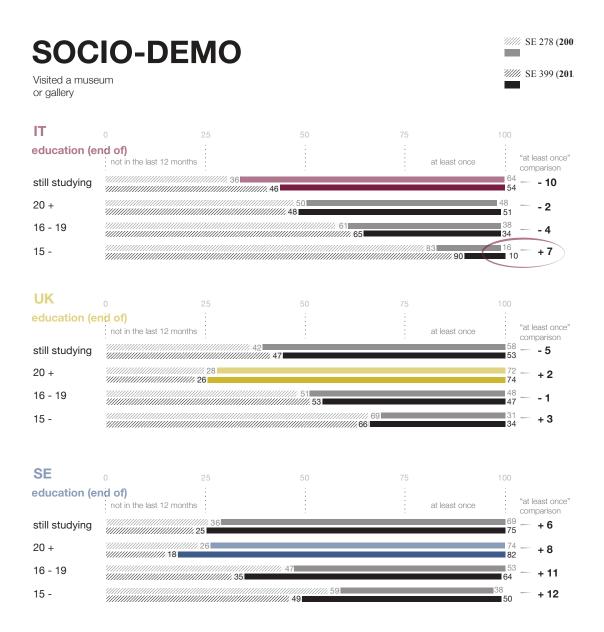
The marginal effects of urbanity, however, are not that large. In 2013, the difference decreased in all of three case-study countries.

The following proposed visualizations (Figure 2.5 - 2.6 - 2.7 - 2.8 - 2.9) pay specific attention to audience, instead of non-audience, leaving only the highest results per country colored. When the sum of percentages does not reach the whole value of 100%, it means that a small percentage of respondents did not know the answer.

musical, theatrical or artistic form and any cultural area) by listening to CD songs, film soundtracks or TV theme songs. Therefore, no one assumes that previous cultural experiences should be the same or homogeneous; and we should admit that (even before the coexistence of analog and digital) cultural consumers have never been a homogeneous group prone to sectoral specialization.

60

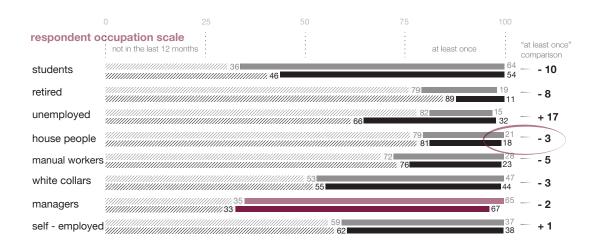
2.4 how many times in the last 12 months?

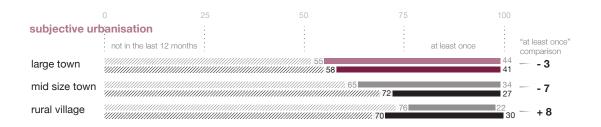


2.5 how many times in the last 12 months?

SOCIO-DEMO Visited a museum or gallery SE 278 (200' SE 399 (201;

IT

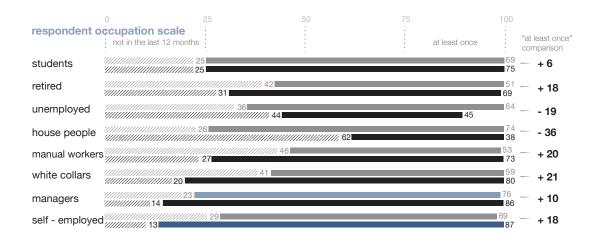


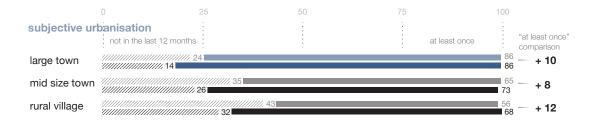


2.6 how many times in the last 12 months?

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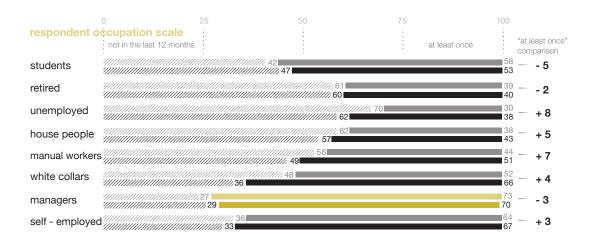


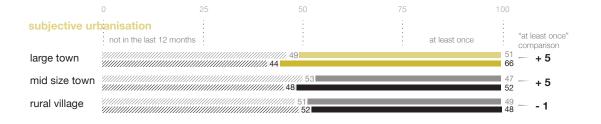


2.7 how many times in the last 12 months?

SOCIO-DEMO Visited a museum or gallery SE 278 (200 SE 399 (201

UK





Europa Nova database | Ad hoc investigation and case studies

As indicated by the marginal effects, our first main conclusion is that level of education, higher-level occupations (e.g. professionals), and student status are the most important variables in determining the probability and number of visits.

Moreover, the cultural practice index reveals some interesting differences in levels of cultural engagement between Member States (Sweden and Northern European countries stand out with the highest levels of cultural engagement).

This survey - *SE 399* - first considered the participation of Europeans in cultural activities. Respondents across the 27 EU Member States were asked if and how many times they had participated in a range of different cultural activities in the last 12 months. In the previous graphics, we presented the results for "at least once a year", aggregating the answers in the categories of "1-2 times", "3-5 times", and "more than 5 times".

To follow up the question of how often they had participated in different cultural activities, respondents were asked about the barriers in accessing these cultural activities. The following visualizations describe the comparison among the barriers, their weights and relationships.⁴⁰

Lack of interest and lack of time are the two main reasons (about 30-40%) for non-participation in all three countries of reference. In Italy, the lack of interest seems to be higher (compared to Sweden and the United Kingdom), but the levels are almost equivalent. After all, lack of interest is shared both by neophytes (not knowing and/or not aware of a possible appreciation) and by informed people. In the same way, lack of time can be interpreted as organizational time or weak interest.

⁴⁰ With 'lack of interest' as the main reason for not visiting museums or galleries (35%), it remains fixed on the x-axis.

-

Generally, **lack of information** is a significant obstacle. However, it is always difficult to understand if the problem or obstacle (in searching for cultural information) is inside the offer or not.

Cost is also an important factor: "too expensive" is mentioned as reason for not attending (or attending less often), especially in Italy (15%). However, expense is not the main obstacle mentioned by respondents for any of these cultural activities.

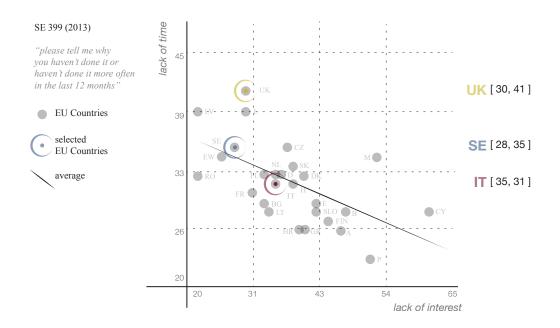
Limited choice or **poor quality** of the activity is a less important barrier to participation, being more evident in Sweden. Swedish people probably have the perception of being more *ex-ante* prepared visitors.

We can conclude that human capital is more important than economic capital as a driver of cultural inequality. Cultural stratification and inequality of access to cultural competencies that legitimate cultural capital are mainly a result of attained status.

2.8 lack of interest / lack of time

WHY NOT/NO MORE OFTEN

or gallery

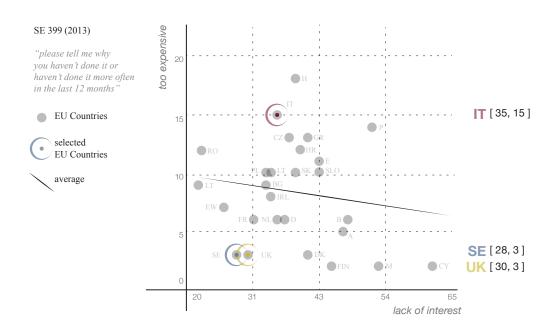




2.9 lack of interest / too expensive

WHY NOT/NO MORE OFTEN

Visited a museum or gallery

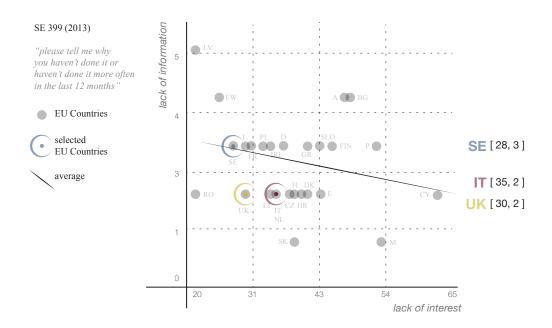




2.10 lack of interest / lack of information

WHY NOT/NO MORE OFTEN

Visited a museum or gallery

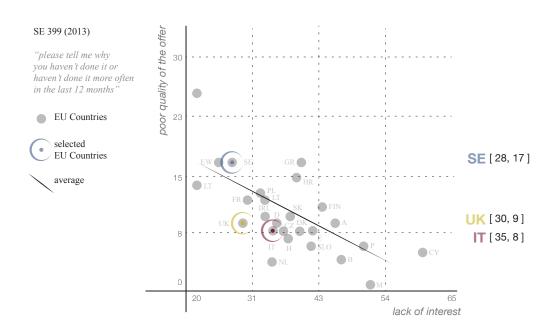




2.11 lack of interest / poor quality

WHY NOT/NO MORE OFTEN

Visited a museum or gallery

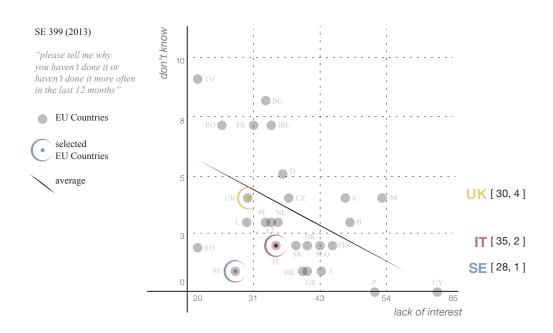




2.12 lack of interest / don't know

WHY NOT/NO MORE OFTEN

Visited a museum or gallery

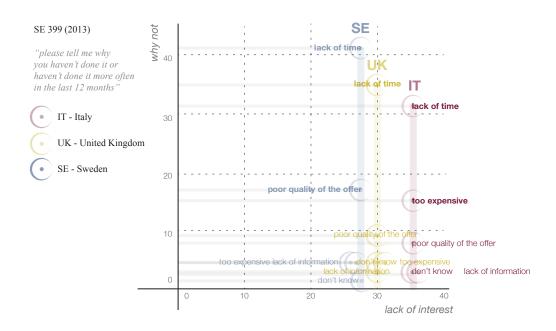


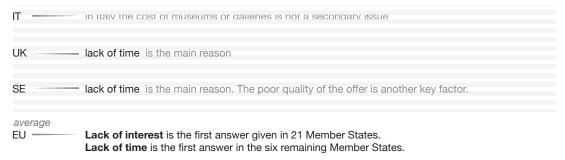


2.13 lack of interest / comparison

WHY NOT/NO MORE OFTEN

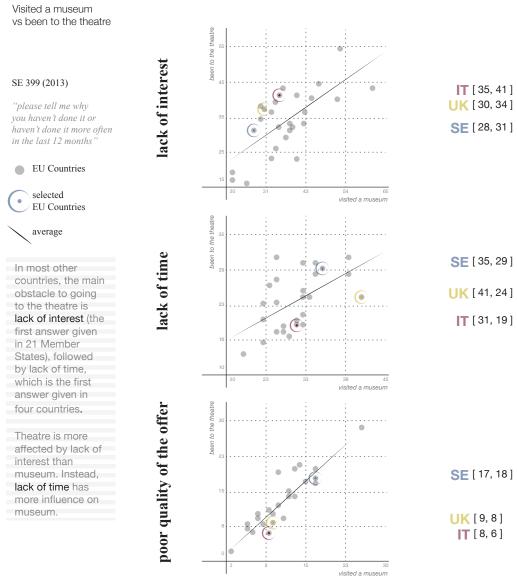
Visited a museum or gallery





2.14 museum / theatre

WHY NOT/NO MORE OFTEN



2.4 · AUDIENCE SEGMENTATION ·

"Segmentation is the recognition that the audience is not a homogenous mass, but rather a collection of distinct and discrete segments, each with different needs, attitudes and expectations. By defining, profiling and differentiating the marketing mix for these segments, you can optimise your offer to meet audience's needs" (Morris Heartgrave McIntyre, 2007).

As a consequence to the abovementioned reasoning, the classic questionnaire that detects age, income, and gender, tends to lose much of its explanatory relevance. Therefore, a different approach is required. An first tentative solution has been offered by Hadley, Morris Heartgrave McIntyre, with an 'appropriate' application of the Audience segmentation in the cultural sphere. Proposed as a pragmatic alternative that grouped individuals in sets (easier to manage and recognize), it attempts to put the Cultural Audience in relation with their needs, desires, attitudes, and distinct reasons; a gimmick to help include people with different products, messages, and media. An approach, described as almost "psycho-graphic", that actually describes and distinguishes them with attractive advertising and almost 'perfumed' labels, like essence, stimulus, concession, enrichment, expression, affirmation, perspective, and entertainment.

Segmentation is presented as a market research method where a given market is broken down into distinct groups that behave in similar ways or have similar needs. It proposes "segments mutually exclusive, measurable and based on how visitors use and respond to the museum".

http://webarchive.national archives.gov.uk/20120215211331/http://research.mla.gov.uk/evidence/documents/Audence%20Knowledge%20Digest.pdf

⁴¹ MORRIS HARGREAVES MCINTYRE, (2007) Audience knowledge
http://webarchive.nationalarchives.gov.uk/20120215211331/http://research.mla.gov.uk/evidence/documents/Audi

⁴² A process of dividing people into similar subgroups based upon defined criteria, such as product usage, demographics, psychographics, communication behaviors, media use, etc. to develop programming.

It offers "a segmentation system useful for:

- Visitor services: to clarify and define the needs of different visitors and why they behave as they do;
- Communications: each segment requires a tailored marketing strategy if is it to be effectively communicated with and attracted to visit;
- Interpretation: the segments can help to focus and rationalize interpretation. Segments can be a useful tool in answering the question 'Who is this exhibition for?' and successfully engaging visitors at different levels by meeting their needs;
- Common internal language about visitors;
- In-depth analysis and monitoring of specific issues: segments can be used to interrogate research data for detailed insight into trends and issues;
- Attracting non-visitors: segments can help devise and monitor the effectiveness of marketing and audience development plans new visitors are normally socially motivated" (Morris Hargreaves McIntyre, 2013).

Are we convinced this works? Can visitors actually be segmented into five identity-related groups that predict their visiting patterns and outcomes?

There has been some criticism on this audience segmentation, seeing it as problematic and ultimately reductive. People cannot be reduced to their generic details, whether demographic characteristics or motivations. The segmentation model seems to take into account how visitors construct meaningful experiences before, during, and after a museum visit, based on the relationships between the type of visitor and their motivations for visiting a museum. Every Audience segment is 'told' to interact with the setting in predictable ways.

For instance, John H. Falk⁴³ proposed that, while museum visits will always contain an unpredictable element, the available opportunities afforded by museums (combined with an understanding of the five or six visitor types) allow museums to

-

⁴³ Falk J. H. (2009) Identity and the Museum Visitor Experience, Left Coast Press, Taylor and Francis Group

predict most visitors' "experiences and their longer-term outcomes. He emphasized that museum visitors can be grouped according to their personalities and interests, rather than their demographic characteristics. But, at the same time, he defined identity as the combination of internal and external social forces – both cultural and individual agencies contribute to identity" (Falk J. H., 2009).

Identity has a fluid nature. As such, it seems incongruous to conclude that visitors or spectators can generally fit into clear identity-related motivation boxes. Rather, we should consider the possibility of including them simultaneously in multiple boxes. Ignoring this overlapping, shifting, and indistinct visitor motivations, is problematic.

The result of this essentialism is an exclusionary framework that inaccurately demarcates the boundaries of possible visitor identities. It does not attempt to amalgamate demographic and motivational variables. It "offers a useful challenge to the mainstream museum studies framework, which focuses narrowly on the duration of the museum visit", without any data from non-visitors. It is important to gather information not only on "who is coming", but it is equally important to understand "who is NOT coming and why".

"These visitor segments, we argue, are too reductive; they essentialize visitors' identities, directing attention away from the diverse multiplicity of motivations that draw individuals to museums and other engagement experiences (e.g. Holliman et al., 2009). Moreover, this approach ignores the empirically demonstrated pattern of development in visitor expectations, perceptions and mind-sets before, during and after visits to cultural institutions (Wagoner & Jensen, 2010). That is, individuals do not maintain a stable and unchanging orientation towards the visit; rather their initial expectations develop and change as they encounter new ideas and experiences (Jensen, 2009). For example, a visitor initially arriving with the expectation of 'enjoyment' may very well leave having had valued 'learning' experiences' "44 (Jensen, 2010).

⁴⁴ Emily Dawson and Eric Jensen (in press), 'Contextual approaches to visitor studies research: Evaluating audience segmentation and identity-related motivations', Visitor Studies.

It is important to gather information not only on "who is coming", but it is equally important to understand "who is NOT coming and why".

The Cultural Institution visit should be understood within a holistic and long-term framework of individual life circumstances, relationships, and trajectories. It acknowledge complexity, change over time, and the interwoven and developmental nature of socio-cultural variables influencing visitors' appropriation of new ideas and experiences encountered at the Institution.

However, what seems interesting to note — also in comparison, and analogy, to other models of interpretation (Bollo, Hadley, Morris Heartgrave McIntyre; figure 2.0), despite the variety of terminologies and complexities of the proposed structure — is the emergence of some elements of common occurrence in the subdivision of the audience:

- By and large, a tripartite division in 'central' audiences, occasional or potential users, and non-users;
- The presence of central ("involved") audiences characterized by knowledge
 and assiduity and marked by the low "activation fee" for cultural experience.
 In this case, involvement in a certain proposal does not require a reduction of
 cultural, social, and perceptive barriers;
- Progressive access barriers and higher "activation fees" as we move from the central audience to the potential one, and to the non-audience;
- The awareness that a single institution can, through micro-interventions, mainly work on the main audience/participants and the potential/intentional audience (unlike the interventions on the so-called audience/indifference that

- fit into larger and general initiatives of cultural policy or in specific projects addressed to people hard to reach);
- If the marketing is primarily interested in retaining and engaging main audience/participants and in approaching potential audience, educational functions seem to have a broader spectrum of action, devoted to almost all the visitors provided by Morris Hargreaves McIntyre scheme (from the already involved audience, to audiences who are potentially involved and hard to reach).

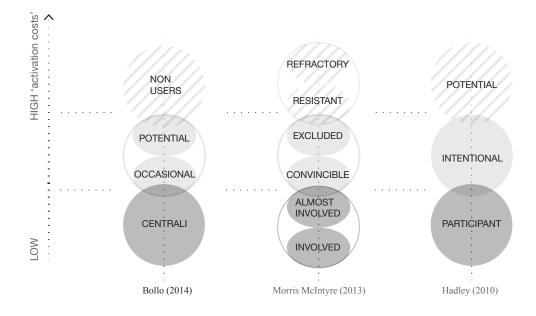
Therefore, as François Matarasso⁴⁵ himself writes in *Full, free and equal: On the social impact of participation in the arts* published in 2010: "we need to develop a much more complex theory and understanding of how people receive, create and interpret their engagement with art: the word "impact" is not just inadequate but misleading in this process". A different conceptual model is needed, one that looks for probabilities instead of guarantees, asking ourselves not "whether" arts and culture have an impact on people, but "how" and "why" they do, in what ways, in which circumstances, and for "whom".

⁴⁵ Matarasso, F. (1997), Use or Ornament? Social impact of Participation in the Arts, Comedia, London.

2.18 models of interpretation

TRIPARTITE DIVISION

subdivision of the audience



2.5 · COGNITIVE BARRIERS. AUDIENCE DEVELOPMENT ·

Traditionally, and numerically, the cultural sector appears closed and exclusive. Museums, for instance, are described as "products of the establishment and they authenticate the established or official values and image of a society in several ways, directly, by promoting and affirming the dominant values, and indirectly, by subordinating or rejecting alternate values" (Sandell R., 1998).

For this reason, in recent decades, the issue of democratization of culture has been involved in various cultural policies. Since the 1950s and 1960s, in Europe, we have tried to ensure the equal opportunity of access to culture through the identification of specific under-represented groups, the development of activities/programs to promote their participation, and the removal of specific barriers, whether physical, intellectual, cultural/attitudinal or financial.

There are three fundamental issues that represent the way Institutions act as agents of social exclusion: access, participation, and representation. The problem of access is a crucial one, since it is not only related to physical access but, and probably in a less visible way, to cultural access. Cultural institutions were conceived as a product of a learned élite and, as such, never had the problem of coping with the democratization of culture until the 1970s. "Traditionally, it [Culture] has been associated with physical and financial barriers (indeed, such barriers are still among the main obstacles compromising the accessibility of heritage institutions, especially in the case of "disadvantaged" groups), while only recently greater attention has been devoted to more "intangible" kinds of barriers, such as sensory and cognitive barriers, cultural barriers (i.e. individual interests and life experiences), attitudinal (having to do with the institution's culture and overall atmosphere) and technological barriers (e.g. the inadequate use of ICTs to facilitate accessibility to the institution's programs), and the perceptions of "non-visitors" (e.g. the perception of cultural institutions as elitist places, targeting the well-educated and sophisticated people; the refusal of specific forms of cultural expression, perceived as uninteresting or offensive; the low priority given to cultural participation)" (ADESTE, Da Milano C., 2014).

Participation is the aspect that has changed the most in recent years. It recognizes audiences as active interlocutors to be involved through a range of practices, from the occasional consultation to "*empowerment-lite*" forms of engagement, and from collaborative meaning-making to participatory planning. ⁴⁶

The last issue, representation, is strictly related to the history of the Cultural Institutions: they are the product of a "Euro-centric" conception of the world and represent the dominant values of the learned European society of the 18th and 19th centuries. It is quite clear that, in most cases, they do not reflect the current values of our multi-cultural world and therefore many people perceive them as exclusive institutions. More precisely, representation tries to address the misrepresentation or non-representation of specific groups and cultures/'sub-cultures' (for example, in theater programming, museum collections and displays, books and services in libraries), which have historically led to the promotion of dominant social and cultural values and thereby, albeit indirectly, to the subordination and refusal of alternative values.

Access, participation, and representation are thus identified as the mechanisms allowing a full enjoyment of the cultural experience. Nowadays, the attention to these three aspects (the first two in particular) is experiencing an increasing development. Visitors hold a clear key role, and today their involvement is becoming more and more a priority for Europe.

The EU is issuing a series of statements that can be read as the result of a double verification. On the one side, the possible utopia of cultural democratization, starting from the second half of the 20th Century, is not yet completed (the results have been disappointing, whether or not policy recipes have been adopted); and on the other, in a greatly reduced welfare, the economic sustainability of culture-making is always more inseparable from social sustainability and innovation. In other words, most of the cultural organizations will have to face the problem of their "social relevance" (Bollo A., 2013).

⁴⁶ A principle recognized in the official documents of international organizations such as ICOM - International Council of Museums and ICOMOS - International Council on Monuments and Sites

"Museums (and not only) are not end in themselves, but means in the service of humanity" (Wittlin A. S., 1949).

Now more than ever we hear of Audience Development (AD); or rather, a broad category of approaches and activities often included within marketing range and expertise. However, they actually differ: if marketing is mainly oriented toward "increasing the numbers of attendees", ⁴⁸ audience development "is about increasing the range of audiences", pointing out not only the audience quantitative increase, but also the typologies of audience that were approached and involved. Through Audience Development, we wish to achieve social and cultural inclusion; through marketing, we head towards a profit-maximization of the sector business.

From the point of view of the purposes, AD has declined in both the binding activity with the habitual and occasional audience (for instance, having people return to visit museums/theaters/cultural sites, and enhancing participation in the cultural life of a certain Institution), and in the actions to approach new or hard to reach audiences normally excluded from the fruition (like stimulating and bringing non-audiences to museums, theaters, libraries).

It is important to claim that AD, before becoming a theory, arose as a practice, and that it was conceived because of the cultural organizations' need to pursue their missions: for this reason, AD has been mostly planned and run by single departments (usually the education or marketing ones), often without involving the organization as a whole. In fact, if we refer to the authoritative definition by the Arts Council of England in 2006, the grand size of the **AD spectrum** emerges quite clearly: "The term Audience Development describes activity that is undertaken specifically to meet

⁴⁸ in other words, as everyone knows, marketing originated in the commercial sector and its principles are to identify, anticipate and satisfy customer needs. This is based on the principle that only the products that can contribute to profits have a right to exist and that one product cannot satisfy everyone, but that all target groups must have their needs met by different products.

⁴⁷ E. Hooper-Greenhill, "Refocusing museum purposes for the 21st century: leadership, learning, research", in Kraeutler, H. (ed.), *Heritage Learning Matters. Museums and universal Heritage*, proceedings of the ICOM/CECA Conference, Vienna, 20-24 August 2007, Schlebruegge Editor 2008, Vienna, pp. 97-106.

the needs of existing and potential audiences, and to help art organizations develop on-going relationships with audiences. It can include aspects of marketing, commissioning, programming, education, customer care, and distribution".

Overall, Audience Development is perceived as a transversal phenomenon that crosscuts not only specific cultural policies, addressed to support access and participation in the cultural sector, but also policies addressed to support cultural access and participation in a broader sense, as well as policies aiming at fostering cultural consumption by young people and the use of new technologies.

2.6 \cdot WHO | AD AUDIENCE CATEGORIES \cdot

The latest Audience analyses (mainly regarding 'segmentation') try to understand why people are excluded, or choose to exclude themselves, from cultural offers, outlining the identification of barriers and the effort/investment required to remove them and attract a given group. As already mentioned, this kind of analysis typically distinguishes between 'central' audiences, occasional or potential users, and non-users

(Bollo A. & Da Milano C., Inception Report EU Commission 2016).

_ HABIT | Central audiences have the habit of accessing the cultural offer. Their involvement does not require tackling cultural or social barriers, which are relatively easy for them to overcome. The main obstacles that they may encounter concern the availability of free time and the rigidity of opening hours; other than that, there may be financial barriers, for frequent access or for families. Central audiences are easy to attract – one could say that they have low 'activation costs' (efforts and resources that need to be invested in order to attract them).

The theory of self-efficacy suggests that "if people were interested and wanted to do an activity, they would overcome difficulties regardless of any barriers preventing engagement" (Charlton A., 2010), a belief supported by the evidence of other studies. In this sense, 'barrier' begins to appear as a misleading metaphor, not representative of the contingent way in which these 'obstacles' may be perceived.

_ CHOICE | Occasional audiences make sporadic use of the cultural offer ('blockbuster' events, visits to museums in holiday destinations, etc.). They include those for whom participation is not a habit, or who rarely choose to attend a show or a concert, but do not have any particular social or cultural disadvantage. In some cases, the barriers that they encounter may be cultural (difficulty in understanding some cultural offers, such as contemporary arts) and they may find difficulties in obtaining information on the available cultural offer. They would require medium 'activation costs'.

_ SURPRISE | Non-users are the furthest from cultural institutions – and whose needs and expectations are the most difficult to analyze. Nobuko Kawashima defines them as "not easily available audiences", deducing that "the concept of not easily available audiences range from those who have almost never attended any arts events to lapsed or infrequent attenders".

Non-users are indifferent to (or even hostile to) the cultural offer, with negative preconceptions or attitudes towards culture. They are people that are hard to reach, indifferent and hostile, who do not participate in any cultural activity for various complex reasons. These may include social exclusion factors, where participation could hardly happen without an intentional, programmed, and targeted approach. Potential (or 'lapsed') users do not visit cultural institutions, but might be interested in doing so. This 'distance' may be rooted in a wide series of factors (cultural, social, financial, and physical barriers), and therefore it is very important to analyze what factors could be most relevant in activating their interest (for example, they might be attracted with specific policies and measures). In any case, as we will see in the next paragraph, in this case the 'activation costs' are high.

Cristina Da Milano and Alessandro Bollo have proposed to rename the three main audience categories using non-academic, intuitive, and easy-to-understand terms (habit, choice, and surprise). It is an inspiring approach. However, it may is still be too rooted in a concept of Audience where the group is considered as a single entity, paying all the attention to the three subdivisions and not to the group as one single element: the vision is not yet punctual but organized in batches.

⁴⁹ Kawashima, N. (2006), "Audience development and social inclusion in Britain" in International Journal of Cultural Policy 2006, Volume 12, Issue 1, http://dx.doi.org/10.1080/10286630600613309

2.7 · WHY | AD STRATEGIES ·

What are the logical strategies and phases of implementation of Audience Development? Bollo identifies three lines of action, often highly inter-dependent, which may take the shape of various geometries and configurations, depending on times and development contexts:

_ WIDENING | Extension of the Audience

A set of actions designed to maximize the number of people with similar profiles, already participating and representing the current Audience for a particular cultural product. It refers both to "Audience by Habit" and "Audience by Choice".

_ DIVERSIFYING | Diversification of the Audience

This refers to the ability to attract different user profiles, addressing potential audiences who have not yet entered in connection with the organization and its products. It even includes those initiatives and projects specifically aimed at audiences that are hard to reach, characterized by high entry barriers and what economists call "high activation" (Sacco P.L., Zarri L., 2004). These audiences do not perceive the museum as an integral part of their daily experience in the city. Therefore, they are totally excluded from any virtuous dynamics of cultural development related to the enhancement of the museum as attractor or activator. It aims at "Audience by Surprise" and "Audience by Choice", who have no or little chance to participate in the Arts.

_ DEEPENING | Improvement of the relationship

Referring to all the activities, services, and solutions aimed at creating the best conditions for the experience of the involved Audience; strengthening, for instance, the ability of interpreting reference contexts, providing adequate systems of mediation, and proposing ways of use in line with the needs of different audiences. It is, obviously, a very broad and diversified system of actions and organizational behaviors. It embraces hospitality, service, experience, support, and active involvement in the life of the Institution itself. Its strategies only address audiences

who "by habit" already value cultural practice but who could be more engaged in the perspective of Taste Cultivation.

Instead, Kawashima has defined four different types of Audience Development: Cultural Inclusion, Extended Marketing, Audience Education, and Taste Cultivation. These four definitions are not necessarily mutually exclusive: they overlap to a certain extent and may even work together.

_ WIDENING | Cultural Inclusion

Cultural Inclusion is the biggest challenge because it targets the group of people who are the least likely to attend the Arts, for seemingly social reasons. It is much concerned with social purposes in trying to rectify the under-representation of a particular group (or groups) by offering them good access to culture and by actively encouraging their participation in cultural life. For instance, "in 'in-reach' projects building-based institutions of culture may go out and try to bring people to their own buildings" (Kawashima N., 2006).

_ WIDENING or DIVERSIFYING | Extended Marketing

This denotes the application of a number of marketing measures targeting an audience that is similar to the existing one (which, in most cases, means a potential audience). It focuses on people with high attendance potential but who are not yet in the 'customer' group. It acts where the barriers to participation are relatively low. If these strategies represent what we mean by Audience Development, then it does not differ much from cultural marketing. It is largely based on the fundamentals of art marketing, arousing the latent interest in the arts of potential audiences and persuading them to come to performances whilst improving aspects of the Arts (which seemingly deter their attendance). "Tactics include arts marketing techniques such as special discounts" (Kawashima N., 2006).

- DIVERSIFYING or DEEPENING | Audience Education

Audience Education is often about offering additional services that provide increased insight and demystification of the offered artwork. If Cultural Inclusion and Extended Marketing are concerned with the quantitative aspect of arts attendance, this is more about the quality of the audience's experience. This can include

everything from events (such as meetings with performers to catalogues), to web material and videos. It is similar to Taste Cultivation, which mainly targets the existing audience.

"Examples include pre or post-performance talks which aim to help the audience to have a better understanding of the event or a different perspective from which to appreciate the performance" (Kawashima N., 2006).

_ DEEPENING | Taste Cultivation

Taste cultivation, or "self-discovery", seeks to market other art forms or genres to an existing Audience – a typical example, from the theater, is trying to promote new dramas to an Audience that is steeped in a classical repertoire. This type of AD differs from the previous ones as it offers different products but to the same individuals.

"A project may encourage attenders of classical music concerts to experience the visual arts or to experiment with contemporary music. Such efforts are made increasingly possible by co-operation between arts organizations that swap their customer databases, helped by the work of the marketing agencies which exist in most regions in Britain" (Kawashima N., 2006).

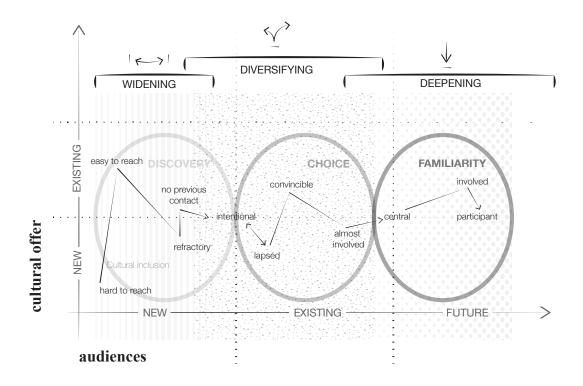
Cultural Inclusion and Extended Marketing refer to the targeting of non-audience with the existing product, whilst Taste Cultivation and Audience Education relate to the existing audience. The product offered in Taste Cultivation is different from the one that the existing audience is used to consuming, whereas Audience Education is about the depth and quality of the experience for the existing audience of specific art products.

We could combine Kawashima's four AD types and Bollo's three AD strategies, integrating them with the EU commission definitions, in order to visualize the state of art on the issue.

2.17 how increasing the numbers of attendees

AD spectrum

audience development



2.8 · HOW | AD LOGIC PHASES ·

If the basic objectives are three, the phases and logics through which Alessandro Bollo unravels and substantiates the relationship between the organization and its audience are two ("Reach" and "Engage"):⁵⁰

REACH Phase | used both to extend and diversify the audiences.

It is the initial and preparatory stage, consisting of a set of actions to intercept, achieve, know, convince, approach, and attract existing and potential audiences. These are mainly communicative and promotional activities and strategies that can also be related to the design of initiatives, events, and experimentation with unusual approaches. Adequately designing a phase of "reach", in an AD perspective, means thinking about how to coherently align "what", "how", and "who" in multiple communication processes that may just be starting. The emphasis on "what" - translated into a significant reflection and production of scientific, artistic, and discipline contents - has almost never gone hand in hand with a consideration and consequent implementation of "how" and "who". These last elements have to be considered in terms of strong interconnection: specification and qualification of the recipient of the communication process ("who") should allow a congruent modulation of channels, registers, styles, and nature of the contents of the communication itself ("how").

In this first phase, the tools commonly used to achieve the dual process (extension and diversification of Audience) can be classified into the following activities: *Mediation, Involvement, and Outreach.*

Mediation refers to all those actions that allow an approach and a better understanding of cultural goods by the Audience. It includes all the basic activities carried out by each museum, although with different degrees of articulation and

refers more to the tactic domain than to a kind of relationship between audiences and cultural contents.

⁵⁰ Yet Heather Maitland tries a first categorization in *A guide to audience development (Maitland H., 2000)*, classifying the different kinds of strategies to reach new audiences in three areas of Mediation, Involvement, and Outreach. Mediation seems to be less considered by later literature on AD, as well as Outreach, a concept that

awareness, such as writing a caption, setting up a guided tour, thinking out the arrangement of the pieces in order to facilitate the communication with visitors. Optimal *Mediation* is required to ensure that every person can find the necessary support for a full and personal appreciation once he has entered the Cultural Institution.

Involvement refers to different modes of Audience involvement, both at a minimum level (laboratories and workshops, normally addressed to young audiences), and at a deeper level, through the participation of the most frequent visitors ('friends' of the museum, supporters, volunteers, and beneficiaries of *ad hoc* events). A particular kind of *Involvement*, and perhaps the most extreme, is the involvement of the Audience in the actual planning of cultural activities or parts of them.

Finally, *Outreach* refers to a variety of activities outside of the space of the museum. Rather rare in Italy, it takes place whenever an element of the museum goes beyond its walls to get in touch with the outside community. "To reach the real non-audiences, cultural institutions or operators must move outside their walls – physically and mentally - into the community, into public spaces, unconventional venues, creating innovative experiences, and developing partnerships with other sectors, such as schools, hospitals, local authorities, supermarkets, etc. A considerable number of the projects take place outside traditional cultural venues, including some very unusual public spaces. This kind of art is also free of charge, removing both financial and physical barriers to access, and is not burdened by the public's interpretation of cultural institutions" (European Audiences: 2020 and beyond - Conference conclusions). It creates a dialogue between the Audience and the Museum, incorporating visitor interest into museum work. *Outreach* must be closely linked to the areas of collection, research, and exhibition.

_ ENGAGE Phase | <u>subsequently follows</u>.

Once the contact has been activated with the "Reach" Phase, we need to create a meaningful context of use, interaction, participation, and experience; a context able to appropriately contribute in achieving results in terms of knowledge, satisfaction, self-realization, engagement, and of subscription (concrete support to an institution or a specific project).

In line with the pursuit of a lasting relationship between the visitor and the Institution, we could add a further phase to those expected and described by Alessandro Bollo: the "Hold" Phase.

HOLD Phase | seen as key element in the success of a Cultural Institution.

It is the ability to establish long-term relationships with people from audiences who found satisfaction during the experience of the previous "Engage" phase. It is the emergence of a continuous exchange and trust relationship between the Institution and the single Person; a relationship able to determine the actual advantage of the encounter, avoiding the frequent zero impact of risky *spectacularizations* that are often coordinated by marketing, especially in recent years.

"The concert of the three tenors certainly has not generated any expansion of the ballet or music audience; in the same way, the blockbuster exhibitions, full of Impressionist works, have not encouraged to purchase tickets to visit other museum permanent collections" (Trimarchi M., 2011).

Moreover, a number of art organizations plan to put on performances in unconventional venues, hoping that the Audience who accidentally or spontaneously comes into contact with the art events will find them interesting and start to regularly attend the performances. Promotional discounts are often offered in these cases. There are also a large number of projects involving artists working with young people and people with disabilities; and projects that provide transport for attendees or that make use of Information Technology to improve accessibility to the arts. This is not sufficient (Kawashima N., 2006): the 'shock-events', the single unusual and attractive opportunities are not enough to nourish a vital, and timeless, link between

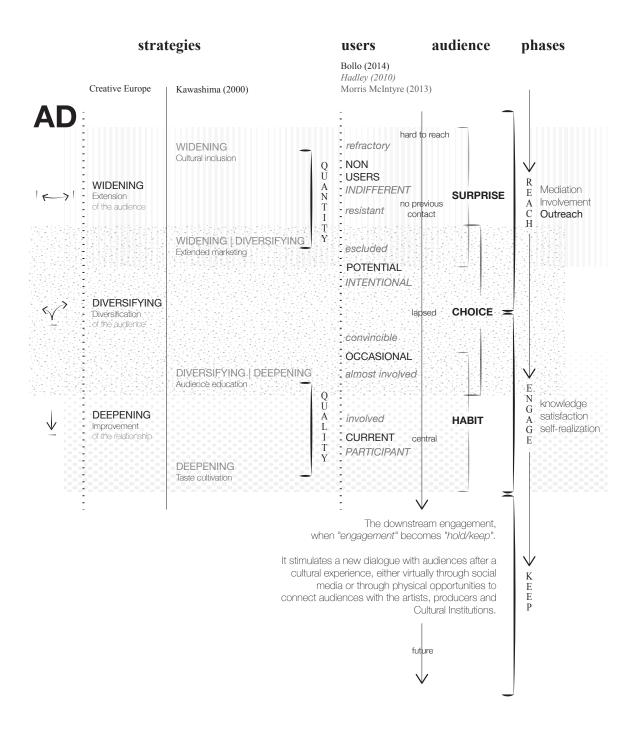
the two entities (Institution and its new or dated Audience). The single episodic approach does not benefit the Institution.

In this phase, we may include another fundamental link to the visitor's chain: downstream engagement, when "Engagement" becomes "Hold". In other words, it stimulates a new dialogue with audiences after the cultural experience, either virtually through social media or through physical opportunities to connect audiences with the artists and producers.⁵¹ This places cultural organizations in the middle of the present conversation.

Audience who accidentally or spontaneously comes into contact with the art events will find them interesting and start to regularly attend the performances.

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New technologies and social media are introducing new ways for cultural organizations (and any organization in society in general) to communicate and network with their audiences and communities.



2.9 · POSSIBLE AD LIMITATIONS ·

Therefore, we are invited to operate in two directions: changing our perception of the Audience, understood not as a traditional public but as society as a whole, and changing our perception of the Institution's mission, from a perspective oriented to the production/cultural product to a visitor-oriented one, without losing sight of the quality of the offered cultural product and the responsibility of an institution towards the latter.

However, it is not an easy task. As we can see in a further example offered by Nobuko Kawashima, a cultural policy researcher who attempts to address this issue by constantly relating cultural marketing to Audience Development. We should take into account the risks, according to her, of the four different types of Audience Development: Audience Education, Taste Cultivation, Extended Marketing, and Cultural Inclusion. The first three all use established marketing techniques to increase the visitor frequency of an existing audience, or to reach a larger audience (i.e. a sales increase in an existing or related segment).

The strategies that are employed vary: "For audience education, it is often about offering additional services that provide increased insight into and demystify the artwork offered. This can be everything from events such as meetings with performers, to catalogues, web material, and videos. Taste cultivation seeks to market other art forms or genres to an existing audience — a typical example from the theatre sector is to try to promote new drama to an audience steeped in a classical repertoire [...] If such strategies are what we mean by audience development, then there is little to distinguish it from cultural marketing. It is the fourth dimension, cultural inclusion, that presents the big challenges [...] If audience development refers to a desire to reach new audience groups that are demographically different from the existing audience or that are culturally or socially excluded, this is, as already mentioned, a major challenge" (Bjørnsen E., 2010).

We run some risks. It is not clear what this concept entails. Bjørnsen, in line with Kawashima, teaches us to distinguish two different types of Audience Development: target-led and product-led. Most Audience Development is product-led. This means that those who want to develop a new audience want to establish contact between new audience groups and an existing art product. However, an Audience Development strategy, aiming to achieve cultural inclusion, should be target-led in order to come into contact with a new audience on their own terms.

And again, "this type of target-led audience development relies to some extent on the cultural democracy of the 1970s, in which audience groups were allowed to influence what was offered more than curators, artistic directors and other decision-makers in the culture sector. This represents another type of cultural leadership, one that is less predicated on an arts sector driven by artistic goals, and more on a desire to combat social and cultural exclusion. The question, of course, is: are the art institutions prepared for this?" (Bjørnsen E., 2010).

Ultimately, this does not completely solve the objections raised for cultural segmentations. It softens and blurs the boundaries among the audience analysis categories, and it is aware of the difficulties in concluding that visitors or spectators, by and large, can fit into clear identity-related motivation boxes. It considers the possibility of simultaneously being in multiple slots, without ignoring the overlapping and shifting. It has a broader and more complete view of the matter. However, it is still **far from** bringing clear focus on the **single consumer**, who is, firstly, a single individual.

The approach is not yet on point but it is organized in batches: segmentation always takes into account categories or groups, and not the single individuals that form them.

2.10 · A BREAKTHROUGH. FROM GENERAL AUDIENCES TO CULTURAL FLOWS ·

"Because the consumption of high idiosyncratic creative goods [...] and unique goods (such as art works) is embedded in an experience which is highly personal, the whole process is very subjective and depends on a unique object-viewer interaction" (Caves R.E., 2000).

As we said at the beginning of the chapter, Audience is a collective term that includes a variety of different and often opposing points of view. There are many words used to describe the Cultural Audience: spectators, visitors, members, customers, users, consumers, participants, paying spectators, attendance, but rarely just as people.

Audience funded cultural players usually consider Audience in terms of "attendance", "viewers" or "visitors": as receivers who seal a pact and, more or less implicitly, are part of a community. As a result, there is a block (not monolithic but definitely larger and diverse) made up of those who "are not" part of that covenant: the so-called "non-audience". In this view, the concept of participation (and non-participation) is based on an essentially passive and reactive vision in which people can decide whether to experience the cultural offer, but only within rigid and standard mechanisms of consumption and experience.

If, on the contrary, we accept the concept of participation within the larger domain of everyday life — exercised with forms, voices, and diverse social dynamics — the processes in place are characterized by a greater degree of people involvement. It informs blocks of people but also single individuals: not fixed segments but rather permeable flows, not the single term "Audience" but the plural one of "Consumers".

3.

AUDIENCE trail

the vertical issues of access

3.

AUDIENCE trail

vertical issues of access

We are now aware that Culture is a multidimensional concept - *chapter 1*. It is strongly subjective and definable as a process. It is considered as a cognitive approach, an accumulation of knowledge and critical judgments that do not necessarily start in a uniform way or with the same intensiveness for each individual (Trimarchi M., 2011).

We take a step forward in this third chapter. We want to face the vertical issues of access. Once physically inside the Cultural Institution, it may be difficult to get in contact with the offered contents.

By acknowledging that a uniform examination of all kinds of Cultural Institutions is difficult and inaccurate, this research focuses only on Museums and Exhibits, including performative dimensions and 'touch points' between new technologies and set-ups. The research focuses on how their virtuous collaboration can better support and nurture experimental design and culture consumption, casting a bridge between the two. At this point, the main goal of the study is multimedia exhibits, particularly those that have recently changed towards a more visitor-centric approach, becoming experimentation laboratories that foster innovation.

At first, the chapter investigates the cultural role of the Museum and its evolutions, in the perspective of Culture as a cognitive process. Born from individual and institutional passions for collections, museums grew as formal storage for beauty, in a cognitive sense more than an experiential one. They often presumed a mere absorption of information. Products of the Age of Enlightenment, museums aimed to form a reliable "transmission model" that offered a linear process in the transfer of information from an authoritative source to an uninformed receiver.

Nowadays, the museum learning process has changed: they now foster a conversation in which both those who know and those who learn play an equally active part in the process of understanding. This means that knowledge is relative, and that visitors bring their own life experiences to proposed narratives.

Exhibitions are therefore equivalent to the creation of new meanings. They are based on an interaction — a direct relationship that has always existed — between things and people. The introduction of new technologies has transformed the cognitive process in a new form of interaction: inter-activity.

The relationship comes alive among two or more parties or between the subjects and technological

media itself. Digital technological devices actually register the relationship. They generate new tracks, acting and re-acting as reagent devices. They create dialogue, combine differences, and trigger memories, multiplying the levels of narrative content.

"In a way, this requires that people benefit from a certain availability of 'cultural facilitators', and that their reactions can be recorded as they take place. Then these accounts can be analyzed to show the meaning they contain: a practice that few Museums can carry out exhaustively, especially when the visit itself is the actual activity under consideration" (Greffe, X., 2010).

3.1 · SIGNIFICATION PROCESS ·

"One of the key dimensions of the emerging Museum is a more sophisticated understanding of the <u>complex relationships</u> between <u>Culture, communication, learning, and identity</u> that will support a new approach to Museum audiences [....] Societies are becoming more aware of the significance of representation, and of the power of symbols to carry meaning, to signal identity, and to invoke social and cultural alignments" (Hooper-Greenhil E., 2007).

We are now aware that Culture is a multidimensional concept, and this has several implications. Culture is strongly **subjective** and, above all, can be defined as a process; more precisely, a **cognitive process**. At the same time, the Audience cannot be generally considered as a homogeneous and fixed block: it encompasses a multitude of different and often opposite points of view and individual preferences. The relationship with the Audience must be an essential point in Cultural production.

With Culture being a cognitive process, we should clear that the accumulation of knowledge (and the eventual generation of a progressively deeper ability to elaborate critical judgments) does not necessarily start in a uniform way and with the same intensiveness for each consumer. The personal experience of cultural consumption leads **each individual** to form his/her own stock of knowledge, pursuing (with various degrees of awareness) a sort of 'specialization'.

Later, cultural consumption will influence his/her own future consumption, choosing cultural goods that are effectively able to increase the value of his/her stock. This taste-formation process is reflected in a progressively higher willingness to pay for cultural consumption, and in a demand for higher quality of cultural supply (Trimarchi M., 2011).

At this point, we want to face the **vertical issues of access**. Once physically inside the Cultural Institution, the vertical problem <u>could lie in the difficulty to get in contact with the offered contents</u>. In addition to this, there could be a lack in active participation or long-term relationship with the cultural goods.

Moreover, in order to produce social value, it is necessary that the visit or proposed activity is meaningful for those who take part in it and that they can share the meaning derived from it. The sense of participation is a constant that accompanies the visitor even inside the Institution and throughout the exhibition. It is the last fundamental point to which the project is anchored. Thus, Exhibitions (and Museums, the focus of this part of the research) are seen as a **dynamic meeting point between design and humanities** (Borsotti M., 2013). It is therefore necessary to eliminate metaphorical barriers and not only physical ones.

"Putting on an exhibition is not like writing an essay": 52 the involvement of the public has to be extreme and complete. In the best cases, exhibit solutions come from storytelling through plot and language rather than spectacular artifices, decorations or illustrations. The idea is that the exhibition extends beyond its physical limits; the show continues beyond the actual visit and carries its goal out to form the community. Therefore, the Exhibit transmits messages and contents (or group of significances) to its Audience.

The sense of participation is a constant that accompanies the visitor even inside the Institution and throughout the exhibition. Exhibit transmits a group of significances to its Audience.

⁵² Rosa, P. (2013) "Exhibiting History", in *European Museums in the 21st Century: Setting the Framework* Vol. 3, Milano, Politecnico di Milano, pp 759-763.

In Museum environments, "<u>Museum experiences can be deeply embedded in visitors' memories with potential for significant learning</u>" (Falk J.H. & Dierking L.D., 2009). Thus, the role of Museums is no longer limited to the conservation of objects: they also have to share and continuously reinterpret them.

"Museums are active in shaping knowledge; using their collections, they put together visual cultural narratives that produce views of the past and thus of the present. In displays and exhibitions, Museums 'condense, dislocate, reorder (fictionalize), and mythologize'. Museum displays combine disparate artefacts and fragments of material Culture into coherent, continuous, and unified narratives, into what Hutcheon⁵³ calls 'totalizing narratives'. Museums must inevitably select the objects that will be displayed from the collections that could be displayed, and this selection shapes the visual narrative to be presented. Different contexts of meaning are invoked by the different assemblages that are produced" (Hooper- Greenhil E., 2007).

⁵³ Hutcheon, L. (1980) Narcissistic Narrative: The Metafictional Paradox, Waterloo, Ontario: Wilfrid Laurier University Press.

3.2 · WHAT IT MEANS TO LEARN IN A MUSEUM - SOME QUESTIONS ·

"Learning" is a recurring term in this chapter, but what does it mean? It is not just an accumulation of skills and facts, but it is a process of becoming.

From a traditional and didactic approach to educational arrangements, '<u>learning</u>' is <u>synonymous with 'academics' or 'knowledge</u>'. Traditional educational processes and teaching methods are designed to encourage the acquisition of knowledge, seen as a transfer of this learning/knowledge from teacher (the expert) to student (the novice). These processes are usually cognitive rather than experiential, and they often presume a mere absorption of information⁵⁵ by the receiving subject (student/visitor).

It may sound obvious, but reality (and the cultural cognitive process) works differently. It is sufficient to reflect on the cultural role of the Museum and its evolutions.

Giddens A. (1991). Modernity and Self-identity: Self and Society in the Late Modern Age. Stanford University Press

⁵⁴ Learning' works to shape what Anthony Giddens calls "self-identity". In considering Museums and Galleries as educational sites, the relationships between the cultural perspectives that Museums produce, and the self-identities of learners, must not be forgotten.

The model of participation to an experience is distributed between "absorption" on one side (the degree of attention of individuals, busy capturing the experience with their mind), and "immersion" on the other (making the subject physically or virtually part of the experience itself) (Sacco P.L. & Segre G., 2008, Serio M., 2004).

3.2.1 · THE CULTURAL ROLE OF THE MUSEUM AND ITS EVOLUTIONS ·

Born from the individual and institutional passion for collections, Museums developed in the Middle-Class/Bourgeois Age as 'storage for beauty', shared by broad sectors of society. Museums have now gone through a relevant transformation, which tended to change its own *raisons d'être*.

Products of the Age of Enlightenment, Museums inherited Descartes' dream of escaping the constraints imposed by tradition and acquired notions in order to found all knowledge on a rational deductive process. Museums <u>aim to build a reliable model</u>, for every time and place, and develop universally valid meta-narratives. Rooted in the premise of a substantial scission between Body and Mind (where the mind is the privileged organ), it alternates between 'private' spaces (for the production of knowledge) and 'public' ones (destined to the consumption of knowledge).

Thus, the Museum is created so to place in good order, as on a table, objects that can be observed, measured, classified, and labelled, presenting a universally valid and reliable image of the world.

In the Modernist Age, this objective to enlighten and educate continued on, deploying an asset of knowledge that could be properly assimilated by the public, conceiving the "transmission model" as a linear process of transferring information from an authoritative source to an uninformed receiver. A linear and perfectly controlled transmission of information from one point to another. According to a unique one-way trajectory, we assume that the communicator is able to define the content of the message, and that this should be accepted without any modification by the receiver.

Therefore, the receiver not only risks to be passive, but he becomes a kind of monad, an entity complete in itself, radically different if not isolated from all the others. The receiver does not show aptitude to change or a personality that can be molded by the experience.

Today, the construction of meaning can be compared to the process of conversation, as Emerita Eilean Hooper-Greenhill⁵⁶ explains and Arjo Klamer⁵⁷ reminds us. A **conversation** where both those who know and those who learn play an equally active part in the process of understanding.

The Museum, beyond learning, is forced to offer stimulating contexts that take into account and promote the use of the learner's pre-existing knowledge, and encourage the development of new knowledge at the same time. This way, the Visitor becomes a central focus and the curator's authoritative voice is necessarily moderated. The Visitor belongs to a specific community of interpretation he is the bearer of expectations, pre-existing knowledge, historical and cultural backgrounds, abilities and learning styles, and interpretative strategies.

Today, the construction of meaning can be compared to the process of conversation and the Visitor becomes a central focus and the curator's authoritative voice is necessarily moderated

 56 Hooper-Greenhill E. (2004), "The educational role of museum", New York; Routledge

⁵⁷ Klamer, A. (2004), Art as a Common Good, http://klamer.nl/index.php/research-projects/art-culture/

The <u>transition from a one-way "transmission model"</u> (based on the transfer of knowledge from an authoritative source to a generic and passive speaker) <u>to a "cultural model"</u> of communication (where visitors can individually and actively take part at the construction and representation of meanings) therefore occurs.

This brings to a complex concept of "Audience/Public" and to the development of "original narratives". For instance, John H. Falk suggests we should "stop thinking about visitors as definable by some permanent quality or attribute such as age or race/ethnicity. Instead, we need to come to appreciate that every visitor is a unique individual, each capable of having a wide range of very different kinds of visitor experiences" (Falk J.H., CMT 2009).

Visitors bring their own life experiences to these narratives and, through a heightened state of immersion, engage in a visceral exploration of personal relevance and meaning. "The impact of Museums is best understood via the meanings that visitors make and negotiate in the long-term. This provides critical insights into what a Museum visit means and how its impact is negotiated within time and space" (Schorch P., 2009). The most memorable immersive stories transcend cultural differences by resonating with our common humanity. Immersive experiences that engage the senses create a heightened emotional and cognitive connection that ignites the imagination.

Moreover, in this perspective, no interpretation is ever a definitively finished and closed one: there is always something to add, and what is said can always be refuted and modified. The hermeneutic circle remains open to these possibilities and, therefore, the meaning is never static. The meaning is also not static in another sense: any process of interpretation is necessarily immersed in a historical context. Our own position in history, our Culture, affects the meaning. Perception (what we see), memory (what we choose to remember), and logical thinking (the meaning we

The 'reflexive museum' - opening the door to behind the scenes, Museums Aotearoa Conference: Culture - Access - Innovation, Making collections accessible to more people in new ways (Gisborne, New Zealand, April 2009).

choose to attribute to things) culturally differ as they are cultural constructions.⁵⁹

"In this sense, knowledge is relative. Different perspectives on the same events, different points of view on what is relevant, different levels of in-depth analysis, and the use of diverse contextual factors: all of these combine to complicate the simple 'facts'" (Bodo S., 2003). Thus, the challenges that art museums are facing are substantially related to two themes: Narrative (what is said) and Voice (who says it). Deriving from these are the issues of the listener, of interpretation, of understanding, and of meaning construction.

Knowledge is something plural and fluid: its genesis can be lead back to the processes of knowing. Communication does not consider the receiver only to form an opinion on the accuracy of the message. Exhibiting is therefore equivalent to creating new meanings.

 59 Emotions have been linked to both decision-making and memory, and they are likely "impacting the experiences with which visitors choose to engage, the memories they make, and ultimately the learning that takes place" (Damasio, 1995).

3.2.2 · NOT ONLY **EMOTIONAL BUT ACTIVE AND RELATIONAL** ESPERIENCE

Learning in a Museum is an **emotional experience**: new aptitudes, interests, appreciations, convictions, and values are developed in an informal and voluntary context (Lord B., 2007). It is an activity that actively involves the body and the senses, and which is influenced by the nature, rhythm, and capacity of movement, with undefined outcomes and **unforeseeable results** (Hooper-Greenhill E., 2007).

Learning in a Museum means **experiencing choice making:** engaging and organizing people (the public, experts from areas outside the Museum, community groups and so on) to actively take part in the conversation. **The Visitor is invited to contribute and dialogue with the Exhibition itself**, ⁶⁰ on the premise that the participants in any act of communication are an active part in the construction of their personal interpretations of the experience.

Therefore, learning in a Museum is the **experience of multi-layered relations**. It contains three central aesthetic aspects: **the inter-personal relationship** between Performer and Audience (or between participants); **the physical** embodied experience of the participant; **and the creative contribution** the participants make to the final performance.

"open-endedness also makes this kind of project a great starting point for a Museum to explore the inclusion of visitor content. Start-up costs and development time are minimal, and the project can be aborted at any time".

https://www.museumnext.com/insight/participatory-museum-design/

Other descriptions of successful installations are available in Annex 1. They exemplify a strong "communication" with the audience, asked not to simply "receive" information but truly absorb it and indicate the absorption of new contents through feedback.

On a simple level, participation might be encouraged by asking visitors to caption or comment on objects by sticking Post-It notes around exhibition displays. As an example, Nina Simon, US consultancy Museum 2.0, cites *The Post-It Project*, conducted at Sweden's Västernorrlands Läns Museum a few years ago, in which "visitors were solicited to write down comments – about anything in the Museum – and post them wherever they wanted". As she suggests, the value and goal, in this case, are perhaps too vague to be genuinely useful, but the

3.2.3 · IS BEING ACTIVE ALWAYS GOOD? ·

"The hyper-textual structure of the narrative and documentary fragments evoke the story in a non-linear fashion: fragments are mobile units in an open structure to be recombined even according to your own background. The exhibition space is thus experienced in a narrative way: you move within a film sequence that progresses with the steps of the visitor" (Cirifino F., Giardina Papa E., & Rosa P., 2011).

"Being a spectator is a bad thing". In his book, The Emancipated Spectator, Jacques Rancière describes how passive spectators have negative perception because of two factors. First, 'viewing' is the opposite of 'knowing' (which is active); second, 'viewing' is also the opposite of 'acting' — "the spectator remains immobile in his/her seat, passive. To be a spectator means to be separated from both the capacity to know and the power to act". (Ranciere, J., 2011)

However, the Audience (as active participant) is often in danger of getting lost in a form of "consumerist hyper-activism". The Audience could be affected by a 'false consciousness', in which the individual, during the cultural experience, is manipulated into imagining having power and choice, while in fact he is voluntarily surrendering his/her freedoms. In contrast, for Rancière, "being a spectator is not some passive condition that we should transform into activity". The Audience is empowered and holds an emancipated position: it can produce its own interpretations, and compose an artistic poem starting from the same elements of the original work of art. "Moving through space, people often become members of the exhibits without knowing it – they can be transformed from unaware users to aware performers" (Vom Lehn D., 2007).

Moreover, the metamorphosis from "observer to participant" is characterized by a high presence of "processuality" and performance: "The processuality of the exhibition corresponds to the perception of it with the entire body. The focus of a pair of eyes on an object is replaced by direct contact with the body, by senses moving within an environment that affects them and is addressed to them" (Siepmann E., 2003). As in performance, the Museum visit takes on a character

of contingency and "processuality". Visitors are given the elements and structure to shape their learning and emotional experience, acting in factual and concrete ways and not only conceptual ones. Exhibition and display systems act as the detonator for experiential processes (Rosa P., 2004).

Therefore, exhibitions and installations contain a high level of human performativity in a relational aesthetic that shifts the focus from objects to gestures, and from things to behaviors (Balzola, A. & Rosa, P., 2011). A "performance" can be defined as a behavioral act that has a spectacular quality: an action that depends on a specific space and time. It is unique.

Performance is **basically processual**: to perform means to produce and accomplish something (executing a drama, an order, or a project). As Victor Turner suggests, the term "**performance**" comes from the old French *parfournir*, which literally means "to provide completely or fully". At the same time, it is unpredictable, in a way absolutely indefinable, but **strictly relational**: "*you do not know what it is until you use it*" (Schechner R., 1977). **Rules can 'frame it', but the flow of action and interaction within this framework** can lead to unprecedented insights and also generate new symbols and meanings (Turner V., 1982).

During the 1980s, many museums around the world experienced a renewed interest in set design. Stage-set designers working in theater have been associated with major exhibition projects, as they are rediscovering the concept of space and are already experts in the theater world.

According to the 'Object Theater' approach, theater design and exhibition design have the same main function: to set the scene and create an environment for the performance. In an exhibition, the set is subordinated to the objects that play the leading role on the stage.

The audience can be considered as the true actors. The exhibition is the set where audience (long ago and in another society) made or used the objects which are now on display, living in the consciousness of the viewer.

The exhibition can therefore be seen as a performance and the museographer as a director.

"The stage of the exhibition is set apart from its surroundings by various elements that form a frame around it. This frame has two dimensions, one physical and one symbolic. The exhibition stage is a room that has a physical existence limited in relation to its material surroundings by set props (walls, screens, lighting, etc.). The exhibition stage is also a symbolic space, a place with special aspects which create a frame around the objects" (Maure M., 1995).

In conclusion, Museums are sites of spectacle and display, environments that can be rich and surprising. They can be overwhelming and difficult to manage, but they can equally arouse curiosity or inspire new ideas. They are not the subject of the verb "to perform" (as is suggested in some Museum studies) (Casey V., 2003; Hoebink D., 2011), leaving the performative role to the Visitor, offering him/her the conditions (a structure, a plot) to become an active participant.

Museum-based learning is physically engaging: movement is inevitable, and the nature, pace, and range of this movement influences the style of learning. Learning in Museums is potentially **more open-ended, more individually directed**, more unpredictable, and more susceptible to multiple responses than in formal education sites, where what is taught is directed by externally established standards.

3.2.4 · OVERTURNED RELATIONS ·

Nicolas Bourriaud is the first to suggest the concept of "encounters": **encounters**—between spectators and artist/curator; between spectators and each other; between spectators and objects — should become the "quintessence of the artistic practice". The purpose of the Culture/Art work (Exhibition, in our case) is "to invent possible encounters"; in fact, encounters can only reach their actual manifestation when activated by human interaction. In the same way, the purpose of the Visitor is to engage with the exhibition and its contents, and thereby "create the conditions for an exchange, as you would return a service in a game of tennis" (Bourriaud N., 2002).

According to this formulation, the risk is to conceive participation as an offer, stressing on how the artist/curator or Institution are offering a 'gift', rather than on the actual manner in which this offer is received, accepted, modified or enacted.

Today, we are witnessing the reversal of the classic relationship with the artwork: the dynamic of a spectator going towards the artwork is exchanged with an artwork/ exhibition moving towards the spectator. The artwork comes out, "out of itself" (Rosa P., 2011). It seeks a shared contact with the observer's experience, a meeting point.

"It [the artwork] forces its immobility; it introduces ways and mechanisms that press upon its frame. Its conventions expand in the space, demanding something from the viewer, sometimes imposing its presence as an active and responsive organism [...] Traditional artwork, fixed and definite, dissolves in favor of what is generated in the encounter" (Rosa P., 2011).

A relationship is established, a physical and actual exchange between two different identities, in which no single element should impose itself on the other, but in which each different element livens and enriches its identity.

The Artwork, or installation, does not pursue the idea of its **self-reflecting purity** any longer, turning into a negative 'theological' dogma without social function and

connection with reality (as already noted by Walter Benjamin⁶¹). It is no longer an Art of specialists for specialists; it is no longer an Art reserved for selected and elected people.

The dynamic of a visitor going towards the artwork is exchanged with an artwork/ exhibition moving towards the visitor

Art is a form of knowledge, and therefore is founded on an **interrogative vocation**. In the conversation with its spectator, the Artwork chooses its directions and **accepts its responsibility**, aware of the consequences.

Once again, "in the designer's thinking, the idea of the public or the viewer changes: it is no longer an indifferent presence put in front of Contemporary Art—to be provoked, awakened, if not even educated—but the viewer/spectator becomes the subject and main interpreter of the operation. He becomes an interpreter to be taken into account in the design phase, as a participating individual, flesh and blood, with his own emotions, potentialities, and willingness to express himself. It is in this sense that the role and figure of the artist changes, becoming the designer of behaviors as well as of events, with all that it means from an ethical and social point of view" (Balzola A. & Rosa P., 2011).

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 $^{^{61}\,}$ Benjamin W. (1936). The Work of Art in the Age of Mechanical Reproduction.

3.2.5 · INVISIBLE INTERACTIONS ·

Interaction is as ancient as Man. It is an indispensable condition from a cognitive point of view, as evidenced by children's experience: in order to interact with things and people, it is necessary to understand the world, its diversity, and feel its energy, nature, and presence.

Indeed, Interaction is a direct relationship between two or more entities that communicate with each other and transfer emotions, stories, and various other forms of information. This is limited to the involved subjects at a given time, and the traces remain in the subjective memory of the involved entities, forming personal experiences.

There also is an 'invisible' dimension among the involved parties: Art is originally a 'magical' ability to fix the 'apparitions' that by nature are fleeting and ephemeral. Art becomes a capturing device and an expression of the invisible to be shared with the Audience.

As evidenced by many archaic forms of Art (for example, the symbolic Egyptian gates that connected men and gods, living and dead), at an archetypal level the Work of Art is an un-representable threshold: it cannot represent the invisible, but only present it.

"Perceiving the invisible also means knowing how to better build the visible, building with 'empty' rather than with 'full'. **The notion of vacuum**, fundamental in Chinese art and philosophy (and in the Far East, in general), can help us to understand that the absence of signs in the symbolic space of a Work of Art is not an absence of meaning, but a field of latent forces that reinforces them once they occur. A bridge between the visible and the invisible. As François Cheng⁶² writes: in some paintings of Sung and Yuan, the Void (non-painted space) occupies two thirds of the canvas. In front of these paintings, even the naive viewer (even if only confusedly) feels that the

⁶² Cheng, F. (1994). *Empty and full: The language of Chinese painting*. Boston: Shambhala. Chicago (Author-Date, 15th ed.)

Void is not an inert presence; it connects the visible world and the invisible one" (Rosa P., 2011).

In the following paragraphs, we will explore some peculiar aspects of tangible interaction; ⁶³ and above all, their capacity of multiplying the narrative levels: multiplying the ways of making the visit experience memorable, bringing a material quality to intangible values.

⁶³ This interpretation considers 'tangible' as all those experiences that require a strong involvement of the body when interacting with a digital system.

3.3 · INTERACTION | INTERACTIVITY ·

"All museums — through their chosen mode of display (using the traditional devices of plinth, vitrine, and labels) — have the potential to transform almost anything they exhibit into a work of art" (Putnam J., 2009, p. 36).

As mentioned above, this approach takes into account the potential of displacement in stressing the relationship between the tangible and intangible values of the cultural asset that is exhibited. James Putnam⁶⁴ suggests the crucial concept of "replacing the value", which is always mediated or linked with the dimension of the invisible and with the capacity of fixing the apparitions of ephemeral values or contents.

"The intangible dimension triggers three levels of cultural experience: memory, stratification of contents, and emotive engagement. Tangible interaction can act as a vehicle in fostering attention, and incentive an emotional cultural experience. The use of multimedia and interactive technologies can generate a sort of 'virtuous destabilization' that stages a new concept of diffuse performativity" (Spallazzo D. & Trocchianesi R., 2016).

In fact, the mediation between object and visitor, and between object and space, is vital. It is able to reflect the communicative and narrative vocation of the object that is put on display. As suggested by the quote, this research has decided to consider new technologies as "mediation", able to foster "the dematerialization of exhibit systems and objects" (Balzola A. & Rosa P., 2011).

Designing the cultural experience means, indeed, designing the relationship between Visitor and Cultural Asset. In this process, both Interaction and Interactivity are key points.

On the one hand, we already know that Interaction is a direct relational form among two or more entities that communicate (transferring emotions, narratives, and

⁶⁴ Putnam J. (2001). Art and Artifact – the Museum as Medium. Thames & Hudson

other information in a specific moment). On the other hand, we are forced to introduce a new concept: Interactivity, an 'intercepted interaction' where the relation process is recorded by a digital device.

As said in the previous chapter, **Interaction** has always existed and is a condition that is as old as Man (indispensable from a cognitive point of view): establishing direct relationship between two or more entities. **Interactivity, instead, is 'intercepted interaction'**: it is the **interaction process** among two or more parties or between the subjects and the technological device. Digital technological devices, in fact, register it: the tracks of this relationship, in the form of information, are filed in a data bank; persisting beyond the time and context in which they were produced, these information tracks are accessible and can be re-elaborated at any time.

3.4 · NEW TECHNOLOGIES AS REAGENT DEVICES ·

The use of technological means and interactivity re-open "a dialogue, acknowledging that a process of creation and information is not complete unless there is an assumption of responsibility by the users as well. They are no longer simple spectators, but become actual producers of experience. They not only take part in a defined narrative, but also "explore" and "create" (in time, in space, and in the field) the potential of a work/event. All this leads us to consider another responsibility: the one of the artist, who (with such an interlocutor in mind) is aware of not only designing an artwork, but also of soliciting behavior, gestures, and reactions that push them push him as an artist to confront himself with a delicate area, which expands from ethics to the conception of modern anthropology. Moreover, the artist knows he might lose control of that same artwork, which necessarily changes its shape due to the established interaction, but where the general sense (result of a profound ideological and design approach) must remain" (Balzola A. & Rosa P., 2011).

Now more than ever, the interactive process is managed by technological systems with this processing power, allowing new relational, active, and sharing dynamics. Technological systems can no longer be qualified as means or tools, but as reagent devices that have the feature of amplifying, transforming, and storing information.

Reagent devices react: they are reactive and create reactions. They create dialogue, combine differences, and trigger memories. They play a decisive role in the experiential transformation, creating new languages and experiments, multiplying the levels of narrative content. They introduce new time dimensions and new exhibit paradigms.

In their relational dimension, reagent devices show an intrinsic duplicity, and can be classified as follows:

PLURAL devices

They amplify a social necessity of participation, they elude an exasperated individuality. Plural devices develop a collective (rather than an individual) enjoyment in which the choices are the experiences of more than one person, and the narrative line proceeds through the effect of more than one decision, so that a powerful interpersonal relationship is paralleled by a human relationship with technology. Multimedia environments and exhibit projects bring the right conditions to develop plural experiences inside habitats containing more than one person.

They make it possible to reintroduce a group participatory dimension (with solidarity forms and socializing dialogues) that is repeated to the point of developing a ritualistic form. "Participants are aware of the awareness of others, and explorations take on a certain aspect of performance" (William A., Kabisch E. & Dourish P., 2005). A community can identify with this dimension. In the experience of those who are watching, a spectator's gesture may be worth as much as the presence of a valuable artefact;

PLAYFUL devices

They transform and make different realities dialogue among each other: they are responsive and create responses. In the evolution of the Museum paradigm (in relation to new technologies and interaction), this dimension primarily involves a first upset of tradition: here, it is forbidden NOT to touch. We can touch, move, and play. As children, we acquire new cultural experiences without realizing it, in a light and pleasant manner.

Moreover, technological devices generate a place that contains a story that is not only read but also experienced: the person is required to play an active role, to become a joint protagonist in a system that expands and exploits his cognitive and sensorial potential. Generally, the body can act as a tool both for implicit interaction (for example, when a sensor detects the user's appearance) and for explicit interaction (when sensors or cameras track the precise motion of the user, in selecting elements or performing actions). Specifically, the action may involve the mere presence, as well as the displacement of the body in space, the (actual or

simulated) touch, the air gesture, the manipulation of objects (full hand gesture), and multimodal interaction;

_ HYPER-TEXTUAL devices

They organize all data from involved interactions, both expanding the possibilities of memory and establishing sensitive data banks.

With regard to the indirect characteristics of multimedia languages (which bring various responses, generate synesthesia, and emotionally involve spectators until they are induced to take an active part), narration is more evocative than informative, more particular than linear. This condition is useful to reconstruct a **personal narrative**.

The hyper-textual structure of the narration and the multitude of documentary fragments make it possible to tell the story in a non-linear style and not following a single point of view. The presentation of the event through the juxtaposition of original documents or oral accounts creates an accumulation of fragments, superimposed upon an individual and systematic explanation. These fragments can be seen as mobile units in an open structure, with the possibility of being recombined. In this way, it is possible to create different interpretative versions of historical facts, depending on the visitor's personal point of view or cultural background.

In addition, the viewers involved in the interactive mechanism are aware that their presence will leave a trace in the computer memory. This transforms the exhibit in an 'open artwork', which could change thanks to the storage and the stratification of the same tracks.

Thanks to the development of technology, minimal gestures can be taken as a reverse and positive example: small gestures can have an extraordinary impact [...] Art must come from a strong motivation to do things, from an impulse to react by doing something in our own small way, giving tools of awareness in order to incentive the creation of personal ethical judgments (Balzola A., 2012).

3.5 · STATE OF THE ART - CLASSIFICATIONS AND ANALYSIS ·

Technologies have great potential to create immersive storytelling for cultural exhibitions by heightening sensory engagement and by forging deeper cognitive and emotional contextual connections with artefacts and objects. However, as in any emerging field, there are many ways to frame, categorize, and label new material, and the descriptive lexicon continuously evolves over time.

The term 'interface' itself can be understood as a balance point between a condition and another, between all involved relationships: visitor and content, visitor and exhibition, visitor and object, visitor and interaction, interaction and content, etc. The term defines increasingly mobile and labile analytical boundaries, which multiply by virtue of the great progress in technology. With the irruption of new virtual, hybrid, unstable territories, the geography of interventions and dialogues in museums has become particularly complex, changeable, and multi-dimensional. Moreover, the same approach to knowledge and communication presents an internal turmoil that forces it to confront itself with other disciplines.

Here below, you can see the main approaches to the theme. Each of them emphasizes a different aspect of the design or consumption process.

3.5.1 · INTERACTIVITY ·

There are at least two symbolic elements that characterize interactivity and what the artistic research should focus on:

- the ability to reverse the roles between user and producer, having them even coincide at times:
- and the ability to configure a new generative system of perception, on which the understanding of collective life and sense of reality is based.

In the configuration of this perceptive system and understanding of the offered content, following Paolo Rosa's suggestion, we can find three main types of interactive relationships in connection to the visitor, or more generally to the person:

_ Unaware interactivity

This refers to an 'invasive' interactivity that directly acts on us. Without knowing it, visitors leave traces throughout all the interactive devices of public and private services that they meet in their techno-urbanized life; these are tracks that can be used by control systems or marketing strategies.

_ **Expert** interactivity

In this case, we are aware of our interactive actions. Sometimes, our choice is purely functional and often seems obligated or automated; in other circumstances, we actually seek the interactive action (play, research, communication). It is a form of interactivity that is linked to experience, because it supposes the awareness of the relationship, the sense of discovery, and cognitive practice **with simple technological devices** (like software) that can be modified.

_ Collaborative interactivity

It involves the use of complex procedures where visitor traces (voluntary or involuntary) are processed in the form of data or metadata. In this way, the participant's intervention may give rise to unexpected and unpredictable developments in the process. Collaborative procedures are normally marked by a

voluntary willingness to share knowledge and experiences.

This collaborative mode can push the interlocutor to introduce new materials and development directions, but it can also amplify (and this is key) the sense of their own choices or the traces of their paths. Recorded data in the interactive processes may discharge from the utilitarian and numerical nature, and charge those 'emotional' aspects that turn them into precious depots for sociability.

Another distinctive topic of collaborative interactivity is that it aims at plurality: **it promotes new forms of socialization among people** who find themselves living the same situation, unlike unconscious interactivity and certain forms of experience interactivity that, instead, tend to occur in an individual dimension.

3.5.2 · TOWARDS INTEGRATION: THREE APPROACHES ·

Davide Spallazzo proposes a coherent classification. He delivers the idea of a triple approach to relationship, reflecting on the degree of awareness of the visitor and on his solicitation to sharing. In this sense, he suggests to read emotional involvement, encouragement of socialization, and the communication of concepts and contents as three possible scopes that respectively guide focused, immersive, and collaborative approaches.

_ **Focused** approach

It identifies consumer projects whose primary scope is to provide visitors with a learning experience with quantifiable results. The Institution provides the Visitor with clear and circumstantial information.

"The so called drill and feedback activities, or rather those based on the question-answer-check model, are often used to provide information, to check the results of the learning process, and to reassure the learner/visitor of their personal progress. Audio guides or multimedia guides can also fall under this model as they allow the passive absorption of information" (Spallazzo D., 2013).

_ **Immersive** approach

The projects gathered under the immersive approach are those designed to engage the Visitor in a passionate and completely absorbing experience, where the learner usually plays an active role.

"If we compare this approach to a focused one, we can see the shift from <u>a model</u> <u>centered around the teacher to one centered around the learner</u>: the institution does not provide the visitor with information ready for 'consumption', but with tools with which to construct their own system of meanings and sense" (Spallazzo D., 2013).

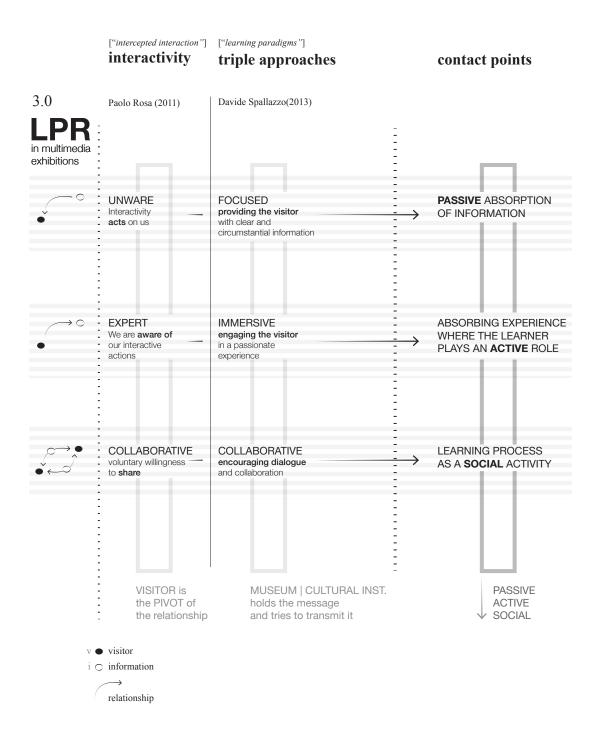
_ Collaborative approach

The last category affords great importance to socialization amongst visitors. They are involved in situations and experiences that are able to encourage dialogue and collaboration. The learning process is here intended as a social activity: each participant is encouraged to share his/her own knowledge and abilities for the purpose of a common goal.

Compared to the analysis on Inter-activity presented to us by Studio Azzurro⁶⁵, a significant difference resides in the non-complete centrality of the Visitor in the learning process. In the first category (focused approach), the receiving end of the learning process leaves the place (Museum, artist or curator) that holds the message and somehow tries to transmit it.

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⁶⁵ Studio Azzurro is an artistic studio from Milan, that focuses its research on the expressive potential of new Information Technologies. It was first set up in 1982 by Fabio Cirifino (photography), Paolo Rosa (visual arts and film) and Leonardo Sangiorgi (graphics and animation). For more than thirty years, Studio Azzurro has been investigating the poetic and expressive potential of technologies that have had such an impact on relations in this age. Through video-installations, sensitive and interactive environments, theatrical performances and films, it has blazed a trail that is now acknowledged worldwide.



3.5.3 · CLASSIFICATION OF IMMERSIVE DESIGN MODELS ·

Maggie Burnette Stogner focuses her studies on the value of conscious experience, which is dictated by sensory immersion. This defines the second type of interactivity (divided into segments and more detailed situations) – as proposed by Paolo Rosa and reprised later by Davide Spallazzo – with a greater emphasis on the component of involvement.

Stogner assumes that Culture is all about our human stories, and that immersive media technologies are an evolving means to tell and share them. In this sense, technologies have excellent potential to create immersive storytelling for cultural exhibitions by heightening sensory engagement and by forging deeper cognitive and emotional contextual connections with artefacts and objects. In her view, immersive narrative-driven exhibitions suggest a continuum of visitor roles, ranging from passive to active to inter-active. She travels through the abovementioned triple classification in a new way:

- in a typical passive role, a visitor strolls through the exhibition as a spectator/observer; in a moderately active role, the visitor participates in the narrative as a time traveler, explorer or discoverer;
- in a highly active, interactive and/or networked role, the visitor might contribute his or her own experiences.

Moreover, she categorized immersive design models in five ways, among which we have selected the three that are most relevant for our reasoning:

_ Experiential Immersion

Experiential immersion (without narrative) is purely sensory, but it can be highly effective in stimulating an emotional connection with extensive retention value. It can be highly provocative, with a lasting sense of inspiration: Visitors bring their own interpretive meaning to this contemplative experience.

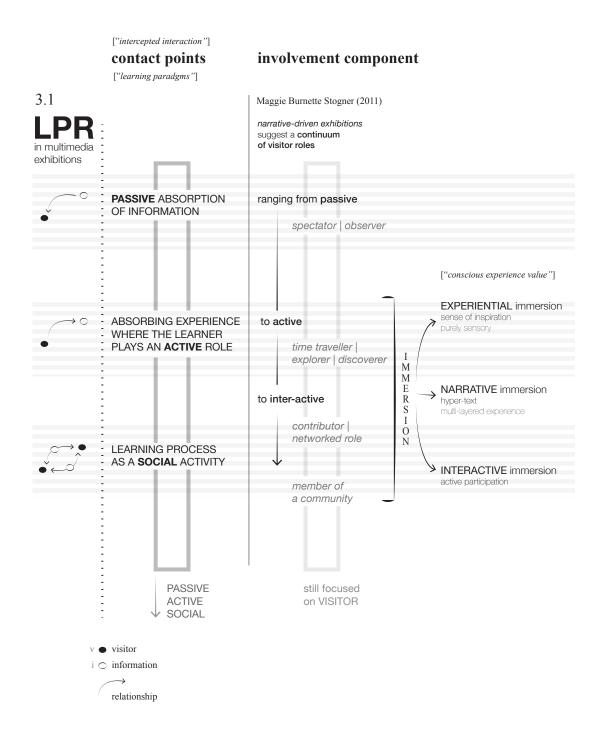
_ Narrative Immersion

Exhibits are designed as experiential stories through which the Visitor moves. Multisensory media is integrated with designed environments to provide rich contextual connections with the artefacts. The digital technology woven throughout this exhibition provides a multi-layered experience, a hyper-text.

_ Interactive Immersion

Some exhibits are able to provoke a substantial change in the role of the Visitor, from passive viewer to active participant. They are fairly new, and as these technologies evolve, they will enable increasingly meaningful levels of Visitor participation and contribution.

Many exhibitions use a combination of these immersive approaches within the same area or installation.



3.5.4 · CLASSIFICATION OF TANGIBLE INTERACTION ·

In case of Expert - or even Collaborative - Interactivity, studying the modalities of contact among visitor, technology, and content becomes an interesting activity. Often, interaction has tangible connotations to help trigger the learning process. In this regard, *ad hoc* investigations have been carried out to assess the potential of tangible interaction in fostering the intangible values of cultural contents.

Two possible design strategies have been defined and highlighted by Davide Spallazzo and Raffaella Trocchianesi: Embedded and Embodied interaction, each one providing two other under categories describing the relevance of the object/gesture in relation to the values that the interaction elicits.

Technologies have great potential to create immersive storytelling for cultural exhibitions by heightening sensory engagement and by forging deeper cognitive and emotional contextual connections with artefacts and objects.

Embedded interaction | smart replicas/originals or symbolic objects

"It consists in creating sensorized⁶⁶ objects that embed meanings in themselves, related to intangible values of cultural heritage, and that explicitly communicate this meaning in their physicality" (Spallazzo, D. & Trocchianesi R., 2013). Usually, the physical manipulation or instrumental use is the main mean of interaction with the object, which (according to what visitors do with it) activates digital contents and human interpretations. The involved objects can be listed and described in the following way:

- Smart replicas/originals | Smart replicas are "copies of artworks on show, usually realized through digital manufacturing, and which embed sensors"; smart originals, instead, "are original artworks and assets enhanced with digital technology and sensing capabilities" (Spallazzo, D. & Trocchianesi R., 2013).
- Symbolic objects | This happens when the smart object itself, beyond its contents, becomes symbolic by means of its shape and evocative power. Symbolic objects are not only activators of stories able to contextualize the assets in the exhibit and convey their intangible value, but they are symbolic in a further intangible way.

⁶⁶ Incorporating sensory and computational capabilities within objects, and the ability of systems to read and interpret gestures and full-body movements.

Embodied interaction | codified or performing gestures

The human body becomes the controller of the digital world and an access key to intangible contents. "It consists in integrating a meaning related to intangible values in gestures, so that intangible values are communicated implicitly in the action performed by the visitor" (Spallazzo, D. & Trocchianesi R., 2013). Embodied interaction makes the distinction between two kinds of gestures:

- **Codified** gestures | both categories codify gesture-based interaction to control and activate interpretive contents. "These include projects that ask visitors to perform specific gestures (e.g. raising a hand, stepping forward, turning their head, etc.) to access digital contents. Gesture-based interaction is usually allowed by sensors (motion and proximity sensors) or by devices able to read the movement of the entire body (e.g. Microsoft Kinect)"⁶⁷ (Spallazzo, D. & Trocchianesi R., 2013).
- **Performing** gestures | "The performing gesture category shares the use of the body to trigger digital interpretation of artwork with the previous category, but it adds meaning to the gesture itself" (Spallazzo, D. & Trocchianesi R., 2013). In the previous case, gestures are meaningful in respect to a codified list of poses, but they do not necessarily add to the comprehension of the artworks or help in conveying the intangible values connected to them.

By analyzing each category in detail, we can recognize how "smart replicas/originals" and "codified gestures" categories employ tangible interaction as a simple trigger to activate interpretive contents.

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The *Gallery One* exhibition at the Cleveland Art Museum by Local Project is an example (Alexander et al., 2013). The *Lens* sculpture recorded the facial expressions of the visitors and then showed them artworks with similar expressions. On the contrary, the *Strike the Pose* installation asked visitors to assume the same pose of sculptures and paintings of the collection with the aim of reaching the best pose accuracy. The described projects share an instrumental use of the visitor's body since it acts as a content activator: in the first case, it is only a controller of movements in a virtual environment, while, in the two other cases, it acquires the role of sorter and imitator.

Beyond the added value of handling original objects or using the body instead of input devices, the act of touching or performing gestures does not necessarily add to the communication and comprehension of the intangible values.

The other two sub-categories – "symbolic objects" and "performing gestures" – employ tangible interaction not only to activate contents related to the intangible values, but also to embed and embody meaning respectively in the "sensorized" object and in the gesture (Spallazzo, D. & Trocchianesi R., 2013).

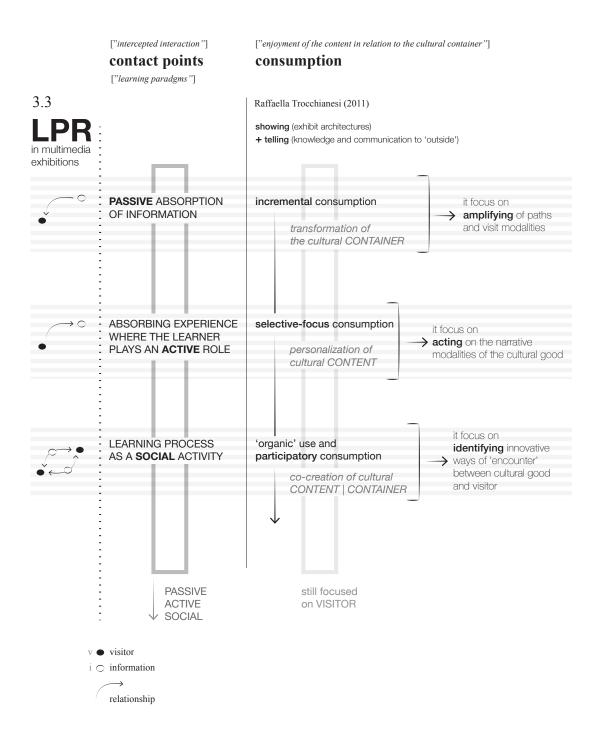
["conscious experience value"] 3.2 Maggie Burnette Stogner (2011) Davide Spallazzo, Raffaella Trocchianesi (2013) in multimedia exhibitions meaning objects/gestures ranging from passive employ tangible interaction 1 as a SILPLE TRIGGER to activate interpretive contents Smart replic originals EXPERIENTIAL **EMBEDDING** MEANING to active objects embed in themselves meanings (object = main mean of interaction) Symbolic M M objects → NARRATIVE R S to inter-active I O N Codified gestures **EMBODYING** MEANING human body becomes the controller of the INTERACTIVE digital world Performing (gesture = main mean of interaction) gestures not only to activate interpretive contents, but also conveying other OWN intangible VALUES v visitor i information relationship

immersion

3.5.5 · FROM INTERACTION TO CONSUMPTION ·

Consumption, understood as the enjoyment of the content in relation to the cultural container, usually is linked to two distinct and complementary areas: Showing and Telling. The former presupposes the use of exhibit architectures, permanent but often ephemeral; the latter implies knowledge, and consequently communication of the artist/artwork/place with the outside (Trocchianesi R., 2011). These areas dialogue via three different consumption approaches:

- ICT and customization of the cultural container towards an **incremental consumption.** This first approach is particularly active in the transformation of the cultural container, and therefore on the set-up and staging methods of the cultural good in a perspective of amplifying visit modalities. In this context, consumption uses *incremental* modalities, exponentially increasing the amount and quality of contents that are offered to the visitors in accordance with their particular involvement and willingness to immerse themselves.
- consumption. "The user, as an active reader, freely designs his own paths within the 'exhibit-museum meta-text': the image is that of a reading that is discontinuous, personal, pieced, and full of combinations, almost creative and 'curatorial'" (Trocchianesi R., 2010). This second approach shifts the focus from the cultural container to the content by acting on the narrative modalities of the cultural good. Visitors are asked to choose and personalize their own experience, selecting and identifying more and more paths and contents.
- ICT and co-creation of cultural content/container towards "organic" use and participatory consumption. This third and final approach identifies innovative ways of encounter between cultural good and visitors, in order to test new consumption participatory scenarios, where users themselves are assigned the task of contributing in terms of both container 'modelling' and content implementation.



3.5.6 · CONSUMPTION ·

Finally, multimedia technologies rest and build upon a content / container relation, generating four different paradigms of consumption when put in relation to space, content, time, and game (Spallazzo D., Trocchianesi R., 2013).

_ Locating | technologies and space

The introduction of digital technology in the museum sector is able to precisely locate the visitor in the exhibition space, with three benefits: providing an orientation tool, tracing visitor paths, and ensuring a coherent flow of information in the correct direction (for example, in front of a specific artwork).

_ Enhancing | technologies and contents

Often, multimedia is aimed at improving artwork comprehension with insights during the visit. Therefore, this second model moves its focus on consumption contents and its applications, seeking to enrich the visitor's experience thanks to additional content.

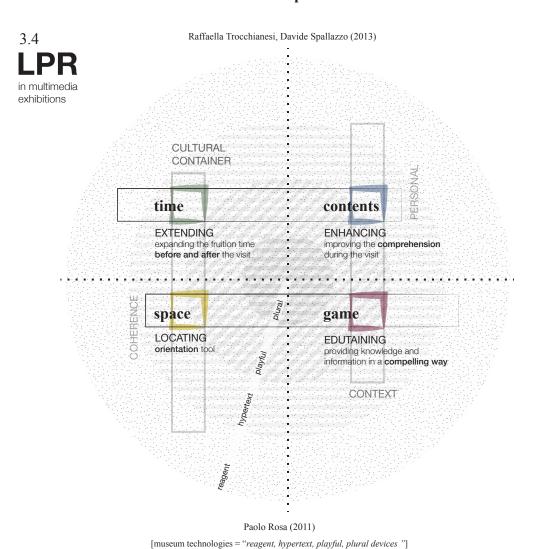
_ Extending | technologies and time.

New time management is certainly one of the most important consequences of the introduction of technology in the museum sector. If, on the one hand, the visit can now be managed with personalized tours (with default duration), on the other hand, technologies have expanded the consumption time out, to before and after the visit. Technological tools can help schedule museum visits on-line, according to the visitor's preferences, and are able to renew and develop the visit experience even after the visit has ended.

_ Edu-taining | technologies and game.

Technologies are also used to create interactive games involving the visitor. Aimed at providing knowledge and information in a compelling way, they educate by entertaining. Game-based learning experiences often transcend the museum dimension, expanding out in the urban space.

consumption



3.5.7 · NATURAL INTERFACES ·

In 1862, the medical journal "The Lancet" warned that "the rapidity and variety of the impression necessarily fatigues both the eye and the brain. The constantly varying distance at which the objects are placed involves an incessant shifting of the adaptive apparatus [...] which scarcely produces cerebral wear because it is unconscious" (Edwards 2008 - Mela Project, 2012).

Inside museum spaces, it is helpful to arrange technological equipment so that it is not actually on display, but so that its effects are perceived. This means reducing the presence of machines and their symbolic value, and increasing the sensitivity of the environment in order to create a condition of normality and familiarity. This also signifies not complicating ordinary spaces with technology (not emphasizing its technical demands), but highlighting the consequences and placing the emphasis on the results.

Natural interfaces are interactive systems that react without the use of technological intermediaries (keyboards, mouse, etc.), but through traditional methods of communication (touch, voice, gesture, breath, etc.) in order to create a more natural situation that is not 'frustrated' by procedures that may not be familiar to all of us. In this way, it is possible to avoid methods that inevitably tend to condition the spectators, ensuring that they are able to behave in a spontaneous and natural way, which is very important (Rosa P., 2011).

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experiential IMMERSION

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experiential IMMERSION

Technologies inside museums have introduced new time dimensions and new exhibit paradigms with high sensory engagement. Museums are a new typology of place where design meets the humanities. However, as in any emerging fields, there are many ways to frame, categorize, and label these innovations. Their descriptive lexicon evolves over time, generating diverse approaches to the theme and emphasizing every different aspect of the design or consumption process. In this regard, chapter 3 offered a critical analysis of the existing methodological paradigms and frameworks that previous studies have tested. The chapter compared different researches, revealing not only gaps, weaknesses, and strongpoints, but also the constant presence of the idea of a triple approach to Interactivity, in relation to the visitor's degree of awareness and his sharing solicitation.

A review of literature on the matter, together with info-graphics of the first results, has been carried out to promote specific in-depth investigations within a unitary framework, drawing on problematic issues and common aspects. A preparatory activity (focused on the possibility of mapping current trends) is to be developed with a subsequent mapping of case studies.

The question of how narration emerges has given rise to a new method of study, analysis, and cataloguing; a schematization that is capable of investigating not only knowledge (content) but mainly the cognitive process (how knowledge is acquired) that comes to life during multimedia experiences. This new method is far from being a mere repository of research outcomes: it is conceived as a multipurpose tool, useful for both the museum institution and the designer.

4.1 · COGNITIVE RELATIONSHIPS OF THE LEARNING PROCESS.

How the interactive relationship is actually named in the research cases we analyzed does not matter; it can be defined simply as 'interactivity' (intercepted by digital devices), emphasizing the visitor/subject role of the relationship. We can also speak of a 'learning paradigm' when the attention is placed on the museum (which holds the message and tries to convey it); and, finally, we can speak of 'consumption' when the cognitive relationship presents an enjoyment of the content in relation to the cultural container.

What emerges from the first three columns (figure 4.0 LPR) is undoubtedly the constant need for a tripartite subdivision in studying and cataloguing the cognitive relationships of learning experiences, typical of multimedia exhibitions.

A constant need for a **tripartite subdivision** from the definition of an **'unaware'** relationship of the visitor with technology to an **active**, participatory, and **social role**. He becomes co-responsible of a system that amplifies and exploits his cognitive and sensory potentialities.

We begin from the definition of an 'unaware' relationship of the visitor with technology *('passive absorption')*, when interactivity is acting directly upon him. Subjected to a mere absorption of information, the visitor undergoes the modification of the cultural container, able to amplify paths and visit modalities. He remains a simple <u>observer</u>.

The artwork gradually turns into an experience ('active role'), it is no longer only represented content: action does not only take place in front of it, but the artwork becomes a container inside which action can take place. The visitor is directly involved; he turns into a traveler, explorer or discoverer. He is no longer a simple spectator, but an active and dialoguing participant. Visitors become a resource, they learn by 'acting'; they test and are able to customize the artwork's content. The evolution of the museum's approach towards new technology and interaction therefore requires one major change in the traditional museum experience: it is now forbidden to not touch.

The surrounding space becomes fluid and dialectical; it breathes and communicates with the visitor. It enriches the experience with surprising visuals and sounds, generating actual events and not just exhibition workstations. It creates dialoguing boxes that are no longer only informative or commercial.

The visitor is invited to an <u>active</u>, participatory, and central role; he is co-responsible of a system that amplifies and exploits his cognitive and sensory potentialities.

The museum becomes a place that welcomes a story that is not only read but actually *lived*. Conceived <u>as an organism</u>, the museum has the potential of creating relations, prefiguring truly 'connected' knowledge. It is no longer, or at least no longer only, a 'temple' that holds its sacred content safe inside, but a 'node' of a fluid networks, transferring and receiving data that is continuously integrated and compared. A place to dive into, in a sensory, narrative, and interactive way.

The museum is a place that you do not necessarily only experience as an individual; it can evolve and become a participatory place *('social activity')*, making your visit and transit even more valuable. A venue that is able to manifest its socializing value and create a constant comparison between one's own crossing and the perception of others' (together with others, and in relation to others).

The visitor is now called to actively collaborate. He is a direct contributor. He is invited to a collective rather than to an individual consumption (towards which technological systems generally tend), so that the experience does not only develop

between man and machine, but also between <u>man and man</u>, thus developing new dialectical forms and unusual encounters among different points of view. In fact, in the experience of those who are watching, a spectator's good gesture may be worth as much as the presence of a valuable artefact.

It is no coincidence that aptitude to greater participation is connected to the feeling of responsibility (towards oneself and others). A spectator who physically takes on his **responsibility** of being such (through actual gestures), partly becomes author of the artwork he is experiencing.

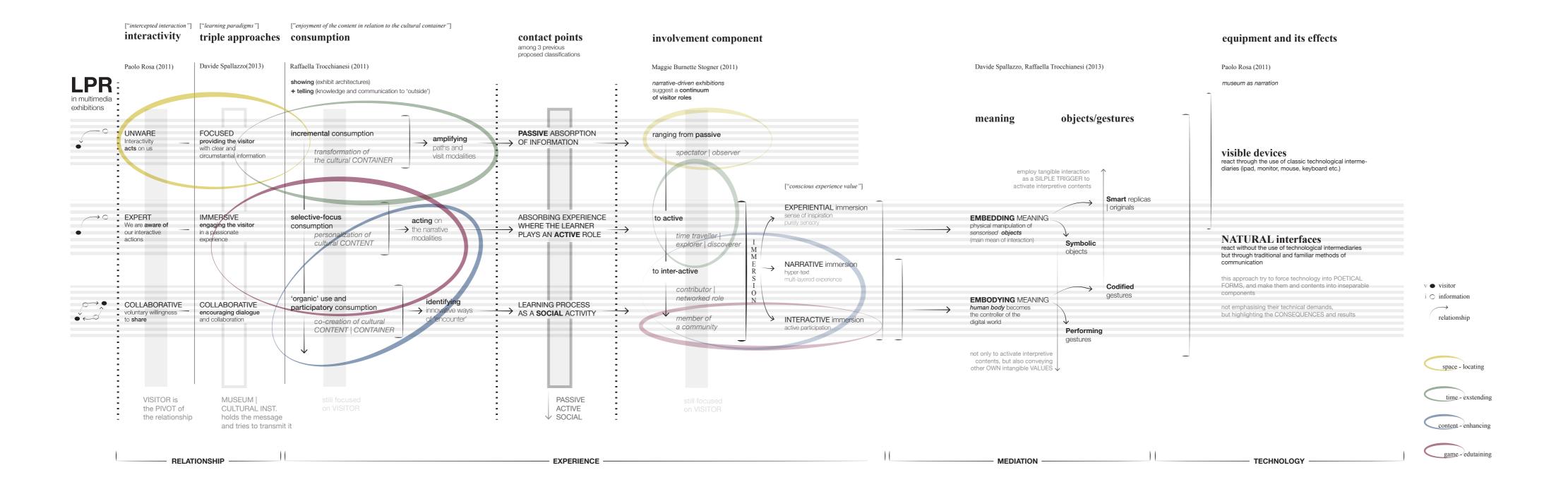
The museum becomes a place that welcomes a story that is not only read but actually lived. Conceived as an **organism**, the museum has the potential of creating relations, **prefiguring truly** 'connected' knowledge. It's not a 'temple' that holds its sacred content safe inside, but a 'node' of a fluid networks.

The gesture can be tangible in a physical sense (**embodying meaning**: action performed by the visitor) or in relation to a concrete and sensorized object (**embedding meaning**): object or action, the 'gesture' brings shape to intangible contents in multimedia exhibitions. Tangible interaction is interpreted as a practice that is capable of multiplying the narrative levels, making the visit experience memorable and intangible values material.

A simple gesture is able to put in motion a quite complex mechanism, without having any symbolic encoded barriers between the gestures and the reactions. The design project therefore creates a two-fold 'staging' situation that must be treated with care.

Technological equipment is an essential part of the narrative and of the exhibition. It is of significant relevance, a meta-linguistic phenomenon to which the public is sensitive to, requiring a careful 'techno-dramatic' treatment. Technology is therefore a challenge but also an extraordinary opportunity: it is the language with which we communicate today. A language that captures our imagination and expresses itself in new behavioral forms.

We can then decide whether to openly display technology or not, using classic technology intermediaries or **visible devices** (more suitable for individual use), or forcing it into 'poetic' forms with **natural interfaces** (traditional communication methods that do not emphasize the technology). In the first case, we must be aware of the risk of falling for a simple 'displaying of the device': a machine that only tells of itself and not one that tells of the general narrative, creating spaces of collective and shared enjoyment.



COGNITIVE RELATIONSHIPSOF THE LEARNING PROCESS

I. Bollati - ETCAEH - accessibility as a non-prejudicial approach - CHAPTER 4 ·

4.2 · INTERACTION SEQUENCES ·

More than sixty years ago, Albert Einstein asked himself a question: "Why does this stupendous applied Science, which saves work and makes life easier, bring us so little happiness?"; he then replied to himself: "because we have not yet learned to make a sensible use of it" (Rosa P., 2010).

It is clear that the classic artwork/viewer relationship is overturning: the dynamic of a spectator moving towards the artwork is replaced with an artwork moving towards the spectator. This outlines ways of interaction and mediation, as well as a preliminary catalogue of technological means. **What is still missing is** the proposal of an interactive installation-cataloguing tool, or **an orientation tool**, in the huge variety of design modes and their experiential results: a tool that would be useful for both the museum institution and the designer.

Hence the proposal to analyze and classify multimedia installations in relation to their message transmission capacity and method, in terms of communication and technology exchange between content and visitor. Therefore, a new method of study, analysis, and cataloguing derives from the answer to the question "how does the narration emerge?".

This is a schematization (figure 4.1) that is capable of investigating not only knowledge (content) but mainly the cognitive⁶⁸ process (how knowledge is acquired) that comes to life during multimedia experiences.

Museums are no longer only 'containers' for memory, but places in which you jointly elaborate and define meaning and identity. This leads to the idea of evaluating the museum not only in numerical terms (how many visitors have entered) but also in terms of cultural growth (how the presented matter has enriched the community

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Knowledge and cognition merge and become vectors of a single great experience, where multimedia language is proposed as a cognitive production that speaks and urges us on present issues and introduces us to the meaning of the sense of memory. This communicative binary means that ethical attitudes not only have to go through the treatise of offered topics; it also shows us how they are proposed, making us aware that their modes and meanings affect our time.

involved in the specific museum space). For this reason, display systems cannot be treated with superficiality, and playful spectacularization cannot be seen as an end in itself. They are capable of manifesting wonder and possibilities.

We have therefore decided to address the message transmission of the Institution (or 'content achievement /access' by the visitor) by investigating the three key elements of the learning process: Subject, Object, and Verb — elements that cover the basic functions of the syntactic order. Subject and Object (human presence and content) can be exchanged, according to the type of action and its more or less active or passive nature. The Verb is usually represented by the technological medium, which suggests activation modes and therefore different actions.

These three components have been defined as a 'base interaction sequence':

- The Subject (or human component), in its **single or plural presence** (alone or in group);
- The Technological medium, which is either **visible** in well-known devices (**mediated** by the body or other objects, more or less loaded with symbolic value), or completely **hidden** in natural interfaces;
- The Content, which can be either completely **intangible** or tangible in **mixed forms** (whenever the multimedia takes the shape of objects, spaces, and bodies). This is the case for whenever the content tries to suggest the invisible, giving space to the interpretation of its lost vital and ritual component, which completes the presence sense of tangible elements.
- These three elements form an open representation that is able to design a
 huge variety of configurations, depending on the combination of the involved
 variables and the resulting outcomes.

These outcomes are called 'dialogic modes'. They are able to give more value to the content or elevate the human interaction component, according to design needs and choices. They can reproduce an original object or artwork, obviating its absence, or they can be in charge of the narration that the object knows how to evoke, supporting its presence. They can also reveal visitor psychophysical data (heartbeat, brain waves, body postures), translating it into image and multimedia scenarios and, therefore, representing real-time emotional states and cognitive processes. In any case, the focus is on the installation's playful potential, on its ability to foster the creativity of the visitor until it pushes him towards a process of co-creation (with the artist or with other visitors). This contributes to their own enjoyment/consumption and to that of others, and facilitates extended and transversal learning opportunities.

For this reason, along with the increased accountability of the designer (who is certainly involved in ethical issues), the responsibility of the people accessing these experiences is emphasized, demanding a minimal **behavioral effort** on their part, an involvement or activation gesture.

The gestural act, in this case, becomes a declaration of availability. What follows is entrusted to the sensitivity, creativity, and intelligence of the individual person. The more the <u>author</u>'s condition swaps with that of the audience, the more the viewer becomes author of his own experiences; and, consequently, the more the quality of the project increases.

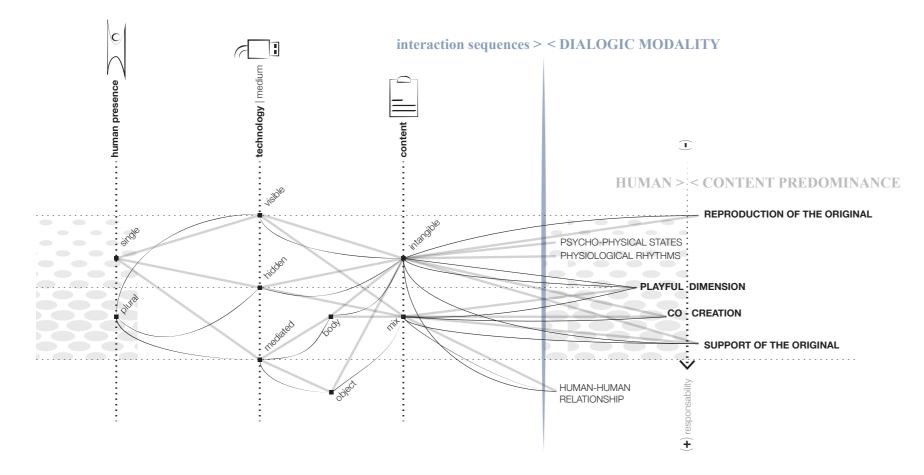
A a **new method of study**, analysis, and cataloguing derives from the answer to the question **"how does the narration emerge?"**

4.1 Message TRANSMISSION, main elements

INTERACTION SEQUENCES

How does the narration emerge? Possible Configurations.





From an idea of a "museum as a collection" to that of a "museum as narration".

4.3 · SELECTION OF CASE STUDIES ·

The previous effort resulted in an extensive review of relevant critical literature. A selection of paradigmatic case studies — individuated among the most innovative digital applications initiated by museums, galleries, and cultural institutions — is necessary in order to facilitate the development of new modes for representation, collection, education, and participation.

Mapping case studies implies intercepting signals that are useful in expanding the range of interest by identifying problematic issues and common aspects (Celaschi F. & Deserti A., 2007).

On the one hand, the analysis of the case studies enables the <u>identification of trends</u>, opportunities, research perspectives, and critical insights that concern the actual and potential role of technologies within contemporary museum culture. On the other hand, the cases that were analyzed are conceived <u>as testing grounds</u> for the evaluation of the effectiveness of the proposed 'interaction sequence' cataloguing method (figure 4.1), as well as additional research tools to unfold new perspectives and directions for the production and sharing of knowledge (produced through bidirectional exchange between theories and practices).

Indeed, we used a practice-based research methodology with the aim of exploring and developing new museum practices, ⁶⁹ and of enhancing and testing the 'interaction sequence' cataloguing tool mentioned above.

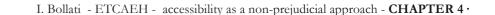
Rather than choosing a number of emblematic cases under pre-determined categories as prime material for qualitative analysis and synthesis, the current investigation extracts information from the entire set of collected cases and produces diagrammatic charts of this dataset to better understand the nature and scope of the collected data.

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⁶⁹ The presented studies are able to provide a representative and inspiring look at directions and prospects for the use of information communication technologies (ICT).

4.2 where are chosen realities and firms located?

GEOGRAPHICAL COVERAGE Variety Principle Silver Spring, USA Gallagher & Associates | Rotterdam, Netherlands New York, USA + Berlin, Germany STUDIO ROOSEGAARDE San Francisco, Northern California + ART + COM Studios Singapore, Singapore + Ivry-sur-Seine, France TAMSCHICK Miguel Chevalier Cologne, Germany Montreal, Canada (•) Barcelona, Spain playmodes 235MEDIA MOMENT FACTORY New York, USA Tokyo, Japan Milan, Italy 7 London, UK -FakeLove CamerAnebbia TeamLab Paris, France + Dot Dot Dot + Singapore, Singapore New York, USA + KARMACHINA + Shanghai, China Los Angeles, Southern California + N03 Tokyo, Japan + Streamcolors STUDIO AZZURRO head office • other offices Surry Hills, Australian Moffitt. Moffitt |



Initially, all research efforts conveyed and found a validation through the identification of significant case studies, strategies, and actions **for each 'interaction sequence' configuration**. The selection ensured <u>covering</u>:

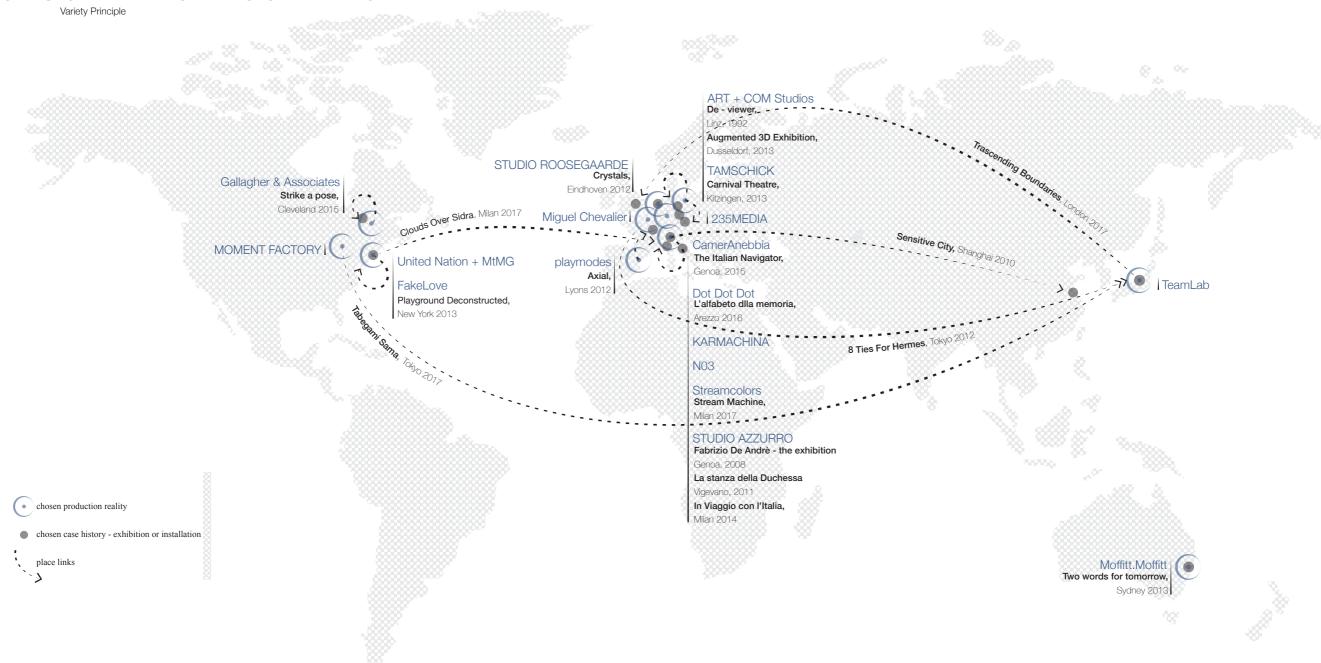
- the **whole range of situations** and possible variations of the interactive message transmission modality, inside multimedia exhibitions or installations (see figure 4.1);
- a **geographical distribution** and context multiplicity of the survey that is as broad as possible, verifying where both artist and installations are located (see figure 4.2 4.3);
- a wide **temporal frame**, from the first experiments of the 1980s (Studio Azzurro⁷⁰ and 235 MEDIA⁷¹) to today, in order to ensure critical and interpretive synthesis of effective examples and best practices (see figure 4.4).

To Studio Azzurro was first set up in 1982 by Fabio Cirifino (photography), Paolo Rosa (visual arts and film), and Leonardo Sangiorgi (graphics and animation). In 1995, Stefano Roveda, an expert in interactive systems, joined the group. For over twenty years, Studio Azzurro has been investigating the poetic and expressive potential of technologies. Through video-installations, experimental work, sensitive and interactive environments, theatrical performances and films, Studio Azzurro has blazed a trail that is now acknowledged worldwide.

⁷¹ **235 MEDIA** has been involved with the presentation of video art since its founding in 1982, and has established an extensive archive with over 3,000 works that are gradually being digitalized, restored, and made accessible to the public. Alongside its role in the presentation of video and media art, for more than 20 years 235 MEDIA has been focused on projects on the status of media art within society and its relationship to other art forms.

4.3 where are chosen case histories located? where do chosen realities work for?

GEOGRAPHICAL COVERAGE



This selection does not aspire to achieve a complete and exhaustive framework of the realities that are active in the field, or to achieve a complete and defined mapping of the technologies. It is made in the awareness of the infinite number of artists that are transversely involved in multimedia exhibitions, and of the constant changes and innovations in technology.

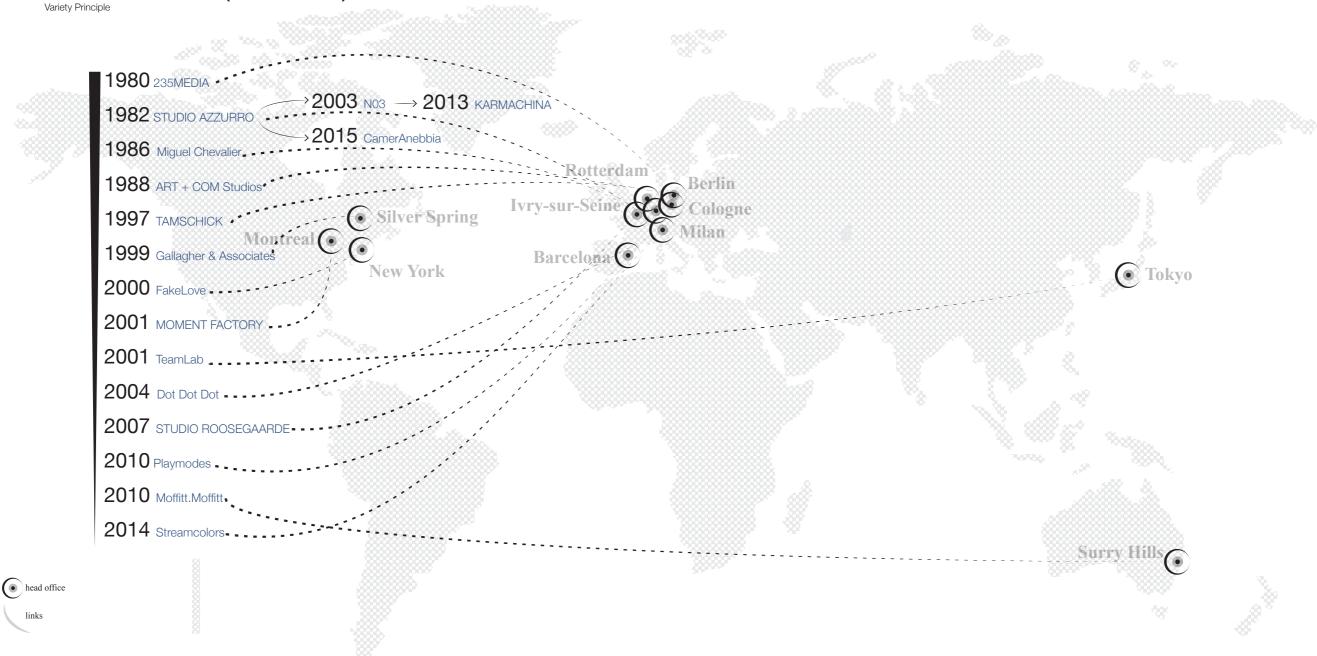
The selection is set to develop an overview of user feedback, human interaction, design intention, resource infrastructure, technology use, and content accessibility.

Once the cases were identified, their study and interpretation was developed through the research and analysis of documentation. A more restricted group of cases (mostly located in Milan) was also developed through direct field research, interviews, visits, and eventual exhibition design activities. This allowed a more in-depth analysis of the single cases.

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4.4 where and when?

GEOGRAPHICAL (and time) COVERAGE Variety Principle



4.3.1 · ANALYSIS OF CASE STUDIES - Case study ID ·

The case studies⁷² were developed through the use of an Identity Card (ID) holding a basic and fixed set of information, identifying aspects and opportunities that technologies could introduce to the museum space, improving its content accessibility. Emphasis was placed on cases with a potential for technologies that address message transmission, content accessibility, user experience, and other project themes.

The ID distinctly illustrates single cases that were collected, identifying them in their most predominant and specific qualities, linked to qualitative (images, geographies, visitor numbers) and quantitative (text descriptions) case study data. The main ID structure is concise and is structured as follows:

Part 1

- <u>Essential 'orientation' information</u>, such as installation or exhibition title, year, author, place;
- Video link, in addition to a key image of the exhibition. Understanding the working principle and how the human presence can interact with content and

AXIAL, 2012 -13 PLAYMODE, Fête des Lumières, Lyons

CARNIVAL THEATRE, 2013 TAMSCHICK, Kitzingen, Germany

CLOUDS OVER SIDRA, 2017 United Nation, Artscape + Meet The Media Guru Milan, Italy

CRYSTALs, 2012-13, Daan Roosegaarde, Natlab (public artwork) Eindhoven, NL

DENTRO L'ULTIMA CENA: IL XIII TESTIMONE, 2010 Studio Azzurro, Vigevano Castle, Italy

FABRIZIO DE ANDRE'- LA MOSTRA, 2008 Studio Azzurro, Genoa, Italy

IN VIAGGIO CON L'ITALIA, 2014 Studio Azzurro, Milan, Italy

L'ALFABETO DELLA MEMORIA, 2016, Dot Dot, Arezzo, Italy

LA POZZANGHERA, 2006 Studio Azzurro, Monza, Italy

LA STANZA DELLA DUCHESSA, 2011 Studio Azzurro, Vigevano Castle, Italy

PLAYGROUND DECONSTRUCTED, 2013, Fake Love, New York, USA

SCULPTURE LENS - STRIKE A POSE, 2015, Gallagher and Associates Cleveland Museum of Art, USA TWO

STREAM MACHINE, 2017 Streamcolors Milan, Italy

THE ITALIAN NAVIGATOR, 2015 CamerAnebbia, Genoa, Italy

TRANSCENDING BOUNDARIES, 2017 teamLab, London, UK

TWO WORDS FOR TOMORROW, 2013 Moffitt. Moffitt, Sydney light festival, Australian

8 TIES FOR HERMÈS, 2012 -13 Miguel Chevalier, Tokyo, Japan

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 $^{^{72}}$ AUGMENTED 3D-EXHIBITS, 2013 ART + COM Studios, Dusseldorf, Germany

medium is vital in order to best receive a message;

- <u>'Interaction sequence' modality diagram</u>, able to highlight the specific configuration at hand and its results.

Part 2

- A more precise and focused **key image of the installation**. Often, we speak of exhibitions or 'sensitive environments' that are composed of different single installations, each with their own interactions and implications;
- 'Experience-specific qualities' derived from a survey field that is developed in order to capture the 'object' or 'virtual' degree of a given multimedia installation, and raise issue points for the discussion. If a museum can be considered as an intricate set of representational techniques and technical materials (or technology mediums), each case study can instead be identified as a set of quantitative and qualitative tendencies or parameters. The 'experience-specific qualities' section is developed through a set of icons and themes, each introducing topics that are conceived as new challenges that technologies can bring to the museum experience.
- The discussion preceding the thematic insights and data visualizations in the following **chapter 3.13**, as well as the final chapter of this volume, helps to further understand these conjectural and speculative directions;
- A **text-description** of the case study, emphasizing the applications with a potential for technologies, addressing content accessibility and visitor experience quality. We seek a topology of exemplary projects that aim to balance cultural aspects with the material and technological ones.⁷⁴

^{73 &}quot;An actual ecosystem: a place in which there is an interrelation between the virtual component and the physical presence, between the specific content and the experience of each visitor" (Studio Azzurro 2011).

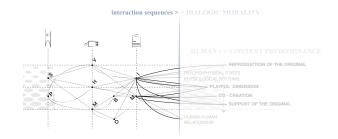
⁷⁴ "Presupposed here is the pretext that museums are not only apt sites and agents for the investigation of particular effects of contemporary technologies and their application; they are also cultural constructions which, in themselves, can be thought as technological (Allen 2012). Recognizing this technological dimension of museums is helpful in avoiding reductive analyses of these sites as a set of derived institutional practices articulated through a set of unbiased tools" (MELA Project, 2012).

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Experience-specific qualities:

theme	2		exhibition scientific or humanistic contents	
			place as container or content flexible or site specific set-up	space
time			project (temporary, itinerant, permanent) du	ıration
	Г		local or international visitors specific or multiple target	person
	L	*(0)	specific or multiple target	_
		♦ ♦♦ ♦ \$	weak or complete immersion	technologies
			visible devices or natural interfaces	

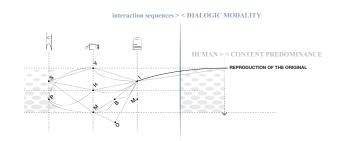
brief description of the analyzed case study, using its designers' words



4.5 possible configuration

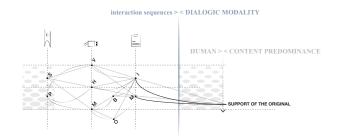
INTERACTION SEQUENCES

AUGMENTED 3D-EXHIBITS single single intangible
AXIAL plural visible intangible
CARNIVAL THEATRE plural inidden mix
CLOUDS OVER SIDRA single single intangible
CRYSTALS plural plural intangible intangible
DENTRO L'ULTIMA CENA single intangible intangible
DE-VIEWER single intangible intangible
FABRIZIO DE ANDRE' single mediate mix
IN VIAGGIO CON L'ITALIA single intangible intangible
L'ALFABETO DELLA MEMORIA single mediate intangible
LA POZZANGHERA plural hidden intangible
LA STANZA DELLA DUCHESSA Single Single mix
PLAYGROUND DECONSTRUCTED single mediate intangible
SCULPTURE LENS - STRIKE A POSE single single mix
STREAM MACHINE single single mix
THE ITALIAN NAVIGATOR single mediate intangible
TRANSCENDING BOUNDARIES plural intangible
TWO WORDS FOR TOMORROW plural plural intangible intangible
8 TIES FOR HERMÈS Complete plural intangible intangible



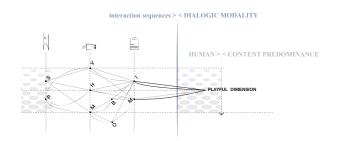
4.6 reproduction of the original





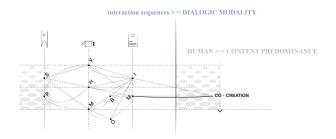
4.7 support to the original



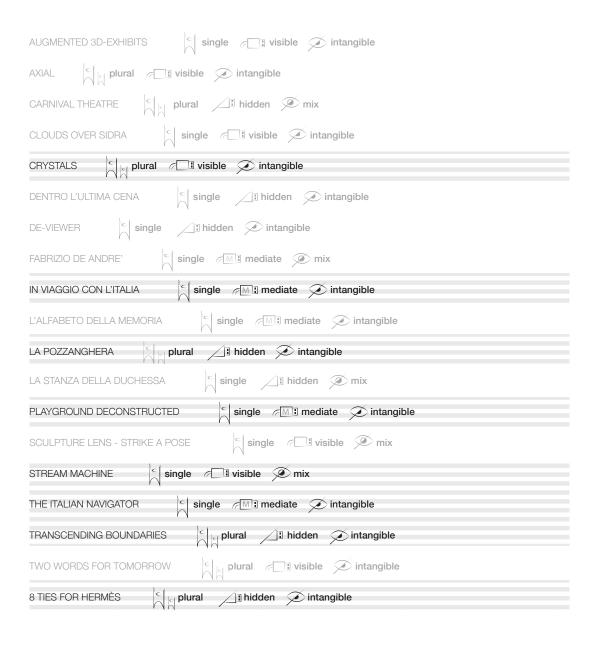


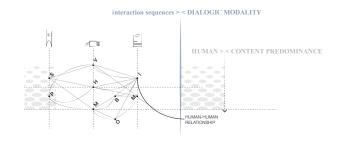
4.8 playful dimension





4.9 co-creation





4.10 human-human



4.3.2 · EXPERIENCE - SPECIFIC QUALITIES - Case study ID ·

In our contemporary cultural landscape, museums are traditionally entities that employ "material assemblages (buildings, collections of objects, physically located exhibitions, images) in the consolidation, questioning and creation of cultural meanings. This is a productive function, with varied goals, motivations, and outcomes: education, experience, archiving, and creation of knowledge, among others". (Basso Peressut L., Lanz F. & Postiglione G., 2013)

Furthermore, as shown in the previous chapter 3.3, 'multimedia' culture, producing models and methods of information transmission, makes people change their ways of thinking and behaving, as if it were a homeopathic practice to 'breathe' life back into museums, bringing them closer to our daily life.

However, technology is not the only key that was chosen for the case studies. It is necessary to analyze the case study in all its nuances (visibility and immersion) and to associate it with other elements, such as content typology, value of space, visit duration, and visitor variety. This way, we constantly interweave the concept of learning with the quality of the experience. A balance of changing elements and qualities to be defined and considered from time to time, as illustrated by the examples gathered here.

Let us begin from the Content, "not understood as a neutral and independent element" but closely linked to human presence inside the museum space "through different processes of appreciation, appropriation, interpretation in a defined space and interaction among people, that represent crucial platforms for mutual understanding" (Basso Peressut L., Lanz F. & Postiglione G., 2013).

It is divided in two macro categories: scientific and humanistic contents. Its nature is **magnified in relation** to the visitor, while technology might be interpreted as a mediator able to enable content and be shaped by the same content at the same time.

Given the evidence of the dependence between different forms of cultural content and technology applications, it is possible to recognize recurring patterns or correlations as possible design directions to envision enriched and intensive visitor experience within museums.

We can ask ourselves many questions: how were these patterns designed? How has the use of technology influenced them according to their content? How do contents comply with an effective design strategy in the context of multimedia installations?

Moreover, technologies, if used correctly, can actually become content and not remain a simple instrument; they can generate a significant **meta-level** within a museum program: a place where you can become immersed in stories, where you can feel, discover, and modify these technological languages, confronting unlikely procedures with a practice that is not an end in itself.

"The narration that unfolds, filling the whole museum space, requires a dramatic approach in the management of the physical space and the virtual components, as if a film script and not just an exhibition. The narration is therefore inextricably linked with the environment, with the stories it tells, and with the overall subject matter" (Studio Azzurro, 2011).

A mixed space (Jacucci G., 2004), a combination of physical and digital media proposing new relations among visitors, space, physical artifacts, and digital media; a responsive environment "where perception and sense experience take place, hinting at a new perspective in the 'situated' use of technology. In particular, the role that participants play in intervening in their environment predisposes particular actions and experiences" (Allen J. & Lupo E., 2012). An environment able to respond, modifying the museum space with the spontaneous human movements or modifying museum space with human voluntary interactions.

In the same way, even space is used in a narrative way; it is made up of several "sites of meaning construction" (Van Den Booch A., 2005). We do not only move from room to room, but also within a 'cinematographic' sequence that develops as we proceed. Entering into a particular place is thus like entering in a story: not just to look at it but to experience it.

We often face two situations:

- a 'virtual' space that dialogues with the architectural context, becoming its content;
- the link with the physical context is <u>non-influential</u> and the work remains unrelated to the context; however, the mobility inside the space is the main aspect of the artwork because it becomes <u>an explorable space</u>.

In the first case, the space has not usually been altered by visible structures and technologies or by outside narratives. The **primary element in the multimedia story** is the space itself. The design project (<u>usually a site-specific set up</u>) seeks to retain the precious special nature, working on the connection between presence and absence. Space does not act as a simple container; it is deliberately preserved exactly as it is. The space is part of the story as a whole, revealing sudden glimpses of additional and parallel narrations or contents.

In the second case, the environment is completely neutral and the set-up is flexible. It is not significant in itself, but it is a **container serving the visitor's experience**. It predisposes particular actions and experiences, enhancing and favoring the passage from its own visibility to the centrality of the visitor's gesture. "The gesture becomes the main element of the cultural design and, together with the use of new technologies, encourages a physical approach that improves the interaction potential". "(Studio Azzurro, 2011)

""Differently from a book, a television program or a website, the museum experience should not be reproducible, becoming in this sense closer to a performative event, inextricably linked to the place or territory it takes place in" (Studio Azzurro, 2011).

Visiting a museum is, above all, a physical experience that ought to offer a unique opportunity for that specific experience, at that precise time, and for those precise people. Visiting a museum means participating in a cultural event. Multimedia installations or exhibitions often are temporary (sometimes itinerant due to financial issues), with high purchase prices and maintenance costs, and dialogic modes. They

are configured as transient and, therefore, in line with multimedia language assumptions. Their language is similar to a kinetic, fluid, and engaging way to tell a story.

"The language of technology and multimedia has a certain similarity with the oral culture on which the characteristics of discursive thought were based: indeterminacy, repeatability, immediacy, simultaneousness, fragmentation, and connectivity" (Studio Azzurro, 2011).

Digital technologies and media, a part from this development trajectory, are increasingly becoming mostly inter-subjective tools: mediations of relations, not with information but with other people. The chosen case studies are, of course, never either 'social' or 'non-social', but merely social in different ways. They deal with the application of museum design elements by changing the relations among people in diverse environments and settings. We would like to investigate how.

How can museums come to embrace their social functions alongside their educational mandates as institutions of cultural dissemination? How are museum able to satisfy a high level of personalization, both in terms of target audience (specific or multiple) and of individual players? How about when visitors are both local and international? Do the majority of cases present the concept of plurality by including minorities and dissenting voices? Or do they risk nourishing a monolithic and unitary perspective?

These differences, together with the selection of technologies (visible or hidden devices), create affective and effective changes in how a designed experience is met in the museum, and how it is absorbed and remembered. Technologies might be used 'for their own sake' (as experiments or creative provocations) or for the sake of the narrative. Does the of technology influence the degree of immediacy and engagement?

The survey highlights relations, rather than categories, among the case studies; it focuses on the transitional territories between the cases rather than on their single

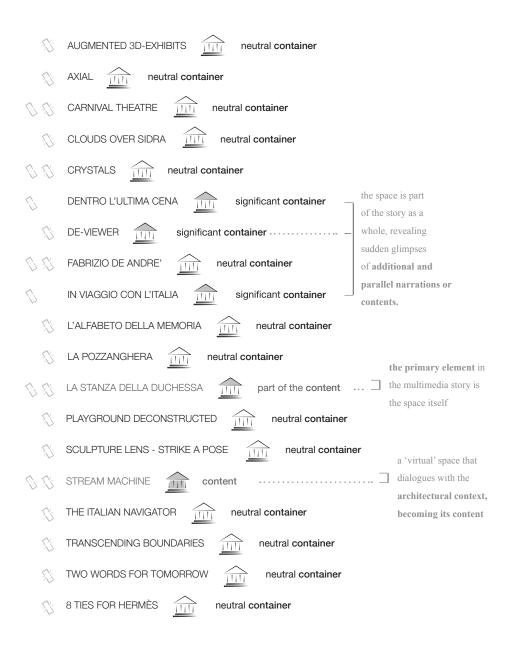
boundaries. The survey, the case study comparison, and the resulting database have created "points to the idea that such techniques might produce a database-as-boundary-object; that is, a digital object (or data set) with a concerted focus and common form, but which dynamically shifts, through specific tools and filter functions, to allow strong structuring within specific uses, research purposes or interpretations" (Allen J. & Lupo E., 2012).

Technology is not the only key that was chosen for the case studies. It is necessary to analyze the case study in all its nuances (visibility and immersion) and to associate it with other elements, such as content **typology**, **value of space**, **visit duration**, **and visitor variety**.



4.11 site specific | flexible set-up

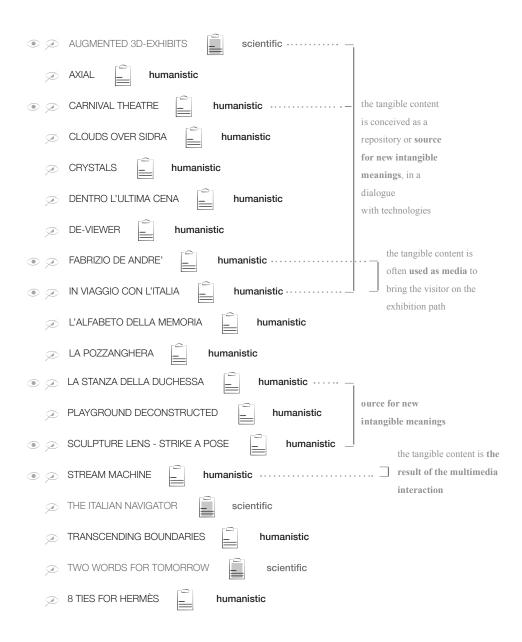
SPACE, as container or content?

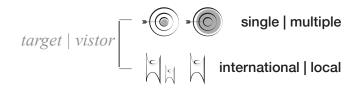




4.12 tangible | intangible contents

THEMES, humanistic or scientific?





4.13 single | multiple target

VISITORS, international or local?

=	AUGMENTED 3D-EXHIBITS international
*	AXIAL C international
*	CARNIVAL THEATRE international
=	CLOUDS OVER SIDRA Company international
*	CRYSTALS international international
*	DENTRO L'ULTIMA CENA CENA international
=	DE-VIEWER Control international
*	FABRIZIO DE ANDRE' international international
*	IN VIAGGIO CON L'ITALIA international international
=	L'ALFABETO DELLA MEMORIA c local
*(6)	LA POZZANGHERA international the interactive installation is adressed to children
*	LA STANZA DELLA DUCHESSA c local
a (C)	PLAYGROUND DECONSTRUCTED international
=	SCULPTURE LENS - STRIKE A POSE international international
*	STREAM MACHINE Iocal
*	THE ITALIAN NAVIGATOR international
2	TRANSCENDING BOUNDARIES international
a (C)	TWO WORDS FOR TOMORROW Control international
*	8 TIES FOR HERMÈS C c international

4.3.3 · CASE STUDY: HIGHLIGHTS ·

From the presented cases and their comparative studies, we were able **to outline some constant**, **predominant tendencies and strategies** per each 'experience-specific quality':

_ CONTEXT | Whether cultural content is scientific or humanistic, it functions as a text on which new stories overlap. It lives in the idea that the exhibition extends beyond its physical limits. It is a starting point in giving shape to the "invisible" or in rediscovering the value of the invisible content. Activated by technologies and used by visitors, it is a vital element of the user's experience.

If the content is **tangible**⁷⁵ (a masterpiece or an object, usually in humanistic exhibitions) "the attention is shifted from the object itself to the story surrounding it, reconstructing a setting that gives a context to the exhibit, enabling it to step out from its immobile sanctity" (Studio Azzurro, 2011). The content is conceived as a repository or source for new meanings, and the dialogue with technologies allows to give space to the virtual dimension of the multimedia story around the tangible content, explaining the significance of its presence and its interpretation.

If the content is intangible, ⁷⁶ it is a portrait of what is invisible, an alternative

IN VIAGGIO CON L'ITALIA, 2014 Studio Azzurro, Milan, Italy

FABRIZIO DE ANDRE'- LA MOSTRA, 2008 Studio Azzurro, Genoa, Italy

LA STANZA DELLA DUCHESSA, 2011 Studio Azzurro, Vigevano Castle, Italy

CARNIVAL THEATRE, 2013 TAMSCHICK, Kitzingen, Germany

SCULPTURE LENS - STRIKE A POSE, 2015, Gallagher and Associates Cleveland Museum of Art, USA

STREAM MACHINE, 2017 Streamcolors Milan, Italy

LA POZZANGHERA, 2006 Studio Azzurro, Monza, Italy

FABRIZIO DE ANDRE'- LA MOSTRA, 2008 Studio Azzurro, Genoa, Italy

DENTRO L'ULTIMA CENA: IL XIII TESTIMONE, 2010 Studio Azzurro, Vigevano Castle, Italy

LA STANZA DELLA DUCHESSA, 2011 Studio Azzurro, Vigevano Castle, Italy

CRYSTALS, 2012-13, Daan Roosegaarde, Natlab (public artwork) Eindhoven, NL

8 TIES FOR HERMÈS, 2012 -13 Miguel Chevalier, Tokyo, Japan

⁷⁵ Related case studies:

Related case studies:

version of the story. It gives voice to the "void that the spectator is invited to fill but also to experience as something impossible to fully reveal, leaving the overall story wrapped in a cloak of mystery. A gap is created in its philological and scientific reconstruction, which can be effectively filled by the imagination" (Studio Azzurro, 2011).

Technology, in this case, should enable users to generate personal content and to layer it on the curated content, finding connections, links, and correspondences. Content is an essential link of a chain that helps reconstruct the full story.

_ SPACE | All case studies build on the assumption that, in an exhibition or installation space made of interactive aesthetics and broad creativity, technologies can make the museum experience a driver of meaningful social interactions between contents and people.

An interactive multimedia exhibition is a place that is not simply meant to be entered and walked through, but **experienced** above all. The design of the space is part of the language of the cultural experience: it is a narrative structure, a necessary condition to facilitate the knowledge, transmission, and translation of the museum's message.

From the difference between 'place as content' and 'place as container', we could define three different shades of the concept of space: a <u>performing space</u>, encouraging visitors to take an active role through the dynamics of game or theater; a

AXIAL, 2012 -13 PLAYMODE, Fête des Lumières, Lyons

AUGMENTED 3D-EXHIBITS, 2013 ART + COM Studios, Dusseldorf, Germany

CARNIVAL THEATRE, 2013 TAMSCHICK, Kitzingen, Germany

PLAYGROUND DECONSTRUCTED, 2013, Fake Love, New York, USA

TWO WORDS FOR TOMORROW, 2013 Moffitt. Moffitt, Sydney light festival, Australian

IN VIAGGIO CON L'ITALIA, 2014 Studio Azzurro, Milan, Italy

SCULPTURE LENS - STRIKE A POSE, 2015, Gallagher and Associates Cleveland Museum of Art, USA

THE ITALIAN NAVIGATOR, 2015 CamerAnebbia, Genoa, Italy

L'ALFABETO DELLA MEMORIA, 2016, Dot Dot, Arezzo, Italy

CLOUDS OVER SIDRA, 2017 United Nation, Artscape + Meet The Media Guru Milan, Italy

STREAM MACHINE, 2017 Streamcolors Milan, Italy

TRANSCENDING BOUNDARIES, 2017 teamLab, London, UK

<u>simulated space</u>, when real and virtual dimensions overlap; or an <u>evoking space</u>, going beyond the architectural structure to unfold an intangible structure or invisible narrative.

Space is a narrative structure, a necessary condition to facilitate the knowledge, and transmission of the museum's message.

_ PERSON | A constant in all the collected examples is that of addressing a multiple target audience, as wide as possible (with international visitors), and not requiring highly technological skills.

In the attempts to trigger interactive narratives,⁷⁷ observing visitor reactions and behaviors ⁷⁸ (almost as if involved in small experiments of **contemporary anthropology**), "we rediscovered the condition of being fond of our 'audience', of thinking of them as flesh and blood, and taking them into account not as customers, but as people, with their own individual faces and souls, with the right to create an experience or to refuse to do so, to express themselves in their own way, and sculpt their own narratives" (Confidential Report on an interactive experience, Rosa P. 1994). People have their own background and different knowledge of the exhibited matter and themes, but they are able to contribute to both their cultural experience and that of others.

7

Axial, 2012 -13 PLAYMODE, Fête des Lumières, Lyons SCULPTURE LENS - STRIKE A POSE, 2015, Gallagher and Associates Cleveland Museum of Art, USA

Participants are asked to be more than simple spectators: they must take on the responsibility of someone who is not there just to watch, but who is asked to participate.

⁷⁸ Related case studies:

_ **TECHNOLOGIES** | We have already learned that interactive media play a decisive role, generating new languages that multiply the work of art's narrative levels and creating new contexts of perception.

All the case studies show different mixed forms of interaction, from structured and formalized behaviors, to unconscious but formal actions, **to informal but conscious behaviors.** Therefore, technologies make it possible to communicate "complex concepts without the need for explicit formalization, reducing cognitive load by using intuitive body knowledge" (Cameron F. & Kenderdine S., 2010).

Most of the examined case studies (with invisible or mediated technologies especially) have been chosen not only with reference to the technological issues, but also in reference to the proposed concept. They are characterized by a strong emotional and psychological link between museum message and visitors. This link represents a chance for the visitor to become an active player who 'experiences' the cultural asset through various channels. We can then add the fundamental concept of "immersion", strictly linked to the concept of "experience". 80 In an immersive exhibition, the established mechanism is always multisensory: multiple senses are involved, designing a continuous mix of tangible 1 and intangible elements.

In communicating a cultural content, it is also crucially important to identify forms of enjoyment that make the content 'tangible' when it is virtual. This means designing installations that allow for concrete interaction, deriving them from the ways we communicate and learn in everyday life: with the senses.

Moreover, in these cases, technology should also support a shift towards a personalization of the experience, focused not only on the use of personal stories and participation, but complemented by the possibility of profiling the user's cultural background and adequately adapting content for better understanding and reception.

 $^{^{80}}$ 'Immersive' is here interpreted as focused on making visitors experience something.

⁸¹ With the awareness that tangible aspects, together with virtual communication, allow the experiential dimension to be introduced and enhanced.

In an immersive exhibition, the media system usually is invisible and expressed through a realistic language or facilitated through natural mechanics.⁸²

It is necessary to reflect on how this interaction can be created and which are the most appropriate technological tools to achieve the goal (avoiding the traditional 'point-and-click' interface and its consequent hand/eye separation). In this sense, explicit objects are often used as media to bring the visitor on the exhibition path through the model of environmental production.⁸³

The result is an augmented learning space able to completely involve users and to **expand the pleasant accumulation of knowledge**, during actual process of consumption and afterwards, in the visitor's memory; an active engagement of the visitor's senses in an altered mental state that is favorable to receiving information or stimulation from a number of senses. A complete immersion that can enable people to rediscover the tactile element and **haptic sensorial experience.**

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LA POZZANGHERA, 2006 Studio Azzurro, Monza, Italy

FABRIZIO DE ANDRE'- LA MOSTRA, 2008 Studio Azzurro, Genoa, Italy

DENTRO L'ULTIMA CENA: IL XIII TESTIMONE, 2010 Studio Azzurro, Vigevano Castle, Italy

LA STANZA DELLA DUCHESSA, 2011 Studio Azzurro, Vigevano Castle, Italy

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THE ITALIAN NAVIGATOR, 2015 Camer Anebbia, Genoa, Italy

TRANSCENDING BOUNDARIES, 2017 teamLab, London, UK

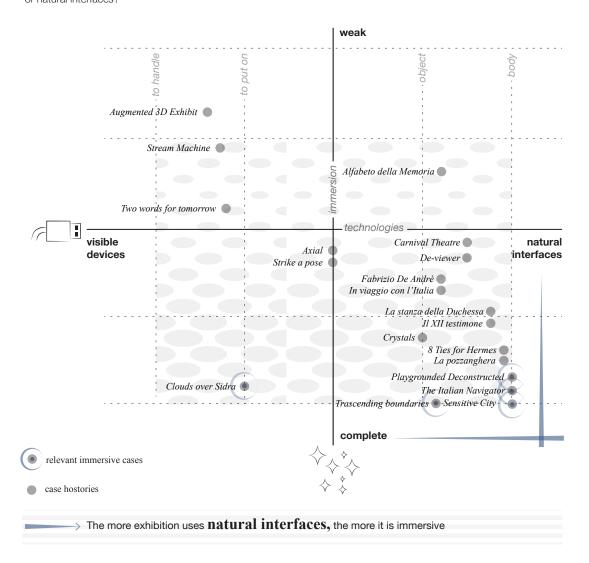
⁸² Related case studies:

⁸³ "In this case, the technology is functional to the production. Instead, in an "abstract" exhibition there are no recognizable and 'figurative' elements: it is the technology itself that becomes form and language" (MELA Project, 2012)

4.14 technologies / immersion

DEGREE OF IMMERSION

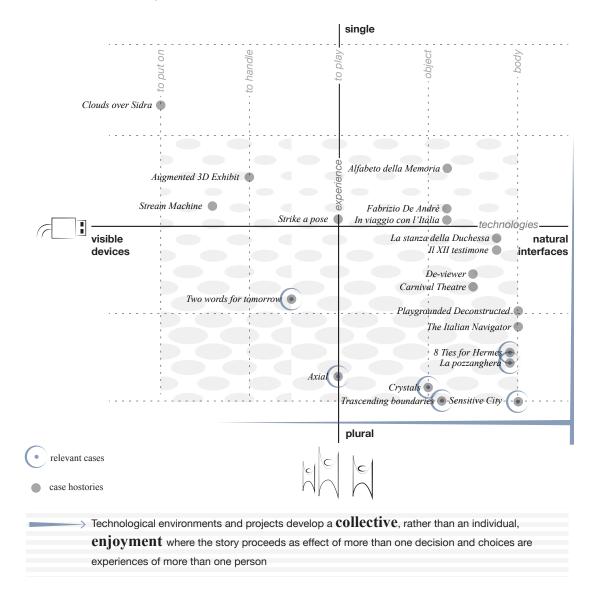
Visible device or natural interfaces?



4.15 technologies / experience

DEGREE OF SHARING

to an aesthetic of relationships



At the end of the paragraph, two simple visualizations (figure 4.14 - 4.15) illustrate the whole number of cases collected during our research, as well as their most predominant tendencies in terms of: technologies that were used (visible or natural interfaces), immersive character of the involved installations, and consumption modalities (single or plural).

The images graphically represent the variety of the descriptive parameters of the Case Study ID cards. At a glance, it is clear that there is a strong relationship between natural mechanism or interfaces and the installation's capacity of being immersive for the visitors and its evocative/ narrative power. The more the exhibition makes use of natural interfaces, the more it is in line with a plural consumption and able to show a relational and interactive approach, making these exhibitions learning ecosystems and narrative habitats. It is therefore more effective in making people feel completely involved in something new and familiar at the same time.

Most of the examined case studies are characterized by a strong emotional and psychological link between museum message and visitors. The concept of "immersion" appears strictly linked to the concept of "experience"

5.

pilot **PROJECT**

RovelloDue - access opportunities

5.

pilot **PROJECT**

RovelloDue - access opportunities

It is now time to exercise the developed **practice-based research methodology** and test the theoretical outcomes in order to verify the state of the progress up to this point.

RovelloDue – **Piccolo Spazio Politecnico** sees the involvement of two historical Milanese institutions — the **Piccolo Teatro di Milano** / Teatro d'Europa (a renowned city theater) and the **Politecnico di Milano** (the largest technical university in Italy) — in the creation of a common project: a temporary multimedia space aimed at telling the stories of the artistic and scientific cultural protagonists of the city of Milan.

The space is for *collective use* through *natural interfaces*, and aims at experimentation and new forms of accessibility. *RovelloDue* tries to discover how technologies facilitate content accessibility and foster the cultural experience, as well as how visitors behave inside the installation. We may consider it a pilot experience, in terms of the chosen design, technological setting, methodology, and of the evaluation strategies that were employed.

An alternation of seven different installations and topics takes place in the second room of this pilot project; all experiences share certain common elements, mostly traceable back to a common technological framework and conceptual approach. High levels of personalization are a goal that is pursued by the project, both in terms of target audience and content requirements.

The outcomes of the *RovelloDue* project have not been easy to clearly identify, because visitors themselves are not usually aware of their experience and the exhibition impact is highly personal.

Therefore, collecting evidence through a visitor's survey has been a crucial activity and has involved several actions. In particular, a quantitative and qualitative questionnaire, as well as staff observation, has revealed positive feedbacks and opened up a number of meaningful considerations.

5.1 · RESEARCH BY DESIGN AND EXPERIMENTAL ACTIONS ·

It is now time to exercise a practice-based research methodology (called 'research by design'), with the aim to explore and develop new multimedia exhibition practices and enhance and test the theoretical outcomes, in order to verify the progress that has been developed up to this point.

The activities that are carried out in *RovelloDue* — based on the combination of conventional research procedures with experimental practices and tools — focus on multiple purposes. Conceived as testing grounds for the evaluation of the findings' effectiveness, as well as additional research tools, the activities draw on the possibility to unfold new perspectives and directions for the production and sharing of acquired experience on the subject, in a bidirectional exchange between theory and practice. They investigate the complexity and potentials of innovative curatorial approaches, exhibition design strategies, use of technologies for contemporary installation, interaction with the audience, audience reaction, and visitor response.

RovelloDue stems from an interdisciplinary research partnership between Piccolo Teatro di Milano - Teatro d'Europa (a renowned city theater) and the Politecnico di Milano (one of the largest Italian technical universities). It is a temporary multimedia space and stands out as the testing ground where theoretical outcomes are undertaken, applied, and prototyped through a practice-based methodology, grounded on the mix and connection of different aims, institutional approaches, disciplines, methods, and means.

RovelloDue aims to discover how (and how much) technologies facilitate content accessibility, and how visitors behave inside the installation. This by keeping two points clearly in mind: assessing a space for *collective use*, and assessing the use of *natural interfaces*. ⁸⁴

The two-year long project is structured in seven different multimedia installations,

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⁸⁴ Both of these elements concurred in the formulation of a narrative hypothesis that had to be more than a simple exhibition of the device. Not a machine that narrates itself, but a machine that narrates and ensures a high level of immersion, as seen in the previous chapter.

each focusing <u>on different and specific topics</u>, related to theater narratives and themes proposed by the university. Each installation presents the same technological setting, but uses different interfaces and designs of exhibition settings and spaces.

The design proposals demonstrate the possibility to transform codified types of spaces into alluring and active places, where significant cultural and architectural features can support museums and cultural institutions in enhancing exhibition education, consumption, and participation practices.

Furthermore, *RovelloDue*, by examining how multimedia technology can foster the visitor's cultural experience, is able to face varied purposes — core objectives and topics of valuable multimedia consumption:

- Envisioning new spaces for theater and cultural institutions.

The action aims to reflect on the potentials of design to effectively support museums, universities, and theatres in enhancing their functions and roles, by verifying how the setting of innovative types of spaces can facilitate the access and the transmission of the knowledge contained in documentary collections and archives to the public at large. *RovelloDue*, in this sense, is an ideal testing-ground. The space on the ground floor overlooks the main street, Via Dante, and opens on Chiostro Nina Vinchi, the fascinating theater courtyard. It is conceived as a 'friction zone', sharing features with museum exhibition areas, theater foyers, and public spaces. It calls for innovative solutions to reshape the formal and functional program and the visibility of the area, and to envision a new concept of multi-purpose, flexible, and open spaces, fostering interactions with the public inside and outside the historical venue of Via Rovello and the theater.

- Exploring new approaches to visitor studies.

Combined with visitors' expectations, the actual movement through this small museum space is a laboratory of human experience that is usefully limited, allowing for a deeper examination of relationships between subjective perspective and objects within a designed environment. The use of *ad hoc* questionnaires investigates the capacity to analyze behaviors, physical movements, meanings, and memories in

multimedia exhibition contexts. It highlights possible gaps between the display maps (as intended by the curators) and the visitor's own re-mappings, and thus examines how multimedia technology can foster the design of exhibition settings and spaces.

- Testing natural interfaces for knowledge representation.

The pilot project is set out to test and explore the possibilities of virtual technologies in knowledge production and communication. By exploiting the possibility of natural interfaces to enhance the perception of the real and virtual world, this experimentation is conceived in order to offer the user a more immersive and meaningful ride in the space of invisible collections and institutional archives. The different content and resource maps can be visualized and navigated in a simple, flexible, but at the same time complex structure, with the aim to create the context for democratic and 'ubiquitous' learning.

- Pointing toward new approaches and tools for the production and sharing of knowledge.

The present age of physical, social, and communicative mobility questions the effectiveness of the conventional practices for the production and sharing of knowledge. In order to upgrade their role, cultural institutions should experiment with new approaches, strategies, and tools. The overcoming of existing research practices and frames of reference should be based on: further exploitation of interdisciplinary models and experimental actions; the combined mix of theoretical and practice-based methodologies; the implementation of innovative prototyping; and more creative experimentation with ICT.

- Fostering a more critical and creative exploitation of ICT in museums and cultural institutions.

The exploitation of ICT in museum practices should be further explored in order to unfold, test, and implement a broader array of opportunities. *RovelloDue* could improve the multimedia installation experience by offering multi-layered access to the conveyed contents, providing multiple AD outreach strategies, entry points, and different interfaces, opening multi-vocal and cross-cultural perspectives, thus transforming the contemplative visit into an interactive and contributory experience.

RovelloDue could enhance acquisition, collection, and research practices, as well as allow the pragmatic articulation of inter-disciplinary projects and results. It could foster cultural networking among different cultural institutions and operators, allowing them to break down some cultural barriers and increase the permeability of cultural spaces. Eventually, RovelloDue could expand the access to cultural engagement, and foster experimentation with creative ways to develop cooperation — co-creating culture and improving the participation of new diversified audiences, theater aficionados, students (but also citizens and tourists) — in the production and sharing of knowledge. The two involved institutions could share their audiences in a mutual exchange, as well as their knowledge and care of the audience, expanding each other's cultural offer, attractiveness, and long-term visitor seduction.

5.2 · ROVELLODUE - SPACE AND IDEA ·

RovelloDue – **Piccolo Spazio Politecnico** is therefore the result of an encounter between Piccolo Teatro di Milano⁸⁵ / Teatro d'Europa and the Politecnico di Milano, two organizations bound by a profound common vision and a long history of collaboration.

Both of them, characterized by an international and interdisciplinary dimension, have become two crucial cultural poles in northern Italy, offering theater and dance performances, movie festivals, education, seminars, contents, knowledge productions, and cultural debates. Both present themselves as essential public services for the wellbeing of their citizens.

RovelloDue - Piccolo Spazio Politecnico was conceived as a new place for encounters, experience, information, and knowledge: two existing Sale Viscontee are used as sets for multimedia installations, taking on a new life.

A new space divided into two distinct but communicating environments, in the historical headquarters of the Piccolo Teatro (renamed Piccolo Teatro Grassi). Neighboring the Renaissance cloister, and directly facing one of the most popular streets of the city, the space offers itself as an 'osmotic membrane' of access to the theater, bookstore, and literary café. It becomes a physical and conceptual hinge between exterior and interior, between the street and the theatrical world, between tourists and citizens.

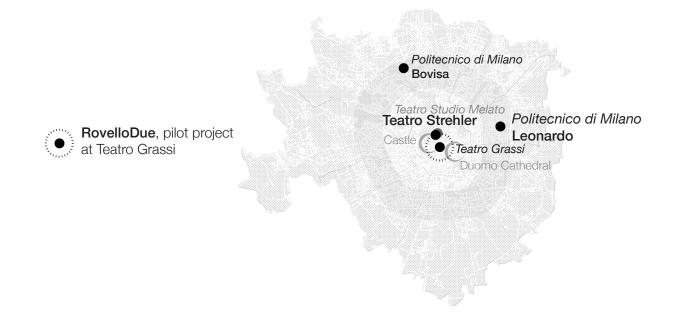
was the first *public* Italian theater built in Italy, and the most popular on the national and international scene. The vision of the founders was to create an institution, supported by the central government and by local authorities (the Municipality and the Province of Milan, the Region of Lombardy), as a public service that was essential for the wellbeing of its citizens. The slogan that accompanied the birth of the Piccolo Teatro was "An Arts Theatre for Everyone", and this motto still sums up the theater's mission today: to stage quality shows for the broadest possible audience. Since 1991, the Piccolo Teatro di Milano has also been called Teatro d'Europa (Theater of Europe), as reconfirmed by Art. 48-bis of the Ministerial Decree of 1 July 2014.

The Piccolo Teatro was established on May 14th,1947, by Giorgio Strehler, Paolo Grassi, and Nina Vinchi. It



 $\label{lem:http://piccoloteatro.tv/it/00007/5200/pg342-18/nasce-rovellodue-piccolo-spazio-politecnico.html$

RovelloDue, 2016/2017 Politecnico di Milano and Piccolo Teatro di Milano Milan, Italy



The **first room** — opening onto both the main street, Via Dante, and the "Nina Vinchi" Renaissance cloister, located beside the theater — welcomes the visitor with a permanent and more traditional narration form (words, images, monitors and video).

A first presentation of information on the building is followed by a presentation of the prominent moments in the histories of the Theater and the University, the two souls of the project. The two histories, in fact, run in parallel, from their foundation to the people who created the two institutions, right up to historical great productions and patents. In 2002, with the staging of *Infinities* at the Bovisa venue of the University (written by the English mathematician John D. Barrow and directed by Luca Ronconi), the Piccolo Teatro and the Politecnico came together to begin a shared journey of research.

Afterwards, passing through a stage curtain, visitors are plunged into a captivating environment: the **second room.** This room presents a multimedia installation created to hold different temporary installations with a strong visual and, above all, emotional impact.

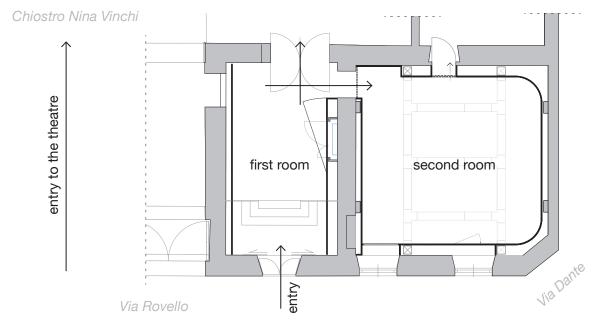
A social space or a "sensitive environment", as Studio Azzurro has defined it; a tiny space, adequately obscured and supplied by hidden technological equipment hanging from the ceiling or hiding in a steering cabin. 86 This equipment is 'flexible', designed to allow different configurations with the same main technologies and natural interfaces, in order to create various different occasions to interact with visitors and register their reactions and/or feedbacks.

A context where the dialogue with the machine is associated with an on-going exchange, among the people involved, their reactions, and sensibilities. The second room, thanks to its interactivity, ensures the opportunity to participate in video content choices, human contact, and social interaction.

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⁸⁶ Exhibition technical data: 4 projectors, 2 computers, 1 Kinect (phase 1 and 2), RFID system (phase 3-4-5), 2 audio speakers, 2 spot lights.





A sort of 'magic box' where various projections on walls and floors show images and scenes, bringing the surfaces to life with new narrations and contents. Vibrations, overlappings, oscillations, and contrasts are the backbone of *RovelloDue*'s narrative form. This gives the visitor a fundamental role in identifying the wide range of possible content variations, requiring a high level of ever more physical interaction.

A 'magic box' that lives thanks to a predefined set of technologies, ⁸⁷ simple and versatile, able to show and help visitors 'touch' never-before-seen contents. Depending on the chosen theme, the multimedia installation changes face, ⁸⁸ welcoming new interactions, coming in contact with its audience in different ways, and unveiling special videos that were developed starting from original content coming from the digital archives of the Piccolo Teatro or of the Politecnico.

The videos tell about past successful performances, inventions or projects that have made history. They are short (a handful of minutes each) but greatly immersive, wrapping the entire room and the visitor in full-body projections. The walls vibrate with multimedia contents and react to the action of the visitor or of the chosen object. It is an installation, more than a multimedia exhibition, both in terms of modality and size. A few square meters that, like any artistic installation, are able to always give center focus to the user.

A video installation that approaches the experiential dimension and typology that is

phases 1-2, the visitor is asked to step (touching with his foot) certain key words that are displayed on the floor, in order to start the video projection of the chosen content on the wall

phases 3-4-5, the visitor is asked to choose a notebook, book or folder from the shelves, open it on a lectern, and consequently generate a series of video messages related to the chosen object

phase 6, the visitor is invited to sit on one of the director's chairs arranged in the middle of the room, associated with keywords, in order to choose a multimedia topic of interest.

⁸⁷ 4 projectors, 2 computers, 1 kinect (phase 1 and 2), RFID system (phase 3-4-5), 2 audio speakers, 2 spot lights.

⁸⁸ The same multimedia installation but with 7 content and interface changes during the whole length of the two-year experiment.

February 2016 - July 2017 (analyzed phases)

November 2017 - April 2018 (phases following the analyzed period)

most used in museums, but that can also tell of other themes (like the world of theater). It is placed at the entrance of a theater but it manifests a logic that is clearly expositive and illustrative, making it easy to place in a broader museum itinerary.

It is a new experiment that is difficult to classify in a static and pre-codified definition but that is able to create new cultural connections. Its heterogeneous character (in all aspects of demand, offer, and modality) proposes to overcome conventional hierarchies in a strategic alliance between different cultural institutions

It does not propose to replace information with wonder, but of informing though wonder. It tries to propose an immersive experience that does not end in the permanence of its setting, but that is progressively enriched through the various manifestations of its culture.

5.2.1 · ROVELLODUE - REASONS ·

RovelloDue – Piccolo Spazio Politecnico sees the involvement of two historical Milanese institutions in the creation of a common project. These institutions, together with the artistic and scientific protagonists they chose to tell the stories of (over time and with fruitful combinations), built the specific character of the city of Milan, in terms of both its national identity and its undeniable openness to the world.

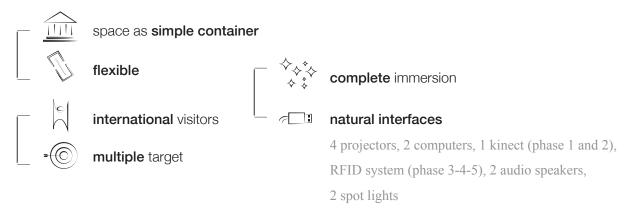
The two institutions open their respective archives, displaying the archival material through spectacular interactive narrations. A source of intangible memory and knowledge that accompanies us in our daily lives.

The space aims to experiment new forms of accessibility, intending *accessibility* as a new openness by part of the theatrical institution, offering residents a completely new entrance to "Chiostro Nina Vinchi" and providing them with a brief interactive and immersive experience. The theater thus increases its permeability and accessibility and, together with the University, offers an opportunity to freely and playfully enter in communication with relevant and often little-known content.

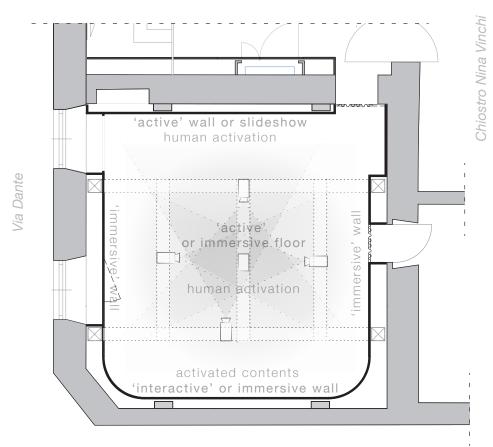
In addition to this, the choice of technological solutions marks a significant focus on *experimentation* of the same consumption, on the multimedia interaction mechanisms and their outcomes in the visitor's experience. We therefore have direct access to the various possible results of digital innovation insertion and application inside the artistic and cultural chain. How much is the cultural experience able to get rid of contemplative passivity and trigger active participation and emotional reading processes, awakening the most creative dimension of the imagination? And which modalities are most effective?



Experience-specific qualities:



Technological equipement



5.2.2 · ROVELLODUE - INSTALLATIONS AND EXPERIENCES ·

The second room of the pilot project sees the alternation of five different topics and experiences, all sharing common elements that are mostly traceable back to a common technological framework and conceptual approach. A main goal of the project is that of developing a high level of 'personalization', both in terms of target audience and content requirements.

From February 2016 to July 2017, **five key phases** ⁸⁹ **have taken place** in *RovelloDue – Piccolo Spazio Politecnico* (annex 02). The first two installations were linked with the theatrical season, telling about the work and poetics of two major theatrical directors (Luca Ronconi and Bertolt Brecht) in synergy with the proposed shows. The rest of the installations offered an excursus on the 'polytechnic' city and its inventions, as well as an opportunity for reflection and collaboration with *Domus* magazine during the 2017 Milan Design Week. The last installation marked the occasion of the 70th anniversary of the Piccolo Teatro.

This interactive video-environment has given us the opportunity of observing a wide range of human reactions and behaviors. It has changed its form, language, and configurations in many ways, but the changes always started from certain common and recurring features:

- RovelloDue should always be a sensitive social space.

It means to be a privileged and designed context, where interactive actions are not confined to the individual dimension. Even in the case of just one person dialoguing with objects and contents, others would be able to observe and therefore participate in the same immersive experience.

Indeed, the space is a context where the dialogue with the machine is considered as " an ongoing exchange, even a complications one, between the other people involved (a number of people participate in the interaction with the device, while at the same

The two-year experiment project started in February 2016 and will most likely to be completed in April 2018. However, questionnaire and data analysis is dated July 2017, showing the results of 5 phases out of 7.

time maintaining contact among themselves, an exchange of their reactions and sensibilities)" (Confidential Report on an interactive experience, Rosa P. 1994).

- RovelloDue should use natural interfaces, freeing the image from its 'armor'.

It is best if sensitive environments are set without even so much as a visible shadow of an electric wire. They try to form relationships and content transmissions through user-friendly systems and simple interfaces. This allows getting a clearer view not of technology but of its final effects, in a stronger symbolic and immersive system where instinctive human actions and reactions foster. Video content should move about, out of the traditional monitor frames and illuminated perimeters of cinemascopes, increasing the subtle and often invisible intertwining of real and virtual cultural experience.

- RovelloDue should present itself as a playful adventure with clear rules.

Interactivity refers not just to a mechanism but also to a relationship between its active parts: a triangulation of System, Person, and Narrative.

"So it is not merely the complexity of the mechanism or its sophistication that are determinant, although we must recognize the catalyzing power of certain instruments and their capacity for generating interrelationships, but also their ability to produce a spark of intelligence and sensitivity". (Confidential Report on an interactive experience, Rosa P. 1994)

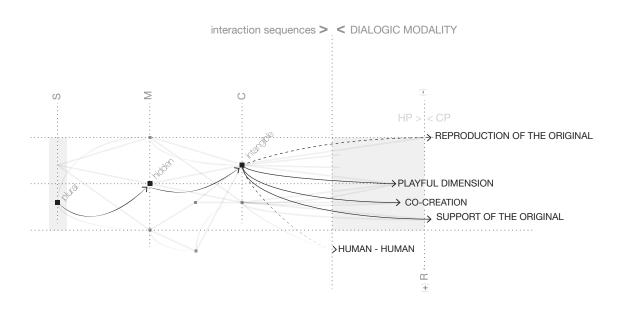
Play is an intrinsic component of all forms of interactivity, even the most archaic. It may even seem superficial. However, it is a threshold of access and its rules gradually come to offer an extraordinary freedom of interpretation. "It is always better to act knowing the rules, rather than acting as if they do not exist only to become unconsciously enslaved by them". (Confidential Report on an interactive experience, Rosa P. 1994)



phase 1 _ **2016** February, 20 - April, 2

SPACE, TIME. WORDS.

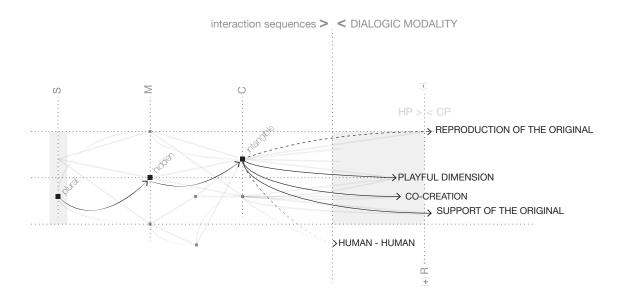
The work of Luca Ronconi at the Piccolo Teatro





phase 2 _ *2016* April, 15 - June, 12

1956-2016 BRECHT.60 years of Theatre at the Piccolo

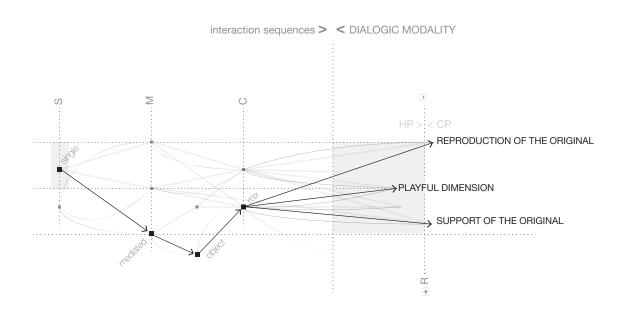


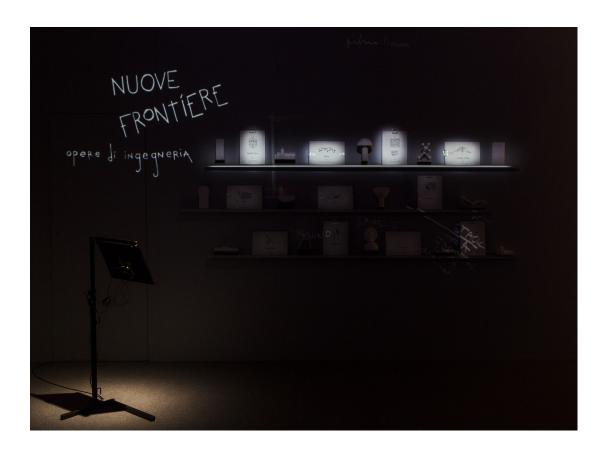


phase 3 _ 2016 /17 July, 12 - March, 1

A KALEIDOSCOPIC JOURNEY

Polytechnic discoveries and research

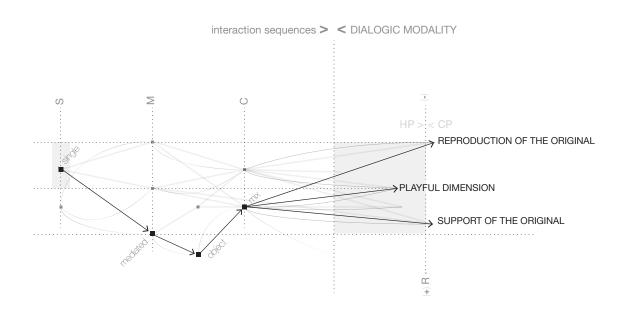




phase 4 _ **20117** *March, 6 - April, 21*

THE SPECTACLE OF ARTEFACTS

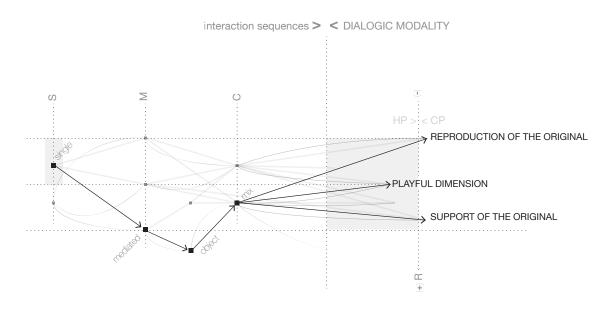
Polytechnic discoveries and research





phase 5 _ **2017** May, 6 - November, 15

IN SEARCH OF BEAUTY



5.2.3 · ROVELLODUE - HOW TO EVALUATE ·

The goals identified and shared by both the Piccolo Teatro and the Polytechnic University are related to the experimentation, evaluation, and dissemination of the pilot project, potentially targeted to all kinds of audiences (by habit, choice, and surprise)⁹⁰. Working with these target groups is a challenge for both institutions, exposing *RovelloDue* to new dimensions, activities, professional expertise, and new socio-cultural goals, roles, and responsibilities.

RovelloDue is a multidimensional opportunity for institutional growth and reflection on the new roles and potentials of cultural multimedia installations. It presents an interdisciplinary and multi-professional project team (composed of Theater and University staff and external experts) that has worked in close synergy for two years in planning and preparing project materials and contents, defining procedures for documentation, and experimenting with new approaches, activities, and professional skills. The **interdisciplinary nature** of the working group has been one of its major factors of success, as it has allowed RovelloDue to expand the scope of its approaches, languages, and perspectives. The activities of the working group have always been founded on the principles of research-action and internal-external evaluation and documentation.

The cycle of multimedia exhibitions carried out in *RovelloDue*'s framework, therefore, may be considered as pilot experiences in terms of the chosen design and technology setting, the methodology, and in terms of the evaluation strategies that were employed.

The overall narrative and multimedia design effort in this exhibition space have attempted to create a space for the dissemination of culture, ⁹¹ investigating how the experience is understood and found attractive by all visitors, and which multimedia interfaces are more effective and why.

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 $^{^{90}}$ Chapter 2 - AUDIENCE spectrum, horizontal issues of access

⁹¹ The activities of *RovelloDue* show a strong coherence with the missions, roles, and social value of the Theater and of the University.

The resulting impacts of *RovelloDue* may take different forms, often **unpredictable**. Some outcomes are not easy to identify, let alone measure, because visitors <u>and participants themselves may not be aware of them</u>. **Visitor experience** is highly individual, also in terms of learning approaches; it depends on the personal cultural inclinations, pre-existing knowledge, backgrounds, educational attainment levels, and motivations. It is <u>not easy to determine which expected or unexpected outcomes</u> to evaluate, or which parameters to follow in doing so.

For the visitor, it is extremely important to actively create something new and meaningful, which does not necessarily correspond with the curators' expectations. **The exhibition impact is highly personal** and every individual perceives it as a unique experience. Several aspects of a visitor's own personality are involved, such as creativity, interest, inspiration, values, motivations, as well as emotional, aesthetic, and linguistic intelligence.

Even the act of learning cannot be the only criterion for evaluation: information based only on this parameter may be unreliable or insufficient to understand the impact of the multimedia exhibition visit. For instance, learning may not be among a visitor's goals, or may become apparent at a later stage. Moreover, as constructivist psychology suggests, the value of cultural experiences is associated not only with outcomes or products, but also with **processes** and with the ability to experiment a phenomenon in a different way. Therefore, participant behavior was carefully observed and evaluated.

Consequently, the collection of **evidence** manifested itself as a crucial activity:

- Quantitative evidence (producing measurable data, in numbers, percentages, and statistics), which tends to deal with facts, such as the number of participant people;
- Qualitative evidence (showing people's thoughts, opinions, ideas, and feelings), more difficult to interpret, collected from different perspectives and vital for the evaluation of cultural activities.

In line with these criteria, the study is inevitably multifaceted. This required using and analyzing more than 100 questionnaires with both yes-and-no and essay questions, interviews, focus groups, 5 staff observations and questionnaires, and conversations between curators and cultural operators of both the Piccolo Teatro di Milano and the Politecnico di Milano.

Visitors were asked to fill in a questionnaire or be interviewed on: what they remembered or liked best, and why; what they found most interesting or enjoyable; on any changes in ways of thinking, attitudes, and interests; and on any particular emotions felt in response to the installation experience. This sort of inquiry allowed evaluators to identify strengths and weaknesses while also helping people become aware of their mental and emotional processes, their changes in personality traits, and of the accumulation in their individual cultural chain of experience.

These combined and various methods create a rich body of data, "allowing for an analysis that is attentive to the interrelations between production, representation, consumption, and identity" (Da Milano C. & Falchetti E., 2014). This allowed, for instance, an understanding of whether producers intended to communicate the perceptible 'messages' on display (through technologies and natural interfaces), and if and how visitors received and identified such messages. Thanks to field-research analysis, this procedure adds a strong empirical dimension to the abstract theory.

5.3 · ROVELLODUE - ANALYSIS OF VISITOR BEHAVIOR · (methodology)

The *RovelloDue* visitor survey involved several actions. In particular, a **quantitative** and **qualitative** questionnaire and a staff observation.

The visitor questionnaire was divided into modules⁹² with the aim of developing a model that is adaptable to different installations, multimedia interfaces, and characteristics. The main areas of interest of the questionnaire were:

QUALITATIVE

- The theatrical and cultural habits of the visitor before the visit. This group of questions considers how the informal learning process hosted in the museum depends on the subjective and individual situation of the visitor (biographical experience, cultural capital, interests, etc.);
- Experience and contents during and after the visit. Reflecting on the environment in which processes take place (sensorial stimulation, interpretation of the museum, space morphology, and object arrangement), this group of questions attempts to identify the main interaction points between exhibition and visitors, and the natural interfaces they should come across during the visit.

QUANTITATIVE

- **Personal** (age) **and professional profile**. This section aims to collect basic data to describe a general <u>visitor profile</u> and the weak or strong relationships with past experiences in cultural and cognitive spheres he may already possess. This is most interesting when <u>compared with the visitor perception</u> of *RovelloDue* staff and ushers.

⁹² The modules analyze: tangible aspects, accessibility, information, design setting, presence of significative objects, technological support, support services, and so on.



RovelloDue, Visitors' FEEDBACKS

Some examples drawn from conversations with visitors

Informed increase and review of knowledge: I learned about Ronconi..; I didn't know that... now I know...; before the experience I knew about Brecht, his biography, now I know about his poetry and key concepts...; I didn't know how Lehaman Trilogy's scenography is so powerful; I thought I knew everything about infinities... now I realise I didn't know anything; I learned a lot about the power of design artifacts; I found out that lambretta is made in Politecnico; I learned that Pirelli's economical adventure and success started from a study trip ...; increase **in interest:** everything was interesting; I was excited by Ronconi's shows; I was particularly interested in inspiring pictures; I would like to learn more about theatre; to learn about more the role of design; changes in attitudes: once I thought teather is boring, now I am very intrigued by it, it is a beautiful way of spending time; the Politecnico's world is more fascinating than I thought; increase in skills: I was able to activate new videos and pictures; I was able to guess the shows and their titles; I learned how Magistretti brothers are used to design; change in attitudes and values I realised that we should have more attention to knowledge of some historical periods; I think I enjoy university research more than I used to; enjoyment and participation: it was fun; it was so beautiful... it was so enjoyable; I enjoy very much what we are doing together...; time flies...; I am glad I learned more about ...; we had so many wonderful experiences...; I enjoy very much Laura Curino; I felt at ease and happy...; I put my heart and imagination into it. Many of these changes were complemented by an increase in self-esteem **and sense of identity:** I thought I was not able to... whereas...; now I can guide my friends; I want to take my nephews to the Installation and explain them everything... I am so proud of what I have done... I would like to show storytelling to all my relatives...

In order to design the most appropriate tool to measure visitor satisfaction, and in order to better understand their needs, the questionnaire format resulted from long debates on its length and readability, as well as on the comprehensibility of the questions, ⁹³ avoiding redundant questions or incomprehensible ones. The definitive structure is composed of 5 sections, 14 yes-and-no questions, and 5 essay questions (annex 03).

The 100 questionnaires, collected during the field-research phase, were then integrated 94 with precious **staff observations** to analyze non-verbal behavior or unexpected phenomena manifested during the experience but without any interaction between the observer and the observed.

"The observation study thus makes it possible to empirically assess if a museum or an exhibition is able to ensure the necessary conditions - even if they are not yet sufficient - throughout the visit, so that learning processes and the production of meaning can take place" (Bollo A. & Dal Pozzolo L., 2005).

From a methodological point of view, this system may play a decisive analytical role since it registers facts and actions that are preconditions for learning and non-learning situations. This is a useful method in verifying the degree of correspondence between "the exhibition the curators have in mind, and the actual interpretation of the occasional visitor". 95

⁹³ All question were formulated in order to ensure neutral wording and to avoid bias, keeping them short and concise. The questionnaire required simple responses, asking one thing at a time, directly addressing the overall objectives of the study and using essay questions only when it is was not possible to use simple yes-and-no ones. The questionnaire opened with simple and interesting questions, followed by the most relevant ones, keeping it as short as possible (10 minutes or less).

⁹⁴ A combination of specific analyses and various techniques became a wide-ranging and innovative tool to gain greater understanding of the cognitive processes taking place within the multimedia cultural installation.

In other words, how the environment - such as architectural space, design, and artistic arrangement, layout, density of objects on display, and instructions - affects the way of participating and interacting with the museum – need to reserve the visit, display and object choice, ability to hold visitor's attention, visit route organization, etc.

Staff observations were transcribed in the form of yes-and-no and essay answers, in addition to conceptual and graphic representations. Ushers were asked to graphically reconstruct, through simple sketches, typical or frequent visitor flows and paths inside *RovelloDue*, revealing recurrences, repetitions or exceptions in their way of visiting and using the space. This helped to give an immediate idea of the overall use of the installation space by the visitors.

Staff was invited to pay specific attention to:

- **Attraction power**. The average time spent by visitors within *RovelloDue*. This value was used to calculate if visitors moved slowly or quickly through the installation;
- Holding power. The 'necessary' time spent in front of information / communication elements or in the immersive space before activating the interaction or selecting new multimedia contents. In other words, the necessary time required to enter in communication with a particular object or with natural interfaces:
- Visitor's confidence with technological devices. How natural and familiar did visitor's find the interface? Was it more immediate and powerful when the technologies were hidden or when they were mediated by an object? And, if so, which kind of object?

4.4 · FROM EXPERIENCE TO REFLECTION ·

(main findings)

The evaluation carried out on questionnaires and observations had positive feedbacks (figure 5.1):⁹⁶ an increase in knowledge, interest, curiosity, motivation, enjoyment, participation, personal engagement, skill development, and changes in ideas, attitudes, and values (annex 02, last page).

At the same time, a series of points emerging from the same evaluation opened up a number of meaningful considerations of various issues:

_ Visitor flow and understanding

The visitor's time and attention span are always (and in all cases) scarce resources, and they are one of the parameters by which exhibition productions need to be assessed. *RovelloDue* renderings (usher sketches of frequent visitor flows and behaviors) show where visitors mostly stop and what they tend to skip, without counting the time spent in the multimedia immersive room. What is interesting to note is that the <u>visitor movements appear consequential to the main narration</u>, and therefore there is a direct correlation between the visitor's position and the location of central elements or natural interfaces. This brings to an <u>easy understanding of the interactive mechanism</u> and its success as a way of managing the visitor's resources – his or her time and attention.

_ Location benefits

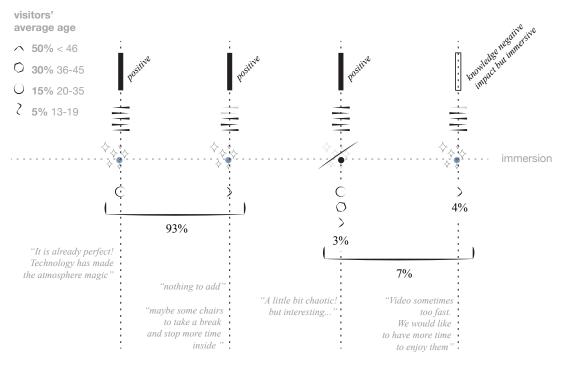
The studies have shown that in each installation there are some key points that act as hubs during the visit and that have a power of attraction that is quite independent from the content and the objects that are on display.

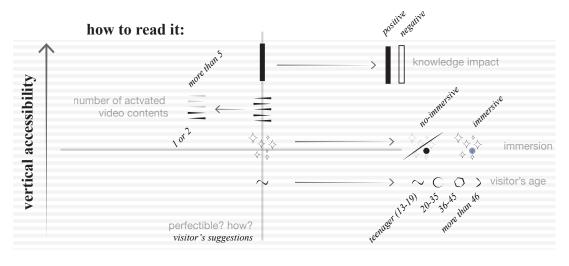
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⁹⁶ 93% of visitors were satisfied: the experience was immersive and they acquired knowledge. 7% of visitors did not feel to have participated in an immersive experience or to have improved their knowledge; however, they all claimed to have had a pleasant experience anyway.

5.1 visitors' questionnaires

EXPERIENCE and CONTENTS





The room configuration invites visitors to head toward certain corners or walls instead of others. The ability of instructions, crystallized in the arrangement of space, to generate expectations in terms of information and meaning is clearly revealed by the following example. The inclusion of seats facing one particular part of the exhibition encourages even those who do not sit down (or directly interact) to at least stop and look in the direction towards which the seats face. This phenomenon can be translated as follows: a curator (in good faith) would never provide seating in front of a projection or wall that is not of primary importance. In this case, the organization of space in directing attention plays a primary role, bringing about a different perception of the area, which is an important resource to be implemented in order to improve communication and content accessibility. When the organization of space and working mechanism of natural interfaces is clear and intuitive (figure 5.1), visitors feel comfortable and their curiosity toward the experience opens up.

_ 'Illusion' of being a player, the importance of the environment (figure 5.3)

For visitor behavior, it is important to stress "how less cultural capital and specific knowledge in the visitor corresponds to a greater ability of the environment and exhibition area to influence their behavior and way of using it" (Confidential Report on an interactive experience, Rosa P. 1994). The use of informal and diverse languages could enhance the opportunities to communicate and create new dialogues with people coming from different educational and cultural backgrounds.⁹⁷

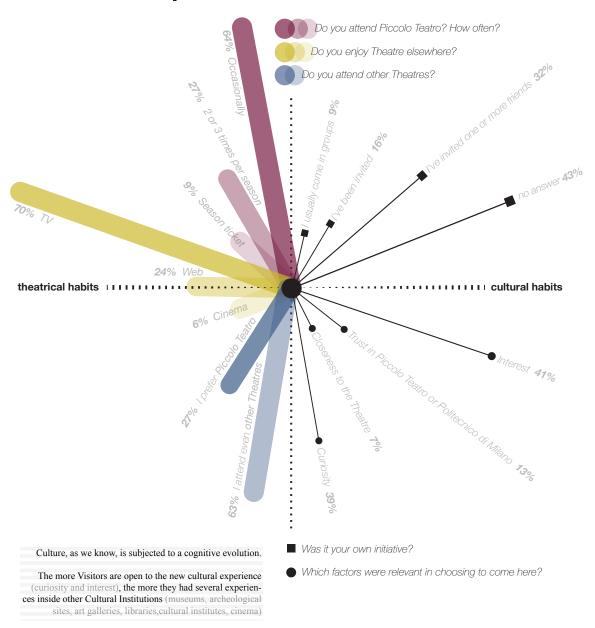
The experiences and specific traits of project participants represent the fundamental starting point from which to accomplish the established goals. However, <u>as the questionnaires have demonstrated, different visitor profiles with different cultural habits and backgrounds present the 'same' positive feedback after the visit.</u>

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⁹⁷ Figure 5.2 shows detailed data on visitor habits and backgrounds.

5.2 visitors' questionnaires

theatrical | cultural HABITS



In fact, interactive multimedia installations can be seen as a hyper-textual structure where narrative and documentary fragments evoke the story in a non-linear flow.

"Fragments are mobile units in an open structure to be recombined even according to your own background. The exhibition space is thus experienced in a narrative way: you move within a film sequence that progresses with the steps of the visitor" (Cirifino F., Giardina P. E. & Rosa P., 2011).

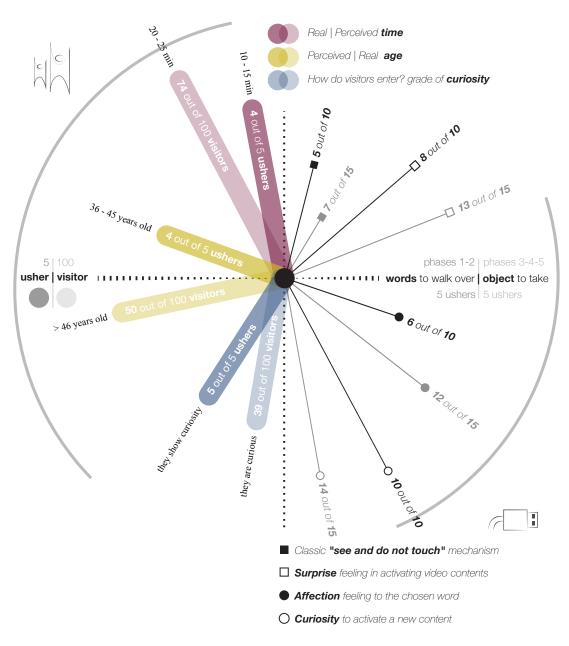
The juxtaposition of different video, oral, and multimedia contents creates an accumulation of fragments that can be seen as moveable units in an open structure, with the possibility of being recombined or discovered in a completely personal order. This way, it is possible to create different versions or interpretations of historical facts depending upon the visitor's personal point of view or cultural background. The very definition of multimedia itself may be interpreted in the same way: a parallel flow of different inputs, old and new, crossing, overlapping, clashing, and moving away from one another.

This interactive mechanism, in all installations, gives the visitor the idea (sometimes the illusion) of 'choosing' the theme or topic of the exhibition, selecting certain contents instead of others. The person chooses what message he wants to access and reach and, by choosing it, he increases his attention and availability in absorbing and metabolizing the same content.

Moreover, "when in the presence of works of art that require a certain cognitive effort to be understood, visitors prefer to find their own points of reference in the physical characteristics of the arrangement in order to find their way around" (Bollo A. & Dal Pozzolo L., 2005). Visitors prefer natural interfaces (figure 5.3), mediated by objects (instead of hidden by a projection of words on the floor, for instance), only when they have a powerful link with the object itself.

5.3 visitors' and staff questionnaires

interesting comparisons



The connection to the medium/object⁹⁸ (for instance, a hand written book) is able to create points of reference and contact with their own cognitive circuit. This connection, this 'affection', brings a mix of attraction and familiarity⁹⁹, the same features that are usually required for natural interfaces.

Perceived time/real time.

As we have already mentioned, visitor time is a scarce resource of information. The overall time devoted to the visit is very often underestimated or not sufficient for an ideal and complete vision. The mix of different survey methods during the study (visitor questionnaires and staff observation) made an interesting comparison between the actual duration of the visit and the visitors' subjective perception.

74% of the interviewed people (figure 5.3) did not correctly assess the duration of their visit, stating a visit time that in some cases was considerably different from the actual one. Whether the visits were very short or very long, the percentage of discrepancy and overestimation of the perceived time remains the same. People tended to think they had spent far longer in the museum than they actually had.

Why? The phenomenon might be explained bearing in mind that the "experience of the visit in most cases is a tiring process in terms of the consumption of physical and cognitive energy, which means that the time devoted to the museum is, in a certain sense, a dense and extraordinary time. It is 'dense' in that it is characterized by sensorial hyper stimulation and by the activation of non-habitual cognitive processes; and 'extraordinary' in the sense that a visit to a museum for many types

exhibition and creates their power of attraction, interest, and appeal" (Bollo A. & Dal Pozzolo L., 2005).

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As Alessandro Bollo and Luca Dal Pozzolo suggested "the visitor is free to explore the itinerary, but he is also equally free to ignore it, taking in the information only partially or even taking no notice of it. The 'ordinary' visitor often does not know why the objects and works on display are important (except for those that are universally known and are object of intense communication), and is not capable of making a personal selection or hierarchy of the objects on show. The display of objects is therefore of particular importance, as is their relationship to other elements of the visit (the greater or lesser density of objects along the way). Also of great importance is the information that, in a certain sense, 'completes' the objects of the collection or temporary

 $^{^{99}}$ As mentioned above in the paragraphf 1.5 \cdot TASTES AND NOVELTY. NOBODY KNOWS \cdot

6.

CONCLUSIONS

6.

CONCLUSIONS

Let us now focus on all the salient considerations presented in the chapters above, which were tested by *RovelloDue*. We shall bring emphasis to our conclusions and establish a parallelism with some extracts from David Carr's intense and meaningful quote: "A museum is not about what it contains; it is about what it makes possible". (Carr D., 2006 - Mela Project, 2012).

The result of the *RovelloDue* experience is coherent with the need and research of a **new tool** (as proposed in Chapter 4) capable of investigating and cataloguing not only knowledge but also the cognition process that takes place in a multimedia exhibition experience.

Furthermore, the introduction of technologies excludes a predefined proposal in the production of meaning, but opens up an entire new range of possible meanings, articulated according to the cultural and existential inclination of each individual visitor. Regardless of the degree of knowledge of the specific exhibition subject, **each visitor should feel comfortable in the exhibition space**, becoming more inclined and open to access the proposed cultural message. Multimedia exhibition open structures make the visitor feel at ease whatever his cultural knowledge of the specific exhibition topic is.

"It constructs narratives that help us to locate our memories, passions, and commitments. The museum illustrates irresistible new thoughts and stimulates revisions of former ones" (Carr D., 2006 - Mela Project, 2012).

Visitors are invited to play with natural interfaces and reagent devices, and to contribute and dialogue with the exhibition. Learning on the set of a multimedia installation means experiencing a 'making of choices', engaging and inviting people to take their part in the same conversation. Visitors are invited to feel and share emotions, which is another signature effect of the cultural process. 'Emotion' is vital with new visitors in particular: neophytes without previous cultural experiences who need proper encouragement. Emotion is seductive and brings to extreme visitor immersion.

"The gift of a museum for every user is an appreciation of complexity, a welcoming to the open door of the unknown, the possible, the possible-to-know, and the impossible-to-know" (Carr D., 2006 - Mela Project, 2012).

Natural interfaces create surprise, magic, amazement, and curiosity; they do not emphasize their technical demands but rather highlight the consequences, placing the emphasis on the results. They are able to mix novelty and familiarity, 'magic' video content and immersive projection with traditional methods of communication, using touch, voice, gesture or affective/symbolic objects, and therefore ensuring spontaneous visitor behavior.

"A museum is not about what it contains; it is about what it makes possible. It makes the user's future conversations, thoughts, and actions possible. It makes engagements with artifacts and documents that lie beyond the museum possible. It constructs narratives that help us to locate our memories, passions, and commitments. The museum illustrates irresistible new thoughts and stimulates revisions of former thoughts. The museum invites us to reconsider how we behave and what we craft in the worlds of lived experience. The gift of a museum for every user is an appreciation of complexity, a welcome in the open door of the unknown, the possible, the possible-to-know, and the impossible-to-know" (Carr D., 2006 - Mela Project, 2012).

6.1 · "A MUSEUM IS WHAT IT MAKES POSSIBLE" ·

RovelloDue's practical experience (creating a space for collective use through natural interfaces) has pointed out how (and how much) technologies facilitate content accessibility, and how visitors behave inside the installation once they are stimulated by interactive mechanisms. As demonstrated above (paragraph 4.4), the majority of visitors (93%) were satisfied. The experience was immersive and they acquired knowledge. Only 7% of visitors did not feel to have participated in an immersive experience or to have improved their knowledge; however, they all claimed to have had a pleasant experience anyway.

This pilot multimedia interactive experience, as demonstrated by the collected feedbacks and opinions, is perceived as a comprehensible and attractive place, able to disseminate Culture and trigger personal engagement.

The pilot highlighted how an exhibit is equivalent to the creation of new meanings. It is a dynamic meeting place between design and humanities. *RovelloDue* shows several connections with previous intuitions of the research, even emphasizing a few concepts that have already been considered and developed. Let us now focus on all the salient considerations presented in the chapters above, which tested by *RovelloDue*.

First, 'Knowledge' inside the multimedia installation is confirmed as something plural and fluid, while 'Culture' is presented as a <u>strongly subjective cognitive</u> <u>approach.</u>

What is subjective is, obviously, relative and interactive multimedia languages generate a **personal narration that is more evocative than informative**, more particular than linear (**figure 5.1**). They produce a narrative hyper-textual structure made up of a plurality of fragments, which can be mixed and ordered in always different sequences and perspectives. Technology is a strong tool in the creation of exhibition contents, as moveable units in a flexible structure with the possibility of always being recombined.

It is possible, in this way, to create different versions or interpretations of the same message depending upon the visitor's personal point of view or cultural background. This is a possible starting point for the cultural cognitive process, which is different for each visitor. Regardless of the degree of knowledge of the specific exhibition subject, each visitor should feel comfortable in the exhibition space (figure 5.1, please read the comments selected and showed in the visualization)., becoming more inclined and open in accessing the proposed cultural message.

The generation of a progressively deeper ability to elaborate critical judgments does not necessarily start in a uniform way, or with the same intensity, for each consumer. Multimedia exhibition open structures make the visitor feel at ease whatever his cultural knowledge of the specific exhibition topic may be.

This strong subjectivity and relativity brings to other considerations - and confirmations - on the concept of 'Cultural Audience'. As noticed in Chapter 2, the Audience cannot generally be considered a homogeneous and set block: it is a multitude of different and often opposite points of view, backgrounds, needs, and individual preferences.

Every single visitor, as a single subject, becomes active in (re)constructing his own exhibition meaning, bringing his own personal experience back home.

Furthermore, the introduction of technologies excludes a predefined proposal in the production of meaning, but opens up an entire new range of possible meanings, articulated according to the cultural and existential inclination of each individual visitor. According to Anna Lisa Tota, a work of art "is produced at the intersection between the vectors of meanings, inscribed within the work by the artist, and the effective use experience of a social actor, who identifies which of the possible meanings are to be used" (Bollo A. & Dal Pozzolo L. (2005).

<u>Visitors are invited to play with natural interfaces and reagent devices</u> and to contribute and dialogue with the exhibition. Learning in the setting of a multimedia installation means experiencing a 'making of choices', engaging and inviting people

to take their part in the same conversation. Even in multimedia interactive exhibitions, designed for a plural consumption, the 'plural' dimension is recreated via collaborative actions and reactions of more single visitors, each with his own personality, ideas, and responsibility. Multimedia exhibitions are a space of encounters, where learning is placed, side by side, with imagination and emotion.

Emotion is another signature effect of the cultural process. It is achieved thanks to the right atmosphere and exhibition environment, and it has the ability to invent and cause irreverent surprise. 'Emotion' is a vital element in the case of new visitors in particular: neophytes without previous cultural experiences who need <u>proper</u> encouragement. Emotion¹⁰⁰ is seductive and brings to extreme visitor immersion.

Moreover, as previously stated, **cultural seduction could be seen as a balance between familiarity and novelty,** ¹⁰¹ between the known and the unknown, triggering pleasure responses and engaging interest. It must provide novelty, variety, and complexity, which should bring to a surprise effect but without losing the feeling of familiarity and personal comprehension of the experience.

RovelloDue has shown how it may be helpful to arrange technological equipment in such a way that it is not visible, but so that its effects are still perceived. **Natural interfaces** create surprise, magic, amazement, and curiosity, without emphasizing their technical demands but rather highlighting the consequences, placing the emphasis on the results. They reduce the presence of machines, and their symbolic value increases the sensitivity of the environment, ensuring a condition of normality and familiarity.

Natural interfaces are able to mix novelty and familiarity, 'magic' video content and

 101 As discussed above in the paragraph 1.5 - TASTES AND NOVELTY. NOBODY KNOWS, and in paragraph 4.4 - FROM EXPERIENCE TO REFLECTION.

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¹⁰⁰ RovelloDue visitor questionnaire results (in chapter 4) revealed that consumers with different personal and professional profiles - age and educational levels - have a similar emotional attitude towards the museum experience.

immersive projection, with traditional methods of communication, <u>using touch</u>, <u>voice</u>, <u>gesture or affective/symbolic objects</u>, <u>therefore ensuring spontaneous visitor</u> behavior.

It is not a coincidence that visitors, in their feedback questionnaires (figure 5.3, right part of the image), have shown a preference for the 'tactile' quality and the interfaces adopted in phases 3 and 4 of the pilot project. Touching is a behavior that is active in the cognition process. It is linked to emotions and feelings, which are spheres that correspond to contemporary topics in modern museum curation and design (like enabling more interactive engagements with museum narratives).

"Being able to touch, feel, and manipulate objects in an environment, in addition to seeing them, provides a sense of immersion in the environment that is otherwise not possible" (Srinivasan & Basdogan, 1997).

Summarizing, this research could enhance the learning and understanding as to how to develop more interesting learning process relationships. Following are some key results of the research:

- the cultural content is more accessible the more the visitor is emotionally at 'ease' and involved during the cultural experience: surprise, amazement, and novelty of the experience, without ever abandoning the familiarity of the designed communication and interaction. <u>Emotion has a strong seductive</u> capacity in cognitive accessibility.
- Emotional involvement is often aroused and obtained through a high degree of experiential immersion, and by the possibility of interpreting and metabolizing contents in a less linear but more personal way, less informative and more evocative (depending on the personal degree of knowledge of the topic at hand or accumulation of previous cultural experiences). Cognitive accessibility is physiologically subjective, highlighting the processes that, through the effect of cultural experience, progressively enrich critical capacity and the desire to participate.
- the power of the experience increases if the visitor is placed in the conditions

of sharing, becoming spectator and object of observation at the same time, while acting in the exhibition space and interacting with the installation and / or content. Cognitive accessibility is essentially social (figure 5.2). Critical interpersonal confrontation not only makes the experience more satisfying, but it helps build a process of cross-fertilization that increases the value of the experience itself. It broadens and deepens the consumer's glossary of learning / appreciation, intensifying his desire to explore.

These are considerations that are fundamental and transversal for any type of cultural experience but that within this research find more substance: developing, verifying, and demonstrating the use of technological means and natural interfaces. These in fact are reagent devices, capable of dealing with the experience subject by amplifying the results listed above.

Back to the initial question: is culture back to normality?

The answer is positive, in the acquired awareness that the cultural consumer is not outside the reality and does not belong to a special group of experts and cultural initiates.

Normality means inclusion and sharing, returning to the art and culture of everyday life. Normality is curiosity and familiarity, to which one may add the surprise of a well-experienced experience. Feeling at ease in your own normal way of being, far from the sensation of extraordinary culture offered to selected few. No exceptionality or unrealistic spectacle: once the process of cultural addiction is initiated, the trigger of the process of formation (taste, learning, appreciation) releases a continuously growing dialogue between meaning and content in the cognitive sphere of each individual.

The desire to participate increases (as does the willingness to pay), requiring a more regular consumption and an ever-increasing quality of the offer. We become more and more experts, experienced in the heterogeneity of cultural experiences, in their demand, and in ourselves.

This way, going to the theater, to an exhibition, becomes a norm: a pleasant custom like practicing sports, watching television programs (figure 5.2), going to restaurants, or taking trips. The centrality of people becomes indispensable, to the detriment of the varied dogmatism of the institutions.

The cultural consumer is not outside the reality.

Normality means inclusion and sharing,
returning to the art and culture of everyday life.

Normality is curiosity and familiarity.

The significance of a museum lies not only in its collection, but also in the reflections and insights it is able to trigger around the objects, the knowledge it provides and the multiple visions and interpretations it offers on the heritage in its care" (Delgado E., 2009).

6.2 · A MUSEUM REQUIRES A SYSTEM ·

A strong joined and cohesive relation among cultural message, museum place, technical applications, and human interaction is able to create a user experience that is greatly emotional.

A museum, as a system, **asks for a systemic view** that considers all elements and the ways they interact among themselves and come to compose the system as a whole. In this context, technology, space, content, experience, and sociality are intertwined and influence each other: they have been pointed out and investigated both in their potential and in their critical aspects.

The aim of this research is also that of deriving a design strategy that crosses all the main elements in order to engage people by displaying contents inside an installation or exhibition. It is an opportunity to explore effective <u>ICT potentials and envision</u> future applications within museums and cultural settings dealing with accessibility issues and practices.

In previous chapters, technology was conceived as a **transversal, cross driver** intercepting place/space, content, and sociality. It is a medium that extends the relationship between *visitor - content, content - space, content - emotion*, and *visitor - visitors*. At the same time, technology was interpreted both as a prime mover and motivator inside a multimedia exhibition, but always as an interdisciplinary medium to convey a huge variety of messages and information.

Technology, space, content, experience, and sociality are intertwined and influence each other.

Technology has definitely never been 'neutral': it shapes visitors' experiences in accordance with their cultural backgrounds and understandings; it has the capacity to move visitors' emotions and immerse them in a powerful atmosphere.

The speculative visualizations of case study data, as presented in Chapter 4, expose contemporary trends and tendencies in correlations between technology, applications, contexts, and aims. Technologies have thus been analyzed both in terms of 'latitudinal comparison' (between cases) but also in terms of 'vertical development' (in the close reading of particular emblematic cases and relating key issues).

Technology was conceived as a **medium that extends the relationship** between visitor - content, content - space, content - emotion, and visitor - visitors.

This analysis provides (through various cases, insights, key issues, and lessons) a snapshot of applied technology within museums, exhibition spaces, and cultural institutions and settings.

It is an attempt to provide a general **overview**, substantiated by different variables that have been considered relevant *(experience-specific qualities)*, looking for analogies and concurrences among all the parameters gathered through the orientation tool *(interaction sequences)*.

Far from being a manual of procedures and modalities for these technological interventions, the pilot project aims to provide indications, insights, and stimulation

for the transforming museum, which projects its representation technologies toward the challenge of a more accessible world.

At the same time, however, the pilot project means to be essential in the <u>choice of appropriate scientific and technological tools</u>, in order to satisfy both the Cultural Institution and multiple visitor needs, ¹⁰² therefore **enriching future policies**.

The contents, messages, exhibition duration, and relationship with its audience, like the attention and dedication to collect, preserve, study, exhibit, and stimulate appreciation for advanced knowledge, high quality of the cultural offer, etc.

- The Museum **strategic framework and economic model** or factors.

Management efficiency, staff and internal maintenance capacity, etc.

From a the point of view of the **visitor**, **his needs** are connected to:

- Feeling seduced, comfortable, and welcome inside the exhibition. Feeling new emotions regardless of his full understanding of the cultural content;
- Acquiring new knowledge on the proposed theme of the museum/exhibition;
- Experiencing an event that makes them feel good and want to return, etc.

 $^{^{102}}$ Usually, a ${\it Museum}$ has to satisfy needs that are linked with:

⁻ The Museum mission and identity.

6.3 · RESEARCH FOLLOW-UP ·

Museums should address this <u>complex issue</u>: envisioning new and multidimensional modalities for cultural heritage interpretation, representation, and exhibition. They have to deal with compelling contemporary issues and <u>tackle them with significant theoretical and practical matters</u>, concerning not only the selection of contents, visitor experiences, and related narratives, but also their internal structure and personnel/supply management. Museums should be able to shape their fixed parts and stabilized modalities in changeable and modifiable frames.

The introduction of digital appliances and multimedia requires strategic approaches and leads to a completely new interpretation of the physical structure of the antiquated Museum concept of the 1990s.

It is not easy. Especially if we consider that **Museum studies and cultural studies** are not 'exact disciplines'. They rely on the aesthetic experience and not on the scientific methods of hard sciences. Therefore, developing innovative knowledge requires a different methodology from scientific explanatory models. We do not need to investigate *how things are*, but *how things could be*.

New possibilities for museums are explored according to a **more experimental and** 'hands-on' inquiry model, balancing the double nature of the research-by-design process.

On the one hand, a meta-design activity (Collina L. M. V., 2005), which usually opens up to different possibilities, is theory and research driven and characterized by problem setting and envisioning. On the other hand, a design activity (context-based and site/problem specific) that is "practice led, focused on concept generation, prototyping, testing and evaluation, with possible further development" in experimental actions and interesting testing grounds (Lupo E., 2016).

RovelloDue is one of the methods that were used to envision new museum technological strategies, where practice has served as research purpose. During the two-year-long project experiment, the objective was to prototype site-specific

concepts for visitor experience, employing real users and seeing the engagement of the user as a resource for the final assessment, contributing and improving the practice-based research process. The pilot case was able to collect in-progress visitor feedback, essential in steering the project, which progressively enriched the cultural cognitive experience with new contents or different interfaces and interactions.

Significant research follow-ups emerged from these last considerations:

- How do you trigger the cognitive process? How do you make Museums ready to welcome new multimedia and interactive exhibition settings?
- Which 'knowledge' is necessary in order for a Museum to adopt the correct technological solutions in displaying contents and dialoguing with visitors? What scale and mode is it best to start from? Could temporary exhibitions¹⁰³ be the first step? Does Museum staff have to be trained?
- Is existing Museum management able to verify and ensure sustainability¹⁰⁴ issues, related to the great tech costs in terms of projects, purchase, installation, maintenance?

Working with technologies, within Museums and Cultural Institutions, requires **flexible and shared**¹⁰⁵ **approaches**.

¹⁰³ Usually, in the renewal process affecting today's concept of Museum, temporary exhibition models can be conceived as the expression of exciting cultural investigations; actual workshops operating in the front line within a dialectic interchange between the stability of museum spaces and the research of new forms of representation.

¹⁰⁴ Sustainability is an important ambassador of innovation in designing, adopting, and spreading new practices and technological visions of the possible.

¹⁰⁵ All the choices, to avoid the inappropriate use of technologies or the use of inappropriate digital solutions and devices, derive from the desires, tastes, and limits of the institution, curators, designers, and external technological experts. All of them play a relevant role in the manifestation of the experience itself and in the final result.

Designers, in tandem with cultural institutions, must make some basic choices, such as:

- The target audience to whom to address the project;
- Where and when the experience should take place;
- The kind of experience, and the types of contents/medium/devices that will be employed.

Traditional museums are normally resistant to these issues. Step-by-step, actor-by-actor, change requires time in order to enter in the minds and behaviors of the institutions and of the people who hold and run the Institution itself.

7.
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7.

LITERATURE

Literature on the topic has been produced profusely, providing not only a sense of the speed at which such development is taking place but also knowledge on projects, including innovative aspects, that are implemented throughout both Europe and the rest of the world. An **extensive review of relevant critical literature** has been developed, dividing it in the different research fields – culture meanings, visitor studies, museum practices and multimedia exhibition design, in line with the prepared research chapters.

This work, on in-depth *State of Art*, allowed to highlight pivotal thematic nuclei, and contributed to a subsequent (next phase) identification and selection of paradigmatic case studies for more detailed investigations, surveys and visits. The faced and debated desk research, here presented, aimed at:

- Providing a general final bibliography, widening the analysis to include references and studies beyond Italy and EU;
- Providing a selected literature review. The most relevant documents have been further reviewed, providing a set of summaries composed by key information. Some publications have been mentioned as related to more areas, since they reflect the complexity of the subject matter;
- Analysing the main relevant ideas of the final bibliography, considering
 also the problematic and controversial issues that characterize the research
 chapters. They have been even presented in form of visualizations and infographics.
- providing a glossary of terms, on the basis that existing literature on the topic provides different interpretations of key-concepts over time. Excerpts of the most relevant definitions of terms in comparison with the general meaning, presented by the OED Oxford English Dictionary.

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8. GLOSSARY 8.

GLOSSARY OF MOST RFI EVANT TERMS

Main terms are here analyzed from a semantic point of view: as they appear in the English Oxford Dictionary and how they are declined in the specific research development.

access ['akses]

- 1. [MASS NOUN] (often access to)
- || The means or opportunity to approach or enter a place
- The right or opportunity to use or benefit from something/someone
- || Denoting broadcasting produced by minority and specialist interest groups, rather than by professionals
- 2. [VERB] (with object)

|| Approach or enter (a place)

|| Obtain or retrieve (computer data or a file)

· ACCESS TO CULTURE ·

Access is an important issue, but the issue has been conceived as a matter of removing practical barriers to potential art attenders who are 'out there'. The right to take part in cultural life is the most explicit right included in the Universal Declaration of Human Rights (Article 27).

"Access to Culture is an essential right of all citizens but becomes fundamental in the case of those with economic and social challenges such as young people and the elderly, people with disabilities and minority groups. Supranational institutions such as the European Union as well as its Member States have come a long way towards incorporating strong cultural normative practices and principles in their policymaking. However, there is a notable gap and a lack of political and public debate on

and between principles and commitments, and everyday practices of fostering Access to Culture".

The public-funded cultural sector has been traditionally considered as an exclusive environment; it is a product of the establishment, authenticating the established or official values and image of a society in several ways: directly, by promoting and affirming the dominant values; and indirectly, by subordinating or rejecting alternate values.

The issue of Access is a crucial one, since it is not only related to physical, economic or geographical access but, and probably in a less visible way, to cultural access as well (see 'Barriers to Access'). This requires countries to manage diversity in a way that supports creative expression and ensures that living heritage is passed on.

Accessibility involves taking into consideration all citizens in their diversity, the creation and carrying out of cultural policies, the creation and management of cultural venues - their programs and audience policies - and the products made by cultural industries.

"The concept of Access and its perceived importance goes back at least to the Victorian era, when the division between the middle and working classes which had developed during the Industrial Revolution was more firmly established in England [...] In recent years, the relationship between culture and Social Exclusion has been furthered in a belief that cultural participation is a means to fight Social Exclusion. It is said that participation in the arts, sport and cultural and recreational activity can help to develop individual potential and self-confidence, and thereby build community identity (Matarasso, 1997). In this way, arts and sport can 'contribute to neighborhood renewal and make a real difference to health, crime, employment, and education in deprived communities' (DCMS 1999:8)". (Kawashima N.)

audience ['ordians]

1. [NOUN]

- || The assembled spectators or listeners at a public event such as a play, film, concert, or meeting
- || The readership of a newspaper, magazine, or book:
- || The people giving attention to something
- || A formal interview with a person in authority

2. [MASS NOUN]

|| Archaic Formal hearing

· AUDIENCE ·

Audience is a collective term that includes a variety of different and often opposing points of view: there are many terms used to describe the cultural audience (spectators, visitors, members, customers, users, consumers, participants, paying spectators, attendance).

Public-funded cultural players usually consider Audience in terms of "attendance", "viewers" or "visitors"; as receivers who seal a pact and, more or less implicitly, are part of a community. As a result, for differentiation, there is a far from monolithic block, larger and diverse, made up of those who "are not" part of that covenant (the so-called "non-public").

In this vision, the concept of participation (and non-participation) is based on an essentially passive and reactive vision in which people can decide whether or not to experience cultural offer, but only within rigid and standard mechanisms of consumption and experience. If, on the contrary, we accept the concept of participation within the larger domain of everyday life - exercised with forms, voices, and diverse social dynamics -, the processes in place are characterized by a greater degree of leadership and involvement of people.

development [dɪˈvɛləpm(ə)nt]

1. [MASS NOUN]

|| The process of developing or being developed || A specified state of growth or advancement

2. [COUNT NOUN]

- || A new and advanced product or idea || An event constituting a new stage in a changing situation
- 3. || The process of converting land to a new purpose by constructing buildings or making use of its resources
- 4. || The process of starting to be affected by an ailment or feeling
- 5. || The process of bringing one's pieces into play in the opening phase of a game

· AUDIENCE **DEVELOPMENT** ·

"Audience Development is about taking action to put people on the center-stage. It involves making an effort to understand what they want, and presenting your heritage site, collection or activity in a way that is accessible, inviting, and meaningful for them; and it involves building on-going relationships to encourage participation and support from as broad a range of people as possible for the long-term". (Heritage Lottery Fund, 2009. Thinking about Audience Development)

Here below is a selection of relevant and interesting definitions from the "early stages" to the last conceptual achievements of the research.

marketing ['maːkɪtɪŋ]

1. [MASS NOUN]

|| The action or business of promoting and selling products or services, including market research and advertising

· AUDIENCE **DEVELOPMENT** ·

different from Art Marketing

"According to McCann (1998: 8), Art Marketing in a narrow sense and in the short term is about inducing people who are already interested in the arts to actually take action to visit a museum or come to an artistic event. Audience Development, by contrast, is persuading people who live outside of that core market into it. Whilst Art Marketing tends to concentrate on existing audiences, Audience Development is different in that it targets not easily available audiences". (Kawashima N.)

"Audience Development is a strategic, dynamic, and interactive process of making the arts widely accessible. It aims at engaging individuals and communities in experiencing, enjoying, participating in, and valuing the arts through various means available today for cultural operators, from digital tools to volunteering, from cocreation to partnerships. Audience Development can be understood in various ways, depending on its objectives and target groups:

- increasing audiences (attracting audiences with the same socio-demographic profile as the current audience);
- deepening relationship with the audiences (enhancing the experience of the current audiences in relation to a cultural event and/or encouraging them to discover related or even non-related, more complex art forms, thus fostering loyalty and return visits);
- diversifying audiences (attracting people with a different socio-demographic profile to the current audiences, including people with no previous contact with the arts)". (EAC/08/2015 Tender specifications)

_ a planned process

"Audience Development is a **strategic, dynamic, and interactive process** of making the arts accessible. It aims at engaging individuals and communities in experiencing, enjoying, participating in, and valuing the arts through various means including art marketing". (Australia Council, 2005. Support for the Arts Handbook)

"[...] a planned, **organization-wide approach** to extend the range and nature of relationships with the public; it helps a cultural organization to achieve its mission, balancing social purpose, financial sustainability, and creative ambitions". (The Audience Agency)

"Audience Development is a continual, actively managed process in which an organization encourages each attender and potential attender to develop confidence, knowledge, experience, and engagement across the full breadth of the art form to meet his or her full potential, whilst meeting the organization's own artistic, social, and financial objectives". (Morris Hargreaves McIntyre)

"Audience Development is **a planned process** that involves building a relationship between an individual and the arts. This takes time and cannot happen by itself. Art organizations must work to develop these relationships". (Heather Maitland, 2000)

Audience Development is always strategic and planned, and takes a sustainable approach in developing long-term relationships with audiences. It is not a final destination but an on-going process.

_ a human relationship

"The aim of Audience Development Art Marketing practitioners is to bring an appropriate number of people - drawn from the widest possible range of social background, economic condition and age - into an appropriate form of contact with the artist and, in so doing, to arrive at the best financial outcome that is compatible with the achievement of that aim". (Keith Diggle, 1984)

"Audience Development is about quantitatively and qualitatively targeting new sectors in innovative ways to broaden the art audience base, then **nurturing new attenders**, along with existing audiences, to encourage them to grow with the organization". (Rogers, 1998)

"The term 'Audience Development' describes activity that is undertaken specifically to meet the needs of existing and potential audiences, and to help art organizations to develop on-going relationships with them. It can include aspects of marketing, commissioning, programming, education, customer care, and distribution. 'Audience' encompasses attendees, visitors, readers, listeners, viewers, participants, and learners'.' (Grants for the Arts, Arts Council England, 2004)

All these definitions show how the concept evolved from an almost purely marketing- oriented approach to a more holistic and processual vision of AD as a multi-faceted means aimed at deepening, strengthening, and expanding the relationship between cultural institutions and different audiences.

A key to success stands in the commitment not just to attract someone for one visit, but in investing in the development of long-term relationships with individuals. This is important as it is comparatively easy to invest time, energy, and resources in generating a new, larger, and more diverse audience for a single event or activity, but keeping those audiences engaged requires an **on-going commitment** to them.

Ultimately, developing a commitment to audiences requires every aspect of your organization to work together in order to ensure on-going relevance, a warm welcome, and a responsive attitude.

The debate on Audience Development is not new. This dialogue has existed for a long time, but today Audience Development is an increasing necessity.

"In the past, cultural institutions were created to increase and reflect national pride and to share the dominant cultural values, and in practice acted as mediators between the artist and the audience, as gate-keepers to what the public would and could access or see. Now we are moving to a more multi-dimensional and interactive world, due largely to technology that is changing the way we create, distribute, access, and monetize cultural content, offering the potential to transform audiences from passive receivers into creators and/or active users of cultural content without needing to pass through intermediaries". (European Audiences: 2020 and beyond - Conference conclusions)

engagement [in'geidzm(ə)nt]

1. [NOUN]

|| A formal agreement to get married || An arrangement to do something or go somewhere at a fixed time

2. [MASS NOUN]

|| The action of engaging or being engaged || A fight or battle between armed forces

· AUDIENCE **ENGAGEMENT** ·

'Audience Engagement' is an expression that is used in practice and literature in a very different and non-codified way, like the many expressions that belong to the semantics of AD (audience building, audience participation, etc.). In particular, it is used to highlight the dimensions of involvement, sounding less explicit in the concept of "development" and more mechanic in that of "building".

It is usually considered as one of the two phases of the more purely operative Audience Development, that is the phase of "Reach" (ways to get in touch with the audience) and the phase of "Engage" (engagement actions based on relations and mutuality). It is, therefore, a phase made up of heterogeneous and articulated processes, actions, and organizational behaviors that may include: activities and mediation devices; active involvement through workshops, educational activities, digital devices, intercultural approaches; public participation in the planning of cultural activities, and creating expressive, artistic, and creative content (co-curation, co-creation, active spectatorship); outreach.

barrier ['barıə]

1. [NOUN]

- || A fence or other obstacle that prevents movement or access
- || A circumstance or obstacle that keeps people or things apart or prevents communication or progress

· BARRIERS TO ACCESS ·

The issue of cultural participation is primarily represented by the existence of Barriers, which cause unequal access to state supported cultural activities (Stevenson, 2012). Audience Development traditionally starts with the identification of the Barriers to attendance experienced by audiences, and planning ways to overcome them. That is, it starts from the assumption that everyone can and should enjoy the arts but that there are a variety of social, educational, attitudinal or practical Barriers that come between you and your potential attenders.

The concept of 'Barriers' has thus become a central area for research, with most studies holding a normative position: if certain obstacles are removed, then under-represented segments of the people will automatically become better represented in audiences. (Kawashima, 2006)

financial Barriers (indeed, such Barriers are still among the main obstacles compromising the accessibility of heritage institutions, especially in the case of "disadvantaged" groups); while only recently greater attention has been devoted to more "intangible" kinds of Barriers, such as sensory and cognitive barriers, cultural barriers (i.e. individual interests and life experiences), attitudinal barriers (having to do with the institution's culture and overall atmosphere), technological barriers (e.g. the inadequate use of ICTs to facilitate accessibility to the institution's programs), and psychological barriers (e.g. the perception of cultural institutions as elitist places, targeting the well-educated and sophisticated people; the refusal of

specific forms of cultural expression, perceived as uninteresting or offensive; the low priority given to cultural participation).

Other Barriers belong to the domain of policy making, such as:

- Lack of recognition (mainly in terms of national policies) of the many roles that culture can play in relieving the Social Exclusion, and thus the lack of resources for the development of accessible cultural services;
- Failure in adjusting territorial and social imbalances, which represent one of the main factors of legitimacy of public intervention in the cultural field;
- Deliberate choice to keep the "elitist" trait of some cultural offers;
- Acknowledgement by many public bodies of the number of visits as the only key indicator of success (and not, for instance, other indicators such as participatory planning and the active involvement of communities).

The various approaches to dialogue with visitors - the very idea of the "undifferentiated", "non-expert" visitor to be guided and instructed - substantially changed. One of the most significant developments is the shift away from what sociologists of science have called the "deficit model", i.e. an approach based on a linear transmission of knowledge from experts/scholars to an uninformed audience, which has traditionally been embraced by most museums.

In the new paradigm, visitors are seen as individuals with their own legitimate knowledge systems, motivations, interests, and personal opinions; different studies highlighted visitors' desire not to be considered as passive users or persons to be "educated", but rather as co-actors in the construction of scientific knowledge.

The dialogue with curators and researchers working in scientific museums was therefore intensified, both with *ad hoc* meetings and debates, and by making research activities visible through "transparent" walls: no longer closed and mysterious laboratories, but spaces open to the visitor.

All the new museums or renewed sections of older museums are embracing this principle of "transparency" and inclusion.¹

"We need to grasp what motivates people to engage in culture and then break down the Barriers of perception, meaning that traditional cultural services are not often enough seen as a relevant leisure option". (DCMS Culture on Demand)

However, much of the discussion has ignored the validity of the choice made by those who perceive no Barriers to participation but still choose not to attend; such as the 48% of those not currently engaged who stated no interest in participation (SG, 2009).

-

¹The "NanoToTouch" programme, for example, invested in the direct contact between researchers and visitors by opening laboratories, so as to promote the awareness of participants in controversial issue such as the risks posed by nanotechnologies. Information on policies, collections, research, and publications may be found in museum websites, in line with the principle of "open access" (Berlin Declaration, 2003: Our mission of disseminating knowledge is only half complete if the information is not widely and readily available to society). Today's trend is to include visitors in museum policies and decision-making processes (Inclusive museum), as well as to develop a closer relationship with the surrounding community (MUSE, the new science museum in Trento, was created after years of on-line and on-site consultation with local residents). Most museums started a blog or used other forms of social media to engage in a dialogue with citizens.

impact ['Impakt]

- 1. [NOUN]
- || The action of one object coming forcibly into contact with another || A marked effect or influence
- 2. [VERB, NO OBJECT]
- || Come into forcible contact with another object
- 3. [VERB + OBJECT]
- || Chiefly North American: come into forcible contact with || Press (something) firmly
- 4. [VERB + ON]
- || Have a strong effect on someone or something

· IMPACT INDICATORS ·

The word 'Indicator' means a quantitative or qualitative variable able to synthetically represent a phenomenon and to summarize the trend; Indicators therefore need to translate evaluation criteria into observable and measurable elements.

Impact Indicators, in particular, concern the project outcomes and allow researchers to verify whether and to what extent the results led to the achievement of objectives. They express the impact that the project produces in a broader sense on the organizations, on the development of art and culture, and on the communities. The impact assessments will be considered in the analysis of the case studies.

participation [pax,tisi'peisn]

1. [MASS NOUN]

|| The action of taking part in something

· PARTICIPATION ·

Measuring success in Audience Development is dependent on developing patterns of broad community participation across many art-forms and in multiple cultural dimensions.

Participation embraces diverse stakeholders, including but not limited to traditional art audiences, also taking into account technology and cultural participation opportunities presented by the world-wide web and social networking software.

The 2009 UNESCO framework for cultural statistics (FCS) defines cultural participation as including: "cultural practices that may involve consumption as well as activities that are undertaken within the community, reflecting quality of life, traditions and beliefs. It includes attendance at formal events, such as going to a movie or to a concert, as well as informal cultural action, such as participating in community cultural activities and amateur artistic productions or everyday activities like reading a book. Moreover, cultural participation covers both active and passive behavior. It includes the person who is listening to a concert and the person who practices music. The purpose of cultural participation surveys should be to assess overall participation levels, even though it may be difficult to distinguish active from passive behavior".

For strategies aimed at promoting social and cultural inclusion to be fully effective, it is necessary to combine Access Development policies with policies focused on Participation (in decision-making, creative processes, meaning-making processes, etc.), recognizing audiences as active interlocutors to be involved through a range of practices going from the occasional consultation to "empowerment-lite" forms of engagement, from collaborative meaning-making to participatory planning.

In order to remove Barriers for wider participation, cultural institutions can adopt a variety of strategies and practices that, as different as they may be, share the common goal of making institutions less self-referential, more rooted in the life of the local community, and more open to the needs of audiences and other stakeholders.

There also seems to be a direct connection between active audiences and active citizenship, with research indicating that cultural participation increases the likelihood of broader civic engagement, including voting in political elections. (Dragan Klaic)

"The arts give people the opportunity to express themselves, it gives them a voice to tell their stories, and culture plays an essential role in any democracy, taking the political debate from the political sphere and giving it back to citizens, with cultural organizations thereby providing a space for politics, debate, and reform [....] The conference confirmed that this new emphasis on Audience Development could be the beginning of a great cultural movement and civic participation that starts with audiences, and is not held in closed rooms".

The new role of art managers should be to create reputable experiences and to invite people to a journey together. "'Something is going on in Europe... do you feel the new wind blowing?', concluded Mary McCarthy and Chris Torch, the conference moderators. People are hungry for social engagement and connection in communities. Cultural organizations and audiences should move confidently forward together, and these conversations with audiences will ensure the long-term sustainability of the cultural sector". (European Audiences: 2020 and beyond - Conference conclusions)

representation [reprizen'tei∫(ə)n]

1. [MASS NOUN]

- || The action of speaking or acting on behalf of someone or the state of being so represented
- || The description or portrayal of someone or something in a particular way
- || The depiction of someone or something in a work of art

2. [COUNT NOUN]

- || A picture, model, or other depiction of someone or something
- $3. \parallel$ (In some theories of perception) a mental state or concept regarded as corresponding to a thing perceived

4. [PLURAL]

|| Formal statements made to an authority, especially so as to communicate an opinion or register a protest

· REPRESENTATION ·

A further issue for cultural institutions to address when dealing with audiences is Representation - or, more precisely, the misrepresentation or non-representation of specific groups and cultures/subcultures (for example, in theater programming, museum collections and displays, books, and library services), which has historically led to the promotion of dominant social and cultural values and thereby, albeit indirectly, to the subordination and refusal of alternative values.

exclusion [ik'skluzʒ(ə)]

- 1. [MASS NOUN]
- || The process of excluding or the state of being excluded
- 2. [COUNT NOUN]

|| An item or eventuality specifically not covered by an insurance policy or other contract

· SOCIAL EXCLUSION ·

In the last two decades, within the context of the political debate about poverty that took place in Europe, Social Exclusion has become synonym of poverty. Even in the academic world, there is a debate concerning the definition of Social Exclusion and its relationship with the concept of poverty.

Social Exclusion represents a broader term compared to poverty, and it defines those people who, whether living in poverty or not, do not participate in the different systems of society: it refers to the lack or rupture of relationships between individuals and their families, friends, community, and state.

These differences in the understanding of Social Exclusion are also due to different cultural traditions of the countries, which are coping with the problem of defining it first and then fighting it. Notwithstanding the conceptual differences that underpin our comprehension of Social Exclusion, there are some elements within this concept that are common to all its definitions and understandings. First of all, Social Exclusion "represents the opposite of social integration. Secondly, it refers to both a state and a process; and thirdly, the concept is multi-dimensional, extending beyond traditional definitions of poverty and deprivation".

Social Exclusion can be considered as a state and/or a dynamic process, which prevents an individual from participating in the social, political, and economic systems of his/her country. These dimensions can easily overlap because of their inter-related nature.

At the end of the '90s, a fourth system was identified, within which exclusion may occur and, consequently, be fought: the cultural one. There are three fundamental issues that represent the way heritage (and particularly museums) acts as an agent of Social Exclusion: access, representation, and participation (see Glossary above).

digital [dij-i-tl]

1. [ADJECTIVE]

|| Of, relating to, or using data in the form of numerical digits

|| Available in electronic form; readable and manipulable by computer

|| Pertaining to, noting, or making use of computers and computerized technologies

2. [COUNT NOUN]

|| One of the keys or finger levers of keyboard instruments

· DIGITAL ·

Both during and in reviewing the full nine research forums, it became clear that the term 'Digital' was predominantly being understood and discussed in four distinct but overlapping ways:

- Digital as a tool as a means to deliver a productive end / output of a particular practice, project, activity;
- Digital as a medium / media particularly in contrast to traditional fine art mediums, such as painting, sculpture, printmaking (although less so in relation to photography, which is still seen as a 'young' medium in museums);
- Digital as technology the binary opposite of modernist artistic practice and art history, understood as the essential expressions of human individualism;
- Digital as culture the ubiquitous, naturalized condition and character of daily life, whether on or offline, that underpins contemporary global existence, whatever the proximity or access to digital and online culture.

Whatever the variation in understanding of the term, the Digital was generally regarded as a useful catalyst, if not both a provocation and foil, in posing fundamental questions about the core mission of an institution, its organizational principles, the basis of its cultural authority, the configuration and conceptualization of its audiences, bringing to the surface implicit working assumptions of what constitutes cultural and public value.

media [mee-dee-uh]

1. [NOUN]

- || A plural of medium
- || (Usually used with a plural verb) the means of communication, as radio and television, newspapers, magazines, and the Internet, that reach or influence people widely

2. [ADJECTIVE]

|| Pertaining to or concerned with such means

· NEW MEDIA ·

The term 'New Media' was adopted by the research in a number of different ways. Firstly, New Media was recognized as a term that encompasses the remediation as well as extensions of mainstream media through digital technology.

Finally, New Media was understood as the cultural reworking of knowledge through digital media to produce a new paradigm of cultural thought and conceptualization.

One of the pervading messages of the research was that instead of thinking about the 'digital' as a conventionalized add-on to existing forms, codes, conventions, and practices of both media and institutions, New Media draws attention to the larger dimension of a set of fundamental changes in human communication made possible in the human-computer interface.

interface ['intə,feis]

1. [NOUN]

|| A point where two systems, subjects, organizations, etc. meet and interact; forming a common boundary

|| A device or program enabling a user to communicate with a computer

2. [VERB]

| Interact with / connect with (another system, person, etc.)

· NATURAL INTERFACES ·

"The Natural Interfaces are interactive systems that react without the use of technological intermediaries (mouse, keyboard etc.), but through traditional methods of communication, using touch, voice, gesture, etc. so as to create a more natural situation that is not frustrated by procedures that may not be familiar to all of us. In this way, it is possible to avoid methods that inevitably tend to condition spectators, ensuring that they are able to behave in a spontaneous, natural way, which is very important". (Studio Azzurro, 2011)

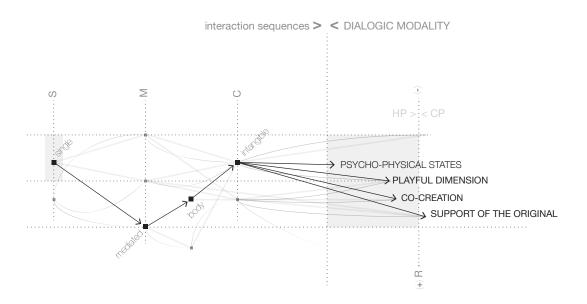
1 ANNEX
case studies data sheet



http://italianavigator.tumblr.com/page/7

THE ITALIAN NAVIGATOR, 2015

CamerAnebbia Genoa, Italy





Experience-specific qualities:



The immaterial content becomes the key point of an experience, and the visitor who goes through this experience is a physical body, an human body that can see, hear, touch elements of a physical space, a space that has to be setup up, with all the related constraints, opportunities and critical points.

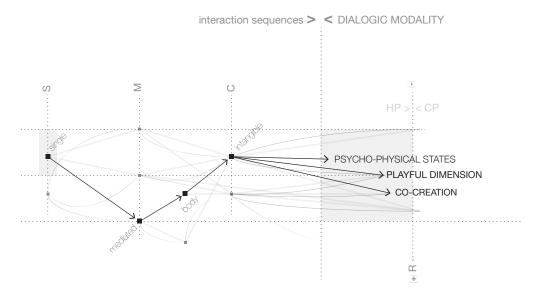
The installation involves literally the visitor into the content exposed. Thanks to sensor technologies (optical devices as kinect or leap motion), an immaterial representation of the visitor's body is allowed. The environment becomes a medium for the meeting of content and user, a surface for the visitor to enter in, to play with and hopefully to be surprised by his/her interaction.



http://fakelove.tv/work/playground-deconstructed

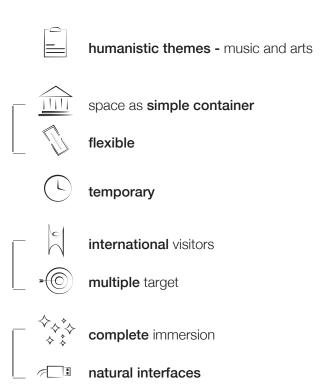
PLAYGROUND DECONSTRUCTED, 2013

Fake Love New York, USA





Experience-specific qualities:



Sonos Playground Deconstructed is a site-specific installation in the Nam June Paik / HBO Production Lab at the Museum of the Moving Image.

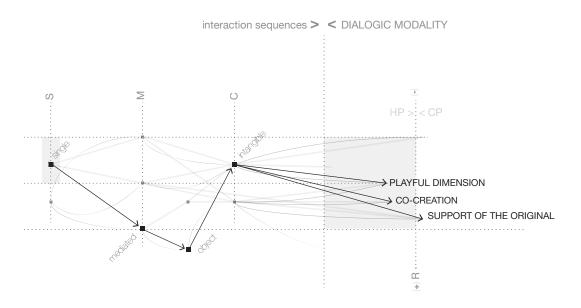
The installation aims to bring minimalist art to life as an immersive music video environment. Visitors are able to select any song from an iPad running spotify and watch a visualization of the music projected onto the surrounding walls. Through motion-capture technology, visitors can interact with and manipulate the animation. The audience is able to create new configuration that alters how the visualization comes to life through their movement. Alone inside the installation is a very jarring and hypnotizing experience: intense spacialized audio paired with a rush of immersive projection mapping



http://www.studioazzurro.com/index.php?com_works=&view=detail&work_ id=138&option=com_works&Itemid=22&lang=it

IN VIAGGIO CON L'ITALIA, 2014

Studio Azzurro Milan, Italy





Experience-specific qualities:



natural interfaces

The Touring Club Italiano celebrated its 120th anniversary by presenting a journey through Italy and its history. Palazzo della Ragione in Milan hosted an interactive exhibition that takes visitors on a tour through the boot-shaped peninsula, its locations and its flavours.

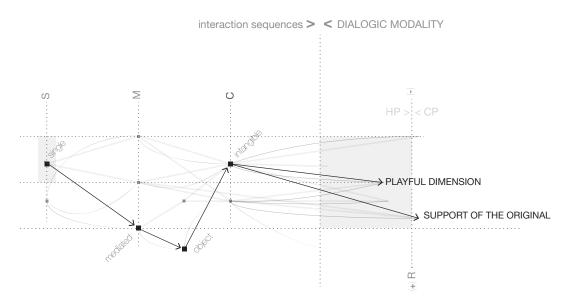
Visitors are able to see how getting around, and thus travel itself, has changed over the years: from the first bicycles, to the car, not forgetting of course aircraft and how they have revolutionised travel. This exhibition goes beyond the classic format. The multimedia design, conceived by Studio Azzurro, offers the same excitement as a real journey, touching on different historical times and places. The visitor becomes an integral part of the exhibition, which comes alive with each step and each touch.



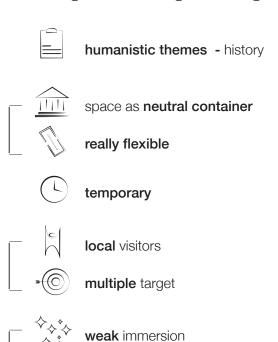
 ${\it http://dotdotdot.it/it/portfolio/lalfabeto-della-memoria/}$

L'ALFABETO DELLA MEMORIA, 2016

Dot Dot Dot Arezzo, Italy







natural interfaces

It was devised to satisfy the requirements of the Museum's mission to publicize the stories immortalized in the diaries to a public beyond the boundaries of Palazzo Pretorio. The tales are narrated and revealed in a suitcase that looks like a Chinese box with drawers, filing cabinets, display units and drop-down leaves, all with a simple, clean esthetics.

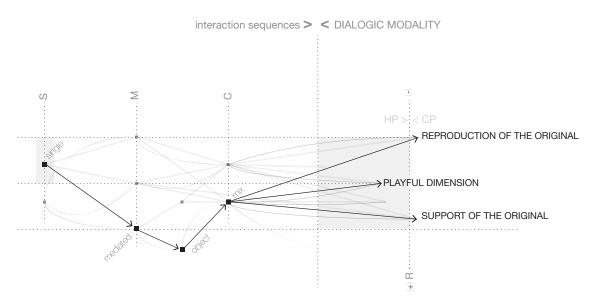
This mobile and compact archive contains an automated, easy-to-use technological system that allows the user to examine the contents in a simple and intuitive way, facilitating the comprehension of the full-immersion and all-embracing aspects of the stories. A filing cabinet has been organized in alphabetical order, allowing visitors to easily select the information sheet they wish to explore.



https://vimeo.com/35315607

FABRIZIO DE ANDRE' - LA MOSTRA, 2008

Studio Azzurro Genoa, Italy









The multimedia experience also provides certain more meditative,in certain ways more didactic. The voice of the singer-songwriter is heard alongside those of his collaborators and the people who lived around him, with a large quantity of interviews, many of which have been specially made for this occasion, through which visitors can develop their own perception.

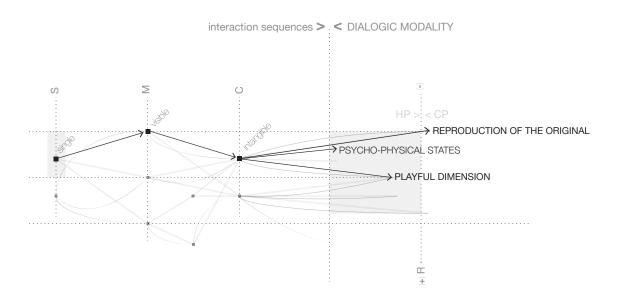
The rooms are filled with facsimiles of the original records and photographic plates showing some of the more signficant photos from the life of Fabrizio De André; these can be selected and moved onto the sensitive surfaces or photographic tripods in order to reveal their own piece of memory. They are tangible supports which preserve in virtual terms their own history, but which are only activated by being chosen and interrogated by the visitor.



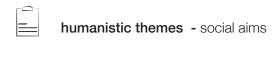
https://with.in/watch/clouds-over-sidra/

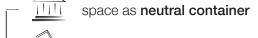
CLOUDS OVER SIDRA, 2017

United Nation, Artscape + Meet The Media Guru Milan, Italy









really flexible







"Clouds Over Sidra" follows a twelve year old in the Za'atari camp in Jordan – home to 84,000 Syrian refugees. It follows her to school, to her makeshift tent and even to the football pitch. "At the UN, we consistently strive to bring citizens' perspectives into the decision making process anyway possible". It's the first ever film shot in virtual reality for the UN, using the medium - oculus, gear VR - to generate greater empathy and new perspectives on people living in conditions of great vulnerability.

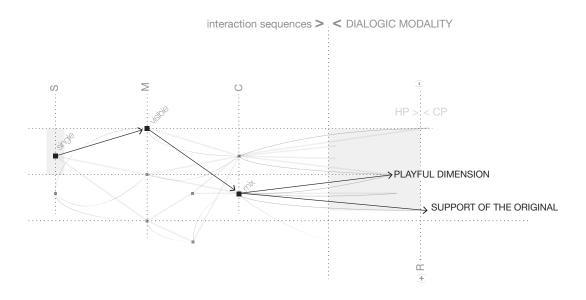
The film's powerful capacity to allow anyone on a global scale experience life within a refugee camp has the ability to inspire the message of hope amongst not only the millions displaced but also those motivated to act.



https://artcom.de/en/project/augmented-3d-exhibits/

AUGMENTED 3D-EXHIBITS, 2013

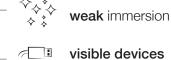
ART + COM Studios Dusseldorf, Germany











For the Reifenhäuser Group, a global provider of innovative technologies and components for the shaping of plastics, ART+COM has developed an augmented installation that introduces the company's products.

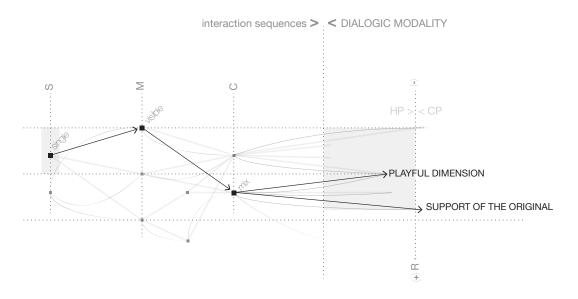
Details of the machines' technical features can be viewed using iPads that are provided. Textual information about the components of the units is automatically displayed as a virtual layer over the camera image when a tablet is aimed at a model. When these hotspots on the screen are touched, more detailed information is provided. It features virtual models of each unit that can be freely rotated on the touchscreen and viewed from several perspectives.



https://vimeo.com/60866008

SCULPTURE LENS - STRIKE A POSE, 2015

Gallagher and Associates
Cleveland Museum of Art, USA







humanistic themes - art



space as simple container



flexible



permanent



international visitors



multiple target



complete immersion



visible devices

Located at the entrance to the Cleveland Museum of Art (CMA), Gallery One welcomes visitors into an active, 13,000-square-foot space where art and technology provide a dynamic environment for visitor exploration. Designed for visitors of all ages, both novice and seasoned, the technology interfaces inspire visitors to see art with greater depth and understanding, sparking experiences across the spectrum from close looking to active making and sharing. A series of "games" invite visitors to engage with the art on view through questions and experiences.

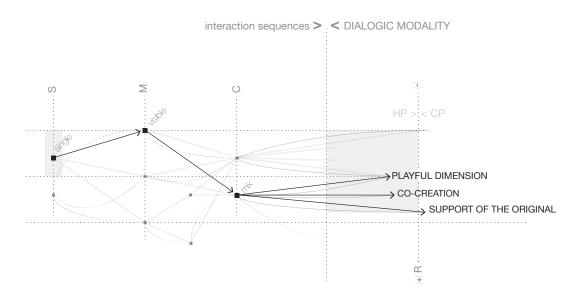
For example, "Strike a Pose" invites visitors to explore figurative sculpture by asking them to match the pose of a sculpture they see on the screen. A motion sensor records their pose, and the interactive determines how closely the visitor has approached the artist's sculpted body.



http://streamcolors.com/wp/

STREAM MACHINE, 2017

Streamcolors Milan, Italy







humanistic themes - archaeology and ethnography



space as significance container and content



really flexible



permanent



local visitors



multiple target



weak immersion



visible devices

Stream Machine installation at Meet the Media Guru con Nancy Proctor is able to remix pictures of Palazzo Litta and Meet The Media Guru events to co-create and print a souvenir postcard. It combines hardware and software to enable, in one solution, cultural institutions to:

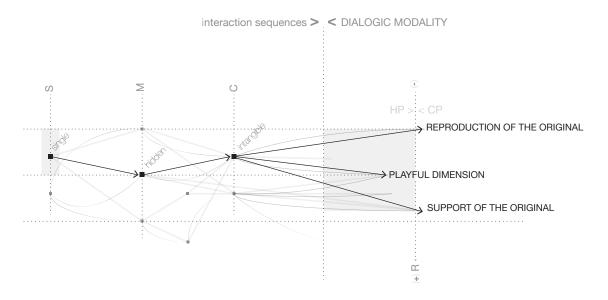
- Audience engagement, offering a new emotional learning experiences with the co-creation expedient. It is able to showcase and promote cultural contents using latest game technologies and interactive design trends solutions.
- Easily manage and diagnostic SM with a friendly usability and remote controlled online system.
- Provide new revenues giving or selling personalized physical objects. Visitors can create, starting from cultural contents, high resolution images ready to be printed.



https://vimeo.com/35327326

DENTRO L'ULTIMA CENA: IL XIII TESTIMONE, 2010

Studio Azzurro Vigevano Castle, Italy







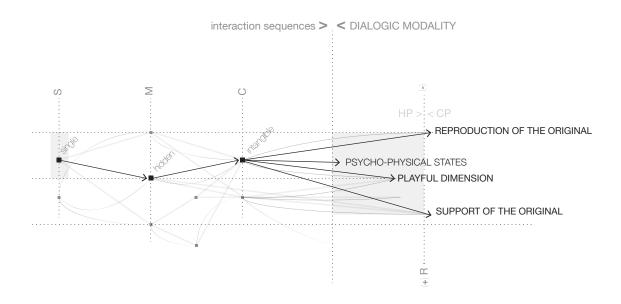
A multimedia fresco to live. An emotional journey into an in-depth analysis of the Last Supper, the most revolutionary and meaningful work painted by Leonardo da Vinci. The world acclaimed fresco, irremovable by nature, is proposed in this instance in a version unhindered by spatial constraints. A structure of individual modular components.

The exhibition path enables visitors to choose from several levels of analysis and participation. The first level is the most traditional: a motion picture style tale where it is possible to view information and multimedia contents along a storytelling path. The second level allows access to interactive stations where visitors can customize their own path to discover and learn about the fresco autonomously from the various available sources.



https://artcom.de/en/project/de-viewer/

DE-VIEWER, 1992 ART + COM Studios Ars Electronica, Linz, Austria











humanistic themes - art



space as significant container



flexible



temporary



international visitors



multiple target



complete immersion



natural interfaces

At the first sight, De-Viewer looks like a traditional oil painting on a wall. With closer inspection, one realises that the painting is deforming at exactly the same place where it is looked at. The viewer's gaze affects the image. A framed rear projection on a canvas shows the painting.

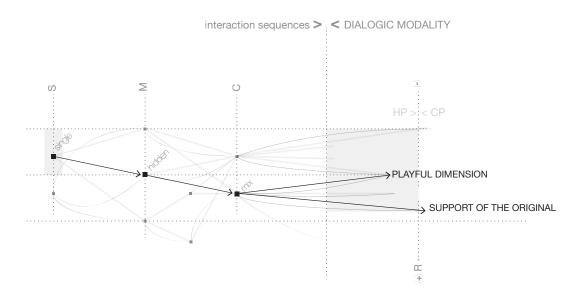
An eye-tracking system is analysing the spectator's gaze. The co-ordinates are then sent to the graphics program that distorts the picture in reaction. As soon as one looks at the picture, it begins to distort. The image is reset to its original condition if nobody is looking at it for 30 seconds. The project was developed as a reaction to the general attitude to computers as tools rather than a medium, still prevalent at the end of the 80s. The painting chosen for this installation, "Boy with a Child-Drawing in His Hand" by G. F. Caroto, shows the first documented child drawing in art history — an appropriate metaphor fof new media art in late 1980s.



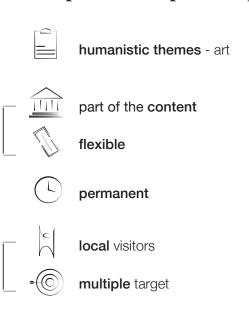
https://vimeo.com/35379907

LA STANZA DELLA DUCHESSA, 2011

Studio Azzurro Vigevano Castle, Italy







complete immersion

natural interfaces

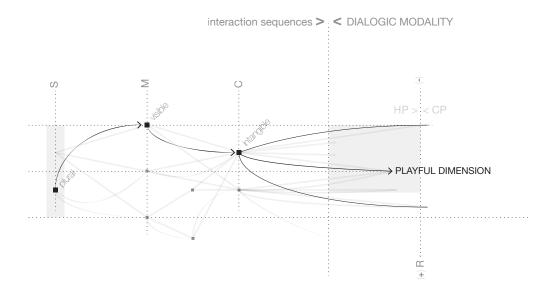
In the Sforza Castle in Vigevano, one room is reserved for the duchess Beatrice d'Este and her found shoe. It is enough to get closer to a side of the table, in order to activate a story and bring to life the pictures lying there on the surface. Historic archive films are assembled so that they are shown alongside reminiscences, bringing them almost to life.

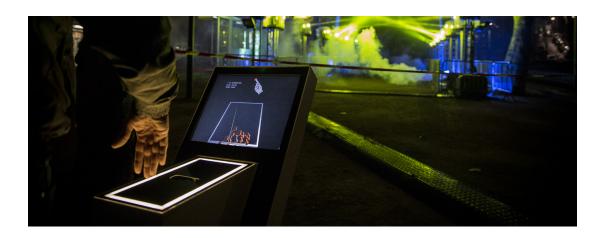
Spectators just have to be present and move inside the room, to be transformed into active participants, being drawn into the atmosphere of the narration so that they feel the experience for themselves, as if they were asking the question and therefore taking responsibility for the answer. The experience therefore becomes even more intimate, more personal. A place of past memory is transformed, through interaction, into a place for participation.

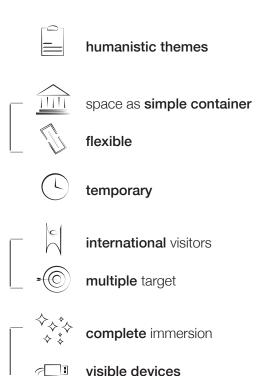


http://playmodes.com/web/axial-fete-des-lumieres/

Axial, 2012 -13 PLAYMODE Fête des Lumières, Lyons







Interaction is based on a LeapMotion sensor, which allows the recognition of finger poses with high precision. Moving their hands above the interactive spot, users see a 3D representation of their hands and instructions on how to play the actual mode and real-time sonification. Several play modes allow the users to interact with Axial as a live audiovisual instrument:

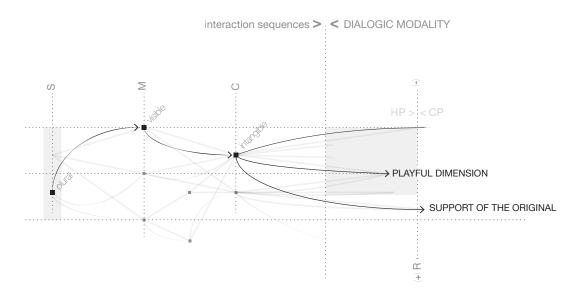
- -On the FollowMe mode, the system tracks the index finger of users and creates a light intersection point which follows the finger position.
- -On the Piano mode, people can use both hands to play the instrument as a piano.
- -On the Delay mode users can create light waves.
- -On the Lyre mode, audience can play the instrument as a harp.



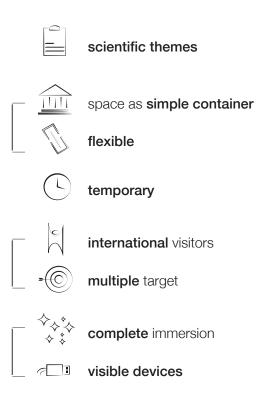
https://vimeo.com/51614625

TWO WORDS FOR TOMORROW, 2013

Moffitt.Moffitt Sydney light festival, Australian







The physical expression of the Two Words for Tomorrow Project took form as an interactive digital light sculpture. Part polling station, part living artwork, the Two Words Waterfall gathered national data in real time to present a magnetic flowing light sculpture that revealed the nations top ten themes and individual two word contributions. This resulted in an urban beacon drawing audiences to participate in the national survey or simply pause to watch the captivating sculpture.

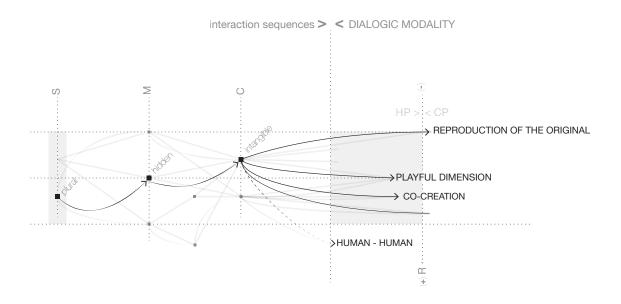
An endless flow of abstract animation, inspired by the paths of waterfalls, rapids, rivers and streams. The mesmerising streams of colour are influenced in real-time by people's hopes and concerns for the future, submitted as two words online and through terminals on site.



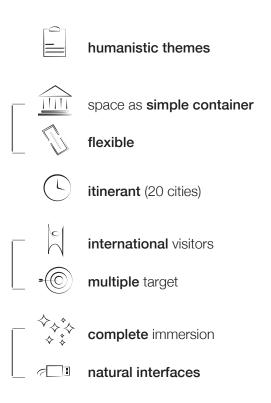
http://www.miguel-chevalier.com/en/8-ties-hermes

8 TIES FOR HERMÈS, 2012 -13

Miguel Chevalier Tokyo, Japan







Miguel Chevalier has integrated the Hermès ties patterns into his virtual universe in order to unveil, in an original way, the collection of 'Heavy Twill' silk ties. Thanks to a subtle mix of technology, ingenuity and poetry, a wall projection, the eight tie designs (USB, Key Board, Binary, ON/OFF...) in the collection appear in rotation via a wall projection that react to the presence and the movements of visitors.

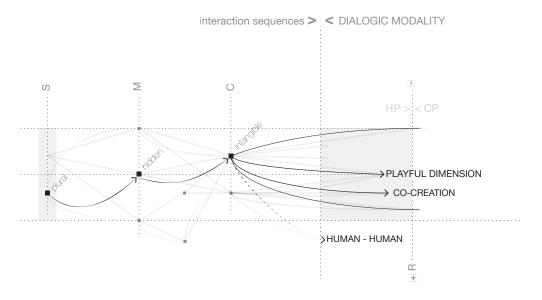
Thus, the real and the virtual come together, distorting scale, so that the most intricate patterns can be studied in their finest details and dynamics. A touch screen is available to visitors, inviting them to select the tie design with which to play. The projection is accompanied by a special sound track, composed by Jacopo Baboni Schilingi, which also responds to movement.



http://pacelondon.team-lab.net

TRANSCENDING BOUNDARIES, 2017

teamLab London, UK







humanistic themes



space as **simple container** - UltraSubjective Space concept, central to teamLab's practice



flexible



temporary



international visitors



multiple target



complete immersion



natural interfaces

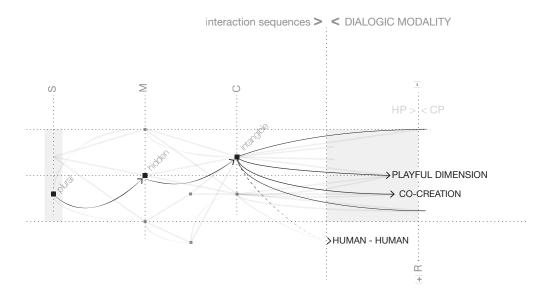
As its title – Transcending Boundaries – suggests, teamLab are in part experimenting with our expectations of what is allowed to happen in an art space in this exhibition. Some of this involves literal boundaries being traversed: the show's butterflies, for instance, flap innocently into the frames of more formal artworks in the space and briefly appear within them. A digital waterfall flows down one wall of the space and its water spills across the floor and reacts when it reaches the feet of the audience. Meanwhile, butterflies fly around and flowers grow, both dying if touched by a visitor's hand. In a second space, instead, computer-generated waves toss wildly on the wall, crashing and tipping into one another in a hyper-real display. The audience too crosses expected boundaries, by being invited to experiment with touching the walls and floors of the space and interacting with the other presences to create unique effects.



https://vimeo.com/35310148

LA POZZANGHERA, 2006 Studio Azzurro

Monza, Italy







The puddle comes from an interactive video installation made up of several projections on the floor that respond to the passage of people and children, creating new visions and little surprises.

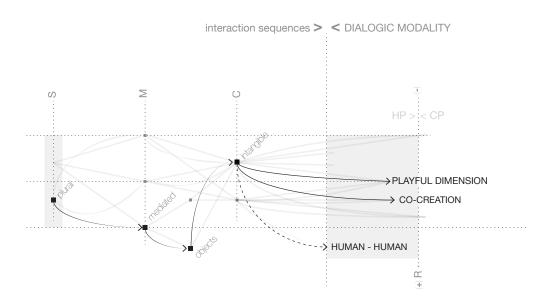
It is a puddle that is affected by the seasons: it grows with the spring rain, among storms and rainbows; it gets smaller during the summer droughts, when the sun cracks the earth and drives out the animals; it gets filled up with leaves, sounds and strange trashes carried by the autumn wind; it freezes over during the winter snowfalls, when the temperature drops and its surface gets as fragile as a mirror.



https://www.studioroosegaarde.net/project/crystal-s/

CRYSTALS, 2012-13

Daan Roosegaarde Natlab (public artwork) Eindhoven, NL







"We made thousands of little crystals which have two LEDs in them," Roosegaarde told. "When they're placed in the area that you see here, they light up. It's a sort of Lego from Mars. You can play, you can interact, you can steal them."

Each Crystal contains LEDs that are wirelessly charged via a magnetic floor. Once visitors start adding, moving or sharing Crystals, the basic breathing of the Crystals will change. The lighting mood of crystals changes from excited to bored, keeping visitors curious.

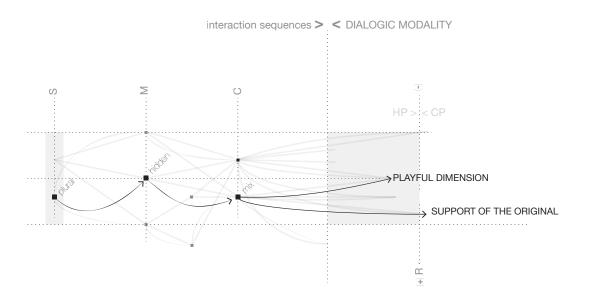
Crystals are white geometric shapes with LEDs inside. The local floor has a magnetic field which allows the Crystals to light-up.



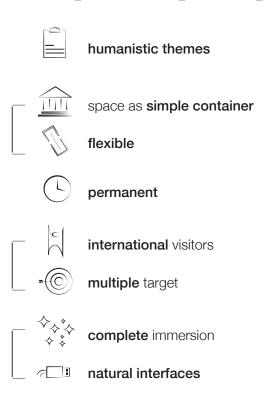
http://www.tamschick.com/en/projects/carnival-theatre/

CARNIVAL THEATRE, 2013

TAMSCHICK Kitzingen, Germany







TMS designed and implemented the highlight of the museum: an audio-visual presentation of twelve historical carnival costumes, which are integrated into a narrative and emotional spatial experience and brought to life via projections.

The performance of the different characters and their individual dialects is supported by a soundtrack especially composed for this piece. On multi-layered, ceiling-high gauze strips, an interplay between the atmospherically illuminated original costumes and the projections on the gauze takes place.

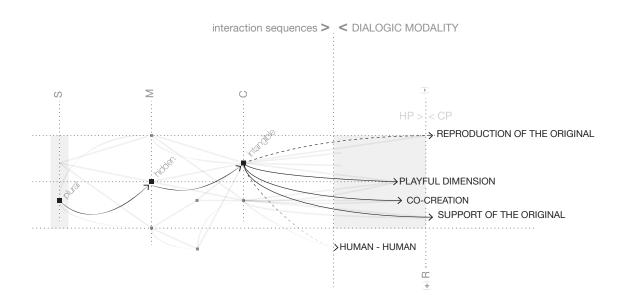
2 ANNEX

RovelloDue - 5 different experiences



phase 1 _ **2016** February, 20 - April, 2

SPACE, TIME. WORDS. The work of Luca Ronconi at the Piccolo Teatro





Passing through a theatre "curtain", visitors are plunged into an immersive environment, created to host temporary exhibitions with a strong multimedia impact.

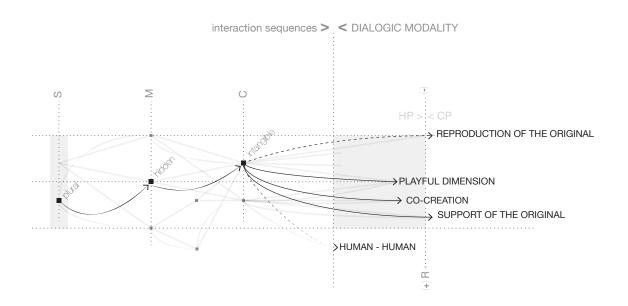
The various multimedia content – photographs, excerpts of productions, sounds, interviews – activated directly by visitors, evokes emotions and atmospheres from Ronconi's creative career. It is based on the three fundamental elements – Space, Time, Words – of the artistic work of Luca Ronconi at the Piccolo Teatro di Milano-Teatro d'Europa. It is a way of respecting his "dream" of infinite journeys created by each spectator within their own memories.

Visitors are invited to actively explore. Moving to the centre of the room, over the key words illuminated on the floor, will activate one of the various multimedia contents provided for each concept: photographs, excerpts of performances, sounds and interviews which evoke ideas and the atmosphere of Ronconi's creative journey. At the end of each content it will be possible to activate a new one. On the opposite wall a continuous series of images from all of the productions, from 2000 to 2015, recount Ronconi's exceptional artistic and personal adventure in his Theatre; a video made up of extracts from rehearsals recalls the experience of Infinities, the performance based on the text by the English mathematician John D. Barrow: staged in 2002 in the Bovisa Workshops – a perfect synthesis of the three key words of Space, Time and Words – it also marked the beginning of the collaboration between the Piccolo and the Politecnico di Milano.



phase 2 _ **2016** April, 15 - June, 12

1956-2016 BRECHT. 60 years of Theatre at the Piccolo





Passing through a theatre "curtain", visitors are plunged into an immersive environment, created to host temporary exhibitions with a strong multimedia impact. The same mechanism of the previous phase but with more words, six instead of three. Sixty years of Brecht at the Piccolo are told through six conceptss – *knowledge*, *humanity*, *justice*, *war*, *work*, *power* – which are emblematic of the German writer's works and the poetry.

Visitors are invited to actively move in the space. Walking over the six key words projected on the floor, they will activate one of the various multimedia contents provided for each concept: photographs, excerpts of performances, sounds and interviews. At the end of each content it will be possible to activate a new one, with the awareness that there are three different random possibilities for each words. Every word is illustrated through audio-visual and photographic elements from the Brecht shows produced by the Piccolo Teatro di Milano over the period of time from 1956 to the present.

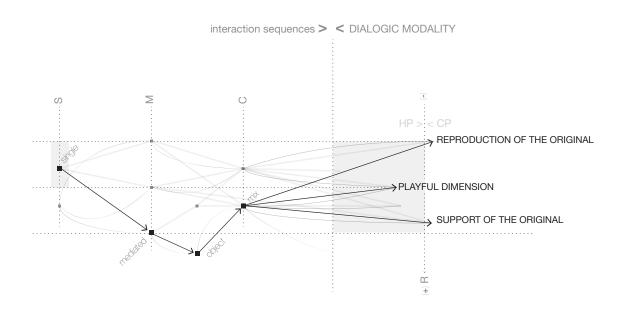
The rapport between Brecht and the Piccolo is closely bound to the events which signalled profound changes in the world. An essential chronology, created with competence and sensibility by the critic Maurizio Porro and projected on the wall to the right of the entrance of the multimedia space, evokes the context in which the shows were conceived. This temporal scan also highlights dates and essential moments in the history of the Politecnico di Milano, the Piccolo's partner in the creation of the project, bearing witness to how the histories of the two Institutions have always run parallel, in close contact with the society in which they both operate.



phase 3 _ 2016 /17 July, 12 - March, 1

A KALEIDOSCOPIC JOURNEY

Polytechnic discoveries and research





Politecnico, Milan. Over 150 years of history. Tens of thousands of works and projects both created and still to be invented. A complexity and variety of thought which is hard to express if not through the concept of a journey. The idea was given to us by Laura Curino in the show Miracoli a Milano, in which each miracle is staged as a delicate and indispensable act of transmission of consciousness with the journey as a metaphor, the common thread and link.

Now, in the same way, this interactive installation sends us on a voyage of discovery. The voyage becomes the selected category of works created as well as current polytechnic research. A miracle, we say, every time we are wonderstruck. With a feeling of marvel, we begin as the pioneers did, we move among stories and we immerse ourselves in history. Full of meaning, the shimmering walls vibrate and multiply.

Kaleidoscopic effects make reference to the etymological union of the words "see" and" beautiful" as well as to the rhetorical figure of entrelacement, in a continuous interweaving of stories and outcomes.

All one has to do is take the "right" notebook, having been attracted by the title or intrigued by the cover, open it and place it on the nearby lectern. By doing so, never-before seen multimedia content is activated. The narration begins. Films and images come to life on the vertical surface. Changing the notebook changes the projection. A few seconds of viewing and on to the choice of a different theme.



Photographs, often period shots, sketches, fragments of shows and original video accompany us on a journey of knowledge, or a mixture of knowledge, discovery of unexpected results, or research, in a stream of experiments and trials. A journey which for certain aspects runs backwards through the life of the Politecnico and of Milan, while for others is projected into the future, through potential scenarios of scientific experimentation and social innovation. A real and physical journey, thanks to the means of transport and the infrastructures created by figures tied to the Politecnico. A human journey, a journey of passion, trials and experiments carried out by professors and students.

Past visions of the future connect the visible with the invisible, events and people who are separated by both space and time. On the contrary, present visions of the future seek to translate the invisible into the visible, creating innovation and hoping for improvement in the near future.

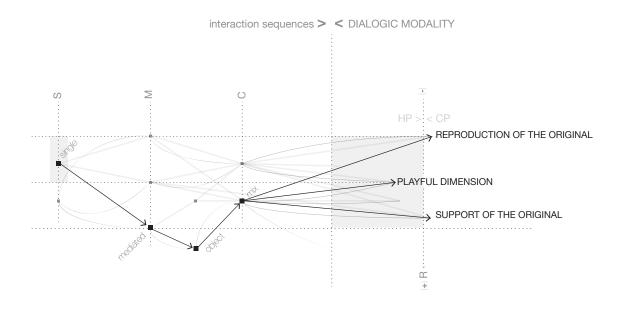
The precariousness of Francesco Brioschi's journeys by carriage, the charm of the Lambretta, the marvellously shapely Isetta, the Roman names chosen by Lancia, the flying cars of the future, probable cars in kit form and possible vehicles made out of fabric - this is just a selection of the content on offer.



phase 4 _ *20117 March, 6 - April, 21*

THE SPECTACLE OF ARTEFACTS

Polytechnic discoveries and research



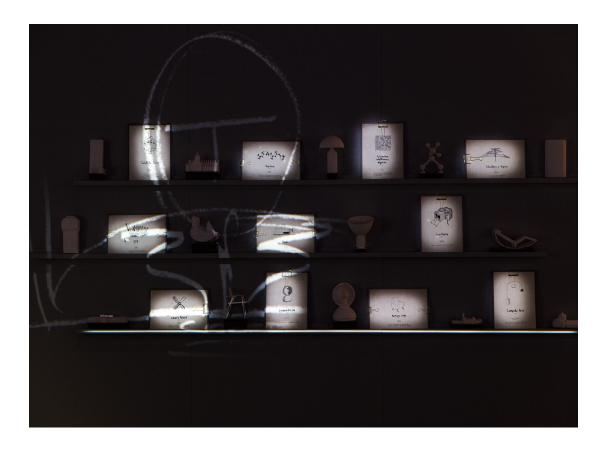


Is it possible for some objects, whether they be large or small, to take on a theatrical role?

On the occasion of Design Week 2017, with the special contribution of the magazine Domus, a selection of architectural, design and engineering works, all connected to the polytechnic world, are placed centre-stage to tell of technological challenges, formal research and the innovations in language that created them.

Each artefact presented is the result of a project which aimed not only to satisfy the requirements for which it was created, but also to embody an idea of beauty. They are not limited to instrumental function, but also possess a figurative and narrative component which is typically Italian and which emerges with force. Each designer involved becomes, undoubtedly, a director-actor who sees the opportunity for active intervention, or some sign which is the precursor of uses to come.

They are those who anticipate and pave the way for future adventures in the encounter between the design-object that they are producing, and the mysterious user to who it is destined. It is the design-object, during the encounter, which plays its function and presence as a "role", in the true theatrical meaning. At times, it accepts the role of stage-hand. It stays to one side, away from the centre of action, saying little. At other times, it becomes an actor in itself, calling attention to itself, conspicuously. Without shyness, not remaining an extra. The artefact, a work created and produced with human intelligence and ability, thus becomes a vital element which interacts, in the space-performance, with its inhabitants or interlocutors.



Almost as though it were a living character, overcoming the indifference of the inanimate. The house itself—as suggested by Andrea Branzi—has acted, since the most ancient of civilisations, as one of the first theatrical stages in life. It echoes the concept of Theatre of Animism, or domestic theatre, lending existence to objects. They are played not only as furnishings but as an interweaving of symbolism and ancient legend.

The period of reference for the installation presented here is wide-ranging, from a Milan just beginning to recover from conflict, rolling up its sleeves and rebuilding, right up to present times. The story begins from the months following the end of the war, when hands, responsible for gesture, as Laura Curino tells in the theatrical play Mani Grandi, senza fine. Hands, an elementary layer of experience, which in turn is the friction of touch and use. They shape the artefacts, no longer mere supports for planned functionality, but nodes and an interweaving of relations. Artefacts which carry, in the space-performance, a message which is capable of in-forming them. The same years, and stories intertwine, new visions multiply.

The magazine Domus observes the changes, becoming The privileged observatory for the recognition of the style of an era, never missing the multi-disciplinary, transversal approach of reciprocal contamination, in both design and theatre. It was the play 70 Angels on the façade – Domus 1928-1998 which demonstrated this in all its force. The same Robert Wilson, in creating the play, set out the scenography, the look of the stage, before creating the content. Just like in architecture, he created a macro-structure, in seven acts, to be built.



A prefabricated structure of objective laws, which establish reciprocal relationships, to which the subjectivity of emotion, beauty and harmony is added; integrating with the actors, object-designs, or artefacts blown up in scale to capture the attention. Once again in dialogue with us human beings, whether they serve, or whether they are protagonists.

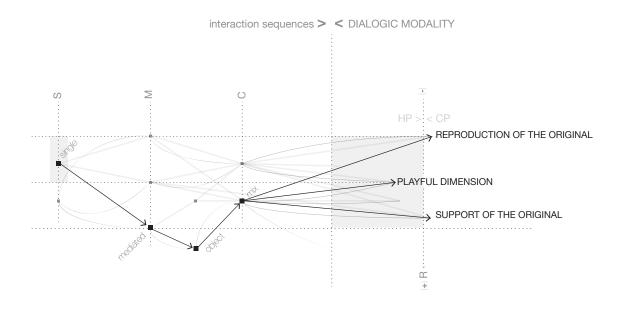
The same interaction mechanism of the phase number 3. All one has to do is take the "right" sketced paper folder, having been attracted by the title or intrigued by drawings, take it and place it on the nearby lectern. By doing so, never-before seen multimedia content is activated. The narration begins. Films and images come to life on the vertical surface. Changing the paper folder, changes the projection. A few seconds of viewing and on to the choice of a different theme.

Attention is shifted away from the symbolic object - paper folder - itself to the story surrounding the object, reconstructing a setting which gives a context to the exhibit, enabling it to step out from its immobile sanctity. In this way, by combining the physical substance of objects, of spaces and of people, with the virtual dimension of the multimedia story, it is possible to suggest the invisible, intangible stories and parallelism among design concepts. The proposed experience is a synthesis of subject matter and action, and that synthesis is interaction.



phase 5 _ **2017** May, 6 - November, 15

IN SEARCH OF BEAUTY





Founded in 1947 – the curtain opened for the first time on the evening of 14 May – by Paolo Grassi, Giorgio Strehler and Nina Vinchi, the Piccolo of Milan was the first ever public theatre in Italy.

The eighteen audio-visual exerts available in the multimedia installation do not cover the riches of seventy years of activity in their entirety: they provide a cue for the examination of a number of fundamental moments, highlighting the cultural values and objectives of the Institution and evoking the artistic figures who have contributed to writing its history.

"An Art Theatre for All", the Piccolo proposes quality shows for an audience which is as wideranging as possible, both in terms of age and background. It promotes a policy of cultural decentralisation, programming shows in various venues throughout the city, beyond the traditional theatre auditoriums.

In 1991, it became a "Teatro d'Europa", underlining its international vocation which was cultivated from the very beginning, with the tours of the most important shows and the hosting of artists from all over the world. The artistic leadership of Giorgio Strehler (1947 - 1997), followed by Luca Ronconi (1998 - 2015) was aimed at an articulated and in-depth study of the classics (Shakespeare, Goldoni, Pirandello and Brecht), as well as an exploration of national and international contemporary dramaturgy, bringing new playwrights to the public's attention.

Directed since 1998 by Sergio Escobar – currently with Stefano Massini as artistic consultant – the Piccolo stages shows in three auditoriums: the Teatro Giorgio Strehler with the nearby Studio Melato, and the original location in Via Rovello 2, named after Paolo Grassi, with the



extraordinary adjacent Renaissance Cloister. Since 1987 the Piccolo has been running a School of Theatre, founded by Giorgio Strehler and now named after Luca Ronconi, which has graduated 230 professional actors over a period of thirty years and is committed to a continuous cultural and methodological exchange with the most important Schools of Theatre worldwide.

3 ANNEX

RovelloDue - questionnaires

VISITOR QUESTIONNAIRE

Dear Visitor,

We ask for a few minutes of your time in order to better understand your personal relationship with theater, entertainment, and culture. Your answers - which will remain anonymous - will help improve the offer and services. We sincerely thank you for your collaboration, and we trust to meet you again in this and other places of culture.

SECTION 1 | Theatrical habits

Do you attend Piccolo Teatro? How often?

- I am a member
- One two times per season
- Occasionally

Do you attend other Theaters?

- I prefer Piccolo Teatro
- I attend other Theaters (based on the Shows that are offered)

Do you enjoy following the Theatre through other media? / Do you prefer other forms of entertainment to Theater?

- Web
- Tv
- Cinema

You chose to come to visit *RovelloDue*: Was it your own initiative or did you share it with someone else? If so, did you involve anyone to come with you?

- I usually come in groups
- I invited one or more relatives / friends / acquaintances
- I was invited

Which factors were relevant in choosing to come here today?

- Interest in the exhibit / installation
- Trust in the Piccolo Teatro or Politecnico di Milano production
- · Closeness to the Theater
- Simple curiosity

SECTION 2 | cultural habits

Do١	you attend	places of	culture?	Which ones?	How	often in a	year?
-----	------------	-----------	----------	-------------	-----	------------	-------

- Museums (sometimes | often)
- Archaeological Sites (sometimes | often)
- Art Galleries (sometimes | often)
 Libraries (sometimes | often)
- Cultural Institutes (sometimes | often)
- Cinema (sometimes | often)

	Connections -	cultural	experience	driving	to	theater
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Is there a cultural experience (reading, study, artwork, etc.) that pushed you to come here? Which
one?
Is there a non-cultural experience (travel, work, personal relationships) that pushed you to come
here? Which one?
SECTION 3 the experience
Was the experience immersive?
Yes, it was.No, it wasn't
In your opinion, did technology contribute to the immersive quality?
Was it pleasant (regardless of the content)?
YesNo
· NO
Was the interaction mechanism immediate and intuitive?
• Yes
 No I read the instructions on the panel
Troda and modification of the partor
Could it be perfected? If so, how do you think?

SECTION 4 | content

How did you choose the panel to activate on the shelves?

How many video contents did you activate?

- 1 or 2
- 3 or 4
- More than 4 or 5

Did you already know the presented topics?

- · Yes, I did
- No, I didn't
- Not all

After the experience, did you gain more knowledge or inclination to develop it?

- Yes, I did
- No, I didn't

The theater can stimulate other activities and interests.

Did this experience stimulate you to undertake any other cultural experience? Which ones?

SECTION 5 | personal and professional profile

Can you tell us your age range?

- Teenager (13-19)
- 20-35
- 36-45
- over 46

What is your business or profession?

- School
- Public Administration
- Private Enterprise
- Professional Firm
- Artisan
- Digital Industry
- Theater
- Art and Culture

STAFF QUESTIONNAIRE

One questionnaire per installation phase. Following is the general one.

SECTION 1| typology

(perceived) average age of visitors

- Teenager (13-19)
- 20-35
- 36-45
- over 46

Visitor type?

- Random Tourists or pedestrians
- Selected linked to the Theater
- Selected linked to the University

Can you kindly draw the visitor paths in the room for each phase /installation?

(The most commonly chosen path, and if you remember some particular exception)

How much time did visitors stay in the room?

- 5 min
- 10-15 min
- 15-20 min
- 30 min
- More than 30 min

Once through the curtain, the visitor seemed:

- Intimidated
- Disoriented
- At ease
- Curious

Was the visitor confident with the exhibition materials / installation?

Words to walk over | objects to pick

- Immediately
- After an explanation
- By emulating other visitors

Were visitors blocked by the "look but don't touch" mechanism?

- Yes, they were
- · No, they weren't

How was the visitor's reaction (affection feeling) to the chosen word?

- Evident
- Contained
- Scarce

How was the visitor's reaction (surprise feeling) in activating the video?

- Evident
- Contained
- Scarce

Once the mechanism was understood, how was the visitor's curiosity in activating a new content?

- Evident
- Contained
- Scarce

Did the visitor show interest in asking additional questions on the mechanism in place? If
so, which questions?
Did the visitor show interest in asking additional questions on the selected contents? If so, which questions?
Are there any observations and behavioral constants that were not addressed in this
questionnaire but that emerged in your observation of the space use?