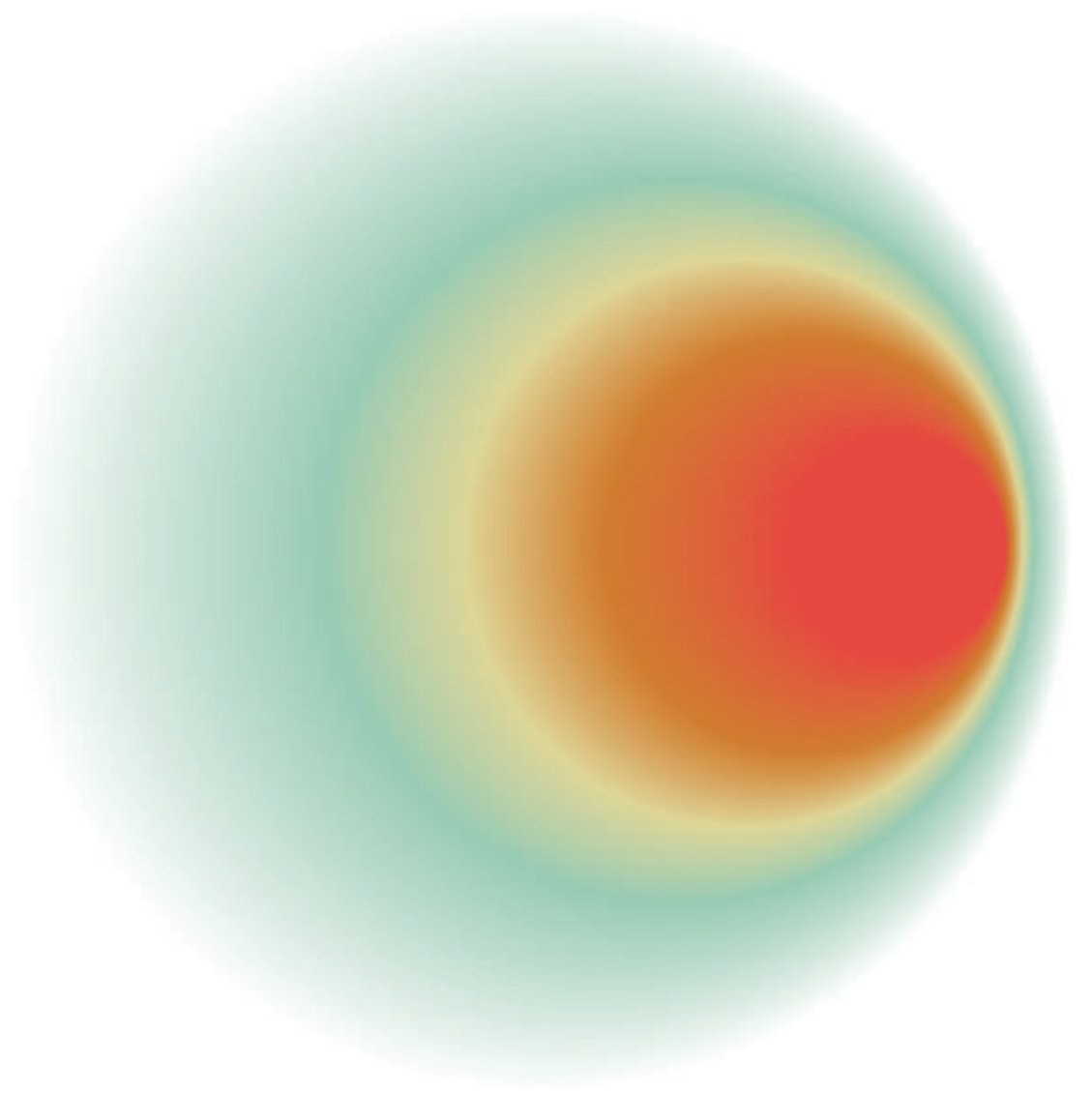


MNEMOSPHERE

Designing a Neologism between Memories, Emotions and Atmospheres

edited by Marta Elisa Cecchi, Clorinda Sissi Galasso



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MNEMOSPHERE

Designing a Neologism between Memories, Emotions and Atmospheres



edited by Marta Elisa Cecchi, Clorinda Sissi Galasso

D.I. **FrancoAngeli** 
DESIGN INTERNATIONAL

MiniFARB project, *mnEMOsphere – Un sistema per l'allestimento della memoria dei luoghi attraverso le emozioni* [Design Department, Politecnico di Milano, 2019-2023].

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Designing a neologism

Marta Elisa Cecchi and Clorinda Sissi Galasso

Design Department, Politecnico di Milano

Why do we need a new wor(l)d?

From a terminological perspective, dealing with a new word has always been a delicate and complex operation. The lexical novelty still struggles to find a common definition that brings together all the fields of knowledge involved. In Linguistics *new word* is viewed as an umbrella term for any newly coined word, whereas *neologism* is reserved for novel terms that bring lexical enrichment to the language (Mattiello, 2017). Neologisms can be original single words, never imagined or pronounced before, or terminological compounds that live from the relationship between already existing words. Using the words of Szymanek (2005) it is possible to distinguish between new lexical formations «created *ex nihilo*, with no activation of any morphological process” (p. 430) and *derivational neologisms*, “coined according to some well-established and productive patterns» (*ibid.*). Cabré (1999) provides a *psychological definition* of what a neologism is, namely «a neologism is a word that is perceived as new by the language community».

According to Newmark (1988), who raises the issue of translation in literature, there are several types of neologism, which make it even clearer what is meant by ‘neologism’ and ‘new’ word, and they are: Old Word with New Senses, New Coinages, Derived Word, Abbreviations, Collocations, Eponyms, Phrasal Words, Transferred Words, Acronyms, Pseudo-neologism (similar to Abbreviation)¹. Nevertheless, the lexical particle ‘neo’, or ‘new’ in these new words, new uses, new expressions, and new senses, means that

1. The classification of neologisms has yet to be settled; there is no single way of classifying them. Indifferent classifications worked out by scholars and different aspects of neologism have been considered.

the word, use, expression, and senses did not exist before². Neologisms are a highly relevant linguistic category for numerous of reasons: they are the elements that make a language alive and dynamic rather than static; they are indicative of language evolution; they are a significant barrier in computational analysis and translation; they help to demonstrate a language's productive morphology. The alteration of a language occurs on various levels – phonetic, morphemic, lexical, syntactic, and so on – and the first three are the most susceptible to change, which may be visible even to one generation. Syntactic changes happen more slowly, and we only notice them years later via achieved texts. Lexical changes are most visible because misunderstanding can occur when we encounter a new word.

Enriching and expanding a language's vocabulary is essential for its development. The recently generated or borrowed terms known as neologisms entered the stock of the lexicon as an integral component after a set period of being perceived as usual and new. The process that leads to the formation of a neologism goes through different steps that can be grouped in *creation*, *consolidation*, and *establishment* (Schmid, 2011).

The first phase sees the word initially voiced and then written by a speaker. In this way, it materializes and begins to have semantic value. Very frequently, the new word does not arise after a specific design process. Still, it occurs for more *impromptu* reasons: to reduce syntactic complexity, to synthesize, for lack of suitable words to express a particular concept, for the need to combine distant concepts. Different situations that all lead to the creation of an «*ad-hoc* formation, a previously non-existent combination of existing morphemes» (*ivi*, p. 73).

The second phase, that of consolidation, starts when new formation begins to spread and to be involved in the language, transforming the *ad-hoc* formation into a real neologism able at this point to survive. The third phase appears as the most difficult to achieve for the term. The novel lexical item has to be recognized by institutions as an entity that overcomes the meaning of its terminological components by creating a new horizon of sense.

2. It is important to mention that the concept of “novelty”, “newness”, is limited itself as depends on what period is taken into consideration. Furthermore, Maarten Janssen (2005) shares his view on the ambiguity and the paradoxicality of the term ‘neologism’ itself, stating that the simple fact that the word is new should imply that it is now part of the language but was not previously.” However, language does not develop in distinct phases in which terms in the new lexicon may be compared to words in the old lexicon. To begin with, ‘new’ is a relative concept; some terms may be older than others, but there is no fixed time for being new. Second, there is no well-defined, stable lexicon of a language against which newness can be measured – a language cannot be stably defined within its time-based, unique, and social dimensions.

Going even more in detail, a neologism needs to be distinguished from *nonce words* as well. The former are stable and their permanence in language passes through a process of institutionalization, the latter are «one-off coinages that when newly minted seemed apparently bound to enter the general vocabulary, but soon vanished, lost amid the linguistic ephemera» (Green, 1991, p. vii). Despite the marked conceptual nuances, what seems to be the common substrate for all neological variables is being the answer to a change. A neologism is motivated, in most cases, by the need for adaptation. The adaptation of language to change, the lexical support for the world's constant transformations, whether physical or conceptual.

According to McCormack, the need to find new words is to compensate for our inability to dialogue and express ourselves: «for describing new things but also when no word currently in existence can accurately express our sentiments. The words we invent to describe our experiences of the world inherently and concurrently reflect our attitudes about the world in which we live. The study of neologisms or neology is a valuable tool for uncovering cultural changes as they occur» (McCormack, 2013, p. 88). Nevertheless, as a general rule, a new unknown word captures attention and makes one wonder or speculate about its meaning, denotative and connotative. It may even perplex or arouse negative emotions and memories.

The *halo* around words

Ultimately, a final key aspect concerning neologisms, but more generally the power of words, is that of having a tendency to evoke a particular “intentionality”: namely, their ability to release their own ‘halo’ of meaning and evocation could provide a better alignment for those who use them. But what does it mean that words have a halo around them from the way they are written, read and spoken?

Observations by Ludwig Wittgenstein, logician and philosopher of language, can help to better understand this ‘invisible’ but perceptible aspect that words have, especially neologisms. According to the author, the atmospheric halo of words coincides with the musical aspect of communication, with the tone of the discourse. This ‘musical’ accompaniment is not added outside the phenomenon but constitutes its intimately expressive dimension. At the center of Wittgensteinian thought is the term ‘atmosphere’ in which the philosopher analyses our way of talking about psychological processes and, in particular, linguistic comprehension, viewed as a ‘private’ mental experience. Wittgenstein emphasizes the communal aspect that takes place between speakers, i.e. there is a kind of ‘attunement’ that involves them in shared aesthetic feeling.

Thus words appear enveloped in a mysterious aura of meaningfulness as they have a recognizable melodic profile and are inserted from time to time in specific activities in which the intonation of the discourse clarifies the context. According to Wittgenstein, atmosphere coincides with the musical aspect of language, with the tone of discourse, with the accompaniment that is not added from the outside to the phenomenon but constitutes its intimately expressive dimension; «to understand atmosphere correctly is to give a face to how our words look to us» (Oliva, 2015, p. 244). In the first pages of the book *The Empire of Signs* written by Barthes (2002), the author states how he grasps the known language as breathing, emotional aeration and pure signification in which he then finds himself moving lightly in the void.

In this perspective, the atmospheric halo around any neologism often allows one to grasp it even before fully understanding its meaning. In the case of ‘mnemosphere’, the activities that were organized to visualize its attributes started from the atmospheric effect that the new term embodied and what feelings emanated from this word having neither form nor definition.

Interpreting the present time

We are now experiencing profound changes at a global level and a different way of connecting with places, memory, and the atmospheres generated by their relationship. We are moving from an anthropocentric conceptual model to a designed *topophilic* attachment to space (Tuan, 1974) that seeks an empathic emotional dialogue with the surrounding environment. In this framework, the need to update languages is real and urgent (Cabré et al., 2012) and there is a growing demand for words that can renew the diffusion of ongoing changes and communicate their implications and nuances. Algeo illustrates the contingency we are assisting with this sentence «we use some new words because we take delight in them... They reflect changes in material and intellectual culture. And they show us something of the way human beings cope with problems and laugh at the absurdities of life» (1991, p. 15). On the other hand, neologisms are often aimed at understanding contemporary and evolving relationships between living beings and the environment.

In the Internet Age, with the ever-faster development of new technologies, numerous neologisms are bubbling to the surface and enriching the language. One example is the letter and sign ‘e-’ transferred to anything electronic, becoming the marker of today’s digital culture, e.g. e-Mail, e-Commerce, e-Book, e-publishing and many others. Among the most famous neologisms of recent years is undoubtedly the notion of ‘non-place’, or ‘non-location’, a French term introduced by French anthropologist Marc Augé in 1992 in

his book *Non-lieux. Introduction à une anthropologie de la surmodernité*³. The neologism non-place defines two complementary but distinct concepts: on the one hand, spaces that are constructed for a particular purpose and, on the other, the relationship that is created between individuals and those spaces. Marc Augé defines non-places as opposed to anthropological places, i.e. all those spaces with the prerogative of being non-identitarian, relational and historical. Indeed, non-places are spaces primarily destined for circulation, consumption and communication, often located outside urban centers: airports, railway stations, shopping centers, supermarkets, hotels, petrol stations, sports facilities, tourist resorts, and refugee camps.

As Augé repeatedly clarified, there are no places and non-places in an absolute sense. However, it is clearly more unlikely that signs of social ties and collective history can exist in places of transit by definition, such as airports and stations. Augé described non-places as spaces typical of surmodernity: another neologism he coined about the social, intellectual and economic phenomena typical of the development of Western societies at the end of the 20th century, in particular, the overcoming the post-industrial phase and the spread of globalization. He attributed to this new phase of modernity the characteristic of ‘excess’: an excess of events that historians struggle to interpret; an excess of easily accessible or usable spaces, in which non-places proliferate; and an excess of ego, i.e. the tendency of people to interpret information on an individual level and not based on a meaning defined at a collective level. Another famous neologism, even if it is not openly referred to as such, can be recognized in the concept of the *opera aperta* (the concept comes from Umberto Eco’s 1962 essay of the same name but also from Roland Barthes’ distinction between readable and writable texts, dealt with in the 1967 essay *La mort de l’auteur*).

However, what is meant by an *opera aperta*? The term means, in the broadest sense, a work of art whose aesthetic, formal or material identity is not defined once and for all but is subject to factors of variability that make it always different within more or less extended limits. Hence, a work of art of completed form and limited in its perfection is also *open*, with the possibility of being interpreted in a thousand different ways without its irreproducible singularity being altered. In each new fruition, the work lives again in an original perspective. Nevertheless, the most appropriate words seem to be the derivational neologisms, made up from existing morphological material (Schmid, 2008), and suitable for combining very distant themes.

3. The Italian term was registered as a neologism for the first time in 2003 and was then accepted in the lexicons of all Italian vocabularies.

By bridging together concepts, and even different fields of knowledge, these words become tools capable of activating new design perspectives and changing cultural horizons.

In this sense, *Mnemosphere* project here presented will investigate the rich soil of a new word formation which, naturally not yet delimited by a univocal definition, become a connective and polyphonic instrument on parallel themes such as the memory of places, the entirety of emotions and the atmosphere of spaces. Through a series of online and offline activities, the project explores what it means to design for a neologism, what parameters, guidelines and research actions can be activated to define the unknown.

The MiniFARB Research Project - *Creation*

The immediate comprehension of a composite word seems to fade as soon as one attempts to give it an unambiguous definition. This mechanism frequently occurs when trying to define “the particular air one breathes in a unique environment”, i.e. the atmosphere, or “the memories linked to a place that emerge and blend into its fabric”, i.e. the place memory. These are affective and spatial dimensions that establish a subjective emotional connection with the perceiver, difficult to grasp without evoking further imagery.

It is precisely starting from this premise that *Mnemosphere* project, in the field of design culture, intends to trigger activities, processes and research reflections for the development of a new concept. Furthermore, it is tempting to claim that it is a pure neologism. Actually, this term has been used sporadically in literature⁴, although a definition has never been formalized in any disciplinary field. Even in the culture of design, it appears as a new word that offers itself to numerous experimentations.

Mnemosphere project lives in this context, uses the new lexical item as a title, and its definition as a principal objective. *Mnemosphere* is a research project, still in progress, which was born in the context of MiniFARB call for proposals, involving PhD students and research fellows, for the allocation of funds for interdisciplinary research projects, promoted by the Department of Design of the Politecnico di Milano. The MiniFARB's emphasis on interdisciplinarity has led to a project being characterized by a composite research team, guided by the common goal of achieving multiple interpretations of the addressed issues. *Mnemosphere*, therefore, bases its approach on a synergic collaboration among distinct fields of knowledge [Fig. 1].

4. The neologism *Mnemosphere* derives from a topical research, but is not strictly related to either English or Italian, but is intended to transverse all cultures and disciplines.

As previously mentioned, the term *mnemosphere* is formed by the merging of three words (MN+EMO+SPHERE), which in turn refer to the themes investigated, namely memory (MN), emotions (EMO) and atmosphere (SPHERE). The purpose is not to consider the extent of each thematic component, but the actual relationship between them. *Mnemosphere*, in fact, was born as a terminological response to the need for a single term, a conceptual entity, able to represent the result of the interaction of mnemonic, atmospheric, and emotional fields. In this context, it should be made clear that the topics presented, in order to be considered a *mnemospheric union*, are first examined from specific perspectives.

The theme of memory is interpreted in its connection with the places where collective and individual narratives are stratified over time. These sites are read as complex objects of territorial interpretation (Assmann, 1997), essential for mnemonic communication and an integral part of the landscape.

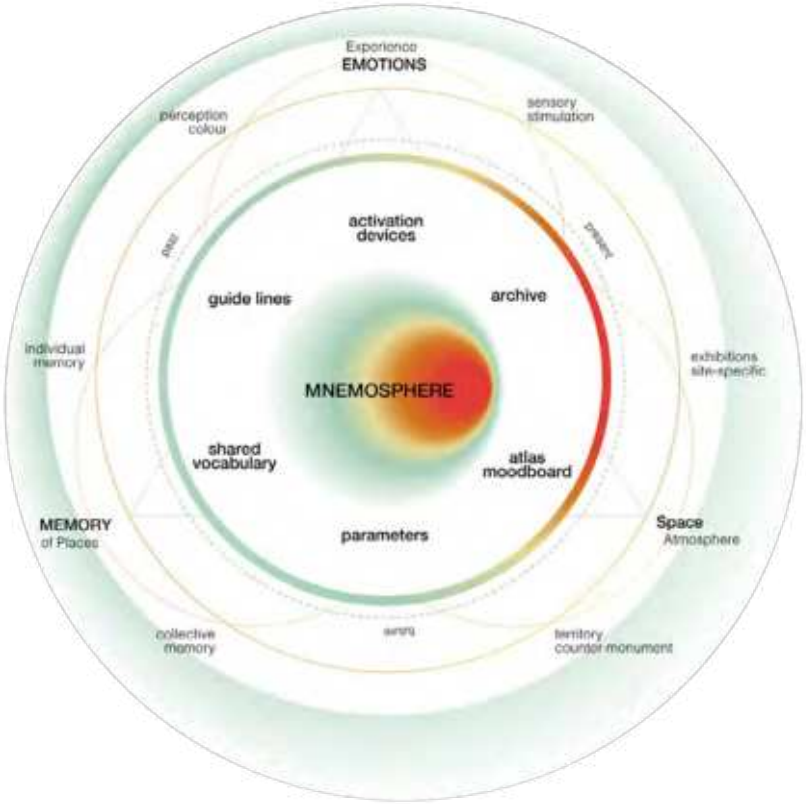


Fig. 1 – *Mnemospheric theoretical framework, 2020.*

The theme of atmosphere, on the other hand, is closely linked to the designed space and has as its main theoretical reference the aesthetic concept of “atmosphere” (Böhme, 2016; Griffero, 2017) developed in the neo-phenomenological philosophy (Schmitz, 1980) which has recently been discussed in the international arena. More specifically, the atmosphere of the space is explored in the field of the exhibition-installation space since it is precisely through these temporary devices that the visitor is involved in a particularly stimulating narrative and emotional experience.

With regard to the theme of emotions, the overall designation refers to the sentimental aspect of experience and is determined by subjective as well as physiological and behavioural components. Colour in this context is one of the fundamental elements in the design of the mnemonic-spatial experience capable of stimulating a strong perceptual and emotional response in individuals, conditioning their behaviour (Kotler, 1973 in Yildirim et al., 2007). The research project, therefore, proposes an approach to the study of emotions starting from colour in its relationship with memory and space.

Online Activities and research phases - *Consolidation*

Mnemosphere was launched in June 2020, when the Covid global emergency was leading to a total rethink of research and didactic activities.

The project transformed all planned actions from offline to online, together with a progressive redefinition of the most suitable methods and tools to be employed. The need for a general reconfiguration of methodology was not a limitation for this research, but proved to be an opportunity to create engagement with a wider audience and privileged access to other, broader contexts.

In the dialogue within the Design discipline, the research on the derived neologism Mnemosphere has analyzed the relationship between different themes that, in their overlap and mutual influence, allow the development of a set of tools aimed at communication and enhancement of the territory through emotions and mediated by the designed space.

The experimentation intended to examine the research themes from both a theoretical and practical point of view, establishing how the different disciplines contribute in a specific and transversal way to the topic and investigating the neologism through field activities.

In view of this, the research project was structured in three methodological steps described below: *Recognition, Meta-Analysis, Synthesis*.

Phase 1 - *Recognition*

The first phase dealt with the analysis of the specific state of the art of each disciplinary field involved, with the aim of reaching a shared theoretical framework. The research took its first steps in the intrinsic intangibility of the various topics covered and the plurality of voices contained. The initial action was the semantic delimitation of the term and the related constellation of concepts. As primary output, it was decided to adopt a shared vocabulary containing a varied lexicon of reference; it was developed through an internal questionnaire with open and closed answers. Interpretive synthesis of the responses and extrapolation of the keywords identified by each team member resulted in a Mnemosphere glossary, a valuable hermeneutic research tool.

At the same time, the graphic identity of the research was defined, emphasizing a degree of sensitivity in visually integrating thematic areas and restoring homogeneity to a single concept-container. The logo [Fig. 2] was developed starting from the circle, as a dynamic expression of abstract concepts, and from the unifying element of the sphere, which alludes to the three-dimensionality of space. Finally, it was decided not to represent sharp contours, but to use nuances that visually enhance the conceptual connection between the themes. Due to the aforementioned pandemic situation, it was necessary to extend the research to virtual platforms of interaction that would bridge the distance and seek out a sense of proximity and involvement.

For this reason, it was decided to develop a social approach with the intention of informally disseminating the preliminary results achieved, but above all to reach a vast heterogeneous audience. The connective vocation of the Instagram platform (@mnemosphere.project) acts as an evocative device and design tool to narrate the research in its progressive development, setting the graphical interface as a composite visual table of the mnemosphere lexical nebula. By assembling this moodboard format, the theoretical tones intended to be communicated to users are made more explicit, inspiring collective and intimate participation.

Phase 2 - *Meta-Analysis*

The intermediate phase of the research aimed to collect data through a series of organized online activities focused on the visual component of the images. The lexical and textual apparatus was undoubtedly fundamental in structuring the depth of the themes dealt with, but seemed insufficient in defining, representing and communicating the perceptive dimension of “mnemosphere”. Content visualisation also appeared necessary to express

the neological value inherent in the imagery produced by a visual-formal composition. For these reasons, an *Open Call for Images* was launched online, in order to use a tool typically belonging to the visual arts sphere and apply it in the field of design, triggering a process of cross-fertilisation, or rather hybridisation, between different disciplines.

The open call consisted of a short questionnaire and the uploading of a maximum of three images per participant. The first part consisted of general questions about the identity of the participant as well as open and closed questions related to Mnemosphere definition; the second part of the open call was entirely about uploading images. Each participant was asked to upload a maximum of three files with a title and description, without any restrictions in terms of format, communicative and figurative language. The images collected demonstrated a wide range of media – photographs, illustrations, paintings, collages, drawings and sketches – which together added heterogeneity and expressive variety to the Mnemosphere topic.

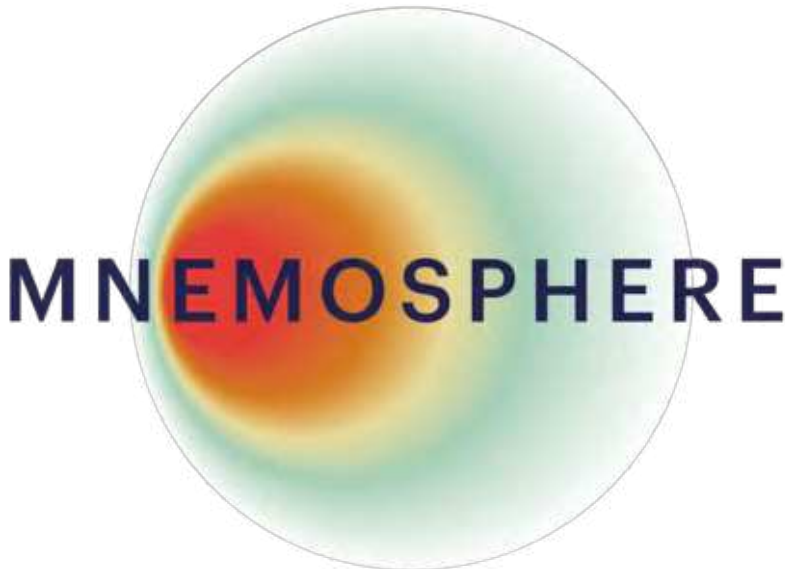


Fig. 2 – Mnemosphere project logo, 2021.

Phase 3 - Synthesis

The final phase was dedicated to the synthesis and critical processing of the results obtained to determine a system of parameters and guidelines.

The Open Call took place between mid-January and the end of March 2021, and more than 200 participants from all over the world contributed, uploading over 400 different images capturing the subjective essence of mnemonic perception. All the collected contributions (images, titles and descriptions) were uploaded in progress to the official platform of the research project, i.e. the website <https://www.mnemosphere.polimi.it/> as a digital database and open online exhibition. The preliminary step of the analysis of the contributions consisted in creating a series of *Identity Cards* [Fig. 3].

These devices summarized all the data inherent to each contribution in a more effective, synthetic and visually intelligible way, allowing the images to be ordered for analytical observation. Each card offered multiple interpretations relating to written information (concepts and descriptions), visual information (percentages of images and colours) and sensory information (relating to the senses involved in the narrative of each image). Subsequently, internal online and offline workshops were organised with a mix of different approaches depending on the thematic and disciplinary perspective addressed, to classify and structure all the submitted responses.

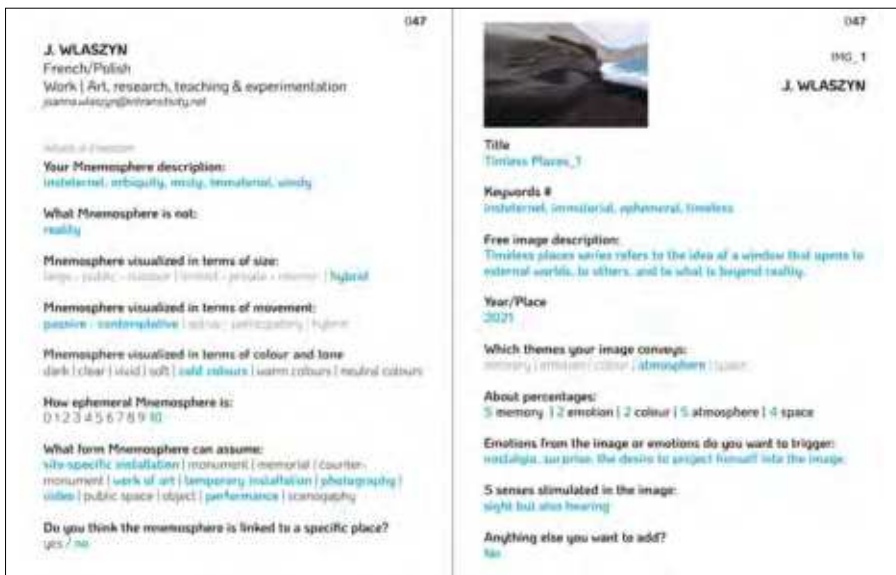


Fig. 3 – Mnemosphere project ID cards, 2021.

The workshop activities proved to be useful methods to extract transversal key concepts that could be translated into parameters for the design of mnemonic spaces and atmospheres.

The first workshop focused on image processing from an atmospheric-spatial point of view and sorted into seven *a priori* categories that allowed the identification of shared morphological elements, modes of representation, particular framings and recurring themes. The approach was purely visual and less linked to image textual descriptions.

The identified categories are [Fig. 5]:

- Atmosphere as Air: in which open spaces, skies and horizons emerge;
- Atmosphere as Bubble: in which the theme of circularity emerges;
- Atmosphere as Fog: in which emerges the theme of undefined spaces, in movement and out of focus;
- Atmosphere as Diaphragm: in which elements connecting interior and exterior emerge, such as entrances, corridors, doors and windows;
- Atmosphere as Net: in which complex, interconnected spaces emerge as well as conceptual and real connective elements;
- Atmosphere as Colorful: in which images emerge in which the main character is colour, tones and abstract symbolism;
- Atmosphere as Void: in which singularities, empty spaces, full of nothingness and desolation emerge.

The second workshop was developed from the mnemonic perspective, using an opposite approach, i.e. focusing on the interpretation of texts and descriptions rather than an analysis of the visual content.

In this context the images were divided into four typologies [Fig. 4]:

- Individual memory: in which faces of people and bodies often emerge;
- Collective memory: in which monuments and memorials emerges;
- Physical environment: in which natural environments, such as landscapes, and urban and domestic environments emerge;
- Abstract dimension: in which symbols and free, highly coloured illustrations emerge.

After making the visual compositions, henceforth called *atlases*, it was possible to analyze the colour elements of each central theme and develop an exploration of the emotion theme from the chromatic point of view. The analysis was supported by 25-colour charts developed for each visual atlas which permitted the identification of similarities and divergences in the thematic atlases, the detection of harmonic and contrasting relationships and

the conceptual link within the semantic clusters. In this way, it was possible to affirm that the colours of nature and materials of certain places influence the individual and collective memory linked to them, and consequently, the related emotional 'temperature' felt by the perceiver/open call participant. Indeed, the process of gradual incorporation of the place into the user's emotional experience alters the hues, brightness and saturation of the realistic representation of the place and landscape.

The Mnemosphere Atlas

The historical background for the open call images analysis takes as its model the visual research of one of the most famous modern art historians, Aby Warburg. Historical pioneer of the interdisciplinary study of culture, he stressed that researchers should stop policing disciplinary boundaries in order to gain insight into the processes of cultural memory (Erl & Nünning, 2008). The methodological process of the Mnemosphere atlases is inspired by his system of panels, materialized in his most important work, *Atlas of Mnemosyne* (1924-28). The images in the panels were assembled and arranged in groups or sequences, which made it possible to perceive an underlying harmony at first glance; visual components were not placed in a hierarchical relationship to each other, and their positioning was not fixed but fluid and could therefore continually change according to the investigation evolution (Forster et al., 2002). These assemblages made it possible to link different works of art, produced by artists in different periods and geographical contexts, which converged in large iconographic tables having a strong aesthetic and installation aura effect. In Warburg's *Atlas* images are the prime subject of study because they provide a transversal and striking way of narrating world cultures, histories and aesthetics. In *Mnemosyne*, the juxtaposition of images, which weave different elements around a central theme, creates different fields of energy that trigger an open and dynamic interpretative process in the perceiver.

The mnemospheric experimentation, which came to life thanks to the open call and the workshops and then took shape through the atlases, aims to offer a series of visual *hypertexts*. The images lose part of their initial meaning to acquire new significations capable of capturing the atmosphere and the memories of the places. The loss of sense of some images is not an uncontrolled aspect, but an engine of development for a shared and definition of the Mnemosphere. Inspired by Warburg, the *Mnemosphere Atlas* stands as an active tool of the neological research able to make tangible the mnemospheric imaginary in the field of design.



Fig. 5 – Mnemosphere Atmospheres Atlases, 2021.

It is important to highlight that there are a lot of different viewpoints concerning neologisms and their age. The main problem is to state when the new word becomes a neologism. Some scholars claim that the word should be at most 25 years old to be considered a neologism. In spite of its terminological and design evolution materialized through the atlases, what remains evident is the need for further experimentations and applications, especially in the form of exhibition spaces and installations, which are able to explore the multicomponential nature of the mnemospheric dimension.

Future prospects include the organization of a series of *Mnemosphere seminars* with academics and professionals to amplify the dissemination of the project; the curatorship of a collective exhibition in Lisbon, organized with Broteria Collaborative Space, to translate the idea of Mnemosphere into unique artistic experiments; the publication of the *Mnemosphere Atlas*, with all the guidelines and the results.

In this way the research will finally open up to offline activities that could involve the direct participation of people. In conclusion, it is hoped that this project will become an example of how, starting from a neologism, innovative and virtuous research processes can be triggered. But, above all, the aspiration is that this experience will not remain enclosed in a terminological definition made up of images and words, but that it may be the starting point for further reflections, practices and studies.

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Part I: MN - Memories

The first Part is dedicated to the nuanced theme of memory, unraveling the interplay of collective and personal meanings woven into the tapestry of both human and places. *Mnemosphere* thus as a past that returns to be experienced, as a present that becomes remembrance, as a future that becomes a possibility and as the creation of further emotional fields.

The **first chapter** deals with the theme of memory of places¹, or rather *mnemotopes*, as cultural objects of territorial interpretation combining topography and communication. The author, Clorinda Sissi Galasso, presents and describes these mnemonic palimpsests, which are deeply rooted in the territory but are also dynamic and living entities, influenced by our interactions and experiences and capable of connecting with the emotional sphere of each individual who inhabits them, thus becoming mnemospheres.

The **second chapter**, written by Anna Laviosa, draws directly on her personal experience as a professional photographer and set designer and the works of Silvio Wolf, Cristina Garcia Rodero, Monika Bulaj and Walid Raad. The author proposes a critical reflection on the photography art practice and its value as an interceptor of memories. The discussion starts from the dichotomy that characterizes the neologism of Mnemosphere, that is, being conceived as something halfway between a bright *déjà-vu* and the blurred background of a place that we do not know but that involves us.

The **third chapter**, written by Daniela Anna Calabi, investigates the relationship between the individual's haptic perceptive intelligence and the atmospheric identity linked to places from an aesthetic and topographical perspective concerning the communication of cultural heritage places and territories. The landscape becomes the ideal mnemonic device and horizon through which the individual's haptic experience merges with the emotional sphere.

1. Intended as specific sites that embody a collective shared knowledge and at the same time a more private and personal form of attachment. The memory of a place is a manifestation that triggers in the perceiving subject a living memory and a construction of meaning.

1. When places become mnemospheres. Communicating mnemotopes as fields of care

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Abstract

Places interact with our past through emotions. Memories merge with topography, creating a localizable map of our lives punctuated by *mnemotopes*, palimpsests of memories, stratified entities influenced by our experiences, thoughts, and interactions over time. They can be understood as *fields of care*, intangible repositories of memories, difficult to describe and depict because they are connected to the emotional realm. To capture the spirit of these places we can use the term *mnemosphere*, as a holistic ecosystem that integrates memories and atmospheres at the level of emotion. This paper will deal with the relationship between the concept of mnemotope with that of mnemosphere, focusing on the emotional transfer of memories from the depths of the place to the surface. In this way, it will be possible to show how the mnemosphere can communicate not only the place itself but also the richness of memories and emotions that have settled on it over time, transforming it from a mere container to an activatable and generative interface for new content.

Memory of places

Place «is the cultural and spatial context where we construct and locate our individual and collective identities» (Hoelscher et al., 2001, p. 275). Within an ongoing process of temporal change, a place transforms into a concentrated hub of significance where identities take shape, settle, and layered through the accumulation of events, impressions, and individuals, ultimately giving rise to memories. The relationship between place and memory is integral to our cultural history, expressed in various forms and configurations.

Since antiquity, spatial metaphors have been intertwined with memory representation, giving it a tangible and enduring quality. Overall, using spatial metaphors to represent memories speaks to the deeply rooted human need to connect our experiences to the physical world around us. The most used spatial metaphors are those of an architectural nature, which do not explain how memory works, but suggest a notion of memory as a deposit (Agazzi & Fortunati, 2007, p. 506): places where remembrances are accumulated in an ideal organization of knowledge (Galasso, 2018). What seems significant about the metaphorical connection with the mnemonic world is that it proposes a conservative spatiality; it offers realities that not only safeguard but deal with the selection of materials to be snatched from oblivion.

Nevertheless, this does not negate the essential role of the territorial aspect in understanding how memories endure in the present. When we inquire about ‘where we were’ during that particular moment, we place our memories within a spatial context that extends beyond our personal sphere and contributes to the collective tapestry of voices. The place that carries its narrative makes us recognize ourselves as part of a whole and invests us with the responsibility of memory. The process of mnemonic spatialization, which began with *mnemotechnics* at the dawn of classical civilization (Yates, 1966), becomes a manifestation of the capacity of places «to locate memories and give them direction» (Horn et al., 2020, p. 2). A geolocated memory is a support in understanding an event and becomes part of individual acts of remembrance, occupying a function of evidence in the economy of human discourse: it allows to orient personal narratives and provides support for self-territorial awareness. Beyond metaphors and spatialized memories, the discussion on the connection between places and memory has become increasingly broad in recent years, involving a wide range of professionals, including historians, architects, educators, and designers. This is due to a growing awareness of the role of places in the production of public discourses on memory: far from being a silent frame of past events, place today has become an authentic witness, an integral part of mnemonic resilience, a crucial factor in the recovery of the past, a matter that we increasingly realize we cannot disregard as the most stable element of the transient human being.

In this context, a debate has emerged about forms, meanings, and transformations of the place/witness. We are confronted with such a proliferation of memory places that they are often reduced to mere memorial markers, superficial assistants to remembrance. However, according to Nora (1984), *les lieux de mémoire* are not ‘what one remembers’ but ‘where memory works’. Thus, to analyze the relationship between place and memory, it is appropriate to dwell on the physical place, considered in its stratigraphy, where memory actively inhabits, be it a large landscape or minute details.

The places of memory are not immune to terminological criticism. Nora describes the difficulty of finding an English equivalent and points out that he chose ‘realms’ to emphasize the symbolic apparatus of these realities. However, the translation problems continue, and the *lieux de mémoire* have been variously transformed into ‘places of memory’ or even ‘backgrounds of memory’, which links them to the classical idea of *loci memoriae* used among others by the famous classical orator Cicero (Yates, 1966). Efforts to expand this conceptual field continued over time, looking for synonyms to expand the lexical field.

In the early 1990s, another term began to make its way: the *mnemotope* (Assmann, 1992). A compound word that exposes the intricate relationship between memory and place. It highlights their interdependencies, going beyond the traditional commemorative idea of *lieu de mémoire* or place of memory. Combining the idea of memory – *mnemo* – and the idea of place – *topos* – in a single terminological structure, the concept shows points of contact and interferences between the two different conceptual spheres and manages to let the complexity of the witnessing place speak for itself.

The mnemotopes

According to archaeologist Anthony Purdy (2002), one of the first authors to use the *mnemotope* not as a synonym for the expression *lieu de mémoire* but as a new core of meaning, the term cannot be fully comprehended without reference to its predecessor, the *chronotope*. For Purdy (p. 94), *mnemotope* is «a chronotopic motif manifesting the presence of the past, the conscious or unconscious memory traces of a more or less distant period in the life of a culture or, metaphorically, an individual». The concept theorized by the Russian scholar Mikhail Bakhtin in 1937 refers to the «intrinsic connectedness of temporal and spatial relationships that are artistically expressed in literature» (Bakhtin, 1981, p. 84). The idea Bakhtin proposes is disruptive, but it remains embedded over time in the literary context from which it emerged, struggling to expand into other fields of knowledge. For this reason, the author reformulates the definition by explaining *mnemotopes* as «points in the geography of a community where time and space intersect and fuse. Time takes on flesh and becomes visible for human contemplation. [...] Chronotopes thus stand as monuments to the community itself, as symbols of it, as forces operating to shape its members’ images of themselves» (Bergan, 2019, p. 7) with a perspective that opens up to the community and its processes of symbolization. Nevertheless, the *mnemotopic* definition offered by Purdy seems too essential. Explaining one concept by referring to another does not fully capture its essence and limits the *mnemotope* to a specific field

of knowledge. What remains evident is that with Bathkin, the thread of discourse is chronology; with mnemotopes, it is topography. So the question is still very much open. To date, no clear and comprehensive explanation of the term has been proposed to separate it from being a terminological alternative for the commemorative idea of places of memory. At this point, to orient the mnemotopic gaze, it is necessary to make a preliminary distinction. Indeed, when we think about the broad context of sites of memory, it is impossible not to consider that there are realities associated with personal memories and realities that refer to the concept of collective memory (Halbwachs, [1950] 1980). For this reason, we can venture a connection between individual and collective mnemotopes. «Individual and collective experience imply each other. All experience is individual in that collectivities do not have minds, or memories either, though we often speak as if they did» (Kenny, 1999, p. 421). The social character of memory is essential, but so is its individual nature: collective memory has become the extensive concept that stands for all kinds of human cognitive products in general (Gedi & Elam 1996, p. 40).

To avoid this drift, it is essential to view collective memory as a compost of many sedimented private memories that form its voice. Even within the social framework, therefore, it is necessary to attach importance to those places of memory of the individual that jointly contribute to the constitution of the mnemotopic network. An individual mnemotope, is a place linked to personal memory, connected to the private dimension of remembrance. Settled on these territorial realities, we can find tender and blurred memories of childhood, existential turning points, and family memories.

Following neuroscientific theories (Imbasciati, 2015; Sherry & Schacter, 1987; Manier & Hirst, 2010), we can speak of ‘implicit individual mnemotopes’, that is, all those places that constitute a dense but unconscious nucleus within the individual and that can reappear as impromptu mental representations in the context of everyday experiences. Then there are ‘explicit individual mnemotopes’ that we recognize as part of our journey through territory/existence and allow us to enter a process of personal institutionalization. Whether explicit or implicit, they are nuanced at the perceptual level; they are realities with a robust evocative force (i.e., nostalgia).

The individual mnemotopes, so rich in mnemonic texture, are simultaneously very fragile and vulnerable. They are subject to the physiological erosion of memories. Some mnemotopes, for example, can become extinct within a single generation. Their survival is related to the transmission of memories, which occurs in community recognition, consolidation, symbolization, and institutionalization processes. To remain stable over time, individual mnemotopic realities must be communicated, their mnemonic value must be recognized, it must consolidate in plurality, and in rare cases, it may be in-

stitutionally recognized as a place of memory. In these phases, mnemotopes are gradually collectivized, always keeping in mind that collective memory cannot be considered as the union of the memories of all the members of the group and that collective mnemotopes are not only places where several common memories are grouped together, but a dynamic set of representations of a past that is experienced as still active, present, and as part of the reality of the group (Jedlowski, 1989). Regardless of whether they are individual or collective mnemotopes, they are a sense-making spatial testimony that shows us the past from which what we see today about a place emerges, putting it in a temporal and spatial perspective. Mnemotopes can therefore be defined as potentially actionable topographic machines eliciting past stimuli that can produce new territorial narratives.

When a mnemotope becomes a mnemosphere

Individual mnemotopes, despite being more widespread than we can effectively perceive, often lack distinct visual identities as they reside in personal memory. They thrive through word of mouth, and their representation is usually limited to photographs kept in family albums or in home movies whose mediums suffer from the ruthless speed of obsolescence. These places are known viscerally, so to speak, rather than with the eye: they arise in the mind through the plurality of senses, and in many cases, they can have profound meaning even if they can not be seen or visited anymore.

They can recall the *fields of care*, intangible repositories of memories (Tuan, 1979) that are difficult to describe and depict because they are very much connected to the emotional realm. They are not only a place filled with memories, they are «affective bond between people and place or setting» (Tuan, 1974, p. 4). They become encoded in our minds with a unique blend of the event and the emotions we felt at that moment. The memories, therefore, are not just mental snapshots of what happened but are richly infused with the spatio-emotional context surrounding them. Neurologically, this process involves the hippocampus, a brain region crucial for memory formation and retrieval. It interacts with the amygdala, another significant brain structure responsible for processing emotions. Together, they intertwine the memory of an event with the emotional response it elicited, associating both with the specific place where the event occurred. This connection is so potent that revisiting these places can trigger a flood of emotions, bringing the past back to life in vivid detail. As time passes and we accumulate more experiences, certain places become imbued with specific emotional meanings. Every individual mnemotope thus presents a unique array of sensations shaping our ongoing perception: certain locations retain a consistent emotional

resonance over time, contrasting with others that progressively diminish within our cognitive fabric, integrating into the intricate web of *transparent mnemotopes*. Revisiting a field of care can generate a spatio-temporal connection, transporting us back in time, allowing us to relive the past, with all its associated emotions, and reflect on the profound impact these experiences have had on our lives. Personal mnemotopes serve as repositories of our life's emotional landscape. As Tuan (1979) underlined, they can generate a sense of place that overcomes years no matter if they are «small as the corner of a room or large as the earth itself» (p. 420): they embody our passage on earth, they preserve mute our extemporaneous feelings, ready to return them to us in an instant, when we pass by or see them in a faded photograph, alive and active as if not a single day has passed.

Thus, as we advance in this analytical journey, even in terminological terms, we can discuss mnemotopes evolving into *mnemospheres*, conceptual frameworks, units of meaning where emotions and memory intertwine inseparably. Within these entities, the fusion of emotion and memory generates a synergistic *third object*, whose profound significance is only perceptible and perhaps understandable through the senses. This amalgam underscores the intricate interplay between cognitive, mnestic, spatial, and emotional facets, manifesting as an emergent, nuanced construct that transcends the sum of its parts, revealing the depth of its essence when perceived through feelings and emotions. Indeed, the study of mnemospheres, as a form of connection between the morphology of place and our memories, allows us to add depth and complexity to our relationship with the surroundings.

For this reason, the following part will delve into different international case studies to explore the potentialities of these constructs and their active presence within the territorial context.

The *Wind Phone*

In Japan, in Iwate Prefecture near Otsuchi town, a white telephone booth containing a disconnected rotary phone is the landmark of the Bell Gardia Kujira-Yama garden (Boyce, 2022). Itaru Sasaki, the creator, gave this booth the name *kaze no denwa*¹, the 'Wind Phone' or the 'Phone Booth of the Wind'. Sasaki San in 2007 rescued an «English style telephone booth from a commercial shop that was being demolished. [...] he intended it as a sculptural element, but later he installed a rotary phone» (Van Dyke, 2022) to call and transmit his feelings to his cousin, who died from cancer.

1. See <https://bell-gardia.jp/en/>

Initially, the wind phone was aimed at personal use. However, following the devastating events of the March 11, 2011 earthquake and tsunami, which resulted in the loss of nearly twenty thousand lives, the wind phone unexpectedly transformed into a pilgrimage site. Over the years, people started to travel worldwide to use the telephone, warmly welcomed by Sasaki San, providing a safe place to experience their most intimate and delicate memories and to communicate privately with their lost loved ones.

The wind phone offers a specific space and a sensitive apparatus for people to feel listened to, to listen for, and even to hear the voices (or traces) of the dead and missing (Boyce, 2022). Upon arrival at the garden, the phone booth appears as an aesthetic device, a beautiful white object in the middle of the carefully maintained greenery. It pleases the eye along with the tidy, fragrant surroundings. Great silence reigns, even though the road is a stone's throw away. A sign welcomes visitors, or rather pilgrims: "Welcome! I have been waiting for you. There is no hurry. Organize your mind a little at a time". You tend to walk around, trying to figure out who you are going to call, what you are going to say. The phone coated in black lacquer is not immediately visible [Fig. 1]. It took time to enter the cabin. A bench is there to ease the wait, help you think, and be ready, if you will. However, when you finally get in, all the senses are activated, and what was an outdoor exquisite furniture object becomes a *mnemosphere*.

It's not like anything else. It isn't therapy. [...] It isn't praying. [...] You pick up the phone and your brain has readied your mouth to speak. It's wired. [...] You don't think what it is you want to say, you just say it. Out loud. Into the phone, which is connected to nothing. From there, there is nothing for your words to do but follow the directives of the thing itself – be carried on the wind (Fontaine, 2018).

And you are not alone. When you pick up the handset, all the words whispered or shouted through that old device condense within the very small site, becoming perceptible memories. Invisible sensations, emotions, grief, unspoken words surround you: upon entering the booth, you can inhabit the same atmosphere as the person being called, creating a unique spatiotemporal encounter that simultaneously generates new memories. Thus, Tuan's idea comes back, that *fields of care* are places that can only be known by the essence from within: they are networks of interpersonal concern in a physical setting (1979). Even if the white booth can appear as a 'postcard from Otsuchi', the mnemospheric reactivation through Itaru Sasaki's operation and the subsequent pilgrimage, makes it a vehicle of real and profound emotions. The position is also pivotal, as a feature of the mnemotope is its localization. The booth is situated not far from Otsuchi, one of the towns severely impact-

ed by the devastating tsunami, close to the sea, which has tragically become a cemetery, commemorative site. In this way, the mnemosphere characterized by deeply intimate and individual traits, undergoes a process of public recognition. This is emphasized by the increasing number of people visiting Bell Guardia annually and the numerous media adaptations that further underscore its significance (e.g., *Voices in the Wind* movie).

Kaze no denwa is now an unofficial shared memorial. In the telephonic mnemosphere the most hidden and difficult-to-express emotions are enabled. Just by opening the door and picking up the receiver, one can speak with those who are no longer there. One might wonder whether it would be easier to have such a conversation at home (Fontaine, 2018), without a miles-long journey to the remote north of Japan. Perhaps that is precisely the point of talking about a mnemotope that becomes a mnemosphere. Only there, in this specific place, it is possible to truly live through certain emotions, to experience these feelings that are so difficult to express and communicate elsewhere.



Fig. 1 – *The Wind Phone, Otsuchi, Iwate, Japan* (photo by Stefano Scagliarini, 2023).

Les Archives du Cœur

Christian Boltanski, a french conceptual artist, began his career painting large canvases, but in the late 1960s, he abandoned the pictorial path to experiment with new worlds of expression. He is famous for installations, whether intimate or monumental, composed of a plurality of heterogeneous elements. His artistic work is permeated by the theme of absence and loss and inspired by contested memories in all their complexity: his research shows that recording presence is much easier than communicating the void. His is an artistic and personal battle to succeed in concrete the value of *what is no more*, implemented with a peculiar inventorial and archival determination combined with the unseen aspects of remembrance (Galasso, 2018). His abstract categorization of forgotten objects and people seeks to bring out their most authentic, stubborn, and permanent memories (Fumanti, 2017).

Teshima, a small island in Kagawa Prefecture in Japan, was chosen by Boltanski to be the home of his site-specific work *Les Archives du Cœur*, 'The Heart Archive'². The artist sought a remote and hard-to-reach location, making it necessary, much like the *kaze no denwa*, to embark on a pilgrimage. The small black building stands near a small beach near Karato Port [Fig. 2]. Its outer walls are dark, charred wood. Sun rays are not reflected but entirely absorbed, seemingly swallowed amidst the wooden facets.

A solitary sign confirms you have arrived at the right place: *Christian Boltanski. Les Archives du Cœur*. Upon opening the door, the atmosphere is entirely different: an almost blinding white envelopes everything. The space consists of two rooms and a counter, also candid, where two lab-coated employees await you in rigorous silence. Visitors are then encouraged to leave their heartbeat in the archive. In a tiny room, it is recorded using a stethoscope connected to a computer, meticulously numbered, documented, and handed over to the owner as a compact disk. From that moment on, the heartbeat officially becomes a part of the artwork's database and archive, which is freely accessible and audible for anyone visiting the space, while sitting with headphones, watching the sea, and getting caught up in the endless return of the wave motion. In a final room, the ambiance becomes dark again, and the walls are studded by black mirrors that do not reflect but swallow, a hallmark of Boltanski's work found in many of his pieces (e.g., *Museo per la Memoria di Ustica*, Bologna). A single light bulb hangs in the center, flickering and pulsing synchronously with archived heartbeats. Gradually, the sound and rhythm of the pulses change as the people who gave them.

2. See <https://benesse-artsite.jp/en/art/boltanski.html>

One feels immersed in this profound sound, resonating with deep bass. The sound of visitors' hearts mixes with those who have passed before them, creating a unique beat that activates the mnemosphere. The heartbeats are the memories left behind and preserved, which together are transformed into a unique experience that can be lived only on Teshima Island in Japan, only on this beach, only in this building, and only in this room.



Fig. 2 – Les Archives du Cœur, Otsuchi, Iwate, Japan (photo by Clorinda Galasso, 2023).

Mnemosphere Open Call results

Not only the case studies here reported, but also the data and images collected by the *Mnemosphere Project Open Call* demonstrated the close correlation between mnemotopes and mnemosphere.

About half of the pictures uploaded, visually presented an intimate relationship with the memory of places, and in other cases the textual apparatus, provided by the survey and expressed by the ID cards, confirmed the mnestic framework of the contribution. From this evidence, the research team organized an in-person workshop at the Department of Design of Politecnico di Milano to analyze and select images from a mnemotopic perspective and through phototextual practices.

Starting from the mnemotopic plural definition and the main mnemotopic categories, four thematic clusters were formed to sort the results:

- Individual memory [Fig. 3]: intimate and personal mnemotopes in which people's faces, bodies, animals, portraits, frozen moments and instants, signs, and symbols of different kinds mainly appear.
- Collective memory [Fig. 4]: mnemotopes with trauma, places of memory, and commemorative sites (e.g., memorials, monuments, ruins);
- Physical environments [Fig. 5]: spontaneous mnemotopes linked to images of anonymous places charged with their narrative (e.g., wild natural landscapes, generic urban contexts, and domestic or private interiors);
- Abstract dimension [Fig. 6]: i.e., images constructed using different artistic techniques, characterized by vivid and saturated colours aimed at emphasizing the emotional impact of external mnestic places through internal emotional tones only.

In the four tables, the mnemotopic physical permanence is strongly present in its diverse manifestations (e.g., urban views, green spaces, castle ruins, and private homes). The human presence associated with a subject of such marked intangibility is surprising.

Beyond the variations on the theme, the narrative capacity of the mnemotopic images remains evident, stable even in the most abstract iconography. It is also clear how mnemospheres, viewed from a mnemotopic perspective, manage to hold meanings and stories communicating them when analyzed in the design context.

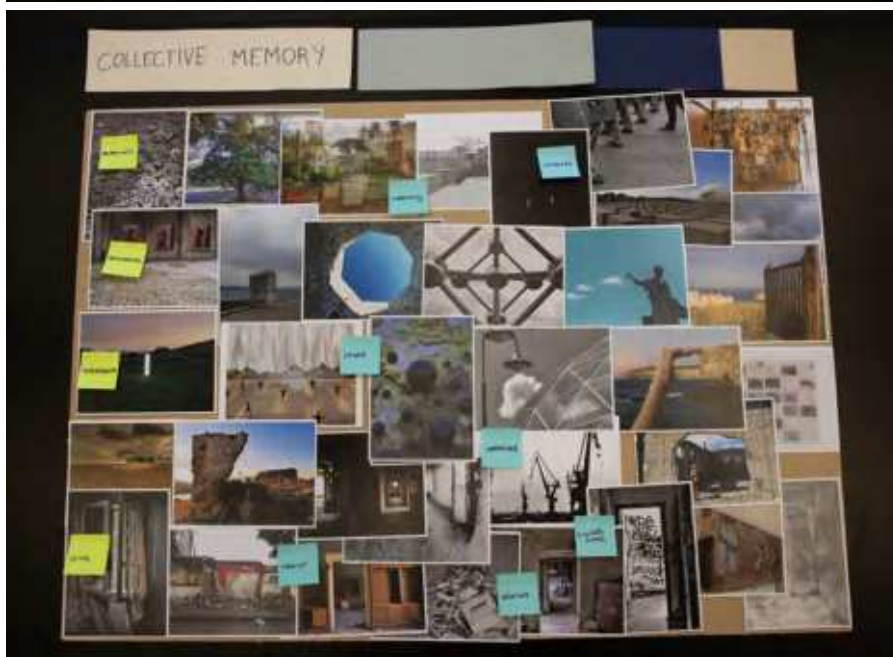


Fig. 3 – Individual memory Table, Mnemosphere Workshop, 2021.

Fig. 4 – Collective memory Table, Mnemosphere Workshop, 2021.



Fig. 5 – Physical Environment Table, Mnemosphere Workshop, 2021.

Fig. 6 – Abstract Dimension Table, Mnemosphere Workshop, 2021.

Concluding remarks

The connection between mnemotopes and mnemospheres seems to exist and inhabit real places that generate *vitalizing movements* (Boyce, 2022, p. 94) experienced by visitors. We are aware that a mnemotope does not always become and persist as a mnemosphere, but the case studies discussed here suggest that connection comes primarily from individual entities.

Indeed, personal mnemotypes, however fragile, barely visible and exposed to the passage of time, seem more capable of preserving, reactivating and releasing emotions compared to collectivized and institutionalized realities. Thus, into the *kaze no denwa*, by picking up the receiver, one can safely express intimate feelings and leave them to the wind to become memories. Thus, in the *Archives du Cœur*, one can hear different heartbeats, yet beating in unison, and perceive oneself as part of a unique humanity.

The mnemospheres, although there is still much to be explored about their hybrid and blurred nature, especially in the context of design, serve as a conduit not only for the physicality of place but also for the intricate fabric of memories and emotions that have been embedded in their being over the centuries. They elevate the place beyond its material boundaries, transcending its mere role as a deposit of moment and events.

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2. Mnemosphere. A photographic gaze

Anna Laviosa, photographer

Abstract

When I take photographs, I am often caught between two opposing forces: the uncontrollable swiftness of intuition and the thoughtfulness of reasoning. When I try to visualize the shape of the *mnemosphere*, I see the same dichotomy: a graceful soap bubble suddenly bursting into an instantaneous photograph or fading like the breath of a flame under ashes. A *déjà-vu* against the prolonged time of a long-term project. Memory and photography share a significant understanding: the selection process through which we choose, not always consciously, what time should not erase. Many people today swim in a stream of unawareness as they produce numerous images without revisiting them later. Their photographs are no longer imprints or clues to remember and recognize something familiar. Due to the dynamic nature of memory, the sphere can take on unpredictable nuances and be veiled by refracted reflections in a rippled pond. Reassembling the fragments without the reference of the original image can prove impossible. By perpetuating a ripple effect, memory repeatedly returns to the image to inscribe new meanings and emotions. This contribution will examine the Mnemosphere project through the lens of authors who have utilized photography as a fundamental tool in their artistic, anthropological, and sociopolitical research. From the visionary Josef Svoboda to the multimedia contaminations between the real and virtual at Prague's Laterna Fest, from Silvio Wolf's exploration of the memory of places where a present *here* coexists with a past elsewhere in site-specific installations to the anthropological works of Cristina García Rodero and Monika Bulaj, and finally, to Walid Raad's reflection on the role of images in constructing collective memory.

Photographic aphorisms

The aphoristic structure of this essay aims to reflect the fragmentary nature of photography and memory. The ambiguity of a photograph, like a memory, stems from being a trace drawn from the wheel of sequential time, allowing for a diverse range of possible interpretations. The image, whether photographic or mnemonic, is a present tile that should be reintegrated into the narrative mosaic to be reconfigured in an attribution of meaning. However, communication through social networks does not help resolve the trauma of discontinuity because it promotes an uninterrupted present where the Lacanian mirror phase becomes increasingly difficult to overcome. The sloppy frivolity of what has been called the *age of inconsistency* makes the torrential flow of our daily lives increasingly elusive (Calasso, 2017, p. 14). Against inconsistency, indeterminacy can be perceived as a vibrant sphere radiating a plethora of potential meanings. Despite the dominance of high definition (HD), ubiquitous in any digital device, it is worth revisiting Leonardo's studies on the pictorial technique of *sfumato*: losing sharpness, the image gains complexity, mystery, ambiguity, and ultimately, charm. Leonardo da Vinci, in fact, scrutinized the ability of ephemeral and indefinite forms, such as clouds or stains on walls, to stimulate the mind to new inventions¹. Images are revelations for the knowledge of truth and the unfolding of beauty (Hillman & Ronchey, 2021, p. 168).

To grasp the revelation, however, we have to tune into the suspended state of the image, without allowing ourselves to be distracted by propagandistic or advertising images that ask us to contemplate them. In summary, this is what James Hillman (2021) articulates in his reflections on the image in a book that contemplates the misuse of the term *iconic*. On my part, I am compelled to contradict the Latin saying: *repetita non iuvant*. In other words, the frequent use of a word does not necessarily lead to a greater awareness of its meaning. The language of marketing gives birth to fantastic pairings, such as 'iconic sandwiches', to attract customers to a freshly opened bistro with the allure of a pretentiously flattering compliment.

In reality, according to etymology (from the ancient Greek *eikòn*, image, and *eikénai*, to be or appear similar), an icon is an image linked by a bond of resemblance to the object it represents. Therefore, the photograph of a sandwich can be iconic, not the sandwich itself. However, one might argue that photographing a sandwich and sharing it on social pages is now equivalent

1. L. Da Vinci, *Trattato della pittura*. Posthumous reconstruction of Leonardo's annotations attributed to Francesco Melzi around 1540, volume one, part two, chapter 63.

to eating it because the value of *representativeness* is directly attributed to the object and not its image. Ultimately, as Stefano Bartezzaghi observes, we don't care much about the sandwich itself². In *Le porte regali* (1977), the Russian philosopher Pavel Florenskij refers to the threshold we cross when observing the icon, that thin membrane between transcendent truth and earthly reality. Like the fragile golden sheets that give a radiant glow to the panels of Byzantine icons, the term 'iconic' should be handled with greater care.

From *Polyekran* to *Laterna Fest*: the pioneering multimedia of Josef Svoboda

For Canadian director Robert Lepage, the theater is the *art of the ephemeral*³ because the mask (not surprisingly, compared to the death mask by Susan Sontag, 2004) much like photography allows one to escape the present and enter a timeless dimension. Born in Bohemia on May 10, 1920, Josef Svoboda is a crucial figure in European post-war theater. On the occasion of the 1958 Brussels Expo, the Czech set designer presented the *Polyekran* (literally 'multi-screen'): a system of eight screens placed in a dark space, where photographs and videos were projected in sync with the performance of a musical score. In designing the scenography for *Hamlet* directed by Pleskot (Prague, 1959), Svoboda lent his name to the first projector used to create backlit illumination on the stage.

From 1948 to 1992, he served as a set designer at the Národní Divadlo in Prague, where he directed the theater laboratory *Laterna Magika* from 1973, a company he founded in 1958. *Laterna Magika* produced performances that combined live action with actors, musicians, and dancers and projected pre-recorded footage. The multimedia set design of the show *The Magic Circus* (1977) came to life on the *Laterna Magika* stage over 2500 times. *La Traviata*, staged in 1992 at the *Sferisferio* in Macerata, Italy, under the direction of Henning Brockhaus, is an excellent example of using a mirror as a scenic backdrop. A tilting structure housed a mosaic of 22x12 meters made of lightweight mirrors constructed from materials typical of the aerospace industry. In Svoboda's work, different languages coexist without conflict because his artistic sensibility unfolds in the contamination between theater and cinema, craftsmanship, and new technologies, all while keeping the ultimate goal

2. *Iconico. Un termine difficile e pretenzioso che va per la maggiore.* From *Lapsus*, Stefano Bartezzaghi, Repubblica, July 30, 2023 https://www.repubblica.it/dossier/cultura/lapsus/2023/07/30/news/iconico_lapsus_stefano_bartezzaghi-409193016/

3. See <https://www.visionideltragico.it/blog/agora/memoria-maschera-e-macchina-nel-teatro-di-robert-lepage>

of each set design in mind: the harmony of the stage. Svoboda's theater is a vibrant sphere that absorbs the languages of cinema, music, and graphics, imbuing them with a dramaturgical intention: virtual images do not merely serve as a scenic backdrop but collaborate in developing a narrative.

Starting with the concept of *mediaturgy*, in a felicitous definition by Anna Maria Monteverdi (2020), the Czech director's theatrical exploration engages in a dialogue between the actor's body and the virtual body, between the stage and the screen. Contemporary theatre directors and set designers continue to conceive screens as layers of memory and as an inner landscape. These layers and landscapes should not be understood as a revised version of the old and flat painted backdrop because Svoboda himself foresaw that the integration of virtual images would be linked to the design of three-dimensional stage structures capable of receiving projections. The intangible light of Svoboda's projections dematerializes in the numerical series of digital multimedia and spreads through the intersections between different disciplines and the relationship between art and new technologies.

From June 21 to 26, 2022, at the Národní Divadlo in Prague, the first edition of the *Laterna Fest* took place, featuring artists from France, Belgium, Hungary, Slovakia, and the Czech Republic. They presented performances, interactive exhibitions, and virtual reality installations. The multimedia festival, however, doesn't hinge on a short-sighted enthusiasm for new technologies but poses this question: do technologies enrich the theatrical experience or create a barrier against the immediate perception of live performance? All the presented works tell a coherent story by drawing from the composite vocabulary of digital mapping, virtual reality, augmented reality, interactive projections, and live action by actors and dancers. The stage environment is not a passive backdrop but, like the human performer, actively interacts with multimedia inputs. The French theatre company Adrien M & Claire B, for example, proposes a dialogue between the real and the imaginary, the visible and the invisible, truth and fiction, the animated and the inanimate, new technologies and craftsmanship. *Acqua Alta* is a project that unfolds in three parts: a performance – *Acqua Alta* – an immersive virtual reality installation – *Tête-à-tête* –, and a book – *Acqua Alta, Crossing the mirror* – in which the narrative development of the story drawn on its pages is visible only through augmented reality displayed on a tablet or smartphone. The virtual representation, a prosthetic extension of reality, can trigger new emotions and perceptual sensations because, as Claire B declares in an interview⁴, «digital art is

4. Interview with Claire Bardainne, *Mirages & Miracles* (2020): <https://www.youtube.com/watch?v=6tX1doYzy38>

alive, reactive, and organic». In less enthusiastic tones, Andrea Pinotti (2021) writes that the presence of virtual objects in the real environment erases the threshold between the image and reality because the environmental image tends to suppress every phenomenological awareness of the medium and that the user of a virtual reality headset mounted on the head is absorbed into the 360° *iconoscape*, losing the freedom to decide whether to focus on the medium or the represented reality.

The identity of places in the site-specific installations of Silvio Wolf

Born in 1952, Silvio Wolf studied philosophy in Milan and psychology in Padua. In 1974, he obtained a Higher Diploma in Advanced Photography from the London College of Printing. His research on the photographic medium focuses on its linguistic features and the two-dimensional nature of the image. Downplaying the narrative dimension, Wolf recognizes, as an active agent in the creative process, the thought made explicit in the image outside itself. Wolf's photography, like the icon discussed by Florenskij (1977), is a non-spatial environment that connects the viewer with a mental elsewhere. The fundamental theme throughout his work is the threshold: a physical and mental space, a boundary and contact that unites and separates, a channel between two interdependent worlds where consciousness transcends into different levels of knowledge. Wolf describes his rigorous approach to site-specific installation as follows:

I feel the fundamental need to build my work starting from the place where I am called to operate. I gather signs, icons, local references on which I intervene. I always have to start from an external, pre-existing datum, and this information is increasingly often images that I find, that I search for, that I can recognize as necessary, there, now. I go to the place, collect, bring to the studio, develop a project, create new signs, and bring metabolized material back to the place of origin (Wolf & Verzotti, 2011, p. 108).

Living the experience of a place means opening oneself to the interaction between different mnemonic and identitarian layers. In Silvio Wolf's site-specific installations, historical and personal memory becomes a tool for reevaluating a place's identity and complex reality. In the installation *The Elsewhere* (Royal Festival Hall Ballroom, London 1999), recorded voices of children are diffused in a space illuminated by white light, creating a vast projection screen for the mental images of the visitors [Fig. 1]. By obstructing the view of the outside, the threshold-light makes the inner, personal, and collective imaginary visible.

Intangible Heritage of España revealed by Cristina García Rodero

Born in 1949, Spanish photojournalist Cristina García Rodero has worked for the photographic agencies *Magnum Photos* and *Agence Vu*. In 1989, she won the W. Eugene Smith Award for her work on rituals and festivities in rural communities in Spain, and in the same year, her book *España Oculta* was honored at the festival *Rencontres d'Arles*.

Taking a step back, W. Eugene Smith, sent by *LIFE magazine* to document the disastrous drought of 1950, captures rural life in Deleitosa, Extremadura, and the following year publishes the photo reportage *Spanish Village*. In depicting its inhabitants, Smith exposes a particularly impoverished quality of life to underscore his political stance against American support for the Francoist dictatorship. Between the late 1950s and the early 1960s, Austrian photographer Inge Morath documented the lifestyle and traditions of rural areas in Spain, moving away from the propagandistic myth of the *España negra* promoted by the regime.

Forty years later, Cristina García Rodero continues in this direction. After a study stay in Italy, at the age of 23, she returned to Spain to initiate a photographic project on Spanish traditions and religious rituals at risk of disappearing. The book gathers one hundred and twenty-six black and white images. The vibrant colorfulness of Spanish tradition is sacrificed in favor of a mythical sense of mystery that directs the gaze beyond the concrete everyday reality. «I hate it when my photographs of *España oculta* – the photographer states in an interview⁵ – are associated with the myth of *España negra*. Buñuel depicted the worst aspects of these places, framing Spain negatively. They were indeed very poor cities, but his work was too sensational. He didn't lie, but he moved in only one direction»⁶. García Rodero portrays a particularly nuanced picture of Spanish rural tradition, depicting a world that is rich, ridiculous, strange, creative, authentic, violent, joyful, and mysterious. «With my photographic project, I wanted to make our traditions, our celebrations, our rituals known. I wanted to show our past. But I also wanted to reflect on our present and our future. In documenting these celebrations, we were all very aware of being privileged witnesses.

We knew that we had to document both the change and what had preceded it». García Rodero prefers to capture her subjects when the event ends, and the participants appear more relaxed and proud of their roles. For example, in the image *Las potencias del alma* (*Easter at Puente Genil, Córdoba*), we don't see the solemn moment of the procession but the relaxed atmosphere of the partici-

5. Cristóbal Mora Bieli-Bianchi, in *The rural Spain as a photographic subject and its contemporary representation: Cristina García Rodero and España oculta* (1989).

6. See <https://www.progettografico.net/espana-oculta-cristina-garcia-sodero/>

pants. A man, dressed as a soldier casually leans against a white wall, smoking a cigarette, while a dove flies over the head of the Nazarene in the foreground. Although the dove, a symbol of peace, seems to open a communication channel between man and God, García Rodero considers the religious aspect secondary to the relationship between people and the shared ritual.



Fig. 1 – The Elsewhere, Silvio Wolf. Public art installation, 1999, Royal Festival Hall, London. Translucent backlit film on glass wall, 12-channel sound broadcast of children's voices in the environment, 5x30m. Sound design: Tiziano Crotti. Installation image.

The *sacred in the everyday* portrayed by Monika Bulaj

Monika Bulaj, a photographer, reporter, and documentarian born in Poland, began her research on ethnic and religious minorities in 1985. Starting with the Lemkos (Łemkowie) and the southeastern and eastern borderlands of Poland, her investigation expanded to Eastern Europe, the Caucasus, the Middle East, Africa, the Iranian plateau, Central Asia, Russia, Afghanistan, Haiti, and Cuba. In her numerous journeys, she encountered ethnic minorities, nomadic peoples, migrants, untouchables, and dispossessed. Empathy and attention to others have shaped her ability to connect with distant cultures. «Those who cannot see cannot have empathy. Empathy requires a certain level of self-loss, of disconnecting from one's mental noise and subjectivity to connect with someone else's» (Cousins, 2018). Monika Bulaj is mapping an atlas of endangered minorities and sacred places where different religious faiths coexist, sites fenced by the barbed wire of violent fanaticism.

Diligently studying anthropology, literature, poetry, languages, and history (both written by the victors and transmitted among generations of exiles gathered around rituals of memory), Bulaj travels along border zones where, more than elsewhere, different cultures intertwine in mutual influences. More than religion, she is interested in the human, the body, the sacredness. Very often, however, this work transcends, transgresses the so-called 'sacred space' and focuses on something that can be called the *sacred in the everyday*, that is, the religiosity that people express daily through their gestures or behavior. Something that is difficult to photograph, not religion, but people's religiosity. In my opinion, anyone expressing themselves through visual language often demonstrates a keen sensitivity, partly instinctive, to the composition of lines, weights, and colors in an image. Therefore, labeling a photograph from a social documentary as 'aesthetic' or 'beautiful' seems like a sterile controversy or an unnecessary compliment. A beautiful form does not hide content but enhances it, making it even more meaningful to the observer. Monika Bulaj does not present a polished portrait of the problematic and complex situations she captures but spreads her calm and focused gaze like the invigorating resinous essence in a walk through the woods.

Taking a picture is not Monika Bulaj's primary objective. She is primarily interested in creating a conducive environment for listening, sharing, and reciprocal exchange between different but communicative cultures. Her images tell a lot but do not consume the entire interpretive ground, allowing the viewer to take an active role in completing the scene's meaning based on their experience. Monika Bulaj is currently working on the documentary *Terra mossa*, directed together with Aleksander Masseroli Mazurkiewicz, to

narrate, starting from a small coastal town in Ionian Calabria (Schiavonea, CZ), a wealth of knowledge, myths, and traditions transported, shared, and embraced by the different countries bordering the Mediterranean.

The Atlas Group: Archive Narratives

Born in 1967 to a Palestinian mother and a Lebanese father, Walid Raad grew up in the eastern part of Beirut, predominantly inhabited by Christians. As a teenager with dreams of becoming a photojournalist, he subscribed to European photography magazines such as *Photo*, *Zoom*, and *Photo Reporter*. His gaze flipped through pages showcasing the works of Eugène Atget, Henri Cartier-Bresson, Man Ray, Diane Arbus, and Helmut Newton. The escalation of the civil war with the Israeli invasion in 1982 forced the Raad family to emigrate to the United States. After completing high school, Walid Raad enrolled in photography courses at the Rochester Institute of Technology in New York. At the same university, he undertook an in-depth study of Middle Eastern countries, enabling him, as an exile, to gain a new perspective on the geopolitical dynamics of the Arab world. From the United States, he experienced the contemporary war in Lebanon through partial information, rumors, media-mediated news, and phone conversations with family members remaining in the homeland. Due to this experience, Raad begins to conceive photographs as windows of cultural openness where the frame's limits give way to new perspectives on his home country. Raad identifies photography as a powerful tool for narrating both invented stories and factual events. He begins a personal collection of images sourced from newspapers, magazines, news broadcasts, archives, and museums.

Some languages, such as German, distinguish between a memory as an archive of images (*Gedächtnis*) and a memory understood as an activity, that is, as our ability to summon images to mind (*Erinnerung*). This distinction emphasizes that, at the same time, we both possess and produce images. In both cases, bodies (meaning brains) act as a living medium that allows us to perceive, project, or remember images, and also enables our imagination to censor or transform them (Belting, 2005, p. 79).

Founder in 1998 of *The Atlas Group*, Raad defines it as an archive of documents related to the wars raging in Lebanon in recent decades. However, rather than simply preserving material on the civil war, the function of the archive designed by Raad is to explore the possibilities of documenting, remembering, and rewriting a historical event. The Atlas Group archive is presented as a research foundation established in 1976. At first glance, it appears conventional, categorizing documents into three main types: A (au-

thored) when there is an indication of authorship, *FD* (found documents) for anonymous material, and *AGP* (Atlas Group Productions) for contributions explicitly produced by *The Atlas Group*. The Atlas Group's archival system introduces an intriguing element of unpredictability, where the same document can inexplicably change its location within the same classification or appear with a different designation, undermining the logic that assigns a specific identity to each object. Despite the overall coherence, the archival system slips through the mesh of rational understanding, as demonstrated in the *Sweet Talk project: A Photographic Document of Beirut* (1994-1997). The Atlas Group commissioned images of the city of Beirut from various photographers, instructing them to provide a date and three possible locations in each caption (one of which corresponds to the truth). This operation triggers a dialogue between the image and the different meanings attributed to it.

However, the resulting doubt dissolves any interpretative certainty into the nebulous realm of multiple perspectives. Raad crafts narratives to question collective memory and geopolitical history, showing how photographs, videos, direct testimonies, and disparate documents cloak official information with a veneer of truth. An example can be found in the work *My Neck is Thinner Than Hair: Engines* (1996-2001). Through a substantial corpus of fragmentary images, Raad reconstructs repeated accounts of car bombings during the war. The images, sourced from the archives of Lebanese newspapers, are presented as artifacts discovered at the disaster site. The retrieval of the engine among the charred wreckage of the car, akin to finding the black box in the case of a plane crash, is crucial for identifying the owner. However, police investigations have often shown the absence of a direct link between the car owner and the perpetrators of the attack because almost all cars used as bombs were stolen. While it is an archive designed for artistic and sociological research, none of the documents produced by The Atlas Group can be considered entirely false.

In some cases, such as in the series of materials grouped under the title *Let's be honest, the weather helped* (1998-2006), the black and white photographs were taken by Raad himself during the civil war in Beirut. Texts, videos, photographs, and newspaper clippings extracted from original sources are represented by Raad in the form of information mediated by literary titles, narrative installations, and performances that transpose the news into a fantastical context.

In Walid Raad's work, we do not distinguish the boundary between invention and chronicle because «Fact in his work incorporates fantasy and imagination while fiction is grounded in real events, dates, and statistics. *The Atlas Group* (1989-2004) tell a complex composite truth stretching beyond historical fact and rely on storytelling and performance to activate imaginary

narratives» (Respini, 2015). Walid Raad encourages us to consider the materials collected by The Atlas Group as hysterical documents rather than historical ones because they result from fantasies drawn from a sea of collective memories, not from the personal memory of a lived experience. Observing them as symptoms, Raad highlights the anomaly of hysterical documents compared to what, labeled as normal, is accepted in power circles that, however, cannot prevent these signals from periodically manifesting their existence. The global trend is that the number of images produced daily continues to grow, so now the most difficult and necessary task is to use the material we have already created, breathing new life into documents stored in a memory numbed by frantic habit.

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3. Atmosphere of landscapes and haptic feeling: an aesthetic sense for communication

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Abstract

Perceptions of atmospheres and the identity of landscapes are experiences linked to haptic qualities, and thus to the interpretation of space and its symbolic representations (Panofsky, 1961). The relational organization of the senses shapes haptic perception; *hapticity*, therefore, is not merely tactile experiences but a measure of the *perceptual intelligence* (Petrelli, 2015), activated by the body *in motion*. Through *haptic sensibility* enabled by movement, both consciousness and emotional response are involved, the visible and the tangible, but also emotional encounter and memory, in a unique space-time interweaving. Haptic perception, deriving from the sense of touch as a function of the skin, in fact, constitutes the mutual contact between us and the environment, *both acting as receptors of a communicative interface* (Bruno, 2002, p. 6): an exchange of energy and information between the body and its environment. The relationship between the multisensory body and the environment is essential; focusing on the visual form may be responsible for the weak atmospheric quality evoked by many contemporary spaces and their representations (Pallasmaa, 2016). The quality of atmospheres is influenced by the overall bodily, haptic, and visual perception; haptic perceptual values, in turn, can be interpreted as multisensory factors that are not merely a sum of visions provided by the body moving in space, but are also shaped by the atmospheric conditions of a landscape (Mazzocut-Mis, 2002, p. 149). The atmosphere is thus a spatial quality, a reflection of the fusion of perceivable factors in the place in which one moves – or imagines moving (Dai, Zheng 2021). This study aims to investigate the relationship between haptic perception and the representation of ‘atmospheric identities’, particularly for the communication design of territorial identities, realized through

aesthetic dimensions and *atmospheric tones* (Böhme, 2016), changing over time but permanently anchored in the symbolic elements that emerge from the landscape, recognized by cultural and social memory as ‘images of the city’. It is important to recognize that landscapes represent a tangible and aesthetically perceived interconnection of relationships in the environment (Calzolari 1999). These relationships weave together the interactions of human societies and individuals with their surroundings, shaping the atmospheric and aesthetic character of the environment and its structures.

Introduction

The atmosphere produces emotions and feelings and gives formidable expressive qualities not only to the representation of space, but also to its communication and, in general, to design; it therefore affects all kinds of “aesthetic work” (Böhme, 2010, p. 64). As current theories on aesthetics as sensible knowledge, particularly the new aesthetics and phenomenology of Böhme and Schmitz (Griffero 2010, 2011) elaborate, the atmospheric phenomenon has emerged as a perception that is by no means taken for granted. It is capable of affectively, intimately, and in unison involve people who share the experience at the same time and place, remaining permanent in their memory. Like art forms, the landscape is also an ‘aesthetic device’ concerned by atmospheric studies; however, just like architectural work, the landscape presents such a great variety of socio-symbolic stratifications as to be irreducible to an (only) atmospheric analysis (Griffero, 2016, p. 30).

This exploration aims to focus on the haptic and own-body matter as a contribution to the communication design of the landscape and its identities, which focuses on the relationships between the subject, the features of the place, and the value of memories. The theories of sensory experience discussed here reference what is termed a revolutionary ‘patica’ aesthetics (Griffero, 2016), which contrasts with traditional theories by rejecting the notion that atmospheres are merely products of subjective projections of inner feelings and emotions. Instead, they emphasize the unique interplay between the observer and the external environment in creating specific atmospheric sensations. Bodily perception imparts the sensation of one’s own presence; when it emerges from the elements of the landscape, it allows one to enter into harmony with atmospheric states, establishing an almost tactile perceptual contact that can be defined as ‘haptic-aesthetic’. Haptic-aesthetic feeling attunes the mood to the environment, and the emotions that can arise from a place’s states are not the result of subjective associations of thought. They are aesthetic learnings shared by those who travel the same journey, subject to differences in sensitivity and cultural backgrounds.

The Latin word *motus* [mōtūs, i.e., movement], at the origin of the meaning of emotion, refers to the inner drive aroused by a *stimulus*; hence, the atmosphere performs a motion from the outside world to oneself and back. Motion and movement activate haptics, but also feelings, and if there are many ways of traveling, the one that is most involved in the memories and characters of a place remains walking, due to the direct contact it establishes with the world and its stories (Careri, 2006). Through haptic perception and movement, consciousness and emotional experience, the visible and the tangible, experience and memory are involved in a singular space-time interweaving (Panofsky, 1961, p. 181).

Landscape and Haptic Value

The explorers form a profound connection with the places they visit, a relationship that aligns their mental states with the perceivable, the imaginable, and the evocable aspects of the world – essentially, the landscape resonates with the sensitive body that orients itself through the stimuli. Griffero (2011) describes this as an ‘affective’ engagement between the body and the landscape, one that arises from aesthetic sensations, with emotions being deeply infused within the realm of atmospheric aesthetics.

‘Aesthetics’ viewed as a comprehensive theory of sensory knowledge, extends far beyond the simplistic interpretation associated with just the sense of beauty. ‘Landscape’ is a cultural process and a space of exploration (Venturi Ferriolo, 2009). These definitions frame some reflections and are worth a few insights. The characteristics of the landscape, its structural inhomogeneity, and its multidisciplinary vocation represent cultural and perceptual complexities that demand the choice of multiple points of view to be communicated. The synthesis carried out by the European Union, becoming aware of the changes that landscapes undergo due to social, economic, and environmental transformations, has provided a legal instrument of community guidelines for a shared approach to the subject¹. The Council of Europe Landscape Convention has approved a definition of ‘landscape’² that, as a cultural process, integrates the concepts of space and place: «Landscape means an area, as perceived by people, whose character is the result of the action and interaction of natural and human factors». According to the Convention, every landscape must be preserved in its most relevant characteristics. It is a community heritage that derives from the combined action of natural configura-

1. See <https://www.coe.int/en/web/landscape/definition-and-legal-recognition-of-landscapes>

2. *Ibid.*

tions and human actions in perpetual evolution, significantly impacting the quality of life. In this recognition of value, perception plays a critical role. Landscape results from multiple factors, but how it is experienced and perceived makes a difference in value.

Landscape is a *perceptual phenomenon* (D'Angelo, 2009), and it is the fundamental assumption of the following thought: the haptic mode of perception specifically refers to the personal, bodily experience that allows one to physically sense the atmosphere of places, through sensations *on the skin*. A sensation arises from environmental features, architecture, and infrastructure; types of natural forms; noises and sounds; light and air temperatures; degrees of darkness; presences and absences. Haptic feeling reflects the aesthetic sense infused by the atmosphere; when we step out into the same morning air, we find ourselves immersed in a shared mode of existence (Griffero, 2016, p. 34). It's as if to suggest that the emotion stirred by a sunset is a universal experience, even though it is imbued with deeply personal and intimate meanings. Haptic feeling is supposed to be the most fitting way to deeply connect with the aesthetics of an atmosphere; it is also an intense and deep form of shared emotional experiences. It is a sensation that evokes experiences of proximity and immersion in landscapes but can also be evoked at a distance or mediated by technological representations and interfaces. It should be made clear that one does not consider haptic-aesthetic feeling to be a sense of 'whole-body touch', which cannot grasp in 'overviews' of space as it proceeds by summations of details of surfaces or bodies. This notion of tactility needs to be revised when considering the empathic power of feeling contact with the landscape, just as the concept of space being flattened in the geometric representation of surfaces and bodies is reductive.

Hence, the haptic-aesthetic feeling of the body in motion is defined as a polysensorial expression, the only one capable of connecting with an atmospheric state that inherently has no surface. Indeed, why assume the definition of haptic-aesthetic perception and not the general one of *global body perception*? Because walking, observing, climbing, stopping, listening, feeling, grasping, grazing, falling, looking, jumping, and running are insufficient, emotions must be generated and attuned to atmospheric space. Therefore, one does not speak of a synaesthetically visual *super touch* instead of an aesthetic that shares emotion through haptic feeling. The haptic-aesthetic feeling does not create a hierarchical relationship between the senses; it does not differentiate itself from the contemplative component of visual observation or the capabilities of other sensory organs but relates them as it explores the perceptible world. The definition is intended to emphasize touch; the perceptual modality proceeds in a corporeal manner.

The term ‘haptic’ actually derives from the ancient Greek *haptikós*, meaning *able to touch, touched, capable of active action*. The term became an alternative to the notion of ‘touch’ when some scholars among psychologists and physiologists, such as Géza Révész (1938), and James J. Gibson (1961), felt the need for a different term to define tactile sensations (generally referred to the hand) extended to the global body, inside and out. Although sight has historically been considered superior to haptic and tactile senses, the emphasis on touch and its connection to the body appears to reintroduce a reversed, yet still hierarchical, sensory logic: it undermines sight to elevate touch as the paramount sense. However, the primacy here is different and twofold. Firstly, haptic, and tactile senses are *ontic* (cf. Heidegger): touch is a prerequisite for understanding the world. Secondly, this relevance is *evolutionary* (encompassing both ontogenetic and phylogenetic aspects): it is through the skin that other sensory modalities specialize, and the nakedness of our bodies and their morphology lay the foundation for our cultural expressions, serving as the biological precondition for the power of language (Mazzeo, 2004, p. 66). Haptic values are identified in the relationship between body and environment, with the recognition of the natural, sensitive, affective origin of aesthetic experience of the landscape and its experience. Martin Grunwald, an expert in haptic perception and head of the Haptic Research Laboratory at the University of Leipzig, considers this sense superior because of its vital importance for many organisms (including human beings), but also because what can be touched has the character of reality, comforts, and relates. Hapticity is thus considered as a *vital extension* of touch.

Furthermore, it measures the perceptual (Petrelli, 2015) and emotional intelligence activated by the body when it actively explores a landscape, and its tangible relationships. The shape of the landscape connotes the experience and is the one that comes into immediate contact with the observer’s feelings, determining the involvement of perceptual and psychic states. Between organicism and rationalism, and referencing the poetics of architect Louis Kahn, Digerud J. G. (1980) identifies the emotional and aesthetic-atmospheric involvement in architectural space as a form of awareness, a state of knowledge, and an openness to understanding connections, origins, and ties with the natural evolution of the world, arising from haptic perception. When it comes to a landscape observed from a distance and when engaging with places, contact occurs with the dense network of witnesses of human events and physical transformations that stratify relationships. Thus, the landscape is a system capable of eliciting an engaging perceptive and aesthetic experience, derived from a structure of relationships (Calzolari, 2000, 56-58). It is interpretable as a unique entity among lithospheres and hydrospheres, between natural and anthropic environments, and across stratified levels of

defined cultural forms. In the aesthetics of the landscape, which is fundamentally a landscape of relationships, the connective tissue is formed by the perceptive and aesthetic experiences (the atmospheres) that influence the states of mind of those who engage with the landscape's complexity.

Suppose the landscape represents historiographic writing, a physical access point to the sediment of memories and relationships; this implies a semantic interpretation, thus decoding forms as if they were *communicative acts*, beginning with the first impression that atmospheric aesthetics provide. However, can any atmospheric interpretation be sufficient to understand the depth of the historiographical scripts imprinted on the territory? There is no general answer. It can be assumed that the unique and special atmosphere of places explored through haptic feeling is more 'sincere', more evocative, and more engaging than that of the visual landscape observed from distance or mediated by interfaces. For the communication design of place identities, the challenge involves deep research and applications, important for predictive exploration from a distance and ethical, sustainable tourism. Indeed, it involves seamlessly combining the experiences of physical and extraphysical spaces. According to Calzolari (2000), the landscape is recognized for its ability to determine aesthetic impressions; it does not merely act as a backdrop to human actions but serves as a container and tangible content of events, forming part of a cultural process. It actively communicates with diverse points of view through the atmospheres it generates and shares, thus qualifying as both an aesthetic and emotional process.

The deeper and intertwined meanings that make up the landscape are formed by the memories and identities of the places; they contribute to determining the atmospheres, endowing places with aesthetic qualities. Immersion in the landscape results in a profound and moving empathy (Catalano, 2020) that brings into play culture, knowledge, and interpretative skills.

Landscape and Atmospheres

The haptic-aesthetic modality of perception leads to further reflections on the communication of the atmospheric landscape. The body's hapticity and aesthetic inclination derive from the sense of touch as a function of the skin; it naturally constitutes the mutual contact between us and the environment, both receptors of a communicative interface (Bruno, 2002, p. 6), establishing an energy exchange. The relationship between the haptic body and the environment is crucial, especially where the visual form returns partial knowledge and may be responsible for the weak atmospheric quality evoked by some territories in their representations (Pallasmaa, 2016).

Haptic-aesthetic perceptual values can be considered factors that cannot be reduced to a summation of visions guaranteed by movement, depending on the overall conditions of the specific environment and atmospheres that hardly exhaust the complexity of meanings in the visual (Mazzocut-Mis, 2002, p. 149). Eugenio Turri (1998) refers to *iconemes* as identifiable and recognisable elements capable of metonymically representing a set of landscape features. These elements, known as ‘territorial emergencies’, stand out in the landscape due to their distinctive shape, size, material, and significance, all of which imbue atmospheric tones to the landscape’s image, thus altering the perception and memory of the place. An example is the Statue of Liberty in New York Bay, a formidable city icon (Rykwert, 2008). Considering the eidetic nature of memory – that is, the natural capacity to recall perceptions associated with an image (Ricoeur, 2004) – one can understand how the representation of an environment can evoke both visual and bodily sensations associated with the memory of its atmospheres, as experienced in those same places or similar situations.

Communication design focuses on developing systems to represent territories, tailored to cultural shifts and the complex histories of landscapes. The territory, with its intricate relationships, demands that the deep atmospheric sensations revealing identities and evoking memories are not confined to the aesthetics of visual representation, which can become stereotypical. Thus, communicating about the territory involves narrating the structure of relationships embedded in places, employing alternative and innovative models to meet the evolving communication needs of spaces perceived differently. Therefore, one must first reflect on the fact that the haptic experience assumes a relationship without physical mediation, between people and places. Attuning to atmospheric aesthetic elements requires primal, direct contact. This contact, even in virtual worlds, is sought with increasingly ‘invisible’ haptic interfaces. In contrast, visual representations (for communicative purposes) become *eidetic staging*, evoking personal memories with predictive, conservative, educational, and aesthetic value (Galasso, 2018).

Effective communication of experience occurs when the aesthetic factors adhere to a simple ‘principle of coherence’ (Böhme 2010, p. 106), aligning the atmosphere with the observer’s mood. Therefore, in the representation of atmospheric aesthetics, an emotional resonance is sought that fosters a sense of presence and immersion in the landscape. Thus, own-body perception represents an evocative tool of knowledge to be rehabilitated and reconsidered in the historical hegemonic interplay with the role of sight. Secondly, it is reflected that haptic-aesthetic feeling and atmosphere share the same space. Landscape serves as the connective element and incubator of atmospheric emotions. Atmosphere is a spatial quality generated by the interaction of per-

ceivable factors through which it is possible to move or imagine moving (Dai & Zheng, 2021). Landscape forms have been observed to evoke memories of and allow us to envision various events – natural, social, cultural, and political – thereby revealing to observer connections with a past that is perceived more than remembered (Galasso, 2018). *Walking through landscape spaces unlocks the mnemonic dimension, fostering evocative, new, or renewed haptic-aesthetic impressions. The perception of such specific spaces and moments acts as a catalyst, solidifying the eidetic, perceptive, and visceral ‘flywheel’ that drives new forms of visual representation of atmospheres.*

In this contemporary digital era, spatial models are distorted by a conception of geographical space (Baule, 2018) that compresses every distance and temporal dimension. Consequently, the body necessarily returns us to the physical, natural, and sustainable dimensions of exploration. Another reflection concerns the fact that the atmospheres of landscapes are perceptual experiences linked to haptic qualities directly influenced by the conception of space, the symbolic and cultural forms of their representations (Panofsky, 1961), and the visible and tangible forms of memories. The haptic representation of form, according to Erwin Panofsky (1892-1968), expresses bodily, emotional, and conceptual sensations through an artistic visual composition that possesses the ‘intention’ (1955, p. 11), that is the implicit communicative desire in the cultural products of society.

The *intention of the landscape* can be described as expressing emotional, conceptual, and haptic-aesthetic sensations, while the substantial differences between the interpretations of those who explore the territories are of a cultural order. For example, the historian completes the experience with a comprehension of the nature of the transformations, which she or he situates temporally and spatially, while the designer intuitively perceives the transformative potential of communication made accessible through the representation of the atmosphere.

Since the time of Panofsky’s sharp and, in some ways, predictive observations on the relationships between optics, haptics, surface, composition, space and time (1989, p. 181), the idea of space has changed, especially in perception, with a perspective shift from Euclidean space to topological space (spatial turn), which, it should be remembered, has profoundly marked the spatial-temporal experience of the territory (Marramao, 2013). The consequences have impacted literal, cultural, and scientific studies, social trends, and those of globalisation; now, nothing can happen without the entire planet being affected, and social structures no longer determine space but constitute them. Geolocalisation restores a different perception of space and time since it is possible to relate with anyone at any time. The impact on the haptic-aesthetic perception of the landscape that receives this topological turn is,

above all, one of “opposition”: to the compression of time due to the physiological procedural ‘slowness’ of haptic perception; to the pervasive visuality, which compresses the value of the haptic perception. A conceptual necessity emerges after the spatial turning point: from visuality to atmospheric as an aesthetic tool, towards the practice of spatial space as a ‘slow’ procedure for the intelligibility of connections, beyond the visual image and its representations. According to Berthoz (1997), the body in motion substantiates complete, global, immediate perceptions, which orient in space and among the meanings of things; *hapticity*, therefore, is not considered as an expression of tactile experience, but as a measure of the perceptive intelligence (Petrelli, 2015) of the senses activated by the body in motion.

Atmospheric Aesthetics and Communication

The literature discussing architecture as a language of space often refers to bodily experience (Bloomer & Moore, 1981); art historian Heinrich Wölfflin argued in 1898 that if we were purely optical entities, the aesthetic judgment of the physical world would be precluded (as cited by Gallese, 2015, p. IX). Knowledge about haptic interactions is being researched, and technologies with haptic feedback promise integrated realities, to make new forms of design possible (Calabi, 2001). Research is also active in other areas, which are not technoscientific, such as the communication design of identities. While aesthetic and philosophical theories clarify the reasons why landscapes instil emotions profoundly from the characteristics of a place, haptic-aesthetic feeling (which activates the atmospheric dimension by evoking cultures and memories) contributes to instructing new attention in design, to bring forth a more conscious and accessible communication.

An interesting example of aesthetic work on memory and place, in which design faces the challenge of communicating the network of cultural and mnemonic relationships, concerns an educational project focused on the Marchiondi Spagliardi Institute in Milan (2019, *Educazione e Memoria. Un racconto di periferia*³). The activity was conducted during the Covid-19 pandemic, when it was impossible to have free physical access to urban sites. The restrictions on accessible spaces necessitated a deeper engagement using archival materials; this unintentionally demonstrated the importance of on-site presence to understanding the atmospheres of the urban landscape. The preliminary analysis explored the many facets of the complex, now-aban-

3. See <https://cinemaperlascuola.istruzione.it/progetto/educazione-e-memoria-iis-galilei-milano/>

doned architectural space. The approach to the actual symbolic meaning of this derelict, massive structure – a true urban memorial – revealed how places of memory initiate a crucial and engaging ‘pedagogy of remembrance’ (Augé, 2004) of events, realities, and oblivion.

After identifying the communication and knowledge deficiencies caused by abandonment, the data collection proceeded in stages (Calabi et al., 2021): the first stage focused on enhancing the archival documentation; the second (eidetic) involved guiding a process to recognize the identity of the place through digital images; the third stage aimed at reintegrating the haptic-aesthetic experience through the exploration of the sites. The third phase made evident the fundamental value of the walk *in situ* to fill the perceptive and experiential gap of the only visual documents discovered by archives. Starting with the visual experience, the atmospheric experience initiated a deeper contact with the topological space; this was made possible by the end of the pandemic confinement, impossible before.

To conclude, the study highlights the pivotal role of haptic aesthetic perception in deepening the understanding of atmospheric identities within urban landscapes. It emphasizes how bodily experiences, integrated with environmental interactions, enrich the communication of spatial narratives. By engaging with both the tangible and the visual aspects of space, haptic perceptions foster a profound connection with the landscape, enhancing the design and communication of territorial identities. This approach not only broadens the sensory engagement with space but also ensures that cultural and historical nuances are perceptibly integrated into the communication design for territories process. Haptic-aesthetic feeling connects with the atmospheric dimension and instructs a new awareness in the project, determining a more engaging and immersive experience.

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Part II: EMO - *Emotions*

The second Part investigates the vast theme of emotions. It delves into the nature and landscape of sensations, intensities, and reactions closely linked to lived human experience.

The approach to this sphere is primarily through the nuanced lens of colour, which enables an understanding of this vibrant and complex sphere from a design perspective that is practicable in different everyday settings and contexts.

The **fourth chapter** of the book, written by colour design expert Ingrid Calvo Ivanovic, explores how colour is a powerful conductor of memory enhancement processes due to its ability to elicit different emotional responses in each person, and how the memory of colour is an extremely subjective and ephemeral factor, just as momentary emotional reactions are.

The **fifth chapter** dives into the case study of the city of Valdivia in Chile, exploring the morphology of the territory, the colours and atmospheres interconnected with the history of the place. The essay is co-written by Elisa Cordero-Jahr and Gonzarlo Cerda-Brintrup and represents a significant contribution on how to observe a particular mnemosphere linked to a real and specific place and bring to the surface its different aesthetic experiences, thus unique and universal emotional and perceptual.

The **sixth chapter** is written by Marcela Saa and is an original contribution on the subject of image and the emotions associated with it through a focus on the body and its movements, in particular the face, which is the mirror of our emotions and past experiences.

Taking more distance from classical academic approaches, this essay also enriches the book's theme by reasoning on the body as another facet and entity of the mnemosphere concept to be analyzed and grasped with a different sensitivity.

4. On the Colours of Memory and the Memory of Colours

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Abstract

This chapter delves into the interplay between colour and memory from a dual perspective. The first perspective explores how colour is a potent conduit for human memory, fostering object recognition, heightening attention, and triggering emotional responses – all pivotal processes for enhancing memory performance. Also, it reflects on the portrayal of memory and flashbacks in the collective imagination, particularly in cinema, where black-and-white depictions have been the norm. However, research indicates that memory recognition is notably more accurate for coloured stimuli than their black-and-white counterparts. The second perspective probes into the fleeting and subjective nature of colour memory. It uncovers humans’ challenges when precisely matching or recalling specific colours, even mere seconds after perceiving them. This exploration elucidates how certain colours are more indelible in memory than others and how properties like hue, lightness, and saturation may impact this phenomenon. Also, the concept of “memory colour” – the quintessential colour associated with canonical objects like the yellow of a banana or the green of grass – is presented along with its complexities and advantages. Lastly, some concepts discussed are illustrated using the chromatic visual atlases derived from Mnemosphere’s *Open Call for Images*.

Visual memory: a few principles

Visual memory is the ability to encode, retain and recall visual information from environmental information and past experiences. It is a fundamental aspect of human cognition, allowing us to recognize familiar faces, navigate our surroundings, recall visual details of events or objects, and un-

derstand the world around us. Many models have been developed to describe and understand how human memory works. Atkinson and Shiffrin (1968) have proposed one of the most influential. In this model, memory comprises three structures; sensory register store, short-term store and long term-store. Almost all the raw information we receive from our senses, either visual or auditory, flows to the sensory register store. When we see something, the visual data is processed by the eyes (specialized cells or photoreceptors within the retina) and transmitted to the brain through the optic nerves. The optical signals are then sent to the primary visual cortex in the occipital lobe at the back of the brain. Here, the brain processes visual information, analyzing basic visual features like colour, shape, orientation, and motion. This early visual processing is essential for identifying and understanding visual stimuli.

After the initial visual processing, the brain holds visual information in short-term visual memory. This memory structure has limited capacity and can only retain data for a short duration, typically a few seconds (Dzulkifli & Mustafar, 2013). Short-term visual memory allows us to remember visual information for immediate use, such as when reading a sentence or following a map. Finally, if the visual information is deemed necessary or relevant, it will be transferred to the deepest level of the memory system, the long-term store, due to several techniques or control processes, such as encoding, retaining, and elaborative rehearsal (Radvansky, 2006). Long-term memory has a potentially unlimited capacity and prolonged, or permanent, duration. Then, when we need to recall visual information, retrieval processes come into play. The brain activates the neural networks associated with the stored visual memory, reconstructing the graphical representation in our mind.

Successful retrieval depends on factors such as the strength of the memory, the cues available, and the context of the retrieval. Two other interconnected cognitive processes are fundamental for encoding and storing information in our memory: attention and emotional arousal. Attention allows us to selectively focus on specific stimuli or information while filtering out irrelevant or less critical input. The information that can capture attention will have a better chance of being transferred from the sensory store to the short-term store. If not, the information will be lost. In other words, the information that we pay more attention to is more likely to be remembered than the one we ignore and do not pay attention to. Numerous research has reported that awareness can increase memory performance levels regarding recall rates and faster reaction time (Pan, 2010; Smilek et al., 2002). On the other hand, emotional arousal refers to the physiological and psychological activation or stimulation triggered by emotional experiences. Emotional arousal significantly impacts how we encode, consolidate, and retrieve information from our memory. It enhances attention, as when we experience intense emotions,

our cognitive resources become focused on the emotional stimulus, making us more attentive and receptive to the associated information. Enhanced attention during emotional arousal improves the encoding of details, leading to better memory formation. Additionally, the brain prioritises the processing and storage of emotionally significant memories. When emotional contexts are present during encoding, they become linked to the associated memories. Later encounters with similar emotional contexts can trigger the recall of related memories, creating solid associations contributing to memory retrieval. As we see, the individual visual memory consists of much more than the external or environmental inputs (the objectively present physical stimuli) that gave rise to it. Visual memory is mainly based on various cognitive processes and neural mechanisms activated in the person by the environmental stimuli, but also on prior knowledge and experiences, the personal relevance we give to information (how it relates to our interests, goals or self-concepts), social and cultural factors, among several aspects. Information from these sources, a blend, becomes integrated to form a single memorial experience. The relationship between colour and memory is a complex and multifaceted one. Colours can influence our memory in various ways, and our memory, in turn, can affect how we perceive and recall colours.

The colours of memory: how colour contributes to human memory

Colour is considered one of the most essential visual experiences for human beings. Critical behaviours such as wayfinding, foraging for food, and recognising predator and prey, or friend and foe, must have played a vital role in the evolution of colour vision (Spence et al., 2006). Colour is a powerful information channel to the human cognitive system, influencing our perception, emotional response, and cognitive processes. Therefore, it significantly enhances memory performance (Wichmann et al., 2002). Colour helps us to recognise things faster and to remember them better.

Colour contributes to our object identification at both the sensory (coding) and cognitive (representation) levels of information processing (Dzulkipli & Mustafar, 2013). It is a prominent environmental cue that helps us identify and differentiate spaces and places. We create mental maps and spatial representations in our memory by associating specific colours with different locations or environments. For example, the colour scheme of a building's interior can help us remember and navigate different rooms or areas. Colours can create visual contrast and distinction between elements within a space, making them more memorable. Vibrant or contrasting colours can draw attention, help us differentiate between objects, and facilitate memory encoding.

ing. For example, brightly coloured signs within the landscape can stand out in our memory, aiding navigation and spatial recollection. Colours contribute to the atmosphere and mood of a space, impacting our memory and emotional recall of that place and influencing how we remember the ambience and overall experience of a place. Beyond identification, colour leads to an advantage in retrieval, presumably due to an enhanced image representation in memory due to the additional chromatic attribute, shortening the duration of the process of matching object attributes to the stored representation. Several studies have demonstrated that recognition accuracy is higher for colour images of natural scenes and images than those in black and white, both during immediate recall and after a 1-week retention interval (Gegenfurtner & Rieger, 2000; Tanaka & Bunosky, 1993). Moreover, Suzuki and Takahashi (1997) found that green landscapes were the most difficult to remember, colourful flowers and rock formations were intermediate, and human-made objects were the easiest. Hence, colour contributes to scene recognition in two main ways: improving edge detection and surface segmentation and being bound with shape as an integral property of the memorial representation.

Additionally, the saliency of colour in the environment can influence and increase our attentional level (Farley & Grant, 1976). Greene, Bell and Boyer (1983) further explain that colours of the warm part of the chromatic circle, such as yellow, red and orange, have been found to have a more significant effect on attention than cold types of colours like blue, violet and grey.

Colour can also give rise to emotional arousal. The range of arousal varies depending on the emotional element attached to a specific type of colour. Naturally, individuals frequently associate certain emotions with particular colours; for example, the subjective experience of anger is usually associated with the concrete concept of red because red correlates with the bodily (i.e. sensory, physiological) experience of increased blood flow during the experience of anger. When investigating such colour emotional associations, we can consider the three colour properties: hue, lightness, and saturation.

Hue is the property that gives a specific colour its leading name (red, yellow, blue) and indicates a particular colour sensation dependent simply on the relevant wavelength; the chromatic form of a colour has no white or black mixed with it. Lightness is the colour property that indicates the extent of the light that it reflects, namely, how light or dark the colour is. And saturation corresponds to the intensity or purity of a hue, the extent of its colourfulness, and the strength or richness of a colour, indicating whether it is vivid, medium or dull. In other words, the highest degree of saturation belongs to a given colour when in the state of greatest purity. Historically, studies on the association between affect and colour have focused only on hue as the salient colour emotion descriptor. But nowadays, it is more accurate to consider that all

properties of colour influence the emotional or semantic association. Several studies support this notion. For example, Wright & Rainwater (1962) found that participants rated lighter colours more often using adjectives relating to happiness (happy, young, social, etc.). Valdez & Mehrabian (1994) showed that people rated lighter chromatic and achromatic colours more positively. Similarly, Hemphill (1996) reported that viewing lighter colours elicited associations to positive affective states (e.g. white, pink, yellow, etc., associated with happiness and positivity) while viewing darker colours mainly produced associations to negative affective states (e.g. grey with sadness and boredom). In addition to lightness, saturation might be more important in determining other affective associations, such as those with arousal or potency. These associative mechanisms may explain how colours “carry” certain affective connotations. This correlation helps people focus and pay attention to the information presented to them or the experiences lived by establishing colour associations to events, making it more likely for them to remember it (Myers, 2006). As stated earlier, attention and arousal are essential elements in memory performance. Consequently, colour can increase the likelihood of the information being stored longer in the memory system, in both short-term and long-term stores. Colour can activate the human cognitive system, draw the observer’s attention to the content, evoke emotions, associate events with chromatic information, and actuate long-term memory.

Colour representation of memory in visual collective imagination

Even if we have seen the relevance of colour to human memory, paradoxically, when memory is represented in the collective visual imaginary, the usual response of creators, art directors and photographers is to diminish or cancel colour of the representation of memory and remembrance in the audio-visual world. The remembrance of past times is usually depicted in the collective visual imagination through the use of monochrome, black and white or colourless images.

Incorporating this technique or stylistic decision in visual communication would have arisen since the advent of colour photography, alluding to the past through the use of black and white, sepia tone or muted colours, and previous photographic techniques that were overcome through technology. In the case of cinema, the use of black and white to represent the past through flashbacks initially emerged as a tribute to silent films and is employed because of its functional and symbolic qualities. On the functional side, the desaturation of colour to illustrate remembrance is used to mimic the aesthetics or looks of older films, particularly colourized black-and-white films or faded prints of

colour films, calling on the collective memory of viewers, who had the experience of the audio-visual image in earlier times, and therefore with lower chromatic and technical quality.

The image and its colours are perceived as “not current or contemporary”, corresponding to an earlier time. Using black and white can also help distinguish between narrative layers, such as indicating flashbacks or memories from present-day events. This visual differentiation helps viewers understand the temporal shift and aids in storytelling.

Countless films use this resource to separate discursive lines (past and present), one of the most notorious examples being the award-winning film *Memento* (2000), directed by Christopher Nolan, where one of the most remarkable peculiarities of the film lies in its timeline, told through constant *analepsis* (flashbacks) and *prolepsis* (flashforwards). This is because Leonard, the main character, is a man who, after a stroke, suffers a brain trauma that causes him anterograde amnesia. Leonard cannot store new memories, so he forgets what he is doing after a few minutes; however, he possesses sensory memory and remembers how to perform everyday actions.

When Leonard tries to recall some events that happened before the accident in the film, the image changes to black and white; instead, when the protagonist is experiencing the present circumstances, the image is presented in realistic colours. There is nostalgic or historical significance on the symbolic side of the use of desaturated or achromatic colours to depict remembrance. Black and white film or imagery can evoke a sense of nostalgia and connect viewers to a bygone era. By presenting a scene or memory in black and white, filmmakers can create a visual association with the past, emphasizing the idea of remembrance or reflecting on historical events. Also, achromatic colours can enhance a scene's or memory's emotional tone. It can create a sense of melancholy, nostalgia or even evoke a sombre or introspective mood, aligning with the themes of memory and remembrance.

Pastoureau (2010) explains, “many of our visual recollections have lost their definite colours; they are not even black-and-white or black-grey-and-white. Buried deep within our memories, they are colourless. But when we summon them, deliberately dredge them to the surface, we more or less consciously tidy them up, both formally and chromatically. Our memory classifies shapes, fixes lines, and our imagination gives them colours they may never have had.” Moreover, the absence of colour in black-and-white imagery can symbolize the fading or distorting of memories over time.

The memory of colours: how well we remember colour

Albers' quote at the beginning of this chapter raises a critical reality concerning the remembrance of colours: it is very ephemeral and relative. Colour memory is usually studied through "successive colour matching" tasks or experiments. In a typical memory-matching task, observers memorise a perceived colour of an "original" colour stimulus, after which the original colour disappears. After a given time interval, their task is to reproduce or match that colour (through activating short-time memory) by selecting one from several "actual" colour stimuli presented (Epps & Kaya, 1998).

Encoding and retrieving colours are not automatic processes but require effort. Several studies have demonstrated that the overall performance in recalling freshly seen colours can be very poor, with the accuracy of colour memory diminishing rapidly as the elapsed time increased between intervals of zero, 15 seconds, 5 minutes and 24 hours. Suzuki & Takahashi (1997) found that only 70% of individuals they tested were able to match colours immediately after seeing them and declining to only 55% in the 1-week-delayed test, suggesting that after some time, when the remembrance of colour is stored in long-term memory, it reaches a plateau with no further degradation or memory loss. There is a consensus that not all colours are equally hard to remember. Jin & Shevell (1996) reported that colours with long and medium wavelengths in the visual spectrum, i.e. red and green, respectively, were more accurately remembered than those with shorter wavelengths, such as blue and violet. Laws (1999) found that individuals seemed to be most sensitive to green hues, but at the same time, they committed the highest number of errors for it when they had to select the correct green target stimulus. This could be because green occupies an extensive range of the visible spectrum, and consequently, we can see more variations in its hue family.

Since more cones are activated in the green region of the spectrum, the retina is more sensitive to this colour than other colours. When remembering green, we have to place a larger amount of information, resulting in more mistakes. Additionally, not all greens are retained equally: the different tones, tints and shades of green (and of any colour) possess some inherent quality, making it difficult to recognise them again and almost impossible to reproduce them. Just like in the case of emotional arousal, in addition to hue, the ability to remember colour is also influenced by its lightness or darkness. Knowing the language of colour phenomena, i.e. how to describe a chromatic stimulus that is being perceived in words, can help store and remember it better. Most of the tested people reported using visual or verbal cues in remembering colours, for example, by associating things or objects to the

colours they are trying to remember, such as green grass, light blue sky, apple red, etc. Encoding operations determine how information is stored, and this, in turn, determines the effectiveness of retrieval cues. Brain areas activated during encoding colours are reactivated during retrieval of those colours. However, the memory of colours can be so relative that it usually introduces errors when performing colour retrieval tasks. Memory is connected to our individual past experiences, and it has a crucial role in perception, affecting the colour appearance of the objects we see, mostly when we have to remember colours that are stored in the long-term memory system.

Long-term memory colours

How colour is stored in long-term memory is an issue that has been concentrated for decades in what can be addressed as canonical, diagnostic or prototypical colour knowledge, this is called the “memory colour” (MC) or “memory colour effect (MCE)”. Hering (1961) first evoked the concept of memory colour. He pointed out that the most typical colour of an object becomes an integral part of the memory representation for that class of objects and significantly influences our perception of that object’s colour.

Memory colours include blue sky, green grass, yellow banana, brown autumn leaves, etc. These memory colours are more specific and represented in a smaller gamut than general terms such as “blue” and “green”. Therefore, a memory colour is the typical colour of an object that a beholder acquires through their experience with that object (Witzel & Gegenfurtner, 2018). This way, it determines the observer’s expectation of an object’s colour based on prior experiences. Just as we know that light usually comes from above, we apply prior knowledge about the natural colour of fruits and other objects. This knowledge is used with additional local and global information about the scene to determine the colour appearance.

The mechanisms that determine colour appearance act throughout all processing stages of the visual system, from the retina to the visual cortex, including visual memory. For recalling memory colours, our visual system activates “colour constancy”, which allows our perception to function and perform even when objects are shown under unknown or different light sources. In other words, white paper, red apples, or pink flowers maintain, in essence, their colour appearance to our eyes, regardless of the light in which they are viewed. Despite colour constancy is a mechanism that helps us to survive in an ever-changing light and colour world, when performing colour matching experiments for memory colours (MC), e.g. when asking people questions about canonical or prototypical colours such as “What is the col-

our of a banana?” or “Which green is the colour of an avocado?” researchers have found, as expected, that the memory of colours is, again, relative and unreliable. The remembered colours are significantly different from the actual ones since colour memory tends to characterise the object’s chromatic features. In many cases, hue changes saturation and lightness increases can be observed. (Bartleson, 1961; Newhall et al., 1957). In other words, when recalling the MC, lemons are usually remembered as more yellow, tomatoes as redder, and tree leaves as greener than they are. The most typical memory colours tend to exaggerate the actual hue of the colour diagnostic objects. This implies that memory colours are inaccurate and tend to exaggerate the actual appearance of the canonical things. MCs are usually oversaturated for objects with chromatic colours, such as a banana, and undersaturated for objects typically achromatic, such as cauliflower (Bae et al., 2015). Besides their relativity, memory colours are fundamental for several aspects of human colour vision and perception, including object and scene recognition, colour memory, colour naming, and colour constancy.

For instance, object recognition is better (faster and more accurate) when colour canonical objects are presented in their typical colour than atypical or grayscale. Moreover, canonical colours improve scene recognition (Gegenfurtner & Rieger, 2000; Wichmann, Sharpe, & Gegenfurtner, 2002). When observers are exposed to these object-colour associations, memory colours prepare them to perceive certain objects, and they direct their attention towards particular colours and things in a scene. In particular, the presence of a specific object automatically leads the observer’s attention to its typical colour in the scene. Additionally, memory colours facilitate the process of colour-based object selection when performing daily-life tasks such as looking for tomatoes in the market, which demands both perceptual and memory functions: we usually scan the colourful surface stimuli of the fruits’ stand, looking for our memory colours of tomatoes, and when we are selecting the tomatoes we will buy, we are comparing the tomatoes we are seeing with the red ones stored in our memory. The memory colour effect confirms that the nature of colour perception and colour memory is a link between the physical environment, experience and subjective impression. The reliability of this link constitutes the “reality of colour”.

Colour as individual and collective memory: the Mnemosphere’s colour atlases

As part of its focus on probing questions on the issue of memory, atmosphere, and spaces, the Mnemosphere project inquired on how colours impact and affect the way people relate to memory and space by evoking individual

and collective emotions. This was done mainly through the project’s *Open Call for Images*, where more than 400 images were received among photographs, illustrations, artworks, and videos. The *Open Call* was articulated by filling a form with pictures and text, stimulating the participants to reflect on the lexicon concepts “memory of places”, “atmosphere of spaces” and “atlas of emotions”, and their relationship with morphological elements such as shape and colour. The result was a collective and participated visual archive, the *Mnemosphere Atlas*, in which emerged the power through which images and colours contribute to narrating personal and collective memories in the present time (Calvo Ivanovic et al., 2021). After the *Open Call*, the research team first organized and arranged the images, denoting the spatial and atmospheric conformations of the subjects and environments depicted and considering the descriptions and concepts provided by the call participants. Regarding the idea of memory, the images were rearranged into four different visual atlases for the study of the main themes of: “individual memory” (considering faces, human bodies, moments frozen in time, and signs), “collective memory” (where memory usually is placed in a specific space such as memorials, monuments, rituality, ruins, cemeteries), “physical environment” (the particular memory of places considering landscapes, rural and urban contexts, façades, interior or private spaces) and, “abstract dimension” (considering abstract compositions with different iconic levels and made through various techniques). An overview of some of the atmospheric atlases and the atlases related to memory can be seen in Figure 1.

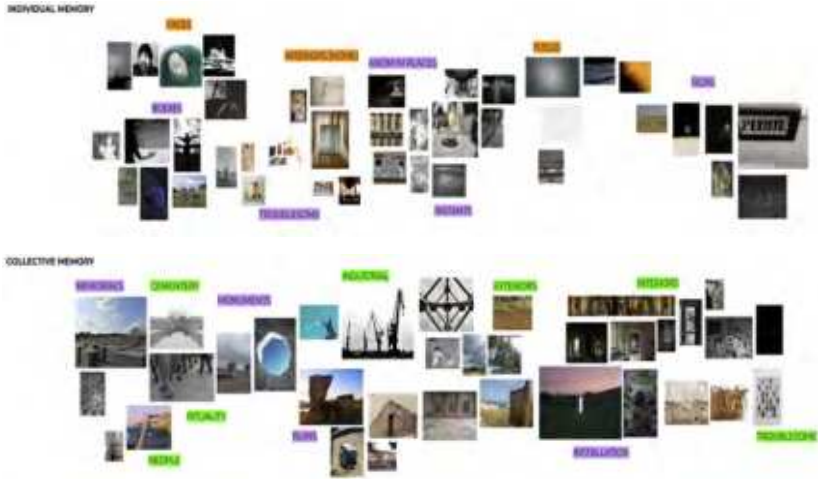


Fig. 1 – Overview of the *Mnemosphere* visual atlases for the main themes of ‘individual memory’ and ‘collective memory’, 2021.

After creating the visual atlases, the project led to analysing the chromatic elements of every main theme to understand how individual and collective memory is visually represented through colours. It sought to translate the formal characteristics of the images (figurative, geometric, organic, abstract, among others) into purely chromatic characteristics. This was made by identifying the most recurrent hues of every atlas while paying particular attention to the lightness and saturation of the colours obtained; as we have seen, these two properties are fundamental for emotional, semantic and mnemonic purposes. The colour translation was done in two steps: obtaining a colour chart of 200 colours and then reducing the number of colours to a more manageable quantity of 25 for each visual atlas. The reduction of the original 200 colour chart was based on three criteria: [1] human perception of visible differences (by eliminating whose difference was not perceptible to the human eye; [2] heterogeneity, meaning keeping colours of different shades, values and saturations; and [3] representativeness, that is, that the final colour chart should reflect the proportion in which colours appeared in the visual atlases, to preserve the original chromatic mood of each theme.

Figurative vs. abstract colour memories

The colour charts of the four main visual atlases can be seen in Figure 2. A first noticeable chromatic similarity is found between individual and collective memory colour charts. Both are composed of harmonious “earthy” colours, from medium to low saturation. Participants’ descriptions of their images support this analogy, and it relates to the challenge of defining boundaries between personal memory (when it is linked to an environmental experience) and the collective heritage rooted in a place. The culture of a place is assimilated by individuals and their memory, as much as personal memories and experiences mix and blend with collective events and history. With a similar colour mood, the colour chart of the “physical environment”, depicting actual colours from the natural and built habitats, also provided a harmonious colour palette of earthy and material colours, with medium to low saturation.

It is interesting to observe how these colours and chromatic palettes resulting from the authors’ interpretation of the memory of places and spaces do not differ considerably from the traditional representation of memory in the collective audio-visual imaginary analysed above. On the contrary, this finding seems to confirm the predominance of a chromatic palette of low saturation, sepia and achromatic tones to represent the memory of past times and memorial places visually, just as they do with flashbacks in the cinema. An avenue for reflection could investigate whether this is a result of the influ-

ence on how memory is represented in cinema and other audio-visual media, in the collective imaginary of the authors, when they were required to submit an image about memory or places of memory, and how much of a personal or experiential nature the visual representations sent by them are.

On the other hand, the “abstract dimension” of memory is composed of full-spectrum hues with high saturation, in complete opposition to the other thematic atlases. When memories are abstract or not linked to specific figurative images or places, they address the inner or subjective expression of the self, sensoriality, personal experiences and emotions. An altered vision of reality is intrinsic in the abstract dimension of memory. Just as it happens in visual arts when comparing landscape or hyperrealistic painting with abstract avant-garde movements.

Therefore, it is a dimension profoundly linked to interiority and individual perception as it is entirely detached from the realistic exterior depiction and is represented solely through the colour-emotion filter. These abstract memories are in full colour. Following the chromatic moods of these visual

HAZE



PHYSICAL ENVIRONMENT



ABSTRACT DIMENSION



Fig. 2 – Every Mnemosphere visual atlas was translated into pure colour information, to then define the colour charts with the most 25 representative colours.

atlases, colours of nature and materials of specific places influence the individual or collective memory related to them. In comparison, the gradual incorporation of places into the user's emotional experience alters and exaggerates the hues, brightness and saturation of the realistic representation of the place and landscape. In fact, 'the sensory and affective quality of the atmosphere tinges on how we perceive our surrounding environment and how we emotionally orient ourselves in it' (Rauh, 2018). According to Simonsson (2014), "colour and light evoke feelings based not only on certain meanings but also on experiences of what can be defined as sensational analogies. [...] Colours and their nuances are not only fixed in our categorising and naming of them or their nature as mere visual perceptions; they also have other sensational effects". These *effects*, relevant to memory and emotion, have been described in this chapter. Recognising the role that colour can play in enhancing memory and how memory can affect colour perception could be essential to provide a route for artists, architects and designers when creating images, objects and spaces.

Moreover, concerning the memory of places, these aspects are of particular interest precisely because they could allow people to be more deeply involved with the place's cultural heritage through communicating with artifacts that may connect with their emotionality and perception and convey the engaging human experience that relates the (chromatic) world of nostalgia and memory.

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5. Valdivia, Chile: The Vestiges, Memory, and Chromatic Atmosphere of A River City

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Abstract

The city of Valdivia, unlike other Chilean cities, faces the river. This has translated into a rich, varied, deep, and intimate history and relationship with the main rivers surrounding and crossing through it. From fishing and bartering in pre-Columbian times, passing through a colonial era, and later an industrial stage, today it remains in a multiplicity of uses that include trade, naval, sports, and touristic activities among others. This intertwined history between the city and its rivers is part of the memory and identity of those who live there. Pierre Nora mentions that «there are as many memories as there are groups; which are by nature multiple, collective, plural, and individualizable» (1984), and that «places of memory are, first of all, remains» (*Ibid.*) and that memory «must first be defined as the set of places where collective memory is anchored, condensed, crystallized, sheltered, and expressed» (1992). In the case of the city of Valdivia, this long-standing relationship of the city with its rivers has left an imprint on its riverbanks: vestiges of old docks, ruins of factories in disuse associated with the river trade, abandoned train lines or sunken ships, which constitute an important part of the collective memory and identity of the city. For Gilberto Gimenez, «the concepts of culture and identity are closely interrelated and indissociable concepts... our identity can only consist in the distinctive appropriation of certain cultural repertoires that are found in our social environment, group, or society» (2005). In Valdivia, there is a culture around its river edge, an issue that completely defines its identity. According to Böhme (2014), the mean atmosphere between the objectivity of the environment and the subjectivity of the human is a space “between” both: «between objective conditions and subjective states, between object and subject». An atmosphere is impregnated by

the objects, constructions, and structures that surround and cross it (Zumthor, 2007). Both the vestiges of bygone activities and the bustling current life that animates these rivers, give Valdivia its very own atmosphere that identifies and distinguishes it. This atmosphere also has its own light and color that form what we have called, its chromatic atmosphere. This text addresses the relationship between the main current and past activities associated with Valdivia's rivers, their chromatic atmosphere, and the memory entrenched in these places, which is part of its inhabitants' identity.

Beginnings of Valdivia

Looking at Valdivia, a city structured historically and urbanistically around the *Valdivia and Calle-Calle* rivers, takes us to a city that has managed to occupy and consolidate its river edges, unlike other Chilean cities. This is shown by its touristic *waterfront*, used daily by the Valdivian community; the *river market*, one of Southern Chile's most characteristic markets; the museums and university buildings of the *Universidad Austral de Chile* on *Teja Island*; the neighborhoods that have been growing along its banks, and the five bridges that cross its waters. However, in contrast with this image of a consolidated city, there is another city: that of the vestiges. It is a city hidden from simple view, one that is partially revealed by the remains scattered along the marshy banks of the river, which recall history and incite the imagination of the passerby on seeing parts submerged in the green waters that evoke possible ships, cinereous and broken walls that outline precarious factories, and rusty buried rails that hint at possible docks [Fig. 1].



Fig. 1 – Valdivia's consolidated riverbanks and industrial vestiges (photo by Gonzalo Cerda-Brintrup [GCB]; watercolor by Elisa Cordero-Jahr [ECJ], 2023).

First founding period: 16th century

The city of Valdivia, since its foundation in 1552 by Spanish colonizers upon a pre-existing indigenous city, has suffered diverse attacks of nature, political events, and accidents, which have destroyed its buildings and human lives time and again. The indigenous uprising of 1599 completely razed the Spanish city, leaving it abandoned and available for the conquest of other maritime powers, such as the Dutch, who briefly occupied its ruins.

The Spanish crown, faced with this threat, refounded the city in 1645, and built a system of fortifications, the Corral, Mancera, and Niebla forts, at the entrance of the Valdivia River. After independence from Spain in 1820 and the creation of the Republic of Chile, the forts fell into disuse and exist today as vestiges of a bygone time. Since the city was founded on the banks of the Valdivia River, most of the traces left by its history are found on its edges [Fig. 2].



Fig. 2 – Mancera Island Castle (photo by GCB, 2023).

Second founding period: 19th century

With the arrival of German settlers from 1850 on, an initiative of the government of Chile to help these remote territories of the country emerge economically, the industrial stage was set that included mills, tanneries, shoe stores, breweries, distilleries, sawmills, and other activities that were housed in suitable constructions, each with its respective jetty to sell the merchandise using the river, the only means of transport of the time. The riverside urban development stands out through promenades and waterfronts, public amenities such as a market, stores, and especially the riverfront on the Valdivia and Calle-Calle rivers. These two rivers are actually one, which changes its name depending on the location. It enters from the east with the name Calle-Calle and becomes the Valdivia, when crossing under the Pedro de Valdivia bridge, in the heart of the city. Valdivia grew around its industrial production, which its ensuing significant increase in architecture: industrial buildings – many built from wood – such as mills, shipyards, depots, and barracks, accompanied the development of housing, even building authentic mansions, following the prevailing neoclassical lines of those years (Cerda, 2022) [Fig. 3]. Later, in 1895, the State Railway Company (EFE) settled in the east of the city with its station, depots, raised water tank, turntable, docks, and jetties. The installation of this means of transport gave the city a significant economic boost and allowed combining shipping of goods by land and by water, through river transport.

In May 1960, the south of Chile and especially the city of Valdivia suffered the largest earthquake recorded in the history of mankind, 9.5° on the Richter scale, destroying much of the industrial and commercial infrastructure. On the other hand, due to political decisions made during the military dictatorship (1973-1989), the railroad ended its operations in 1990, closing its facilities, which have been systematically vandalized ever since.



Fig. 3 – River market and wooden architecture (photos by ECJ and GCB, 2023).

Memory, Identity, and Chromatic Atmosphere

From a theoretical point of view, there are several concepts involved in this research. From our perspective and according to the approach proposed, those of *memory*, *identity*, and *chromatic atmosphere* are significant. These are presented here associated with the object of study, the architectural vestiges in the city of Valdivia.

Memory

This history woven between the urban space and its rivers is part of the memory and identity of those who inhabit this city. Pierre Nora mentions that «there are as many memories as there are groups; that this is by nature, multiple, collective, plural, and individualizable» (2008) as well as that «the places of memory are, above all, remains» (*Ibid.*) and that memory «should be defined, first of all, as the set of places where collective memory is anchored, condensed, crystallized, sheltered, and expressed» (*Ibid.*). In the case of Valdivia, this long relationship with its rivers has left an imprint on its river edges: vestiges of old docks, ruins of factories associated with the water-based trade, abandoned train lines, and sunken ships, which constitute an important part of memory and its collective identity. The city is full of vestiges, and in Nora's words, full of *places of memory*, be these large-scale such as abandoned industrial warehouses or the smaller semi-submerged remains of small disused docks.

Culture and identity

Culture, as a way of life, is expressed materially in a territorial context, cultural identity being in turn a product of the collectivity and as such, linked to its heritage (Molano, 2007). Molano points out that «there is no cultural identity without memory, without the ability to recognize the past, and without its symbolic or referential elements that help to build the future» (*ivi*:4). For Gilberto Giménez, culture cannot be separated from identity since «our identity can only consist of the distinctive appropriation of certain cultural repertoires that are found in our social environment, our group, or our society» (2005). In Valdivia, there is a culture around its river edge, an issue that completely defines its identity: it is what we could call a *culture of water* that is expressed in the daily life of those who inhabit the city, and that is manifested in daily trade in the *river market*, in competitive water sports, in a typical stroll along the waterfront, and also in the parade of boats decorated with multi-colored lights during *Valdivian Week*, a carnival held in February every year.

Chromatic atmosphere

The term atmosphere comes from science, to denote the gaseous layer that envelops the earth. From the 19th century, the term began to be used metaphorically in literature, to describe certain moods in certain places, distinguishing, for example, an oppressive atmosphere from a relaxed one (Böhme, 2020). An atmosphere is a spatial perception that works instantly. It is an understanding that is immediately obtained from space, which comes from our biology as a resource that human beings, as well as other animals, use to survive (Zumthor, 2006). Once we are immersed in a given atmosphere, in a given space, we can only begin to identify the objects it comprises (Böhme, 2014), and the constructions and structures that frame and cross it (Zumthor, 2006). An atmosphere is understood once through all the senses, that is to say, it is a simultaneous, peripheral, and unconscious experience that «fuses perception, memory, and imagination» (Pallasmaa, 2014, p. 231) and that also involves the emotional (Böhme, 2016).

Böhme proposes that the key components in the creation of atmospheres in cinema, theater, design, and architecture are light and color, among others (Böhme, 2020). Likewise, Zumthor mentions color, among the things “that move them” in a certain place (2006). From the arts, the Impressionists always knew that color was an essential part of creating atmospheres in their works. Artists such as Monet, Pissarro, Cézanne, and Turner created them with simple pigments, within the restricted dimensions of a canvas. This type of art has been called atmospheric painting (Pallasmaa, 2014), where the edges and structures are suppressed to make way for sensations of movement, moisture, and temperature, and colors differentiate one situation from another (Griffero, 2020). Atmosphere, light, and color are one and the same thing for visual perception, merging into what we have called the chromatic atmosphere. A chromatic atmosphere is «a certain set of colors (and their relationships) in a certain space, in a certain light, which arouses certain emotions. A chromatic atmosphere is perceived visually, but it is always part of a wider atmosphere, where all the senses are present» (Cordero & Cerda 2023, p. 2). Both the places of vestiges of past activities and the bustling current life that animates the Valdivia River, have a chromatic atmosphere that identifies and distinguishes them. These chromatic atmospheres are rooted in these places and remain in the memory of their inhabitants, forming part of their identity.

The Vestiges of the River Edge

Starting at the end of the river in Corral Bay

Corral Bay is at the mouth of the Valdivia River, with 3 main forts, built from *cancagua stone* and *sandstone*, which were originally connected to the city only through the river. *Niebla Fort* is currently a museum, but *Corral* and *Mancera Forts* only offer ruins for the public to visit. The atmosphere of the three forts is charged by the breadth of their space and open frontality towards the sea with its infinite horizon; the exposure to the inclement weather and the persistent wind; and the heaviness of the monumental moss-covered cracked stones of the ruins' walls. Its chromatic atmosphere comprises the green of the grasses, mosses, shrubs, and trees that surround the ruins; the blues, light blues, grays, and whites of the sea, the river, and the skies; and the browns, of the millenarian stones.

The river vestiges over time

The city of Valdivia, unlike other Chilean cities, faces the river. This translates into a story of a deep and intimate relationship with the rivers that surround and cross it, especially the Valdivia and Calle-Calle. It begins with fishing and bartering in pre-Columbian times, continues with the Spanish colonial conquest, before later with the industrial stage being influenced by German immigrants, and reaches today, through multiple uses that include trade, naval activity, sports, tourism, and others.

The vestiges of the jetties

In the heart of the city, on both sides of the river, it is easy to notice the vestiges of ancient jetties that connected both banks of the Valdivia and Calle-Calle rivers. These traces speak of the city still without its bridges but with an intense river traffic of people between the central quarter and the old industrial neighborhoods, *Teja Island* and *Las Ánimas*.

It is interesting to note that these boarding points, although many no longer exist, remain in the memory of the old inhabitants of the city, with their names and references, forming a means of understanding and organizing the city through memories. The names of the *Gatica*, *Condell*, *Scheihing*, and *Oettinger* ferries, to name a few, are still heard among the older inhabitants (Jiménez et al., 2012), together plotting the reference points. The atmosphere of these jetties is given by the encounter between the hard stone and the soft water of the river, the dampness of its banks, and the light of the water. The chromatic atmosphere comprises greens from the surrounding vegetation; grays, light blues, whites, and blues of its waters and skies; and the browns of the *cancagua* and sandstone with which they were built [Fig. 4].

The vestiges of the river jetties

Transportation in Valdivia, before roads, streets, and bridges, was done along the river. Dozens of abandoned jetties give an account of an industrial era that had its heyday in the late 19th and early 20th centuries, with cargo and passenger transportation between the banks of the city, and also to other places in Chile and the world. The half-destroyed, half-submerged vestiges of these docks, built using wood or rails, are found on both banks of the Calle-Calle and Valdivia rivers.

As with the jetties, the meeting of soft and moving water, and the iron or hard wooden, static structures, characterize these places. The chromatic atmosphere of these jetties comprises the greens of the surrounding nature; red ochers from the rusty metal rails; light blues, blues, grays, and whites of the waters and the sky; and browns of the wooden jetties [Fig. 5].

The remains of sunken ships

The river world where the city of Valdivia is located inevitably has a historical component associated with different shipwrecks and tragedies.

The history and memory of the city converge in already mythical sunken ships, such as the steamer *Canelos*, which was wrecked during the tsunami that followed the 1960 earthquake. Nowadays, from the shore, it is possible to see its submerged remains in the Valdivia River, in the *Estancilla* sector. However, traces of smaller sunken ships are scattered along the entire river, configuring an atmosphere that associates sailing with danger, stimulates the imagination of inhabitants and tourists, and constitutes part of the city's memory. In Valdivia, to talk about rivers is also to talk about shipwrecks, and their vestiges are present in daily life [Fig. 6].

The atmosphere of shipwrecks is one of mystery and loneliness, evoking abandonment or tragedies. The chromatic atmosphere comprises the blues, light blues, grays, and whites of the waters and the sky; the browns of the sunken boats; and the greens of the surrounding vegetation and also of the waters. In the case of the *Canelos*, the black of its structure and the white of its mast are added, which can be seen above water level.

The remains of dismantled ships

Valdivia as a river city has several shipyards, the largest being ASENNAV (Shipyards and Naval Services). Next to it, in the Las Animas Neighborhood, there is a *Boat Parking* sector that offers accommodation on land to industrial fishing vessels of up to 1,000 tons and 55 meters in length. The presence of this parking lot, which is separated from the river edge by an avenue, does not pass unnoticed in the city. When this is the case, the ships must be moved on rails to the water, crossing the avenue and interrupting traffic for a couple



Fig. 4 – Vestiges of ancient stone jetties (photo by ECJ, 2023).

of hours. The atmosphere of the *Boat Parking* is that of a cinematographic scenography, unique in the south of Chile, with dozens of abandoned ships awaiting scrapping. It completely marks and signifies not only the neighborhood where it is located but the city as a whole. The sight of that infinity of dismantled boats speaks to us about both Valdivia's shipping past, and its living present in the industrial activity of the city. The chromatic atmosphere of this place is composed of the greens of the large grass carpet that stretches under the heavy ships; reds, blacks, blues, and whites with which they are painted; grays, light blues, and blues of the skies, and the red and yellow rust, found on almost all the ships, as a patina of time [Fig. 7].

The railway vestiges: the locomotive, carriages, and facilities

The Valdivia railway station, built in 1895, represented the *end of the line* for the branch line that linked the central network (Santiago-Puerto Montt) with the coast (Valdivia). As a terminal, it had countless facilities for both goods and passenger rail transport, along with others for the upkeep and repair of locomotives and carriages, such as the engine house, workshops, a turntable, water tanks, and coal bunker, etc. (González et al., 2018). The first building was destroyed by the 1960 earthquake and was replaced by a



Fig. 5 – Vestiges of a river jetty (photo by ECJ, 2023).

new one in 1973, which was operational until 1990. In 2019, the structure was rehabilitated as a Center for Artistic Creation¹, which currently has a varied program and many visitors. However, most of the State Railway site is abandoned [Fig. 8]. The general atmosphere is one of spaciousness and abandonment, with lonely walls standing as vestiges of old constructions, a rusty raised water tank, and a dozen disused, vandalized wagons, spread around the site. The remains, in the form of rusty ironwork, old rails, and sleepers, poke out above the overgrown grass.

The chromatic atmosphere comprises greens from vegetation that surrounds and covers everything; red ochers of the rails and rusty structures that emerge everywhere; and light blues, blues, whites, and grays of the skies and the waters that seep through the foliage of the river edge. Some of the abandoned wagons retain colors from other times, with some greens, yellows, and blues that are washing away. The remodeling of the station building recovered the bright blue ceramics characteristic of the 1973 building, which continue to radiate their color to the surrounding streets, giving identity to the sector [Fig. 9].

The railway vestiges: the docks

As has been said, the main transportation system to and from Valdivia and the world, since its foundation, was through the sea and its river. This meant that the city had several river ports, with the railway station being one of the most important, since the railway line only reached as far as Valdivia and not to the sea, some 20 km from the city. The intense traffic of the entire industrial production was transported for decades by the ship-train combination. This is evidenced by the vestiges of old metal and wooden dock structures still found in the station complex. These semi-sunken railway docks are part of Valdivia's productive past and constitute a *place of memory* for the city's inhabitants, especially for those from the station neighborhood. The current atmosphere of these docks is one of abandonment, as is the rest of the railway site. Its chromatic atmosphere is composed of red ocher, from the metal of its structures; gray for the concrete of the *pozos* (supports) that hold the structure; green, from the vegetation around the setting; blue, light blue, white, and gray, from the waters and skies in which they are located.

1. Center for Artistic Education (CECREA) is a program of the Chilean Ministry of Cultures, Arts, and Heritage that promotes the right of citizens from 7 to 19 years old to imagine and create, through the convergence of arts, sciences, technologies, and sustainability.



Fig. 6 – Vestiges of boats on the Valdivia River, and on the right, the steamer Canelos (photos by GCB and ECJ, 2023).

Fig. 7 – Boat Parking (photo by GCB, 2023).

The industrial vestiges

After the earthquake of 1960, industrial activity declined sharply in the area and the city. The destruction was such that many industries disappeared, others emigrated, and those that survived never recovered their former boom. The vestiges of industry are scattered across the city: old chimneys, ruins of old factories, and remains of large warehouses are part of everyday life and carry meaning and content to the urban space.

The Corral Blast Furnaces

One of the industrial activities of greatest impact and significance in the area was the starting-up, in 1910, of the “Corral Blast Furnaces”, at the mouth of the Valdivia River. This was the first steel plant in Chile for iron and steel production. It meant the hiring of thousands of workers, hundreds of technicians and specialists, many from abroad, transforming the place into one of the neuralgic points of the country’s industrial life at that time. All this development came to an end in 1958 when the industry was closed for diverse reasons (Oviedo, 2011) [Fig. 10].

At present, although most of the industrial facilities have disappeared, it is still possible to note the vestiges of the old agglomeration plants, the rolling steel mill, the power generator, and the railway repair workshop, among other warehouses. As a whole, they constitute one of the largest industrial vestiges in the Valdivia area, which, hidden among the brambles and thickets, are not forgotten by the locals, who keep their memory alive in the locality.

The atmosphere is lush due to the mounds that border the ravine where the ruins are located, and moist due to the waters of both the bay and the wetlands that now surround them. The chromatic atmosphere of this sector is green from the surrounding vegetation and wetlands; gray through the concrete walls of the ruins; and gray, light blue, white, and blue because of the skies and surrounding waters [Fig. 11].



Fig. 8 – Railway vestiges (photos by GCB, 2023).

The Anwandter Brewery and the Museum of Contemporary Art (MAC)

The facilities that are currently facing the river and the city's *river market*, are the remains of the old Anwandter Brewery, today Valdivia's Museum of Contemporary Art (MAC).

The brewery, the first in the city, opened in 1851 and would undergo a series of vicissitudes such as fires, reconstructions, and change of owners, until bringing down the shutters with the earthquake of 1960. In turn, the MAC, which has been operating since 1994, is the activation of a *habitable-ruin*, that is currently experiencing rehabilitation and recycling (macvaldivia.cl).

This is the most recognized ruin in the city, both from its location in the urban center and its history. From the perspective of heritage rehabilitation, this is a very important example in the south of the country, since the concept of *habitable-ruin* as an intervention criterion was adopted, a very innovative modality for the 1990s. The general atmosphere inside the museum is of a certain coldness and humidity, as it is a ruin. The walls in some parts are covered with moss and water is dripping on some walls. However, on being located directly facing the city center, its large windows show the com-



Fig. 9 – Vestiges of river containment (photo by GCB, 2023).

mercial and urban movement of daily life. Its chromatic atmosphere is gray, due to the strong visible presence of the ruin's concrete; grays, greens, and light blues, from the waters of the Valdivia River in the forefront; and multicolored, due to the view of the city with the different buildings that radiate their saturated colors to the place.

Concluding remarks

The city of Valdivia is an eloquent example of the interaction between the past and the present. Its innumerable vestiges, present in the urban fabric and the daily life of its inhabitants, tell us about a conjunction between the exposed current and the hinted past. In Valdivia, the marks of time are spread throughout its territory and help us to finish completing its image through memory, creating an imagined Valdivia. As a whole, all these vestiges are part of the city's atmosphere, loading the public space with meanings, especially the banks of the rivers, which have been the living stream of history and around which the city has organized its life and future.

The chromatic atmospheres of all these places coincide in the green tones, corresponding to the Valdivian nature that acts on these river edges as a backdrop growing as *free vegetation* (Ibieta, 2022) or, in the words of Gilles Clément, as a *third garden* (Erlwein, 2010). The same goes for its blue, gray, and greenish waters and its blue, gray, and white skies, which envelop the vestiges in their atmosphere, next to the green. Grays and browns are the colors of these ruins as submerged concrete, wood, metal, or stone. Finally, the ocher red of metallic objects and constructions rusting on docks and railways stand out; as does the black, blue, and red from the boats in disuse [Fig. 12].

The chromatic atmosphere of this city of vestiges is marked by the patina of time and is an essential part of its identity, filling the current city with



Fig. 10 – Remains of Corral Blast Furnaces (photo by ECJ; drawing by GCB, 2023).



Fig. 11 – Vestiges of the Corral Blast Furnaces (photo and watercolor by ECJ, 2023).

Fig. 12 – From left to right the synthesis of the main colors of the chromatic atmospheres of the vestige sites: blues and light blues; ochre reds; greens; browns; and finally, blacks, greys, and whites (watercolor by ECJ, 2023)

meaning. The vestiges are the material expression of past times that trigger, in the present, memory. Thus, vestiges, memory, and chromatic atmosphere make up an indissoluble and tense trilogy, which loads Valdivia's present with content.

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6. Memories of the youthful face: body and feelings in images

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Abstract

This chapter genealogically analyzes the feelings, gestures and bodies of youth through the analysis of visual pieces of illustrated magazines of the twentieth century, to evidence the strategies, designs and ideas at the basis of an idea of modern youth¹. In this way, I analyze the recurrences and insistences of narratives, motifs and representations of images of the young body that build senses on youth feelings as elements proper and adjusted to their vital cycle, such as melancholy and euphoria. In particular, I make an observation on the face – as a place of the body and expression of gestures and emotionality –, which presents the tensions and discourses about the emotional worlds of youth.

The young face through images

This chapter is about youth and feelings, an analysis carried out on illustrated magazines of the 20th century in Chile. The images of these youthful bodies represented and circulated young people as a visual motif, as well as objects of admiration and consumption. These bodies were marked by symbolizations, discourses, and images that configured the borders, horizons, and possibilities of what was to be expected for Chilean youth, and that, in tune with other youth on the continent and the Western world, became visual, mental, and cultural images that hegemonic and alternative media made popular during almost the entire 20th century. This has constituted ideas and

1. This chapter is the result of research from the Fondecyt Project 1201141, financed by the National Agency for Research and Development (ANID), Chile.

also built memories about what it means to be and look young, so its study allows us to offer a look at the atmospheric spaces that are created and recreated through these media.

For some time now I have investigated different visualities to think about a genealogical and cultural history about youth. The images can make visible the ways in which the body was presented and represented visually, and with this, it allowed designing the ideas of what constitutes youth. In general terms, it is important to point out that youth is a category resulting from historically situated and culturally produced and reproduced social processes (Feixa, 1998, 2003; Aguilera, 2014). It is known as the perspective of the sociocultural construction of youth, which moves away from perspectives that consider it an immutable biological data. In this way, thinking about the images and feelings that are reflected, particularly through gestures and emotions, constitutes a space to rediscover how visuality proposes and designs, and not only reproduces what is possible to imagine.

What do the images want to express about these young faces? The face is considered, by different disciplines of the human and natural sciences, as a privileged space for expression linked to the body and emotions. Its representation in images has a long iconological trajectory through portraiture. Placing the face as a reflection of the expression of the body's humors, endorsing its emotional and cultural worlds and locations in history (Belting, 2007, 2021; LeBreton; 2002, 2012; Guzmán, 2016). Also, youth as a vital moment has been linked to the humors of the body, to the turbulence of hormones and excessive changes. Even when these storms have been studied as cultural effects that operate on the body and subjectivity, in the West "common sense" continues to predominate that youth is completely affected by its hormonal deregulation (Mead; 1985; Feixa; 2003). Therefore, when thinking about youthful faces, what we will find is a perfect convergence to think/imagine an atmosphere of emotions, which is presented as an ideal scenario to understand the tensions and discourses about the emotional worlds of youth. The face has been understood as a privileged area of communication and expressiveness and, therefore, attention tends to rebound on it, either through discourses on the youthful body, as well as through image technologies to portray. However, it should be noted that, although the face is a favorite space for understanding gestures/emotionality, it will not be the only way in which feelings are presented and expressed in images. The body accompanies with other gestures, poses and reflex actions what is being communicated. Thinking about the face should invite us to reflect on the symbolic, material, contextual and historical conditions that allowed us to express ourselves and allow ourselves to be portrayed in an image, thus creating ideal atmospheres for each generation.

Regarding the methodology used for the visual analysis, I carried out an interpretive analysis through the description and categorization found in the sympathy between images from different youth illustrated magazines of the 20th century. It is a visual dialogue between different types of images on a black background, following the design and idea of Atlas Mnemosyne by Aby Warburg (2010) that I have called panels, which allows me to study in a connected way and in sympathy and without discrimination between images, either due to their technical or temporal condition, thus generating a space for comparative analysis between different visual objects (Saa, 2018, 2022). In this chapter I will present two atmospheric spaces of feelings, which are exemplary in how they configure emotional worlds and memories for young people of the past, and I think, still for those of today.

Sentimental atmospheres of the youth

Thinking about a space for feelings invites us to reflect on the places where we locate them, and also the times and historicity that we confer on them, hence the very notion of atmosphere is relevant as a category. Many of those feelings that we currently attribute to youth, and that even sneak into institutionalized discussions or popular discourses, are nothing more than updates of feelings that have accompanied the idea of youth for at least a century. In this way, the very cultural construction of these emotional worlds allows the creation of atmospheres that reproduce as proper for youth those feelings linked to the excess of joy or frenzy, or to their melancholy and mood swings. Talking about feelings always makes us return to the body as the primary place of socialization and enunciation.

In this chapter we will see a type of youthful corporality that was immortalized through photographs, advertisements and covers of illustrated magazines, and that were hegemonic during the 20th century to globally transmit ideas and images of youth: these should be called youthful bodies in images, or young paper bodies. In these bodies, certain gestures and postures that enunciated feelings were immortalized, creating global atmospheres for their entire generation, which were not only relegated to the space of memory, but also prefigured what was allowed.

Joy, euphoria and youthful frenzy

In this first atmosphere of feelings, I put into dialogue different images found in Chilean youth magazines of the 20th century, which refer to states of joy, frenzy and youthful euphoria, understanding them as feelings of different degrees that are inscribed in a state of mind of positivism or happiness.

These feelings, expressed in the youthful bodies and faces, constituted a type of hegemonic visuality in youth magazines, where youth was constantly represented in a cheerful way or alluding to said feelings, either in texts or images [Fig. 1]. From the 50s onwards, when photographs and some drawings began to present leisure spaces as typically youthful places, the representation of the body and face expressing joy, and also adding feelings of euphoria or frenzy, were reproduced recurrently in the different media, alluding to dances, styles and expressions of Chilean youth cultures.

What we observe in all these images are young people in fun contexts. Although this proposal consists of observing said gestures, the analysis of feelings such as euphoria and/or youthful frenzy are expressed with all the corporality, and that we can recognize when we see in images a contortion of the excited body. It is in the contortion of the body where our indication appears and is linked to this atmosphere of joy, and with certain facial gestures, we can spin and condense the senses of those of us who observe the photographs today and recognize bliss, enjoyment, happiness, ecstasy and euphoria in them.



Fig. 1 – Joy, euphoria and youthful frenzy panel. Sympathy between images from youth magazines on a black background.

The contortion of the youthful body as a movement linked to fun, to the movement of music and youth cultures, undoubtedly had its hegemonic image through rock and roll, and the very image of Elvis Presley, who, built as a star image, of the masses, and quickly as a cultural image, projected through his movements and contortions, a diversity of attributes that the North American postwar youth proposed for the identification of the new western youth, closely linked mainly with consumption and his leisure aesthetics. International and national musical idols, linked to the music that the youth of the 50s, 60s and early 70s listened to, enjoyed and danced to, are linked to the new forms of socialization of the first Chilean youth cultures. Since the 1950s, the first Chilean youth cultures began to emerge in Chile and quickly echoed their style and actions in the country's media discourse (González and Feixa, 2013). Not only dances and costume accessories become fashionable, but also styles, spaces and music that would become the heritage of the youth. The dance, among these consumptions, formed a central part of the interests linked to youth, and which was installed not only through youth magazines, but also in the foreign cinema that came to Chile, and also through television programs.

The youthful faces expressing this diversity of feelings tend to have some repetitive characteristics in the visual representation. On the one hand, the agreement with bodies in motion, and in contortion. On the other hand, in their facial expression, they can be seen with their mouths open exclaiming or smiling, with their tongues or teeth sticking out, and on many occasions their eyes are closed and their heads are tilted slightly back or to the side. There is a looseness or relaxation of all the facial expression that allows us to identify this type of feelings, which as a pattern differs from other expressive and emotional forms of the youthful, and which in turn will be linked to specific spaces and consumption.

As can be seen in the images, music and dance as a context for this type of image allow us to argue that this youthful feeling represented is linked to the social practice of entertainment, and thus these images function as evidence that captures and mobilizes the sense of enjoyment that both youth and these practices produced. Euphoric joy, youthful frenzy and unbridled optimism are, without a doubt, part of the feelings that are plausibly framed in the hegemonic understandings of youth, but particularly towards certain youth cultures or ideas about youth linked to leisure and the teenage market. From a historical perspective, in the Chilean case, the joy of youthful faces was early associated with products that marketed female and youthful physical well-being such as lotions, dyes, soaps, perfumes, and medicines to lose weight, and these images thus linked the idea of well-being and happiness with youthful bodies and faces through the images of illustrated maga-

zines (Saa, 2014). Undoubtedly, part of the joyful hegemonic gestures of this group rests on the visual representation observed in this composition of images, which alludes to the feeling of happiness and frenzy, and which will be linked to the commodified consumption of music and enjoyment of youth cultures, as well as certain consumption of body grooming. This young youthful atmosphere thus proposes certain gestures on the faces framed in positive states of mind, and becomes a memory that continues to form part of the most visible and popular repertoires of this group, fundamentally linked to certain patterns of cultural consumption of mass society.

And if this atmosphere almost hegemonically confers the representation of the emotional worlds of youth, then what happens to those young people who are portrayed lacking such expressions in the images in magazines? Isn't it happiness, joy and this type of feeling that the cultural industry mainly sells as a reason and promise of the longed-for youth? If, when observing the first atmospheric composition of images, we recognize a diversity of widely used motifs on the jovial, representing the happiness and joy of this group, there is a second composition that refers precisely to static modes of their bodies, without energy, and linked to emotions such as reluctance, sadness, apathy and melancholy, and that will create another atmosphere that paradoxically is also closely linked to the idea of youth.

Between laziness and melancholy: youthful self-absorption

In the archive review, I observed, both in the photographs and in other types of illustrations, the portrait of young people in passive states, which we could describe as meditative, apathetic and melancholic states, abstracted from the world, alone and dedicated to a contemplation of the horizon, or of themselves. This would therefore constitute a second sentimental atmosphere for Chilean youth, and why not, for Westerners [Fig. 2].

The media characteristics of the images in this panel correspond to photographs – with different levels of intervention – that circulated at the beginning of the century, during the 1930s and 1960s, and which, in terms of their photographed referents, respond both to anonymous subjects and to youthful idols who revealed the correspondence of said states of mind among all of them. These representations of youthful disenchantment that as an image presented a focus on faces with hints of disinterest, sadness or melancholy, will be linked to at least two models that explain the meanings of said visuality: modern psychological approaches to youth, and the influences of romanticism in the aesthetic and discursive understanding of youth.

In relation to the first link with psychology, it is possible to say that the idea of adolescence, understood as turbulence, was widely disseminated in

Europe, the United States and South America during this period, and would permeate medical, legal, pedagogical fields, among others, implying a new perspective and treatment of young people (Hall, 1915; Feixa, 2003), hence these images functioned as proof or sign of this type of discourse and knowledge popularized during the 20th century, and that their use is illustrative in magazines for reports or chronicles about the stage of adolescence.

These images are used by youth magazines in edifying stories that taught both youth and their tutors – the adult world –, what a young man and a young woman looked like when “going through” the thankless age of adolescence. Laziness, disinterest, boredom, are part of the emotional states that name and are linked to the normal or typical senses of Chilean youth and adolescents – and why not say it, Westerners.

The images of adolescent women who express themselves through their gaze lost on the horizon or on themselves, and the lack of expression of their mouths is a very recurring image in this sentimental atmosphere.



Fig. 2 – Panel between laziness and melancholy. Sympathy between images from youth magazines on a black background

This is often accompanied by a hunched or listless body, seated, without movement, although the mere representation of the face does not require more corporality to condense the meaning they want to express. The images used by Chilean magazines account for this emotional world that overwhelms young people and that, although it is present in psychological and educational discursive construction, it also has an aesthetic and philosophical tradition on which it is based. In this way, another link that we can trace is with aesthetic and cultural images that promote the ideas of youthful romanticism through the melancholic representations of these subjects. The melancholic feeling of youth is not only a physical reluctance, or a psychological self-absorption typical of age, but it is a spiritual and moral state of the subject that is faced with this new life, and that from this point of view, can be linked to those romantic conceptions of youth promoted by Rousseau, and that, as Carles Feixa (2003) points out, will have a hegemonic repercussion in the discursive and metaphorical field about youth that will last until the 20th century. Melancholy as a feeling that can be linked to romantic discourse, emerges as a type of expression, emotion and visuality about the young, which represents that confusion about the world that surrounds them and the new problems they face. In this line, I maintain that the romantic model as a founding myth of youth, finds a pertinent frame to understand these expressions of youthful melancholy in the images, to the extent that it makes sense in its aesthetic dimension.

Finally, we cannot forget that the images used in the media portraying youthful emotion linked to melancholy are aesthetically inscribed in an iconographic tradition that refers to the melancholic motif. Although, philosophically, artistically and aesthetically, melancholy has a tradition linked to the Middle Ages and the conception of temperaments, as an iconographic motif it will be linked to the winged angel of the famous engraving *Melancholy I* by Alberto Dürero, subscribed to a modern tradition that emerged from the 15th century onwards, the moment in which Dürero carried out his work. The importance of this image to represent the new melancholy, and its importance as an inaugural image (Agamben, 2006), will allow it to become a symbol in the West, and will turn this expression into a visual motif of great impact and circulation, not only for European consumption, but also for aesthetic and artistic interest in America (Rice, 2015).

Sadness and melancholy, apathy and reluctance, as feelings put into circulation in the representation of the young body, are inscribed in these two discursive architectures and in an important iconographic tradition. As a visual motif, melancholy will endure and transcend to other spaces of visuality beyond artistic circuits towards those linked to the production of images in mass culture. Undoubtedly, melancholy, and reluctance or disinterest, also

occur as a result of atmospheric constructions, that allow and are part of the representations of the passive world of youthful passions and that during the 20th century made sense in the configuration of the youthful body.

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Part III: SPHERE - *Atmospheres*

In the third Part, the exploration centers around atmospheres, encompassing the environments and spaces we temporarily inhabit or continuously traverse. Here atmosphere is intended as a transient spatial condition in the interplay between resonance and permeation, physical, cognitive, or emotional, that involves the perceiving subject and the environment in a state of synchronicity. A phenomenon that occurs in space, characterizing it and making the effects of experience permanent.

The seventh chapter addresses the theme of Mnemosphere in temporary exhibition design, considering the corpus of historical case studies as an archipelago of examples, a source for the exhibition design culture to be reviewed and discovered with new eyes. The contribution is written by Marta Elisa Cecchi and represents a development of her doctoral research on the concept of atmosphere applied to exhibition design and interiors, which aims to promote a different sensitivity to the study of designed spaces with an atmospheric and contemporary approach.

The eighth chapter, written by Claudia Mastrantoni, investigates atmospheres in the contemporary urban context, i.e. spaces of transition, junction, and filtering, which evolve through different cultural and program changes. The urban space interpreted from an enzymatic, atmospheric and organic viewpoint appears as a complex of different spheres without cuts and interruptions, in other words, 'seamlessness' in an ongoing metamorphosis.

The ninth chapter represents further development and focuses on the concept of void applied to the city and urban space. Emptiness is not only considered a lack of content but a potential generator of memories and appropriation actions of space by humans and non-humans. The author of the essay, Ambra Borin, thus suggests a new way of conceiving the space we inhabit, starting exactly from what is missing to establish relationships, connect through services, and thus comprehend the environment not only as a geometric space but as a mnemosphere in which to feel a living part.

7. Mnemospheric archipelago. Towards an aesthetic approach to explore exhibit design culture

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Abstract

Mnemosphere as a neologism encompasses the concept of atmosphere, representing the component most intimately linked to space and in which diverse yet interrelated experience layers converge. This concept, recently much investigated in neo-phenomenological aesthetics, resides in the spatial disciplines as a phenomenon that has always existed but has not yet been decoded and sufficiently consolidated; especially in the discipline of design and in particular in the field of exhibition design which still lacks new theories and approaches that reinterpret past examples and explore meanings and values from an alternative and contemporary perspective. Since the atmospheric dimension is not linguistically easily circumscribed and conveyable, the visual material, made up of images and historical records, plays a decisive factor in communicating the memory of these temporary places and the emotions involved in the experience in a process that is both imaginative and synaesthetic. Indeed, it is possible to detect how an atmospheric presence persists and survives, whether material or meteorological, real or imaginary, envelops the images of these ephemeral ambiances that are unfortunately no longer directly experienced. In this view, the neologism of the mnemosphere adds a further fascinating piece to understanding the exhibition space from a renewed aesthetic and ecological perspective. Memory and emotions are layered in time and space emerging from the surface of the image, determining narratives and imaginaries to be explored with new eyes. In conceiving of the exhibition culture as an archipelago of atmospheres, it is, therefore, possible to decipher this system of references, composed of islands and landmasses, as a whole studded with distinct 'mnemospheric dimensions', i.e. sensational spaces, rich in memory that can be breathed in again. Through this approach,

it is, therefore, possible to reconstruct the ‘insular’ cartography of mnemospheres in the specific field of exhibition design by harnessing the power of imaginative thinking to charge and intensify the gaze through a different sensibility. Therefore, the modern concept of atmosphere integrated into the neologism of mnemosphere takes on a different pivotal role in spatial design research, no longer merely a poetic and romantic term but a tool and method for investigating the conception and perception of designed space. More generally, this contribution, therefore, intends to outline a different ‘mnemospheric’ approach to understanding the space capable of implementing our aesthetic capabilities with which we look at our surroundings every day.

Introduction

Stepping into a space perceived as distinct from the rest of the environment, having a unique ambient ‘quality’ means grasping its *atmosphere* and immediately being affected by some of the sensory and vibrant elements. Although apparently explicit in its definition, the concept of the atmosphere has been misused and extremely vague in describing spatial qualities. Indeed, although it is possible to perceive the changing atmospheres one encounters, it is also true that it is still challenging to define and change the specific features that determine it in experience. Air, ambience, aura, climate, environment, halo, *milieu*, mood, *Stimmung*, and *Umwelt* are some of the synonyms related to the concept of atmosphere, which points to its wide-ranging characterisation. The concept of atmosphere thus appears as an umbrella term incorporating several interpretations and conceptual declinations that depend on the context in which they are used.

According to Rauh is «something beyond language that remains unspoken in many sensory experiences, even though it is felt and evokes value-laden impressions» (2020, 33). One might have the impression that the atmosphere is meant to point to its vagueness and to indicate something indeterminate, superficial, and challenging to express, even if it is «only in order to hide the speaker’s speechlessness» (Böhme, 2010). Similarly to Adorno’s “more” concept, the “quid” and “something” different deal with the concept of aura¹, which also highlights its atmosphere in an evocative fashion, to ‘mite’ beyond rational explanation and with an emphasis to suggest that only there is the essential, the aesthetically relevant to be found. While Paul James’ anal-

1. One of Adorno’s critical passages on Benjamin’s writings shows how the concept of the aura is revealed when the work, while remaining within the process of commodification, points beyond itself and beyond the here and now. Retrieved in Assunto et al., *Aesthetica Bina*, Baumgarten e Burke.

ogy explaining the difficulty of describing clearly the atmosphere visualises the atmospheric phenomenon as that of hydrometeors, i.e. clouds, misting the horizon not allowing figures and edges of what is in the background to be caught: «Atmosphere relates to the critical strategy of clouding, to render obscure, to resist rhetorical clarity» (James, 2008, p. 61). According to Griffero (2013), however, it is possible to compare the atmosphere phenomenon to the wind since the wind is a phenomenon that all living beings recognize; it is not contoured but discrete, cohesive and difficult to penetrate. Atmospheres do not possess a perimeter in which they manifest themselves, and they coincide totally with their phenomenological appearance, have no hidden sides, and conceal ‘nothing’ within them.

Within the discipline of interior design, and in general spatial design such as architecture, the concept of ‘atmosphere’ is often presented as a friendly, known, intelligible and fundamentally harmless word (Canepa, 2019, p. VIII) to indicate the “beauty” of a particular space. However, although the term has been widely used in this field, especially to evaluate remarkable architectural projects and works of excellent quality and aesthetic impact, it is still unclear and undefined what constitutes its distinctive qualities, how and why it manifests itself and the factors it depends on. The atmosphere is a more conscious objective in literary, theatrical, scenographic and cinematic thinking than in design, exhibition and architecture. Perhaps this is because artists and actors are more aware of the role of atmosphere in an environment and on what elements and factors it is determined, rather than designers or architects who tend to think of atmosphere more as an intellectual reference of the composition and geometry of space.

Moreover, the word ‘atmosphere’ can denote the prevailing psychological climate. Paradoxically, entering a room, one perceives its charged atmosphere; the air one breathes does not become lighter but more solid and tangible as it is detectable as present and active (Ingold, 2012). Therefore, the body, mind, and emotions react physically to a ‘material’ yet ‘invisible’ space, which determines a changing and different psychological and emotional response in each individual in that particular place². According to Pallasmaa (2014), the immediate appraisal of space appeals to our senses, our embodied and existential body, and is perceived in a ‘diffuse’, ‘peripheral’, ‘opaque’, ‘misty’ and above all, instinctive and unconscious manner rather than through precise and conscious observation.

2. As Luce Irigaray has written, any philosophy of Being ought to begin with a philosophy of breathing. If Heidegger prioritized logos and earth over the philosophical value of breath and air, Irigaray’s amendment questions whether “we can live anywhere else but in air?” (1999, p. 315).

This complexity of observation and perception includes the dimension of time, as experience (present) merges with memory (past) and imagination (timeless).

The Atmospheric turn

The concept of the atmosphere has recently become one of the most important in the German neo-phenomenological debate, and it has been deepened in aesthetics, particularly by the philosopher Gernot Böhme, the foremost exponent of this “atmospheric renaissance” or “atmospheric turn”.

One of the most exciting aspects of this new atmospheric aesthetics – as well as the starting point for many reflections that have evolved from it – is the fact that atmosphere as a phenomenon and concept has an inbetweeners nature, a “quasi-thing”³. As the Italian philosopher of atmosphere, Tonino Griffero, labelled it, i.e. a phenomenon that is partially objective and subjective simultaneously. For this reason, the properties of atmospheres are not only perceptible but also producible (Wang, 2018), and they are thus temporarily caught in the intersection between the objective and the subjective (Edensor & Sumartojo, 2015), between material and immaterial (Wieczorek, 2002), and between experience and environment (Mikkel & Bjerregaard, 2012). For example, even though atmospheres are considered objective, they cannot be experienced as concrete and tangible qualities belonging to objects, people and places. Similarly, when considered from the subjective perspective, atmospheres are shared by other people in particular spaces or for particular objects and therefore have objective characteristics of fascination.

In this perspective, atmospheres are always new, intermittent and simultaneously transcend e coincide with their temporary character/appearance since they are qualities floating in the air as pure phenomena and not factual facts in *senso* physical-meteorological. Atmospheres occupy space temporarily, yet locating them in a specific spot is impossible. It is possible to drag them along on an emotional and sensory level and then transform them into vivid impressions and faded memories once the experience is over. Moreover, the ‘in-between’ conception of atmosphere provides a way to escape the methodological essentialism that continues to dominate Western logic; the relentless search for the singular and true nature of things; the desire for certainty, for dividing the world into ‘this’ or ‘that’. In this context, the

3. It is possible to state definitively that quasi-things have quality (intensity), extension (non-geometric dimensionality), relation (concerning other quasi-things and to the perceiver’s states of mind), place (they are more here than there, in experienced space) and time (they arise right now, etc.). In the same way, then, atmospheres embrace all these characteristics.

perspective suggested by Eva Horn, who advocates an aisthesis of air, i.e. to bring back air (as an invisible and haptic medium in which we find ourselves existing⁴) «at the foreground of our perception as both object and condition of perception» (2021, p. 116), is interesting. Thus it is possible to conceive of the atmosphere not as something external and alien but as an in-between state that connects and encompasses, that enters and exits the individual, in which we are constantly immersed⁵.

The neo-phenomenological current focusing on the atmosphere investigates the phenomenon from the side of the aesthetics of perception (or “aisthēsis” – αἴσθησις, derived from Greek “aisthanomai” – αἰσθάνομαι, that means “I perceive, feel, sense”) and from that of the aesthetics of production. Böhme (2010) introduces the term “aesthetic work”, i.e. the ability of the designer to generate these atmospheres professionally. This aspect is crucial because it reinterprets the traditional problems of aesthetics, given an acute critical analysis of the processes that lead to designing spaces capable of “manipulating” individuals’ sensibilities” (Griffero, 2013).

For this reason, scenography and temporary exhibitions are the ideal fields for testing the theory and practice of building atmospheres in spaces. In this perspective, the history of these design areas, i.e. the examples and references of the past, are a fundamental resource to be reinterpreted from an atmospheric perspective as they make it possible to study at a temporal and spatial distance the elements that determined that precise spatial atmospheric effect.

Mnemosphere neologism as a tool to investigate the culture of exhibition design

The need to effectively translate and comprehend the atmosphere concept in the design of the built-interior space is becoming particularly relevant in the specific context of temporary exhibitions. This is especially pertinent to exhibition design since it establishes a narrative and emotional engagement between users and the subject matter and users and the exhibition space. Basu (2017) states, «museum exhibitions are like laboratories in which objects can be endlessly arranged and rearranged to explore and explicate the

4. Many authors, including Horn, Morton, Tetsuro and others, mention often in their reflections the concept of ‘being in the air’, i.e. of conceiving the phenomenology of existence that goes beyond the division between organisms and the environment but rather conceives these entities as continuous, deeply interconnected, and linked sources of exchange.

5. Horn suggests that art and art space may be the most radical and experimental fields in which to develop this aisthesis of the air. Embracing this vision, the exhibition space is once again the field in which the concept of atmosphere is best investigated.

relationships between things» (p. 29). Indeed, within the exhibition space itself, an intricate web of relationships is generated that, like vectors of forces and energies, bounce back and forth between an object to another, between things and people, between people and space, between space and exhibits, in an endless cycle of potent atmospheric interference.

To this extent, integrating the concept of atmosphere into this specific discipline allows a different perspective on exhibition design, which investigates the perception of the temporary space and its expressive-sensorial characteristics with even greater sensitivity⁶. Furthermore, the history of temporary exhibition spaces is full of experimentations and atmospheric effects that have contributed, and still contribute, to making this sector particularly interesting for the spatial design culture. Studying the best examples of exhibition design is essential for building the body of exhibition design culture, that is, a source of inspiration and references for today's exhibition designers who wish to convey atmospheres⁷. Unfortunately, it is also true that these past examples can no longer be directly experienced spatially except through an effort of *imaginative perception* and *empathic identification* that takes place through a careful rereading and analysis of historical sources. Imagining the atmosphere of those spaces has always been an intuitive practice of many students and researchers studying history, but so far needs to be adequately addressed with appropriate tools and means, primarily through a renewed atmospheric sensitivity. In other words, if it is true that the visible and formal details of a designed space (whether architecture or exhibition design) are more evident to an *expert eye* (Saitto, 2020), and it is possible to grasp them even remotely through documents and archival materials, the invisible ones

6. Sergio Polano (2012), critic and historian, has recently emphasised the importance of investigating historical exhibitions despite the limited amount of material available. Translation of the Author: "It is risky to reconstruct this continuity and circularity on the minimal material that survives in the exhibitions: graphic material is rare, photographic material is perhaps inadequate, and written material is mostly tangential. However, suppose we do not want to limit ourselves to pure confirmations, to *déjà vu* ["Already seen, already read"]. In that case, it is on this type of risk that historical research must play in the attempt to explore exhibitions and exhibition design critically, only apparently simple and transparent phenomena, anything but ephemeral in their effects".

7. The atmospheric effect found its peculiar expression in the exhibition culture developed by Franco Albini (and Carlo Scarpa indeed) in the terms "ambientamento" (Cafiero, 1999), i.e. "ambientate", and "riappaesamento" (Polano, 1988), i.e. "re-landscaping", which imply the acclimatization, setting, and the idea of giving an environmental quality to a space. The concept of ambience for Albini brings the visitor closer to the artwork through "a language consistent with his sensibility" (Jenner, 2013, p. 10) Quoting Persico, Albini's "artistic rationalism" is directed "beyond architecture", focusing on the human being and simultaneously on the balance of aesthetic and moral values (Bosoni & Bucci, 2005; Bucci & Irace, 2006).

(more appropriately those commonly referred to as ‘atmospheric’) have effects perceptible through the senses. Bridging this distance between remote observation and intuitive experience, as well as between visible and invisible aspects of designed spaces, is a crucial gateway to understanding the atmospheric phenomenon, traversing all its nuances, and its potential for design in order to achieve engaging quality spaces increasingly.

In this framework of intentions and purposes, the neologism of the Mnemosphere becomes a further and fundamental investigation tool to understand the atmosphere in exhibition spaces, regarding both the analysis of past exhibition spaces and the immersive and actual experience of present ones. The term ‘mnemosphere’ already contains a more precise focus and sense of how a particular space engages the person, i.e. triggers their memory, emotions and atmospheric spatial perception. The new term, since it does not consider each thematic component in its own right but, on the contrary, enhances the actual relationship between them, stimulates an ‘augmented’ conception of the atmospheric phenomenon. Mnemosphere was born as a terminological response to the need for a single term, a conceptual entity able to represent the result of the interaction of mnemonic, atmospheric, and emotional fields. In this perspective, the concept of atmosphere in the Mnemosphere project gains nuances linked explicitly to the memory and the emotions activated by ‘toned’ spaces. The power of neologism is thus shown in its capacity to understand a given reality with a renewed, different gaze and to be able to grasp aspects that were hitherto silent, hidden, and considered marginal.

Setting a “mnemospheric” approach

The modern concept of atmosphere integrated into the neologism of mnemosphere thus generates an alternative approach to understanding designed space that can no longer be experienced, and consequently, today’s experiential exhibition spaces, as it enables the visible formal characteristics and invisible sensory and perceptual aspects of these environments to be grasped more effectively. The neologism of the mnemosphere thus assumes the crucial role of a compass in the imaginative and sensorial observation of the visual material of the available historical culture of temporary exhibitions, consisting of images and historical documents.

Although two-dimensional and mute, from these images, it is possible to detect how a particular atmospheric presence persists and survives, be it material and meteorological, real and imaginary, that enveloped those designed ephemeral spaces. Thus memory and emotions are stratified in time and space, surfacing from the surface of images and documents, like emerged islands, each one different from the other but all inevitably interconnected to form an invisible network of references and atmospheric narratives.

Thus conceiving the exhibition culture as an archipelago of atmospheres, it is thus possible to decipher this system of references, composed of ‘islands’ and ‘landmasses’, as a whole studded with distinct ‘mnemospheric dimensions’, i.e. sensational spaces, rich in memories and imaginaries that can be breathed in again with a fresh approach, and thus re-experienced. Through this tool of the neologism of ‘mnemosphere’, it is possible to set up a mnemospheric mindset to comprehend what is seen and experienced. Therefore, it is possible to bring out the ‘insular’ cartography of mnemospheres in the exhibition design of temporary spaces, drawing on the power of imaginative thinking to charge and intensify the viewer’s gaze.

Eyes breathing

“If eyes could breathe” is a sentence from Elias Canetti (1986) retrieved from the third autobiographical book, *The Play of the Eyes*, and is a starting point to attempt to set up an original approach in the study and interpretation of historical and contemporary exhibition space design culture, and to bring out features and characteristics of exhibition spaces and layouts that have not so far been fully grasped, included in their pervasive and sensorial effects, and decoded in a framework that would enhance even secondary and lesser considered aspects.

‘Breathing with the eyes’ is not entirely new in the history and culture of the world. As explained in the book *Architetture invisibili. L’esperienza dei luoghi attraverso gli odori* (Barbara & Perliss, 2006), the authors illustrate how in ancient Greek culture, it was believed that thoughts and words were not created by the mind but were generated by the human being’s lungs and were therefore located in the organ that regulates the balance, relationship and exchange between the outside environment and the inside of the body. Words were linked to breathing through a channel connecting the oropharyngeal apparatus (mouth and ears) (*ivi*, p. 106)

as everyone with lungs breathes the space between the hands and the space around the hands and the space of the room and the space of the building that surrounds the room and the space of the neighbourhoods nearby and the space of the cities and the space of the regions and the space of the nations and the space of the continents and islands and the space of the oceans and the space of the troposphere and the space of the stratosphere and the space of the mesosphere in and out (Spahr, 2005, p. 8).

Furthermore, the Greek word ‘*psyché*’, which translates as soul or mind, meant initially “air” or “breath”, and the Greek verb ‘*psyche in*’, meant to blow. Although “to perceive” meant “to inhale”, i.e. to assimilate something from the outside in, on the contrary “to look” meant “to blow in the direction of”, i.e. to return something from the inside out. In English, the verb “to smell” is transitive and intransitive and clarifies the close relationship between what is perceived-smelled and what produces the smell. In this context, the sight was not only a passive sense of registering, receiving and contemplating the outside. However, it was conceived as an active sense, which interpreted what was assimilated and conveyed it through a “breath” to the outside. The sense of sight was constituted as an action that triggered a process of continuous exchange with external reality.

According to McCormack (2018), «Through breath we also give birth to volume, sometimes enveloped in shaped form. Breathing is also the edge, the limit, however. We are always one breath away from something beyond use» (*ivi*, in *On volumising* chapter). The basis of visual breathing is inevitably the sight apparatus, which stimulates our ability to recall memories, emotions and sensations; an apparatus that allows one to appeal to the imagination and creative thinking when observing an unfamiliar reality to comprehend it. On the other hand, the visual is the starting point for “multi-sensory attempts to shape how spaces” (Edensor & Sumartojo, 2015, p. 254).

Furthermore, according to Goodwin (2016), the visualisation of the atmosphere through images and photographs as part of the experience of space is a territory not yet entirely and thoroughly explored (*ivi*, p. 31). The author stresses how images can be an *essential means of conveying the airs of particular places* and how they can be analysed to communicate qualities other than their evident appearance.

Breathing with the eyes means grasping the spaces’ “colours” no longer visible (many of which have never been experienced), thus providing an interpretation and perception of these ambiances from a contemporary aesthetic perspective. The ‘enhanced’ sense of sight counterbalances the missed experience of the real “here and now” as equally immersive and authentic in engaging the observer who, in seeing, forgets the name of the things he/she sees (Irwin in Weschler, 1982).

Indeed, in a well-known metaphor by Bruno Munari taken up by Marco Romanelli (2020), according to which the tree serves to “show the wind” completely overturning its classical conception, it is possible to understand the functioning of the mnemospheric approach, which allows us to perceive the image of the tree itself with a changed and increased meaning but also formal and sensory overtones. The image of the tree itself then can be seen at the same time as a kind of shrub, a mass of branches, small leaves and a

central trunk as of a living body that shows the invisible around it by bringing out the sensory, emotional and poetic qualities that characterize it⁸.

From mnemosphere atlases to (exhibition) atmospheres “archipelago”

The main activity of the Mnemosphere research project was the creation of the Mnemosphere atlases, which echoed the studies undertaken by Walter Benjamin with the Mnemosyne atlases (Iuav, 2012) where images depicting different subjects and from different cultures and eras were grouped into thematic clusters capable of creating connections and remnants to each other and to further imagery. Mnemosphere atlases were particularly important for understanding the environmental and atmospheric perceptions of the subjects depicted and categorising them into broad thematic clusters; The latter referred to the ‘natures’ of the atmospheric phenomenon (atmosphere as air, bubble, fog, diaphragm, net, hues&tones, void), i.e., the first visible and most common features through which it manifests itself and is commonly acknowledged as such⁹.

It was interesting to note that in the Mnemosphere Open Call for Images, in which participants were asked to associate an image with the concept of Mnemosphere, many participants had described and depicted it through symbolic images such as ‘mist,’ ‘bubbles,’ ‘shades,’ ‘emptiness,’ and open and natural spaces, in which the main expressive features returned a sense of ‘lightness,’ ‘otherness,’ and ‘fleetingness. In addition, the images depicting spaces often featured places considered sacred, enigmatic, as if suspended in time, but also domestic, intimate and warm environments, in which the atmosphere was linked more to the dimension of memory and the past.

8. It is important to clarify an aspect regarding the value of images: phenomenologically speaking, photography is a visual system of representation. In an image, we can see the relationship between what is physically depicted and what it represents, i.e. its meaning or message. In this perspective, a photographic image captures ‘objective’ reality and the intentions and sensibility of the person who produced those images. The spatial dimensions are reduced to the surface, which means that the camera’s perspective angles and the lenses used from a technical point of view also contribute to creating a particular effect in the final image. Thus, images of a space and photographs documenting a past installation are never objective and neutral and depict the photographer’s way of seeing and understanding the reality seen and experienced.

9. It should be pointed out that the identification of atmospheric ‘natures’ is part of a doctoral research project in the field of design, developed in parallel with the Mnemosphere research project, in which it was possible to verify and apply the theoretical assumptions related to the concept of atmosphere and thus to identify the environmental qualities associated with it in the field of temporary exhibition design.

However, we know that the atmosphere of a place or space does not necessarily manifest itself only in these ‘conventional’ ways, and pictures (and descriptions of what is and what is not a mnemosphere) were also found to be very diverse, extremely vivid, dynamic and colourful, with apparent and defined subjects in which the expressive features returned a sense of ‘hyper-connectedness,’ ‘diaphragmatic,’ ‘rhythmic,’ ‘vivid’ and engaging. The mnemosphere atlases thus enabled the expressive and environmental qualities of the spaces and subjects depicted in the submitted images to emerge even more clearly from an atmospheric perspective. The analysis of the ‘mnemosphere’ images was thus conducted using atmospheric categories, which, used as a tool for investigation and ordering, proved suitable and coincident with the theoretical elaboration and literature review previously made on the subject. Hence, from these clusters of mnemospheric images, it was possible to engage in an atmospheric approach of interpreting historical temporary exhibition spaces by identifying those primary atmosphere characters and defining new specific reference categories in exhibit design.

These atmospheric exhibition categories, visualised as ‘archipelagos’ – in the literary sense of agglomeration of several typologically similar case studies with similar characteristics to allow further groupings – are the direct evolution of the interpretation of the neologism of mnemosphere through atlases. They represent the ordering tool through which it was possible to visualise the particular characteristics of exhibition spaces (case studies) as individual ‘islands’ or ‘mnemospheric dimensions’ and thus temporary exhibition spaces that solicit memories, emotions and sensoriality but also and above all atmospheric environmental conformations, pervasive and effective in conveying the content and engaging the visitor in the experience. If the characters of the atmospheric phenomenon were identified a priori and subsequently tested through the open call of images and the creation of the atlases, the atmospheric exhibition categories were deduced a posteriori by sorting the selected case studies by affinity and similar perceptual expressiveness. The categories identified are a direct translation of atmospheric characters (valid for any environment, territory, space and place) into environmental qualities of temporary exhibition spaces and are [Fig. 1]:

dynamic/active¹⁰

That is spaces with virtual and digital surfaces, characterised by projections, sensors and interactive actions that make the environment perceived as infinite and in motion. This category picks up on the macro category of atmosphere as air as an open medium of physical exchange and contact with the living, changing reality surrounding human beings. The atmosphere with a vast, vivid character, thus an exhibition space that comes to life, emulates nature and seeks interaction with human beings.

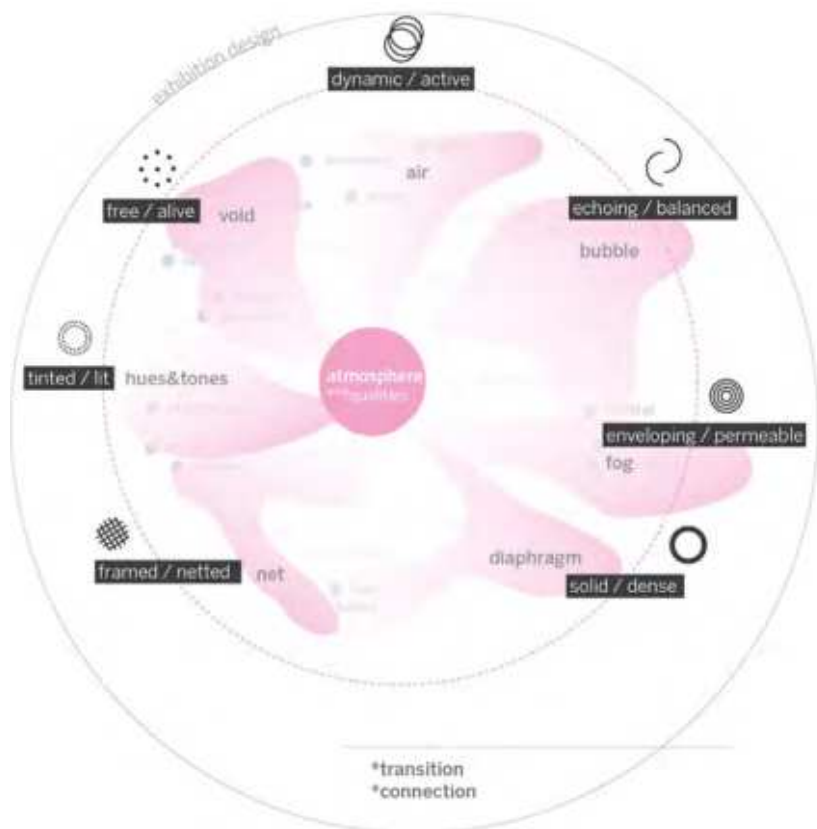


Fig. 1 – Diagram showing the connection between the atmospheric natures identified previously and the exhibition space categories obtained.

10. To deepen the exploration of this category of spaces, it is recommended to read Giuliana Bruno's book, *Atmospheres of Projection. Environmentality in Art and Screen Media*, The University of Chicago Press, 2022.

echoing/balanced

That is, spaces that reflect, through mirroring surfaces, refract through inclined planes that modulate and animate the exhibition space, but also spaces in balance, i.e. with tense and suspended surfaces that make the space fluctuate without gravity. Linked to this category is the macro-category of the nature of the atmosphere as a 'bubble', i.e. of a delimited space that recreates its particular habitat within, in which the dynamism of the environment is given by the body that traverses the space and the perspective that changes along the way. An expressive environment to find oneself reflected, bounced from side to side and suspended mid-air.

enveloping/permeable

A defined plastic form characterises soft, permeable spaces, often produced with natural fabrics and textiles. The image of the space is that of a cosy environment, enveloping the visitor, in which the surfaces appear opaque, penetrable to the eye, and the perception is one of blurred depth. Associated with this category is the nature of the atmosphere as 'fog', i.e. of a filtered space, in which boundaries are not perceived, that cancels depth and simultaneously envelops the person within.

solid/dense

That is, spaces characterised by being dense and thick, in which the distinction between solid and void is clearly defined. A precise geometry and volumetric definition characterise the surfaces. It is a 'classical' architectural type of conformation in which panels and walls modulate space and paths. The image of the 'diaphragm' or atmosphere is associated with this category as a threshold defining a precise moment of transition between one state and another.

framed/netted

That is to say, spaces with structures and frameworks of various materials and geometries make the environment scanned and ordered like a grid. Associated with this category is the atmosphere as a 'network', i.e. a system of connections and cross-references, a rhizomatic web without centres but diffuse and extended in space.

tinted/lit

That is to say, colourful and particularly well-lit spaces in which the graphic and colour component is crucial in making the space go from flat to three-dimensional. In these spaces, the control of the illumination and shad-

ing, the colour palette and graphic details, and special and suggestive lighting effects determine the quality of the overall ambience that would otherwise be neutral and conventional in accommodating the works within it. Associated with this category is the nature of the atmosphere understood as hues and tones, i.e. a landscape of different shades and intensities, in a way auratic.

free/alive

That is to say, empty spaces dotted with individual artworks or compositions of exhibits in which the architectural or natural surroundings provide the quality of the space, but also exhibition spaces as autonomous and independent installations and ‘environments’ with their own specific identity that cannot be compared to other examples. Associated with this category is the nature of the atmosphere as ‘emptiness’, i.e. the environment as a fertile emptiness, open ‘nothing’, experienced as the absence of something. The presence at the centre of the space of a single entity independent of the rest of the context gives a sense of emptiness.

Indeed, this *insular cartography* of historical examples, thus reinterpreted and subdivided, provides a better understanding of creating and conveying a particular type of atmospheric effect in a designed space. At the same time, by stressing this concept, it also indicates how to shape a mnemosphere and recognise it in the space we experience. Therefore, the concept of the mnemosphere, without an explicit and concise definition in words, can be visualised and analysed in its countless environmental forms.

Concluding remarks

While the definition of an atmosphere remains a matter without a definite and definitive answer, it is also true that the concept of the “mnemosphere” throws a further layer of insight into its nature, conformations and the complexity of elements that determine it.

Similarly, the investigation carried out through images and analysed according to atmospheric categories has made it possible to visualise the conceivable forms of the mnemosphere in spatial and environmental terms. Two types of research, one contained within the other, conducted in parallel, feeding off each other and enabling us to fill, small steps at a time, the gap and what cannot be defined of both topics. The neologism of mnemosphere collects in a single term the complexity that is ‘hidden’ behind the experience of any environment, that is, the charge of impressions, meanings, emotions and memories that emerge from a place, whether natural or built, allowing us to understand how the design of a space (particularly an exhibition space),

determines different effects at an expressive and sensorial level during the experience; at the same time how a “mnemosphere” is a physical and conceptual dimension to keep in mind when analysing and observing images of environments and designs of the past.

Therefore, the investigation briefly presented here shows how this neologism, integrated with the modern concept of atmosphere, is an essential research tool to conceive and interpret space with a new and different sensibility, that is, an altered and new framework of reference, attentive to the multi-componential nature of space and its effects. The *mnemospheric approach* to spatial conception can represent a further investigative tool in spatial design, as it allows us to implement the aesthetic capacities with which we look at our surroundings daily (Alison, 2020) and to reveal their main qualities more clearly. In other words, observing a space with a mnemosphere approach means ‘breathing’ it (i.e. grasping it directly or indirectly) in its expressive, mnemonic and emotional complexity.

Thus, in this perspective of sorting and defining the atmospheric and environmental characteristics of the various temporary exhibition spaces, an orientation is also outlined on how one can begin to design a mnemosphere. This approach, which is developed according to categories – and not so much through a list of things to include in the design – represents a fundamental *glue* to connect the creative and purposeful aspect of wanting to create a quality space to that of designing and technically producing an authentic atmosphere in an exhibition space. Ultimately, understanding the exhibition space as a mnemospheric dimension (island) and thus conceiving of the different examples of exhibition culture as an archipelago of different mnemospheres means being able to breathe the unique and special qualities that characterise them in each example and space as many as the different experiences within each.

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8. Atmo-spheres of Seamlessness

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Abstract

The atmospheres are multiple, enabling their interrelation in the sense of continuity of space, concept, and function. The generative trigger of the research described in this volume, in which this chapter is inserted, is to investigate experiences of different scales and forms of connecting places, memories, and atmospheres. This chapter explores the rut of connection between different spheres, an element identified with the adjective “seamlessness”, i.e. with no cuts, no seams, no interruption; an element that brings design consequences such as the accessibility and permeability of spaces and services. The idea is to investigate architectural spheres that are less composite and more enzymatic, aimed at overcoming the limits of buildings and infrastructures, and capable of fitting into the constantly changing territory. Crossable infrastructures allow permeability, with dynamic temporal and spatial variables corresponding to a fluid society that produces democratic programs. The identity of a place is seen by its general configuration and spatial articulation, the memory of its context, and its *genius loci*. The memory of place prefigures practices of social and cultural change. These evolutions affect spatial implications, modifying their physical configurations. However, we must consider the phenomenon of metamorphosis in functional terms, where the designer/researcher wonders how to preserve the identity of a place, even under the pressure of new functional needs. Atmospheres, therefore, are iridescent and generated through kinetic observation, room after room, from open to closed space, from public to private, a mosaic of interrelationships and osmosis that change over time. This contribution will investigate spheres of transition, junction, and filtering, which evolve in space and time through cultural and program changes.

Introduction

This chapter investigates within the urban context and reflects on the changes happening today from the urban/architectural point of view, not only as a change in the mesh of the built environment but also the cultural, social, political, and commercial changes, which in constant change affect the transformation not only of spaces but also of both public and private services. It also contributes to discussing spatial and service design and their positive relationship. The spatial design focuses on people and space, with a particular emphasis on the notion of place, place identity, and *genius loci* (Norberg-Schulz, 1980); it is concerned with people's migration between various parts of their internal and external environments and it provides value and information in both private and public locations.

Today, design embodies a holistic perspective (Buchanan, 1992), dealing with complex problems and situations in which seemingly independent action areas are increasingly merging and intersecting. Design is developing from a specialized skill to a more comprehensive and diversified discipline encompassing social settings, products, services, systems, and branding (Friedman, 2002; Muratovski, 2010). Service design, which is always a combination of tangible and intangible features (Meroni & Sangiorgi, 2011), requires an increasing amount of tangible, safe, stable, and physical aspects in our hyperconnected, digital, and ephemeral environment (Collina et al., 2021). The combination between service and spaces is a transdisciplinary approach to imagining alternative future developments.

The *Mnemosphere project* employs an interdisciplinary approach to explore the design and communication of place memory. It focuses on experiential spaces that can evoke emotions (Galasso et al., 2021). Generally, spatial experiences are inherently characterized by their multi-sensory and simultaneous nature, and comprehending the complex architectural entity involves the perception of an atmosphere, ambience, or feeling (Pallasmaa, 2014). Indeed, the assessment of a space or place's character necessitates the utilization of sensory categories that surpass the traditional five senses outlined by Aristotle, "such as the sensation of orientation, gravity, balance, stability, motion, duration, continuity, scale and illumination" (Pallasmaa, 2014). This contribution, then, concentrates on the spheres of transition, junction, and filtering, precisely focusing on the concept of continuity, better expressed with the word "seamlessness". In this context, this term refers to the unification and fluidity of spaces and functions, eliminating perceived barriers and enhancing user experience, seeking to create an uninterrupted, continuous experience across different domains.

Spatial Continuity

Seamless spaces embody this ideal by aiming to blur the boundaries between physical realms (including public/private and interior/outdoor spaces) and virtual realms (including digital technologies), providing users with a unified and immersive environment, integrating architecture, design, and technology seamlessly to create cohesive environments where transitions between spaces are smooth and sometimes unnoticeable.

The notion of seamless spaces [Fig. 1] revolves around the integration of physical and digital domains, enabling effortless navigation and interaction for individuals. Key elements of seamless spaces include continuity, accessibility, permeability, intuitive interfaces, and contextual awareness. Moreover, seamless spaces have broader implications for society and culture. By breaking down barriers and facilitating interconnectedness, these spaces have the potential to bridge cultural divides and foster a sense of global community. However, digital divide and exclusion issues must be addressed to ensure equitable access and participation.

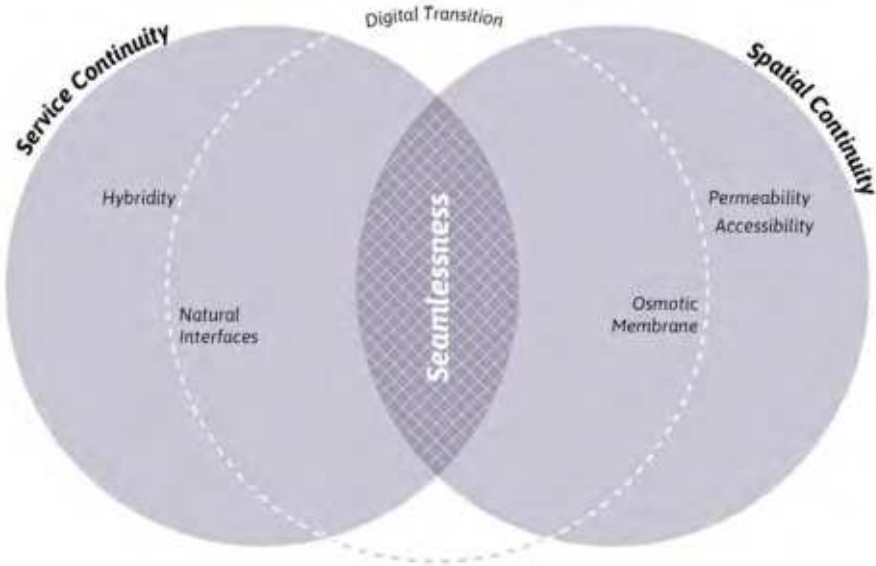


Fig. 1 – Diagram of the Spheres of Seamlessness.

Spheres of transitions, junctions, and filtering

Seamless spaces are characterized by smooth and continuous transitions between different zones, blurring the boundaries between indoor and outdoor spaces or public and private areas. This approach fosters a sense of openness and facilitates easy movement within the environment. A space is usually delimited (physically or virtually) by borders (tangible or intangible), and these boundaries define the stress points at which continuity is focused, that is, the ease or otherwise of traversing that space. The idea of “accessibility” as “permeability” into spaces might be described as enabling effortless entry into space, highlighting a distinction between public outdoor spaces and public interiors (Poot et al., 2015).

Defining the elements contributing to spatial continuity, we can find blurring the limits between outside and inside, between private and public, and between physical and digital environments.

Contemporary Architecture still attributes its own foundation to the acts of building, constructing visible spaces; metaphors limited to a single building and single typologies, and does not take the opportunity to represent a dispersed, inverted, and immaterial urban condition (Branzi, 2006).

When considering the urban environment, it is observed that the quantity and ratio of public space contained within urban structures are consistently on the rise. These spaces contribute to a broader network of pedestrian pathways, encompassing indoor and outdoor areas. Despite the significance of interior public spaces in the modern city and our urban encounters, their design is often neglected (Harteveld & Brown, 2007). Considering these fundamental principles, including interiors is a pivotal component within the spatial transition, junction, and filtering framework. The emergence of the notion of “interiors” occurred in Europe throughout the 18th and 19th centuries, coinciding with the development of new commercial and industrial institutions. These institutions were established within structures supplied by public administrations, local authorities, and educational institutions and utilized for discipline and consumption. The “interiors” embodied an innovative manifestation of the public realm, providing spaces for diverse joint endeavours and public presentations.

The “interiorization of public life” has been seen as a consequence of technological breakthroughs and enhanced spatial logistics, which have prompted a growing trend of public and communal activities being conducted within buildings (Cicek et al., 2018). As a result, various regions within the city established enduring connections with distinct internal spaces, also denoted as “infrastructures of seamlessness”, according to Koolhaas (2002),

wherein the delineations between these spaces grew less distinct. The design of common spaces has emerged as a significant strategy in influencing the development of contemporary metropolises in recent decades. Architects and urban planners operate within the realm where architectural and urban dimensions converge, aiming to develop initiatives that enhance the city's civic, typological, and morphological variety by integrating aspects of privacy and publicity (Avermaete et al., 2006).

In order to provide a continuous spatial transition between the interior and external spaces, as well as between the public and private realms, it is advisable to incorporate a spatial element that functions as a filtering threshold. Transitional spaces, often known as filter or threshold spaces, play a crucial role in designing and planning constructed settings. These spatial elements serve as conduits or bridges connecting disparate regions, enabling a seamless and regulated passage from one atmosphere to another. The elements mentioned above have a pivotal role in influencing the trajectory of motion and encounters of individuals as they traverse urban environments, structures, or indoor areas. The urbanist Kevin Lynch, in *The Image of the City* (1960), identified paths, edges, districts, nodes, and landmarks as crucial elements in shaping people's mental images of cities. Nodes, representing pivotal transition points, play a crucial role in this mental mapping, as they mark changes in the urban fabric and serve as recognizable landmarks guiding individuals through the city. Transitional spaces are fundamental to creating well-structured and harmonious built environments. The "entry transition" (Alexander, 1977), as the sequence of spaces from the public realm to the private domain, advocates for a gradual and carefully orchestrated shift in spatial qualities to enhance the overall experience of moving through a building. The transition often involves grand entrances, atriums, or vestibules that establish a sense of arrival and transition visitors from the exterior to the interior. These filter spaces are strategically designed to provide a moment of pause and orientation, preparing occupants for the unique qualities of the space they are about to enter.

The junction is the membrane which separates from one side to another, and if accessible and permeable as much as to consider the continuity is considered an "Osmotic Membrane" (Collina et al., 2021). Osmotic is a term borrowed from biology; it refers to the gradual liquid movement from one part of a body to another through a membrane. The Osmotic Membrane can be visually permeable (transparent), physically permeable (porous), or digitally permeable (interactive). These levels of osmosis are different and tangibly affect the sense of continuity between an interior and the urban fabric.

Service Continuity

The notion of seamless functions is intrinsically tied to the concept of hybridization, which entails the convergence of multiple functions, activities, and programs within a unified spatial setting, giving rise to places characterized by their capacity for social congregation, inclusivity, cultural aggregation, and territorial welfare, among other attributes. This hybridization phenomenon emerges as a strategic response to contemporary urban challenges, exemplified by instances in urban contexts. Considering the Italian context, the Italian Ministry of Economy and Finance reported that approximately 10% of Italy's public real estate remains unutilized (Diana et al., 2022).

Moreover, there has been a notable acceleration in the “de-functionalization” of public realms recently due to the increasing digital services or the surpassing of some on-site practices. Hybridization serves dual purposes: firstly, revitalizing underutilized spaces by introducing new activities that cater to societal needs and foster proximity; secondly, integrating new categories of local users and stakeholders who previously may not have considered accessing such spaces.

Spheres of function, connection, and hybridization into services

To support this idea of hybridization of privacy and publicity, but also of activities and programs, we can refer to Andrea Branzi in *Weak and Diffuse Modernity* (2006), in the *Non-Figurative Architecture*, about an architecture that changes over time, surpassing its constructing limits and becoming a producer of immaterial qualities. In pursuing sustainable and adaptable urban development, designers, architects, researchers, and urban planners are increasingly exploring models of weak urbanization (Branzi, 2006). This concept revolves around creating reversible, evolving, and provisory architectural models that can directly respond to the ever-changing necessities of a reformist society. In this approach, the city is regarded as an organic entity, continuously elaborating its social and territorial organization.

The core principle driving this movement is to dismiss rigid and inflexible urban structures in favor of an «architecture that is less composite and more enzymatic» (Branzi, 2006). The envisioned architecture can seamlessly insert itself into the process of the territory's transformation, much like an enzyme catalyzing a chemical reaction. It adapts, morphs, and evolves to fit the dynamic needs of the society it serves. At the heart of this new architectural vision lies the traversable architecture concept that ensures the smooth penetration of territory and space. Rather than isolating spaces and creating

barriers, this architecture seeks to establish connections and foster a sense of unity within the urban fabric. It encourages the free flow of movement, ideas, and interactions. Crucial to the success of weak urbanisation is an evolving architecture where time becomes a structural and dynamic element. The traditional approach of designing structures meant to stand the test of time gives way to an architecture that embraces change. Buildings and urban spaces are designed to adapt, evolve, and transform, keeping pace with the evolving needs of the community they serve. This adaptable architectural approach aligns perfectly with the fluid nature of contemporary society and an elastic democracy unburdened by rigid ideologies. It eschews dogmas and fixed formulas, instead embracing a process that generates programs organically.

The result is a diffuse genetic of ideas and collective creativity that harmoniously shapes and reshapes the urban landscape with the community's aspirations.

Stitching the spheres of continuity through multi-functionality and flexibility

In 2020, Carlos Moreno, talking about *15-minute cities*¹, the idea which refers to creating urban environments where residents can access most of their daily needs within a 15-minute walk or bike ride from their homes, pointed out that wherein residing in an urban setting entail embracing a certain degree of dysfunction, exemplified by long commutes, noisy streets, underutilized spaces. By amalgamating the concept of function with continuity, novel design challenges might emerge.

These challenges can be metamorphosed into opportunities by conceiving the urban landscape as a dynamic and animated domain traversed by diverse streams of information and goods, thus engendering an open and transitory system of sensory and perceptual structures. In this context, the city is envisioned as an “experimental”² reality rather than a rigid formal entity, transcending the boundaries of conventional architecture. Seamless areas often integrate multifunctional elements that serve multiple purposes. Flexible design strategies enable spaces to adapt to changing needs and support diverse activities, optimizing land use and resource efficiency. An example of hybridization is the Milan City Council's *Rete Spazi Ibridi*³, “Hybrid Spaces Network”: a qualified list to census and network social and

1. Carlos Moreno (2020) – Panthéon Sorbonne University, IAE Paris. TED talk – *15-minute city*. Retrieved from https://www.ted.com/speakers/carlos_moreno

2. Archizoom Associati (1969) “No-Stop City”, Casabella Magazine.

3. Rete Spazi Ibridi: <https://economiaelavoro.comune.milano.it/progetti/rete-spazi-ibridi-della-citta-di-milano>

cultural-based urban regeneration experiences in the city's neighborhoods. The "Rete Spazi Ibridi" idea is to create a network of hybrid spaces throughout the city that serves as multifunctional hubs, fostering social interaction, cultural exchange, and community engagement.

This spaces-network concept aims to transform underutilized or abandoned urban spaces into dynamic and inclusive places that cater to the diverse needs of the Milanese population. These hybrid spaces typically combine different functions, such as cultural events, coworking spaces, recreational areas, art exhibitions, workshops, and temporary markets. This aspect is essential because it allows the possibility of creating new experiences for the public, in sometimes non-conventional places, new experiences that are more inherent to current trends. Among the closest examples that research is moving toward is using hybridization to build new policies for the urban regeneration of places and through participatory processes.

Among the benefits given from the hybridization both in terms of spaces and functions, to ensure an atmosphere of seamlessness, we can trace:

- *Urban Regeneration*: entails rejuvenating and revitalising neglected areas to enhance the well-being and prosperity of the local community.
- *Social Integration*: the establishment of inclusive environments that facilitate the coming together of individuals from diverse backgrounds, promoting social cohesion and facilitating interpersonal interaction.
- *Culture and Creativity*: The promotion of artistic and cultural activities inside the city, as well as the encouragement of creativity and expression, are key factors in fostering culture and creativity.
- *Sustainability*: involves transforming urban spaces in an environmentally and economically conscientious manner, so adhering to the city's dedication to sustainability and responsible urban development.
- *Community Empowerment*: a crucial aspect of planning and managing public spaces since it involves the active participation of residents and stakeholders. By engaging these individuals, the aim is to ensure that the design and utilization of these spaces align with the specific requirements and wants of the community.

Digital as a trigger of emotional experience

Our society is accelerating toward a digital culture characterized by new forms of literacy, education, practice, and expression. Hybrid spaces are an example of dynamic environments that are shaped by individuals who engage also with technologies (De Souza & Silva, 2006). The spatial domain has the potential to undergo a transformation, giving rise to a hybrid milieu

characterized by varying degrees of technological integration within both physical and digital realms. According to Loukides and Bruner (2014), there is an increasing blurring of boundaries between tangible and intangible entities, as well as between hardware and software, and between private and public domains. The phenomenon referred to as “blurring” (Jordan, 2009) facilitates engagement, and individuals should rely on a diverse range of technology in order to attain this outcome.

The very recent initiatives released by the new European Union’s Next Generation EU (NGEU)⁴, launched explicitly in response to the pandemic in Europe, is designed to accelerate, among other things, digital transitions into the public realm. As mentioned in previous lines, there has been a notable acceleration in the “de-functionalization” of public realms recently due to the increasing digital services or the surpassing of some on-site practices. So, while the technology “fills in” through immersive spaces and new user experiences, it also divides by being more of a barrier than a filter, including, through the emptying of on-site and staffed activities, replaced by digitized totems, online platforms, by Artificial Intelligence and Augmented Reality.

We must aspire for technology at the service of the content and the visitor. Silent but agent, servant and not the protagonist. A technology that may disguise itself as normality and familiarity increases the sensitive temperature of the environment (Bollati, 2021).

To enable this kind of continuous immersion between the content (the technology) and the user, several best practices exist, including natural interfaces (Cirifino et al., 2011). These interfaces make interactions between humans and machines more intuitive, seamless, and user-friendly by leveraging familiar actions and behaviors. Some common examples of natural interfaces include gesture-based interfaces enable users to control devices or systems through hand movements or body gestures; touchscreen interfaces, where users can interact directly with the screen through taps, pinches, and swipes, making it a more intuitive way to engage with technology; or voice user interface allows users to interact with devices or applications using spoken language. Natural interfaces aim to bridge the gap between technology and humans, reducing the learning curve and making technology more accessible to a broader range of users. By leveraging natural interactions, these interfaces can enhance user experiences, increase efficiency, and improve overall usability. Born in the name of innovation only to be immediately overtaken by even newer technology, natural interfaces are short-lived. A

4. NextGenerationEU: https://next-generation-eu.europa.eu/index_en

significant aspect of modern atmo-spheres is their amalgamation of the digital and physical realms. The seamless integration of digital technologies into physical spaces creates hybrid environments that captivate our senses and blur the boundaries between the virtual and the real. These environments are not static entities; they are a mosaic of interrelationships that constantly interact and influence one another. The osmosis between elements allows for a continuous exchange of energy, ideas, and emotions, shaping the atmosphere unexpectedly.

Conclusion

Atmo-spheres are not mere static entities but rather dynamic and ever-evolving constructs. The iridescence of these atmospheres arises from the vibrant and intricate interplay of elements within them. These are brought to life through kinetic observation, where the observer actively participates in the experience. As we move through different spaces, we witness a fascinating transformation of atmospheres room after room. The transitions from open to closed spaces create a sense of containment and intimacy, while the shifts from public to private areas evoke distinct emotions and behaviours in individuals. We consider continuity as a design element, captivate us through kinetic observation, presenting a rich tapestry of interrelationships from open to closed spaces, public to private domains, and digital to physical realms.

The ever-changing mosaic of these atmospheres invites us to explore and experience environments in an engaging and significant way: continuity in time – between past and present, continuity between spaces - between inside and outside; social continuity - between public and private; digital continuity – between real and virtual world. Continuity lies in the eye of the dweller, through the user experience, but sometimes it does not bring one closer; rather, it divides. The challenge is to combine all the elements, so they are seamless in connecting places, memories, and atmospheres.

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9. The Void empowering a Sense of Belonging within Inhabited Spheres

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Abstract

The concept of Void, since ancient times, has often been associated with a negative connotation. The Void is everything, it is a center from which something else is generated, it is space, it is lightness, it is immateriality but at the same time also fullness. The emptiness is not only synonymous with nothingness, but becomes above all a physical manifestation of images, relationships, memories and actions. The architectural void is, first of all, a kind of open space, available to the project as unplanned: it is the place of events. We need to reason about the need and the difficulties of giving place with a new project to the complex interweaving of social and spatial relationships that make spaces. The city is an environment of interactions, in which the dynamic social transformations are most evident. Public space offers a true opportunity to test new urban and social models, thus becoming a principal catalyst for positive changes in the entire urban context. It is therefore necessary to re-establish a relationship between public space and its inhabitants, providing a system of proximity by highlighting the human and non-human dimensions and consequently connecting services, relationships, and opportunities. In an analogous way, it is interesting to scale these peculiarities of the concept of Void – as a potential generator of memories and actions in living spaces and relations – in other more remote and distant contexts and inhabited spheres, where co-existing expressions of absence, silence, nothingness. We consider those depopulated spheres, with little innovation of services and human relations; but which stage their fertile territory to guarantee new cultural and social manifestations, dissemination of future memories and a concrete sense of belonging in these contexts. One must always start from an emptiness, to demonstrate the true essence of its existence.

Introduction: emptiness as a generative phenomenon

Throughout history, the Void has frequently been linked to a pessimistic connotation. Otherwise, the concept of Void encompasses several attributes, serving as a generative center from which other entities emerge. It embodies notions of spatiality, weightlessness, and intangibility, while simultaneously embodying a sense of completeness. The concept of emptiness encompasses more than just a state of *nothingness*; it mostly serves as a tangible representation of several elements such as images, relationships, memories, and activities. The architectural emptiness can be understood as an open area that is not premeditated, serving as a site for various occurrences inside a project. It is imperative to engage in a thoughtful analysis of the necessity and challenges associated with accommodating a new project within the intricate interplay of social and spatial dynamics that constitute physical environments. The Void drives as a blank space upon which these interactions might take place, facilitating the occurrence of events and the manifestation of pictures, memories, emotions, actions and scenarios of the community and simultaneity of urban events.

The Void is a generator and defining agent for the livable, diverse, open and collective sphere. In short, it identifies a public space conceived as an urban void in which movements, dynamics and variations can take place; making explicit the power and passage of time and the importance of human action. Basically, public space is generated in two different ways: the first is the one that follows a temporal process of accumulating and modifying, without any kind of definite prefiguration; the second, on the other hand, follows what is a design plan, a planning decision to realize the space.

Void dimensions in urban spheres

When speaking of emptiness, in an urban context, this generally indicates a negative space, deprived of buildings. Empty space, however, from the invention and first constitution of the *polis*, is a positive and meaningful generator for the city that surrounds it and that, in the emptiness, has its core (Borin & Galluzzo, 2019). For example, the agora in Athens admirably demonstrates the supremacy of the *genius loci* (Norberg-Schulz, 1979): it is a privileged place with a great deal of collective meaning, which is architecturally conformed through a long process of aggregation.

The *agora* becomes the public space that together with the Acropolis constitutes the reference point of Athenian city life. All the civic functions of the *polis* are concentrated in this place. Therefore, it has always been considered the place that hosted the purest political form of antiquity: Athenian democ-

racy. In reality, a necessary but not sufficient element in the planning of the *agora* was that of neutrality, having a public place where no one is a guest, but which can be walked through, traversed and inhabited by all equally.

Urban public space is no longer the residual between buildings but for the first time is treated as an entity in its own right; here, the void is measured and managed, conformed and prepared to become a proper setting for the actions, events and habits of citizens (Borin & Galluzzo, 2019). Actually, urban sphere is shaped as an integrated and fluid system of specific places, with the common denominator of being permeable to the events of what is public, and in which the void is a continuous, instantaneous and multiple scenario (Espuelas, 1999). If cities are the moments of interaction with time, memory and people, it becomes interesting to analyze them from the physical place where this happens. It is usual nowadays by thinking of cities from their buildings and to imagine urban form from their solids. Reversing this point of view, it is therefore possible to understand what it means to look at an urban landscape by studying the form and meaning of the spaces between the architectures, thus considering emptiness with the same importance as fullness.

According to this, Purini stated (2008) «what seems to be of interest are no longer the architectures as such, nor, after all, their relationship if this remains only on the architectural level, but rather the connective that binds them. In this way, the idea of the void closely approximates that of the environment, understood as a unifying fluid of relationships, rather than of objects». The purpose is understood looking at those vacuums of the city dense with shapes, exchanges, relations and meanings, as the primary field of investigation of architectural research, observing the space between things no longer as that which separates two fullnesses, pause, absence, but rather as an actual architecture, which by separating relates the built, the people, and the places, «the space you leave behind is as significant as the space you fille» (Távora, 1996).

Urban void, therefore, is conceived as a densely inhabited *sphere* of events, forms, meanings, and above all, a primary catalyst for urban identities. Interpreting urban space as a system of places that accommodate the dialogue between buildings entails reasoning about the topology of the urban ensemble, regardless of specific forms. From this initial definition of void, it can be asserted that within the urban fabric, it becomes the realm of mediation and relationship, the backdrop of urban events, and thus the locus where the collective structure and its very identity are reflected. Consistent with this assertion, «cities were born not when buildings, but when the unbuilt spaces assumed meaning, or rather when this meaning began to prevail over the meanings of individual buildings [...] cities derive their strength primarily from open spaces, those that can be defined as *non-built*» (Ciamarra, 2004).

For instance, the Void «by its very nature not directly tangible, appears as something difficult to comprehend, not easily graspable, like smoke passing through one's fingers, and thus destined to elude reflection. Therefore, while the theme of emptiness possesses undeniable conceptual and practical interest, it also entails evident difficulty in defining clear and well-defined fields of action» (Zucchi, 2016). The system of these urban voids encompasses not only those spaces of the city where public urban life is enacted, but also those places where temporalities and stratifications of elements come into relation, perceived through streets, courtyards, porticoes, or squares. These are spaces that narrate the history of a place and immediately communicate a certain urban area's hierarchy.

In the contemporary urban context, it is now evident how urban void, generally embodied in a square or an open and free space, is no longer a univocal relationship and thus opens up to new scenarios yet to be fully investigated and experimented by architectural design: indeed, «empty spaces can be conceived as urban reserves for the experimentation of collective dreams» (Inti, 2014).

Emptiness as extended sensible memories

Urban voids can be characterised as areas of suspension, drawing upon the concept of void as interruption, as previously demonstrated. Suspension is seen as an imbalance resulting from discordant elements within the urban environment (Zumthor, 2007). Nonetheless, the emergence of these voids signifies instances of crisis resulting from economic destabilisation or shifts in social and cultural dynamics. Therefore, it is evident that the urban void encompasses the setting for urban occurrences, serving as the space where the communal framework and the fundamental essence of the city are mirrored (Zucchi, 2018).

In recent years, various viewpoints regarding the future of cities have inevitably grappled with the impact of the Covid-19 pandemic on both our daily lives and urban environments. One of the enduring visual representations of the lockdown period that will remain ingrained in our collective memory is the sight of urban landscapes devoid of human presence, with streets and public areas eerily devoid of activity, creating an atmosphere that borders on the weird. The streets and squares, formerly bustling with individuals, underwent a quick transformation into prohibited areas. These spaces, once serving as conduits between residences and various destinations such as workplaces, supermarkets, and other essential locations, were now rendered off-limits.

The use of public space was restricted, resulting in its transformation into a prohibited area, while our residences served as our primary shelter (Galluzzo & Borin, 2021).

The urban environment appears empty of human presence, yet it exhibits signs of being inhabited by intangible entities reminiscent of past behaviours and routines. One of the photographic projects that documents this significant event is Giovanni Hänninen's work, which portrays an idyllic Milan, temporarily suspended from its typical hustle and bustle, through exploring the interplay between architecture and visual communication. The project titled "The Missing Piece" examines a collection of urban locations characterised by unoccupied advertising marquees, which resemble unfilled frames on building façades. These empty spaces are metaphorically likened to missing puzzle pieces, presenting an opportunity to reconsider the future and explore novel approaches to living and adapting within a post-Covid context (Galluzzo, 2022). During the pandemic, the squares emerged as notable locations that had a profound impact on individuals, rendering them speechless. The square has historically served as a fundamental spatial element within urban environments, serving as a nucleus for the development of many urban components. It has been closely linked to communal gatherings and has also functioned as a hub for political and administrative activities.

The project *Le Piazze (In)visibili*, "(In)visible Squares", which is supported by the Ministry of Foreign Affairs and International Cooperation and curated by Marco Delogu, a photographer, exhibition curator, and publisher, is relevant to the subject matter at hand. The initiative in question is a publishing endeavour that centres around the convergence of pictures depicting several Italian piazzas and concise textual pieces. The squares were captured in photographic form during the period of lockdown in 2020, exhibiting a notable absence of individuals. The lack of content in these photos serves as a reminder that cities are not inherently and permanently fixed in the manner in which we have traditionally perceived them.

The reevaluation of the city's role as a catalyst for cultural advancement has occurred in the aftermath of the pandemic. The concept of the urban sphere has increasingly been viewed as a domain conducive to the exploration of collaborative initiatives in social innovation. This perspective has given rise to the notion of "open urbanism," as proposed by Sennett (2018; 2020), which seeks to integrate public health and social density in order to foster a renewed "sense of place" within urban spheres. This approach emphasizes the importance of creating urban spaces that are not merely occupied, but rather, are characterised by their distinctiveness and recognition by inhabitants and visitors alike (Feld & Basso, 1996). The topic of public space has regained prominence in contemporary discussions, encompassing various perspectives such as sustainable peri-urban life, future concepts of technologically enhanced and innovative metropolises (Carta 2007; 2017), and the revitalization of cities through a renewed emphasis on *proximity* (Manzi-

ni 2021; Tajani 2021). Conversely, UN Habitat (2021) reaffirmed during the spring of 2021 that if the pandemic mostly affected urban areas, the appropriate course of action is to engage in a process of reevaluating and reimagining cities rather than completely forsaking them.

Urban void as stage for cities transformations driven by proximity dimensions

Gehl (2013) extensively employs several illustrative instances to propose strategies for urban design that prioritise human welfare. While the author dedicates significant attention to buildings and streets, there is a notable absence of comprehensive analysis on the material aspects of the urban environment, with the exception of rudimentary depictions of urban furniture. Gehl acknowledges the significance of dimensions and relative distances in the field of urban planning, which can be traced back to the influential work of E.T. Hall. Additionally, Gehl emphasises the need of understanding and delineating the relationships between individuals and their surrounding environment. However, the offered notion of space is portrayed as just pertaining to measures and dimensions, thus disregarding considerations of materiality, expression, and content (Manzini et al., 2023).

Regardless of the potential negative consequences associated with the *spectacularisation* of everyday life, a concept that has been both reevaluated and criticised as a sacrifice of culture for the sake of pleasure, the present-day manifestation of this performative aspect is accompanied by an ethical perspective that emphasises the shared responsibility of the third sector and citizens. This perspective also highlights the importance of collaboration between the public and private sectors, as well as the integration of public art and urban design (Iannelli & Musarò, 2017).

According to Sassen (1994), cities that possess a significant concentration of command functions and high-level producer-service firms, which are oriented towards global markets, are considered strategic sites in the global economy. In a broader sense, these cities exhibit a high degree of internationalisation in both their economic activities and their social structure. The city of Milan and its surrounding metropolitan area are currently undergoing a period of significant dynamism, characterised by several developments that serve to reinforce the city's considerable allure. The primary aspect that arises is the presence of variability in density. The *15-minute city* concept (Moreno, 2021) fosters the establishment of a cohesive community whereby residents exhibit more mutual assistance, facilitated by the availability of local activities that are facilitated through novel collaborative approaches. This phenomenon reintroduces the concept of the human size, which has been diminished as a result of frequent travel. Due to its close proximity, users are afforded the opportunity to establish contact with

the inhabitants of their local community, fostering social interactions and facilitating access to shared resources. The facilitation of collaborative actions within local communities greatly facilitates the development, production, and implementation of solutions aimed at improving quality of life. There exists a certain degree of proactivity that enables the implementation of these actions.

These actions range from smaller events focused on entertainment or cultural dissemination, to initiatives that address specific needs of neighbourhoods by utilizing public spaces that are often underutilised (such as urban gardens or improvised playgrounds). Additionally, there are efforts to make temporary micro-transformations to spaces that are awaiting structural changes, in order to prototype their viability, effectiveness, proper utilization, and the benefits they bring to individuals. According to Florida (2005), it is asserted that the creative class possesses a unique quality in which its members are involved in labour that serves the purpose of generating novel and significant forms. In this manner, solutions are generated to enhance the perception of spaces, particularly public spaces, which frequently exhibit characteristics of temporality and affordability.

These solutions are designed to address the evolving requirements for everyday livability, thereby exerting a transformative influence on urban landscapes. They involve the collaboration of individuals who unite in response to practical needs, employing design principles to develop and execute their ideas. Furthermore, these initiatives extend beyond mere implementation, encompassing the stages of utilization, experimentation, and refinement. The implementation of a comprehensive service system at a metropolitan level, seamlessly integrated into the urban landscape and easily accessible through public transportation, has the potential to serve as a catalyst for the revitalization of deteriorated areas. This approach can attract foreign investments, generate employment opportunities, expedite the rejuvenation of local communities, and foster the symbiotic growth of sustainable infrastructure and collective transportation. The contemporary reconsideration of territorial spheres involves a comprehensive set of actors, encompassing local communities (such as associations and informal groups), as well as public and commercial entities that see the significance of public participation in shaping their own roles and operations. Proximity refers to the process of establishing connections, fostering integration, and developing systems that enhance the livability, safety, and attractiveness of urban areas.

This entails envisioning spaces that are accommodating to both humans and non-human entities, coordinating initiatives based on shared concepts, implementing short, medium, and long-term projects, and actively contributing resources towards the reconfiguration of urban environments and servic-

es answering to the habits, feelings and futures of people. This contribution should be considered valuable due to its analysis of engagement processes and grassroots initiatives.

Additionally, it acknowledges the significant role it plays in driving the regeneration of the territory. Furthermore, it recognises the aesthetic and social impact it has on the redevelopment of streets and buildings, which are transformed into stage sets. It is crucial not to overlook the performative aspect, as it holds more significance than mere communication and should not be dismissed as a capitalist appropriation of urban space. Instead, its potential to foster new alliances should be critically examined. The city implements measures to address territorial emergencies by revitalising abandoned, forgotten, or disused locations inside the city through cost-effective exhibition-like projects, with the aim of enhancing the *unfinished* (Crespi, 2023). Towards avoid oversimplification, the act of designing outside the confines of urban social reality necessitates perceiving the current state as a realm of potentialities governed by ambiguity, wherever diverse and multifaceted visions of the future intersect (Akama et al., 2018).

According to Bargna (2021), perceiving the unforeseen as a prospect rather than a constraint entail relinquishing the inclination to preserve something in its isolated state. The projects discussed in this context exhibit deliberate vagueness and adaptability, which are indicative of their desire to create opportunities for fluid future scenarios despite their perceived fragilities and apparent defects. Moreover, Crespi (2023) states that Design has the potential to significantly contribute to the establishment of an aesthetic that encompasses the exhibition approach as a design philosophy. Furthermore, it may effectively tackle the theme of regenerating both interior and exterior environments in post-industrial cities through inventive means.

Conclusions: emptiness as a re-generative phenomenon

Based on the above discourse, the performative part of urban life can be re-conceptualized beyond materialism and pleasure, which only capture a single aspect of urban life. Instead, urban planning and city life must be strengthened. Cities are often seen as the result of purposeful and structured efforts, although some have formed owing to unforeseen occurrences. The urban voids found will be used to improve community well-being and involvement. The urban environment can be conceptualized as a *taskscape* (Ingold, 1993), comprising a range of activities and potential uses that are contingent upon social experiences. The taskscape is contingent upon the active engagement of individuals in the practises of inhabiting the city (Ingold, 2000). The integration of performative practices into project culture necessi-

tates the inclusion of many social actors and the urban environment. This inclusion is crucial for the meaningful transformation of spaces into places and landscapes into cityscapes. The transitory nature and potential for reversal of design acts, in contrast to the desire to permanently control a territory that is inherently disorderly, align with the unpredictable nature of urban life. The memory of urban spaces is constantly vulnerable to social improvisation and cultural shifts. Accepting urban gaps as essential to the urban environment is creating a theoretical framework for comprehensive urban rehabilitation. Urban voids can bridge the gap between urban infrastructure and future urban projects as urbanization and population density increase.

In conclusion, in order to fully experience life, individuals must initially establish a void, which then enables them to navigate and occupy the available space. The concept of the emptiness might be understood as a tangible resource. One must always start from an emptiness, to demonstrate the true essence of its existence.

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Appendix

The final part of this volume collects, in an ideal online exhibition, the images which identify different mnemospheres and which were submitted during the *Mnemosphere Open Call*. Furthermore, the Mnemosphere atlases are included with the images structured according to thematic focus areas.

The book concludes with comprehensive biographies of the authors that offer insights into their backgrounds, professional achievements, and contributions to the field.

Open Call Visual Exhibition

The pictures are captioned with the authors' names, titles and years given to each one. Like a proper summary of an exhibition catalogue, they are arranged in no particular order, deliberately free of classifications (as they are already categorized by the different analyses conducted during the research project), thus accessible and available for everyone's use for further and future research. It is essential to make these resources available to share the results of the *Mnemosphere* research project, foster this neologism and stimulate future research in the field and as collateral to this project. The images include the title, the author's name, and the year the subject was captured or produced. The online call also requested a brief description of the submitted images (along with other details). However, these have not been included in this visual collection as it was preferred to let the images speak for themselves, free of any authorial interpretation and thus a resource for future and further research for anyone wishing to investigate other aspects of the mnemosphere or other topics.

As a curatorial choice, only a selection of images will be presented here for illustrative purpose. The idea is that they can coexist in the book as in a mnemosphere. The complete list and gallery can be found on the main Mnemosphere project website: <https://www.mnemosphere.polimi.it/>



Fig. 1a – Mnemosphere Open Call results, 2021



Fig. 1b – The image shows the set of all photos, including the diptychs and triptychs that completed the submissions, which were collected during the online Open Call.



Fig. 2 – Emozioni, Andrea Filoni, 2014.

Fig. 3 – Le strade della vita, Andrea Fontana, 2017.



Fig. 4 – Protection, Andrea Carenini, 2019.

Fig. 5 – Untitled (Erased Chun-Li Head), Inês Miguel Oliveira, 2021.



Fig. 6 – Salve, Silvia Varrani, 2015.



Fig. 7 – Circadian Rhythm, Aga Wojtanowicz, 2021.

Fig. 8 – Border Water, Nadja Pelkey, 2021.



Fig. 9 – Santa Caterina da Siena, Alessia Soressi, 2021.

Fig. 10 – Ae Fond Kiss, Amanda Forrest, 2013.



Fig. 11 – Paesaggi, Alessandro Bonalume, 2020.



Fig. 12 – Metaphysics series #1, Anatoliy Menkiv, 2020.

Fig. 13 – Piedra Blanca, Ambar Ignea, 2017.

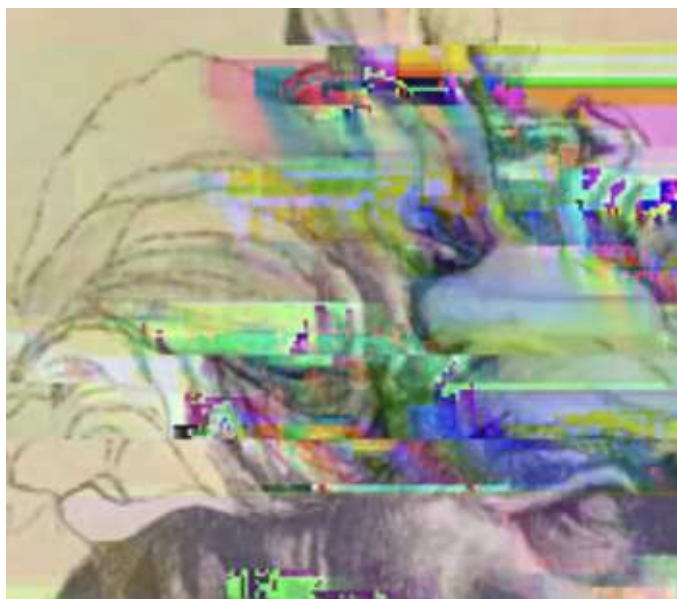


Fig. 14 – Myth Making, Angela McFall, 2019.

Fig. 15 – Heart Thoughts, Ana Maria Guta, 2021.



Fig. 16 – Space, Anamika Anamika, 2021.

Fig. 17 – How much a heart can hold, Asha Lepiarczyk, 2021.



Fig. 18 – Rigid Fluidity, Allison Tanenhaus, 2020.

Fig. 19 – Infiniting, Rose Mara Kielela, 2021.



Fig. 20 – Ferro e Lunaria, Anna Laviosa, 2020.



Fig. 21 – Aprile pomeriggio, Antonio Aiello, 2019.

Fig. 22 – Dawn in Angkor, Andrea P., 2019.

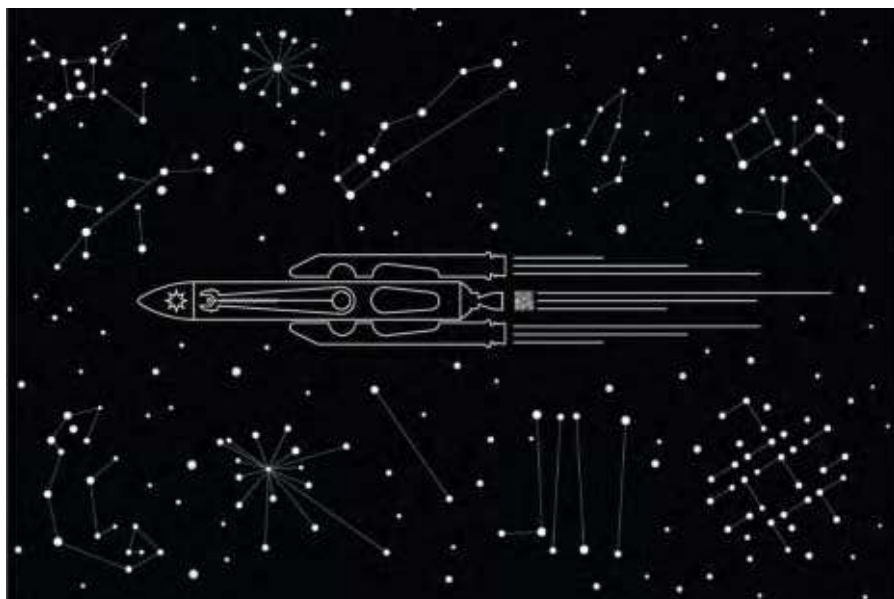


Fig. 23 – The Big Space Fuck, Art Clay, 2021.

Fig. 24 – OrbiLux, Ayshia Taskin, 2021.



Fig. 25 – Casa, Beatrice Scagnoli, 2018.

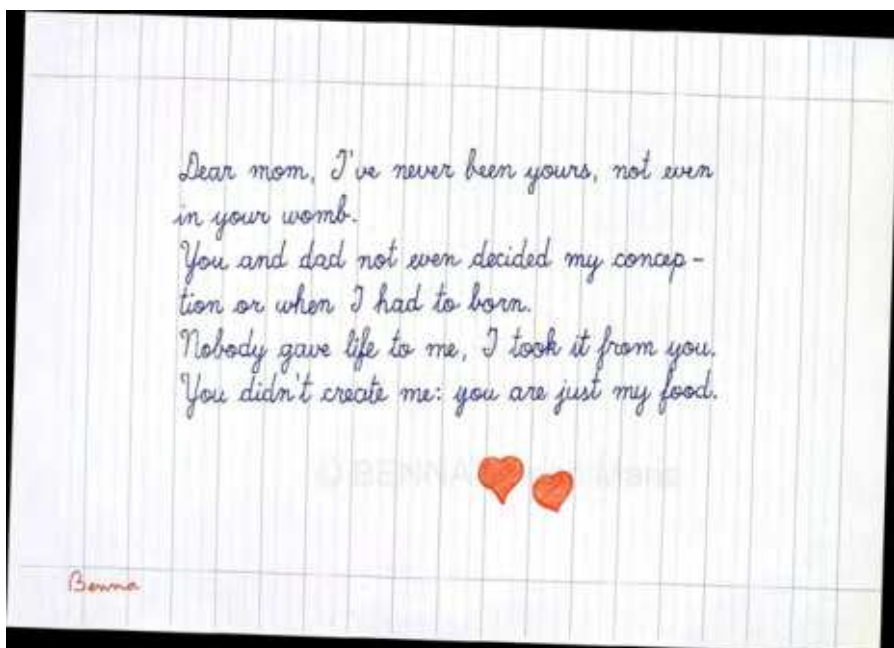


Fig. 26 – Focus, Benedetta Verrotti di Pianella, 2020.

Fig. 27 – If I only had the words, Benna Gaeen Maris , 2018.



Fig. 28 – L'inquietudine del mare, Rossana Albanesi, 2019.

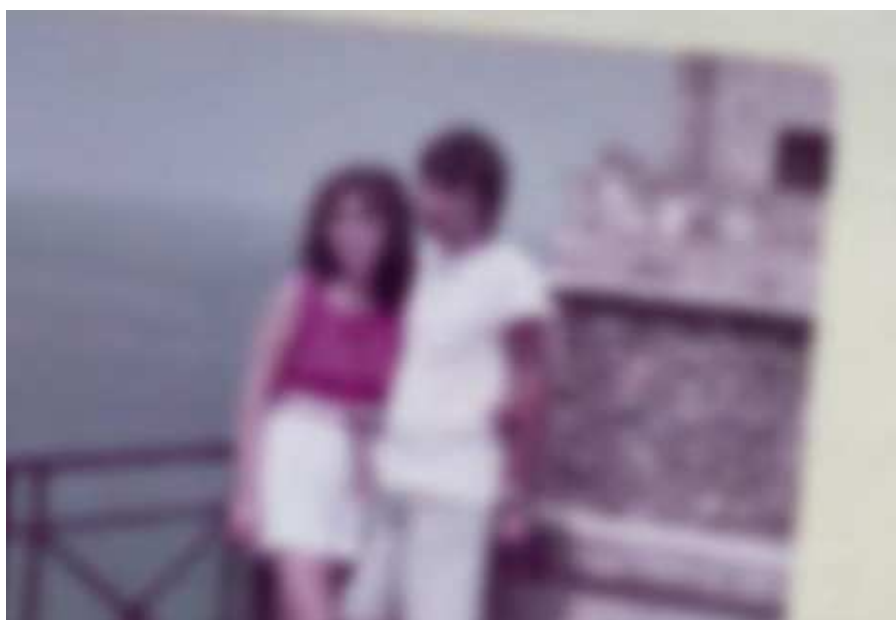


Fig. 29 – Visceral Ecologies VI, Chantal Meza, 2019.

Fig. 30 – Prima, Bruna Crapanzano.



Fig. 31 – At five, Carol Radsprecher, 2012.

Fig. 32 – Mask Mandate 6, Chad Ferber, 2020.



Fig. 33 – Atmosfera di un viaggio speciale, Chiara Girardi, 2017.

Fig. 34 – Cielo, Chiara Manente, 2021.



Fig. 35 – No Where Now Here No. 193, Christian Nicolay, 2020.



Fig. 36 – The portal of Mr. Hora, Fictional diorama, Christina Heurig, 2016.

Fig. 37 – Brazilian landscape from moving car, Bruno Bontempo, 2011.



Fig. 38 – Apertura o chiusura, Chiara Buson, 2021.

Fig. 39 – The past and the future in the memory, Ciro Di Fiore, 2017.



Fig. 40 – Sinergy, Costin Brateanu, 2018.

Fig. 41 – Inizio, Claudia Conca, 2018.



Fig. 42 – Stately, Daniela D’Andrea, 2016.

Fig. 43 – Chico y pan, Despoina Papanikolopoulou, 1987.



Fig. 44 – This seeing a Sign No. 2, Daniele Bongiovanni, 2021.

Fig. 45 – Confine liquido, Dario Sorgato, 2021.



Fig. 46 – Porta_1, Dariana Chem, 2019.

Fig. 47 – Ricordi flash, Aneta Malinowska, 2021.

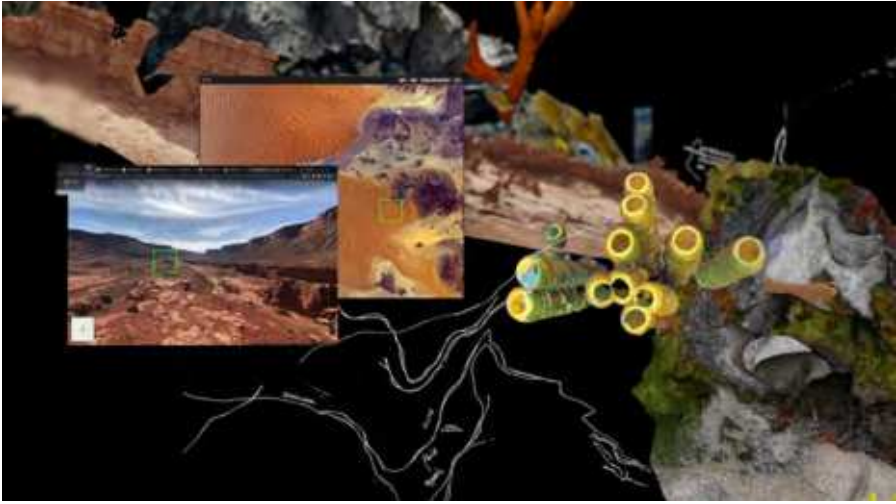


Fig. 48 – 0° N, 0° E - scene II, Deborah Mora.

Fig. 49 – Memory over time, Debora Carru, 2020.

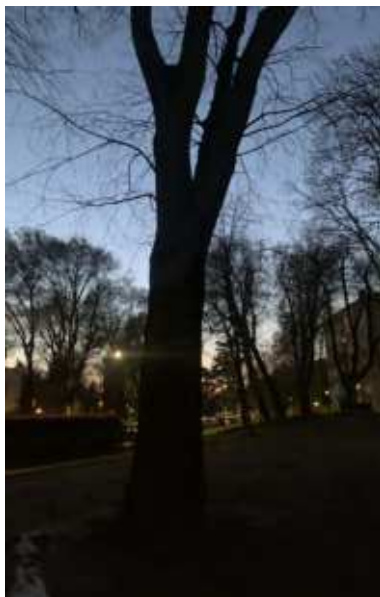


Fig. 50 – Park, Davide Verallo, 2021.

Fig. 51 – Dove si nasconde un ricordo, Federica Paolini, 2019.



Fig. 52 – Migranti notturni, Elisa Crestani, 2019.

Fig. 53 – Interazione, Elisabetta Nobili, 2020.



Fig. 54 – Intervallo spazio temporale #3, Domenico Giannantonio, 2018.

Fig. 55 – Papaveri e papere, Donatella Andria, 2020.



Fig. 56 – Blue bed, Eila Goldhahn, 2008.

Fig. 57 – Atmosfere dello spazio, Edoardo Vagnarelli, 2020.

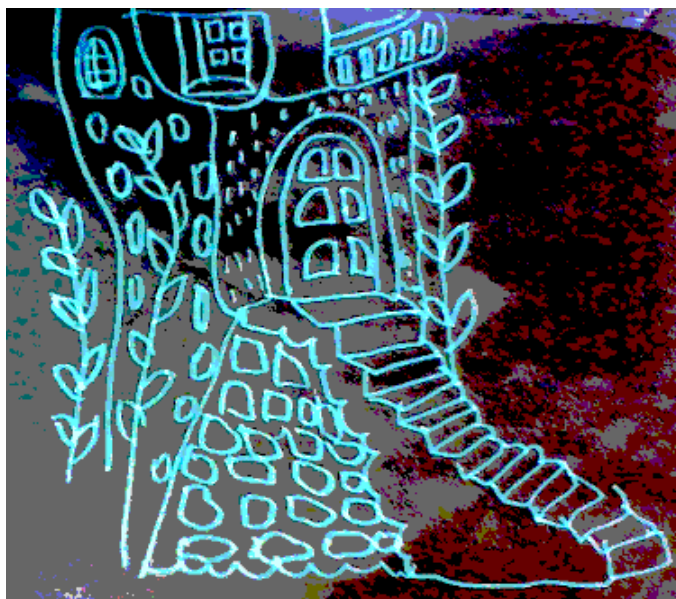


Fig. 58 – Old chapel, Elena Belova 2018.

Fig. 59 – Sunset, Elena Ferrario, 2020.



Fig. 60 – Bandiera Rossa, Emma Graziani, 2021.

Fig. 61 – Tonnara aperta, Erika Barresi, 2020.



Fig. 62 – In un soffio, Elena Grossi, 2020.

Fig. 63 – Anatomy of the Incoherent Clay, Elizabeth Torres, 2019.



Fig. 64 – Fish of the city which no longer exist, Erika Dania Ramírez Mejía, 2018.

Fig. 65 – Sonder Seclusion, Faizan Adil, 2014.

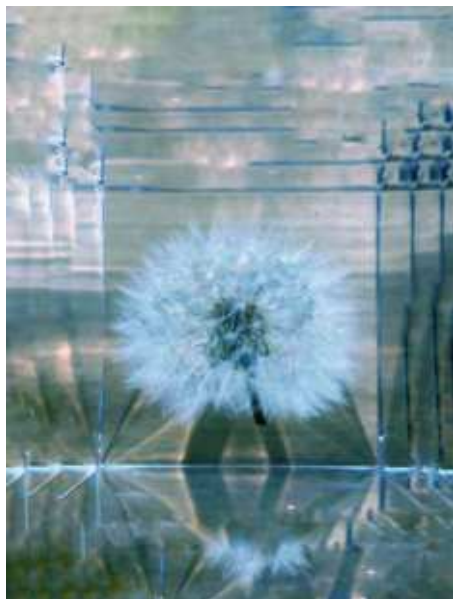


Fig. 66 – Desideri in trappola, Emilia Pagani, 2018.

Fig. 67 – Mnemosphere Atlante, Adriano Buttitta, 2021.



Fig. 68 – Remnants of a future passed, Fabrizio Mario Ferrarese, 2020.

Fig. 69 – Passato e presente, Erika Grigis, 2020.



Fig. 70 – Senha 1, Fabiane Aleixo, 2020.

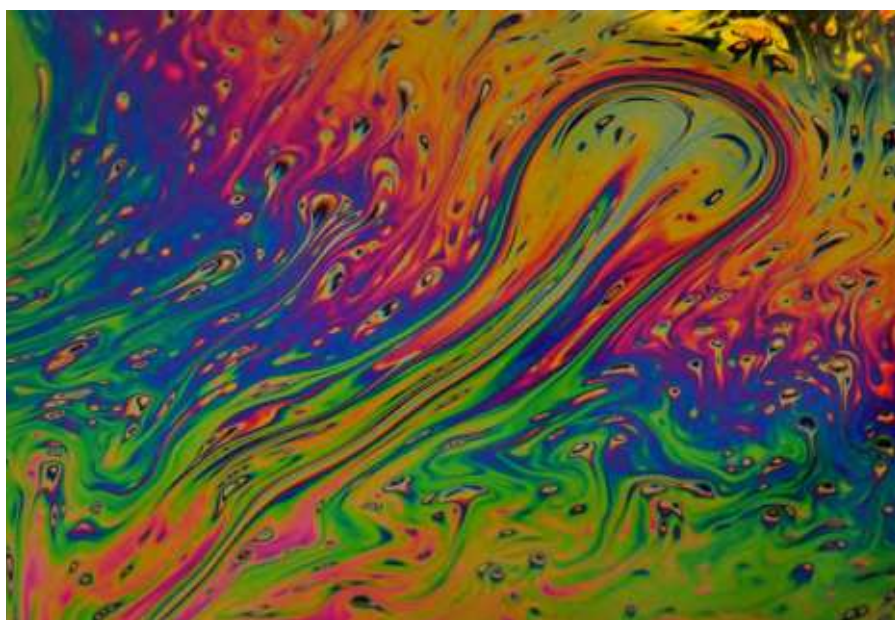


Fig. 71 – Vivere in una bolla, Francesco Camilli, 2021.

Fig. 72 – Scream (urlo), Franco Speroni, 2018.



Fig. 73 – The WING II, Jagoda Zwiernik, 2020.

Fig. 74 – Mattoni, Francesco Camposano, 2019.



Fig. 75 – Rise, Frank Mulvey.

Fig. 76 – Appunti, Giluia Camedda, 2019.

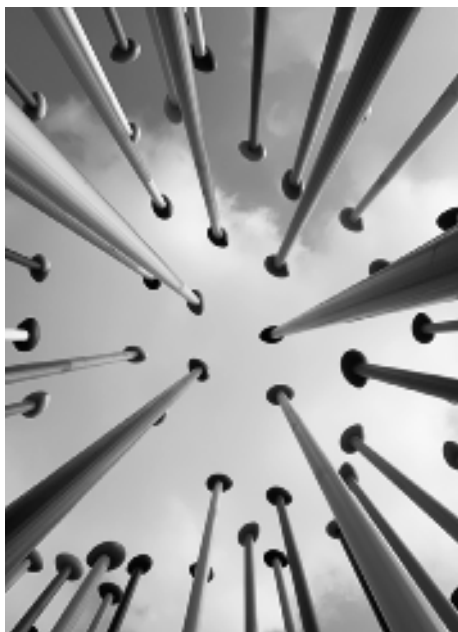


Fig. 77 – Unsettled Fidelity, Giuseppe Di Leo, 2020.

Fig. 78 – Untitled, Isabella Lo Duca, 2020.



Fig. 79 – C'è anche la vita, Giulia Panichi, 2016.

Fig. 80 – Supermarket coven, Gladys Mendez, 2019.



Fig. 81 – Herbarium 3, Gustavo Aguerre, 2020.



Fig. 82 – We need miracles, HR Stamenov, 2020.

Fig. 83 – Witnesses 2, Hamza Kırbaş, 2021.



Fig. 84 – Indagine No. 2, Ilena Ragosta, 2020.

Fig. 85 – Memory patterns, Maksim Finogeev, 2015.



Fig. 86 – The Hose is Her, Ivona Pelajic, 2021.

Fig. 87 – Love and pigeons, Irina Novikova, 2019.



Fig. 88 – Let everything burn, Inna Kuzminova, 2021.

Fig. 89 – Brave new world, Lea Della Cerra, 2021.



Fig. 90 – The Body and the Mountain, João Manuel Miranda, 2016.

Fig. 91 – The Great Battle, James Johnson Perkins, 2010-2019.

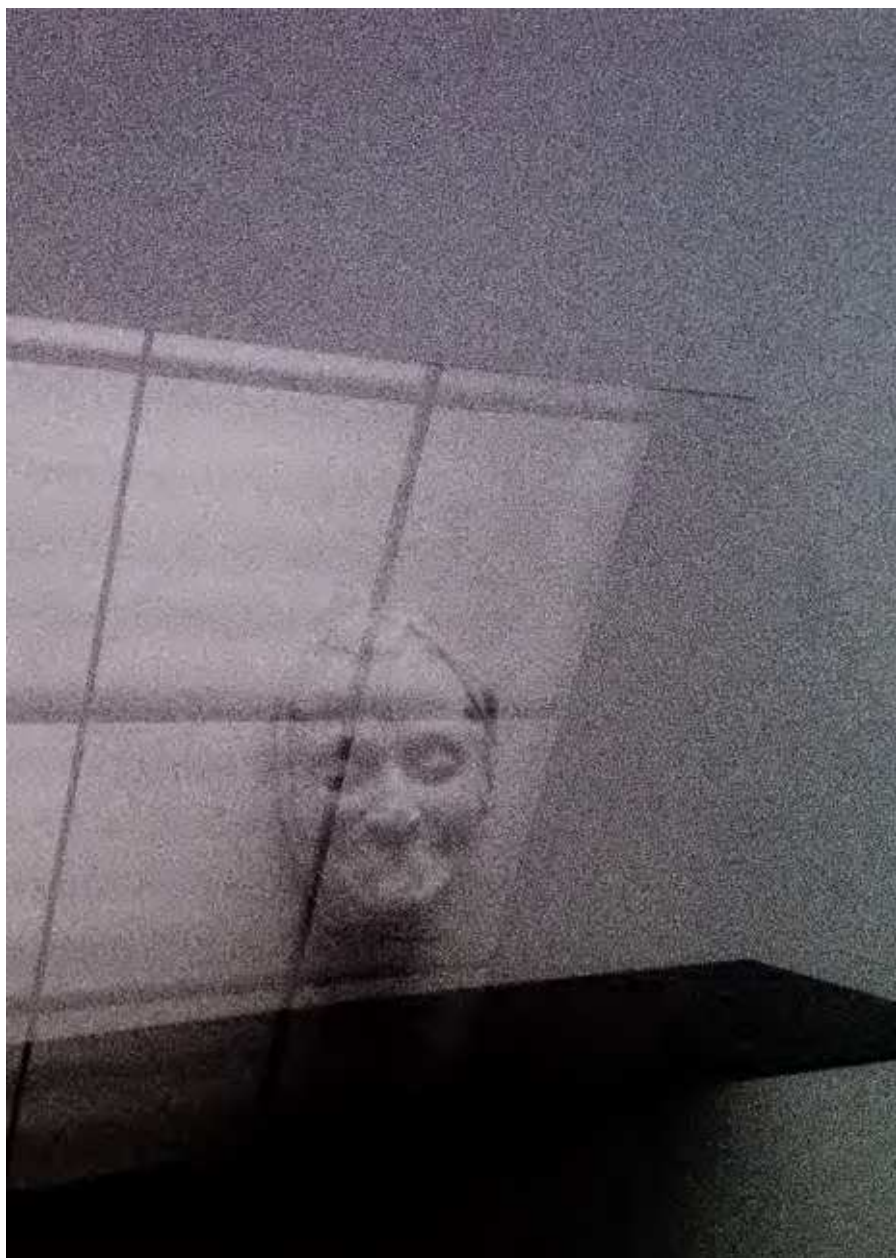


Fig. 92 – PICT0018, Jeroen Cavents, 2020.

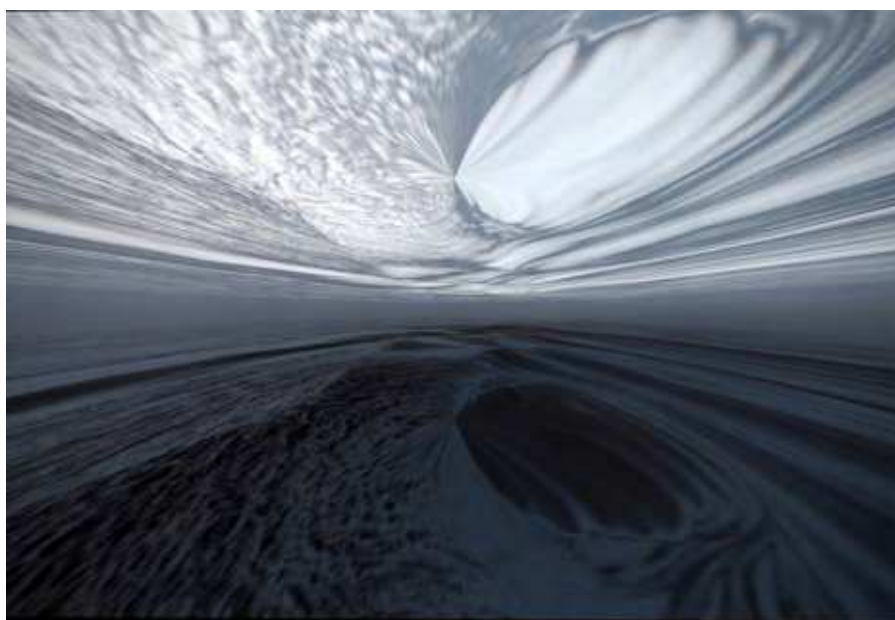


Fig. 93 – Road to mom, Josephine Florence, 2019.

Fig. 94 – Timeless Places 2, Joanna Wlasyzn, 2021.

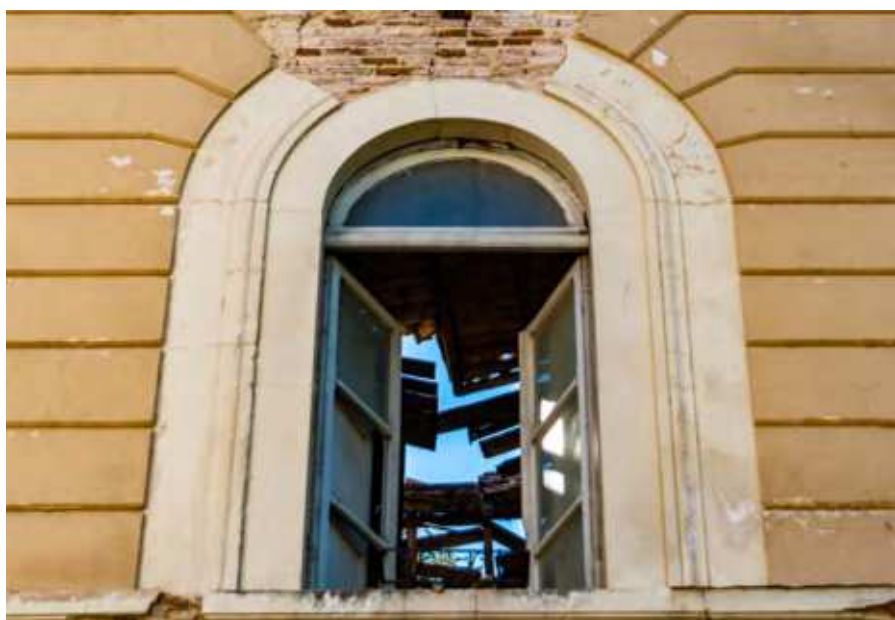
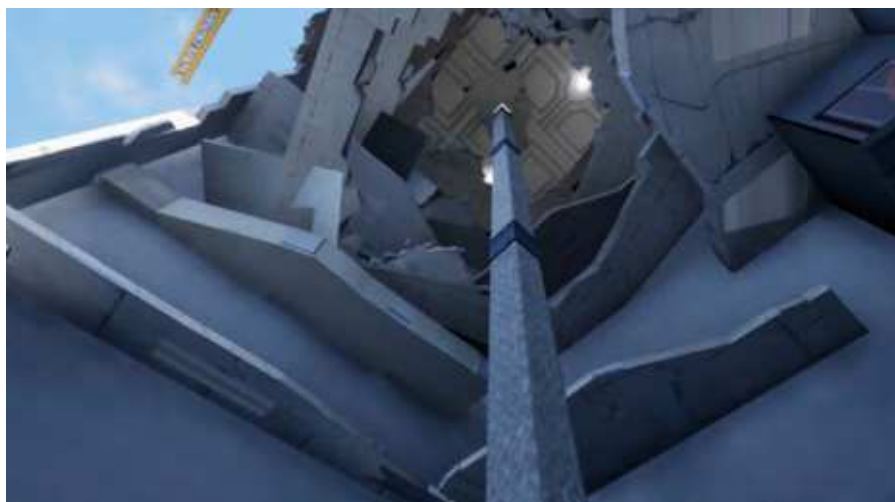


Fig. 95 – Dorsi, Inbar Hagi, 2019.

Fig. 96 – Finestra vista cielo, Iolanda Albrizio, 2020.



Fig. 97 – Memory Lost/Found #1, Laura Krasnow, 2014.

Fig. 98 – Within, Karolina Malinowska, 2021.



Fig. 99 – Beyond, Lee Panizza, 2021.

Fig. 100 – La nuova (ri)nascita, Letizia Maria Caputo, 2020.



Fig. 101 – Le cose importanti, Lucia Palomba, 2020.

Fig. 102 – Nebbia, Letizia Blini, 2020.



Fig. 103 – MFA of Yesterday and Today, Lisa Nelson, 2020.

Fig. 104 – Escape 1, Liyu Xue, 2021.



Fig. 105 – 1974 Ricordi, Luca Ponti, 2018.

Fig. 106 – sole tronchi colore, Luca Boffi, 2019.



Fig. 107 – Decommissioned, Kathryn Reichert, 2017.

Fig. 108 – Memories of Vermont 3, Madara Tropa, 2021.

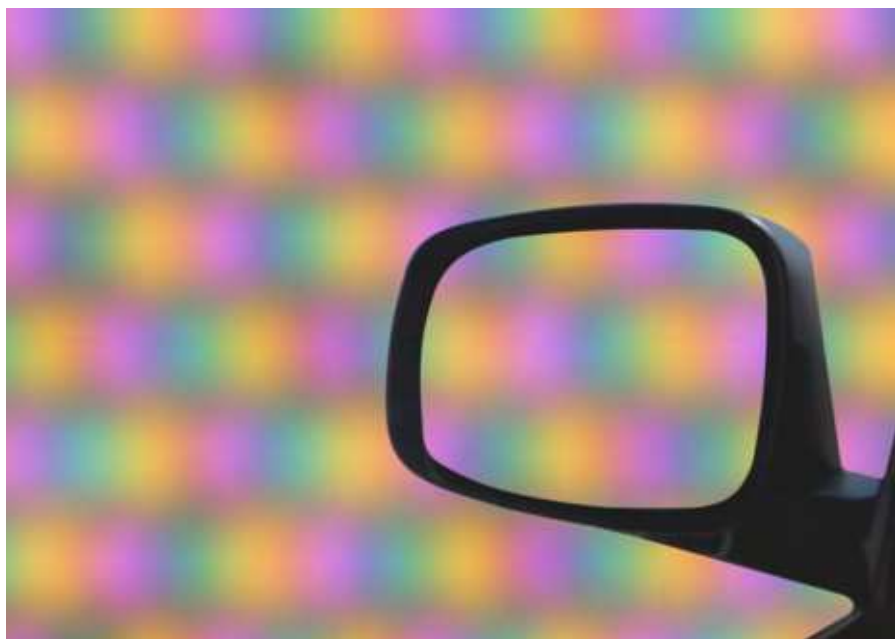


Fig. 109 – CMBR, Maciej Toporowicz.

Fig. 110 – Welcome to the paradise of algorithm (detail), Silvia Gallart, 2020.



Fig. 111 – Exits, Ana Maria Guta, 2021.

Fig. 112 – Puncturing the Berlin Tower, Manolis Iliakis, 2016.



Fig. 113 – Un'emozione arancione, Marco De Santi, 2020.

Fig. 114 – Il grido, Manuela Guglielmi.



Fig. 115 – Fantasy Modulation, Mare Kaczmarek, 2020.

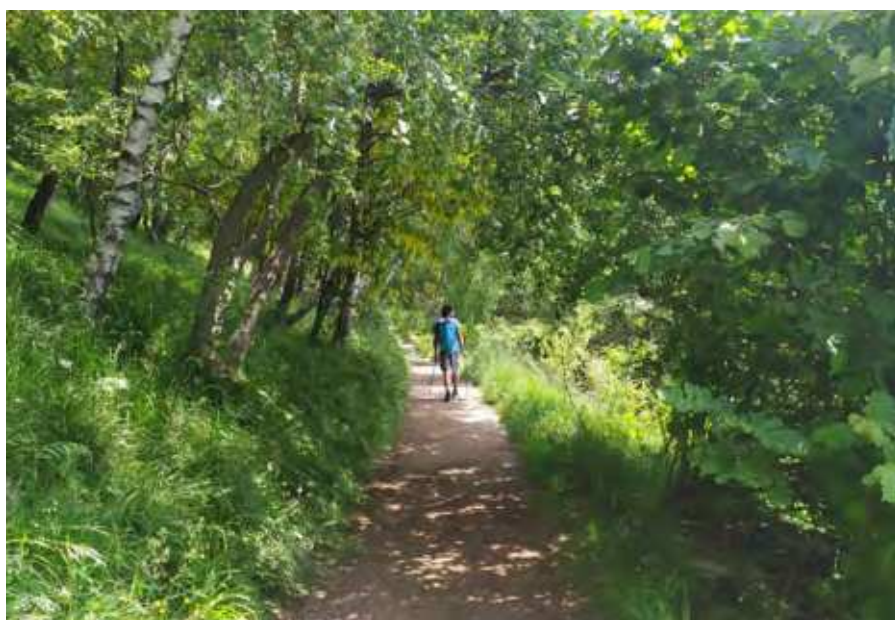


Fig. 116 – Campi di soia, Margherita Del Piero, 2020.

Fig. 117 – Bosco, Maria Terraroli, 2019.



Fig. 118 – La mattina, Marina Maiuri, 2020.



Fig. 119 – Memories, Mark Berghash, 2020.

Fig. 120 – Colorful serenity, Marina Modica Amore, 2021.



Fig. 121 – Non è l'amore che va via, Marilena Ieva, 2020.



Fig. 122 – Geometria moderna, Mario Carminati, 2020.

Fig. 123 – Tatomic Highway, Sam HEYDT, 2020.

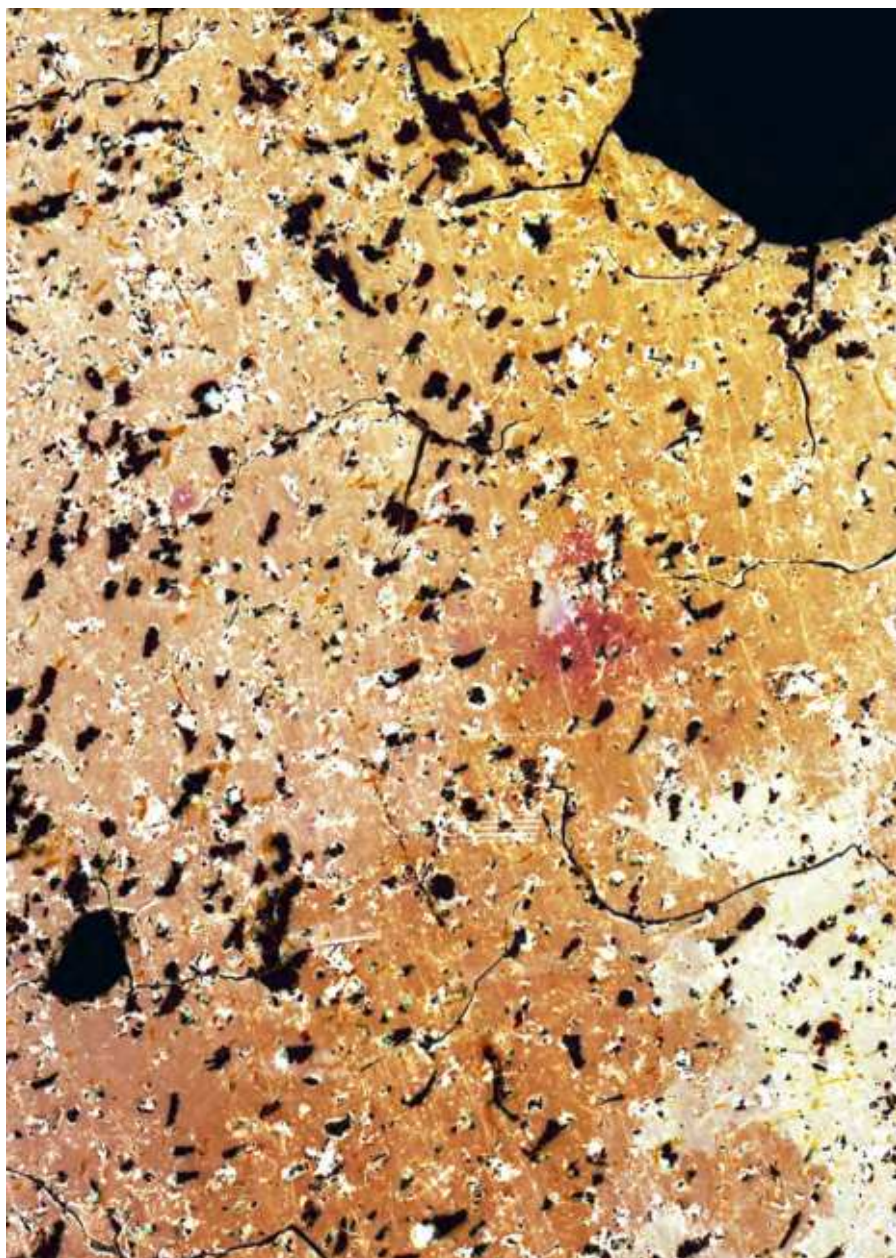


Fig. 124 – Se le fotografie scomparissero dal mondo, Stefano Scagliarini, 2021.

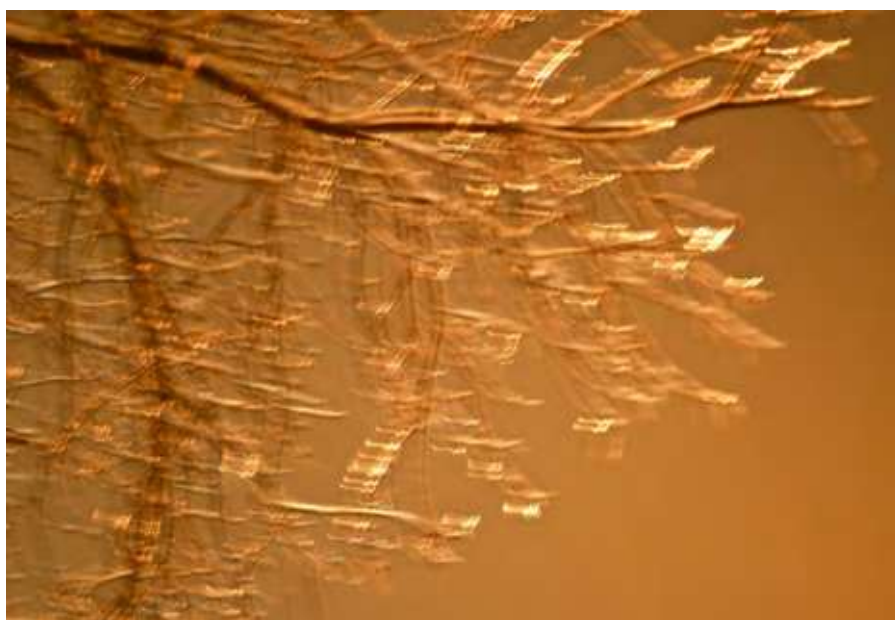


Fig. 125 – REVE e persistenza della memoria, Maurizio Teruzzi, 2018.

Fig. 126 – Save me from melting, Medea Paatashvili, 2010.



Fig. 127 – Breath in Breath Out, Martyna Benedyka, 2020.

Fig. 128 – Muscle Memory, Maurice Moore, 2021.



Fig. 129 – Špicer Castle, Beočin 1898, Milica Denković, 2021

Fig. 130 – Connection, Nikolay Vlahov, 2020.

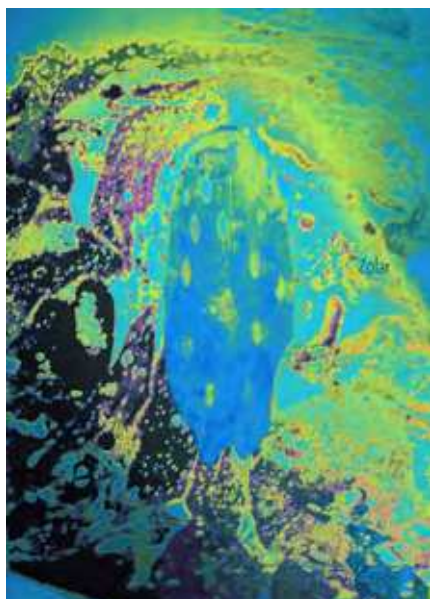


Fig. 131 – Mnemosphere Geometry, Myriam Solar, 2021.

Fig. 132 – MIRROR CAVE CAVE CAVE SPERABILIS, the181, 2018.



Fig. 133 – Architecture of memory (Deconstruction) 1, Nina Todorović, 2016.

Fig. 134 – Jexiste, Nino Memanishvili, 2018.



Fig. 135 – Nebbia, Nicola De Lorenzo, 2019.

Fig. 136 – The Birth of Venus, Milena Jovičević, 2015.

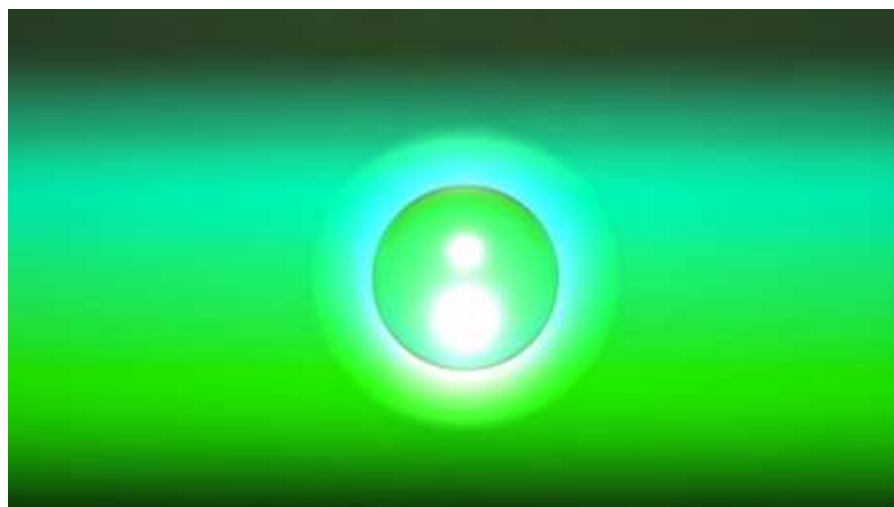


Fig. 137 – Field of dreams, Martina Gallegos, 2015.

Fig. 138 – The color of hope, Niklas De Jeroch, 2021.



Fig. 139 – Il cielo in una stanza, Paola Francesca Barone, 2020.

Fig. 140 – Hundred yers old platanus, Mihai Lukács.



Fig. 141 – Dead end, Olivia Froudine, 2006.

Fig. 142 – Die wand VI, Paolo Bandinu, 2019.



Fig. 143 – My summer emotions when I was a child, Olga Konstantynovska, 2021.

Fig. 144 – Untitled, Rosa Lacavalla, 2019.



Fig. 145 – Hands of time, Odirile Makaku, 2020.

Fig. 146 – Bright hour 7, Pedro Gramaxo, 2020.



Fig. 147 – Alone, Patryk Rogiński, 2018.

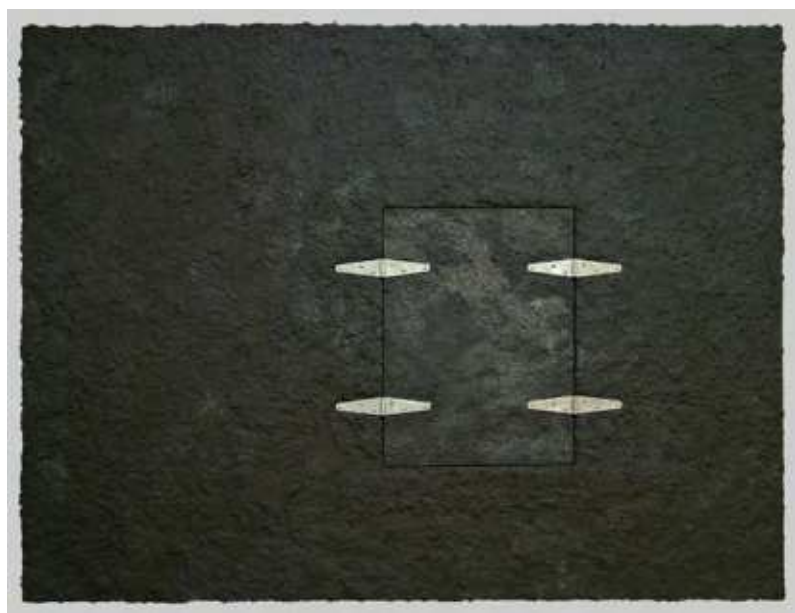


Fig. 148 – Nature near Khuzestan, Mana Hejazi, 2018.

Fig. 149 – Karasu No. 4, P. Prost, 2016.



Fig. 150 – Temple of Righteousness and Staunch Rectitude, Quince Pan, 2020.



Fig. 151 – Folding time/Wisdom engine, Tanya P. Johnson, 2020.



Fig. 152 – Entanglements of elevation VI, Trevor Coopersmith 2020.

Fig. 153 – Puesta de sol, Rachelline Centomo, 2021.



Fig. 154 – Hotel Molika 2019, Raji Jagadeesan, 2019.

Fig. 155 – Adventure people, Priti Biscuitwala, 2018.



Fig. 156 – Domestic epiphany, Vanessa Monna, 2018.

Fig. 157 – Longing for something we cannot quite remember, Teodor Tranca, 2018.



Fig. 158 – Daughter of Dust Motes, Shara Mercado Poole, 2018.

Fig. 159 – Jern, Syl Arena, 2020.



Fig. 160 – Yellow, Aleena Khan, 2017.

Fig. 161 – Searching, Warsame Isse, 2017.



Fig. 162 – Wet cyanotype number 250, William Reichard, 2020.

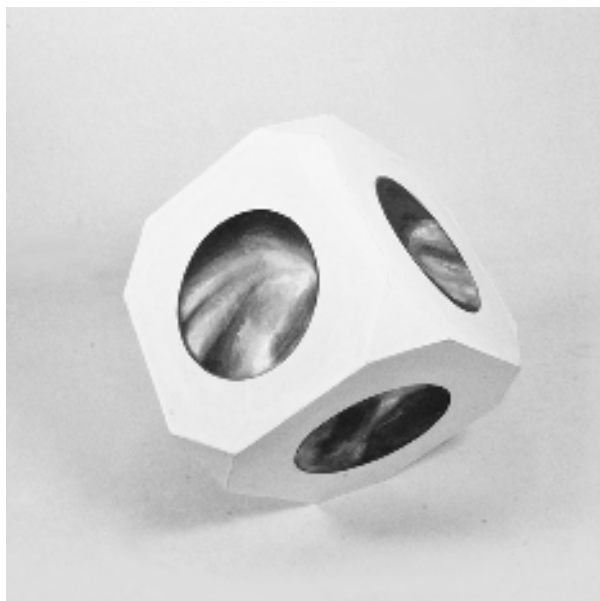


Fig. 163 – Cube Raum (Afiguration of time IV), Vanessa Pavelskida Gama, 2019.

Fig. 164 – Fading, Tony Bowen, 2018.



Fig. 165 – Casa, Laura Botticini, 2021.

Fig. 166 – Lost in Nuuk, Sylvain Souklaye, 2018.



Fig. 167 – Atmosfera, Steve Fossiant, 2021.

Fig. 168 – Figuração VII, Stéfani Agostini, 2020.



Fig. 169 – Overwhelmed, Shaky Cathedral, 2021.

Fig. 170 – Rovigo Due Torri, Luca Zonari Cane', 2019.



Fig. 171 – (As)solo, Roberto Vietti 2020.

Fig. 172 – Confrontation, Roopesh Sitharan, 2018.



Fig. 173 – Time preserved as memory 3, Rhea Gupte, 2017-2021.



Fig. 174 – Terra della risorgive, Simone Pella, 2021.

Fig. 175 – The takeover, Shruti Bijnorja, 2021.



Fig. 176 – Holding the last breath, Shaheera Aslam, 2021.

Fig. 177 – Colors, Sara Solomon, 2020.

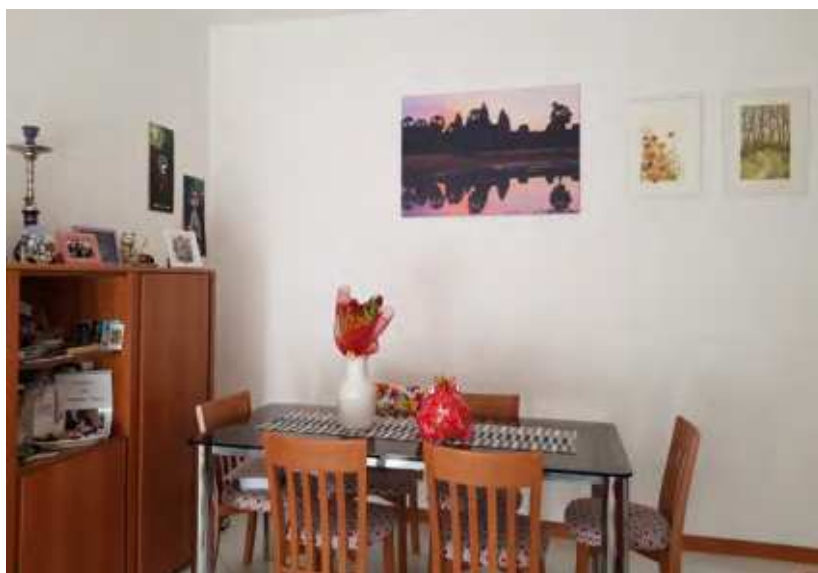
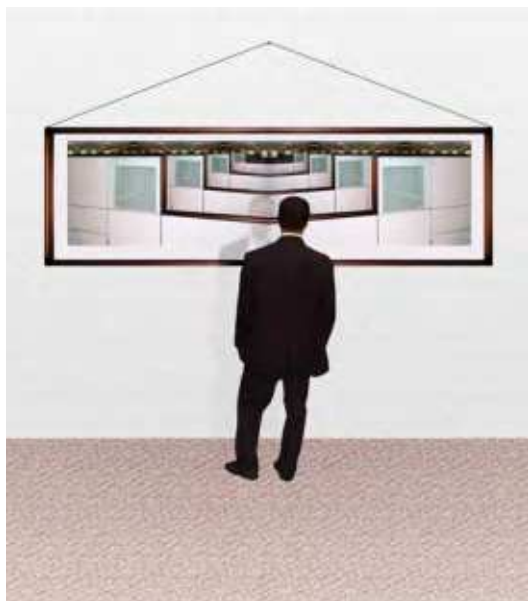


Fig. 178 – Home/Work, Simon Currel, 2010.

Fig. 179 – La mia mnemosfera, Simona Riganti, 2021.

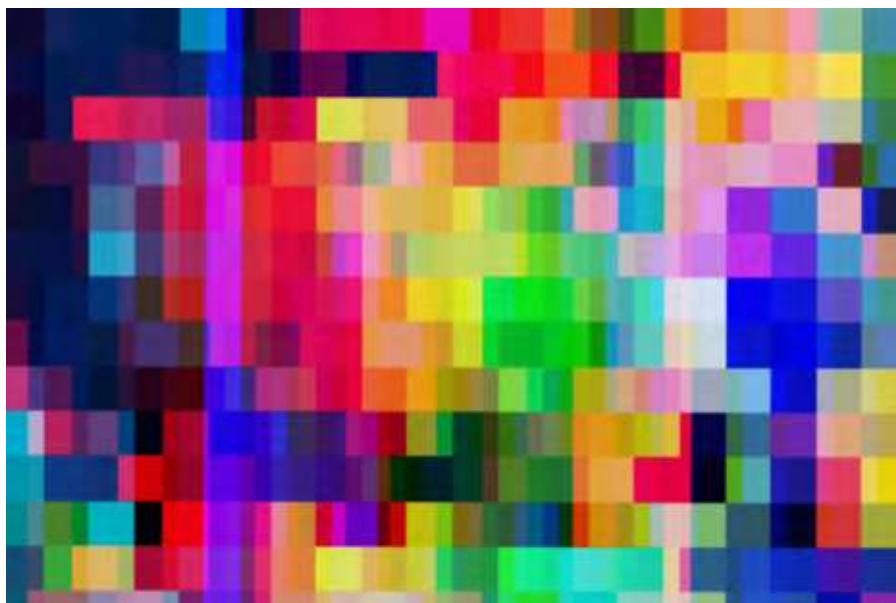


Fig. 180 – Atlas of emotions, Špela Jeretina, 2021.

Fig. 181 – Memory II, Wania Shaikh, 2019.



Fig. 182 – Donna/Mummia, Veronica Camastra, 2021.

Fig. 183 – We are finally reaching the mountains, Zoi Arvaniti, 2020.



Fig. 184 – Upwelling #8, Austin Turley, 2018.

Fig. 185 – Burst, Polona Pečan, 2020.

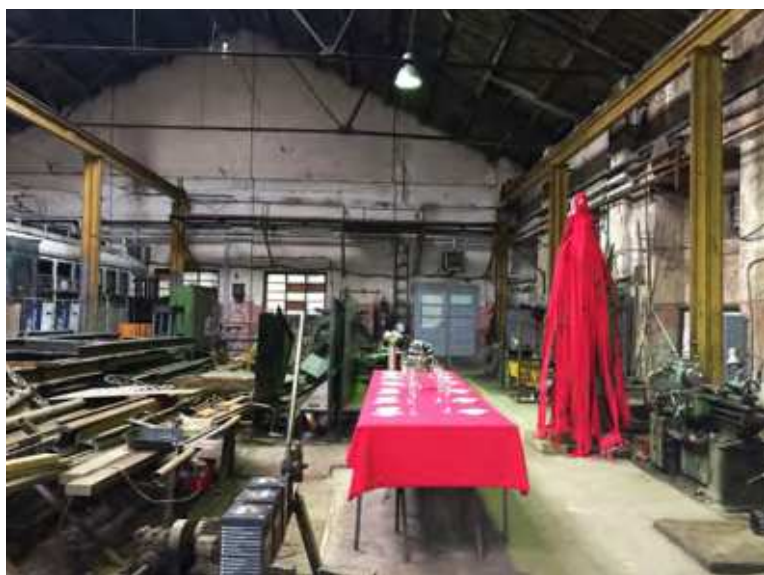


Fig. 186 – La prima volta non tornerà mai più, Riccardo Scagliarini, 2020.

Fig. 187 – Sweet Illusion and Minus 36, Renée Renard, 2019.



Fig. 188 – Dna, Maria Pilar Vettori 2020.



Fig. 189 – Guardians of Hong Kong 1, Ala Leresteux, 2015.

Fig. 190 – Connected, Shelby McIntosh, 2020.

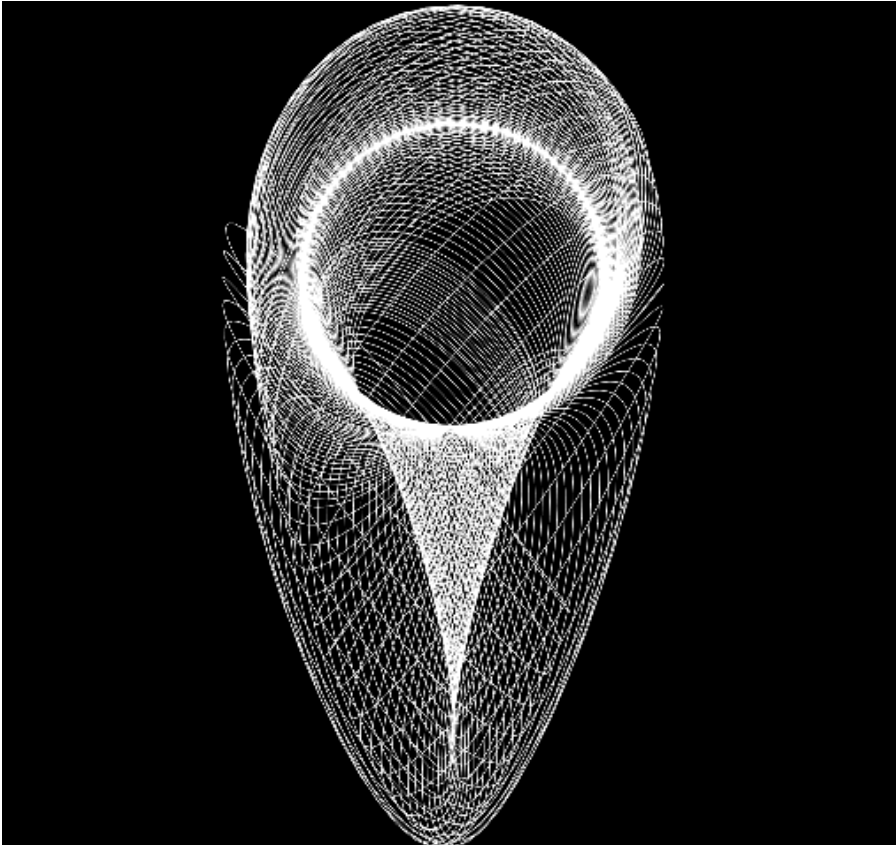


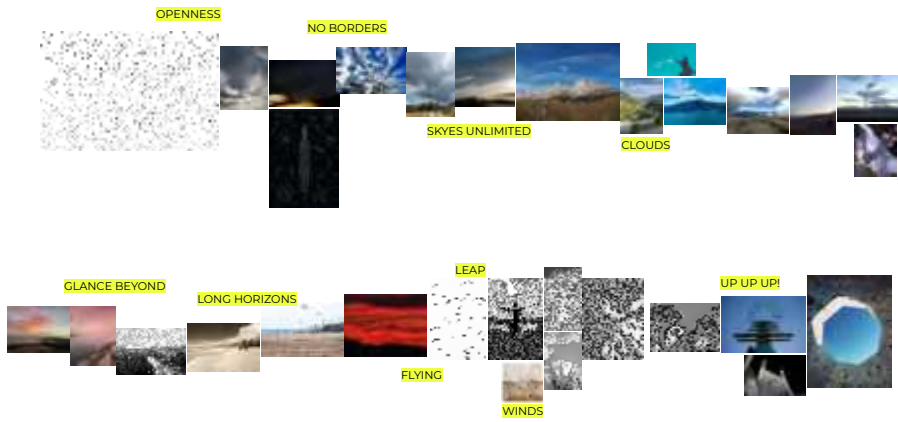
Fig. 191 – Topological quantum synthesis, Robert B. Lisek, 2020.

Mnemosphere Atlas

In this last part of the appendix, the Mnemosphere atlases are presented. The atlas medium allowed the images of the Open Call to be organised and interpreted according to the atmospheric perspective relating to the spatial layout of the depiction and in the mnestic perspective relating to the memory of places, thus becoming one of the devices for visualising the neologism of Mnemosphere in all its declinations and shades of meaning.

By curatorial choice, the atlases have been graphically adapted to the layout of the volume and, hence, are not displayed in the linear format used during the research project, which allowed the atlases to be approached as visual mnemospheric overviews. The atlases in their original layout can be found on the main website of the Mnemosphere project, to which we refer the full view: <https://www.mnemosphere.polimi.it/>.

AIR



DIAPHRAGM

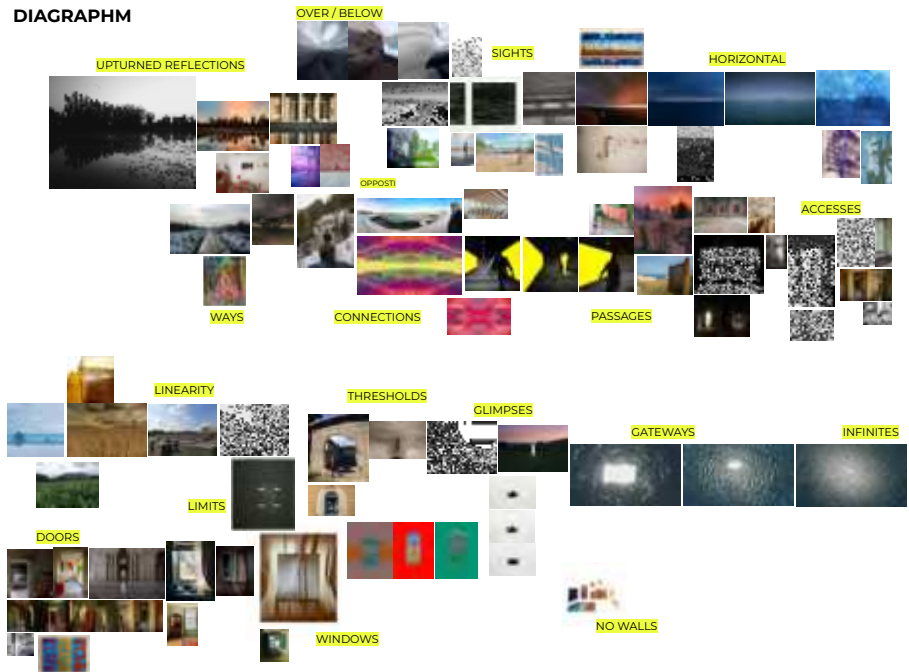
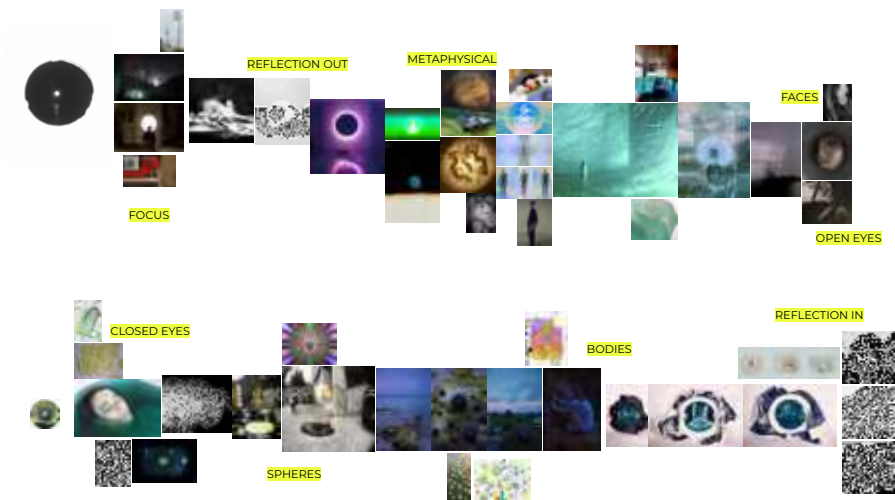


Fig. 1 – “Air” Mnemosphere Atlas (atmosphere).

Fig. 2 – “Diaphragm” Mnemosphere Atlas (atmosphere).

BUBBLE



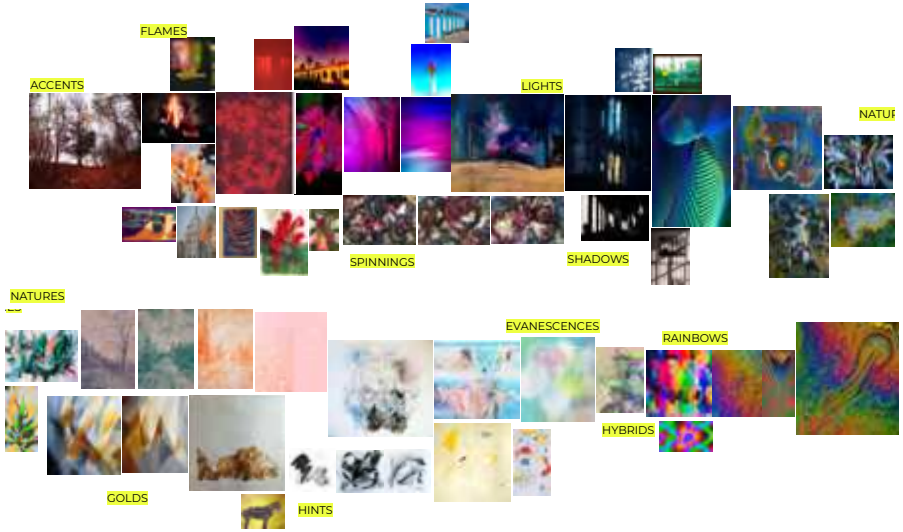
FOG



Fig. 3 – “Bubble” Mnemosphere Atla (atmosphere).

Fig. 4 – “Fog” Mnemosphere Atla (atmosphere).

COLOURFUL



VOID



Fig. 5 – “Colorful” Mnemosphere Atlas (atmosphere).

Fig. 6 – “Void” Mnemosphere Atlas (atmosphere).

NETS

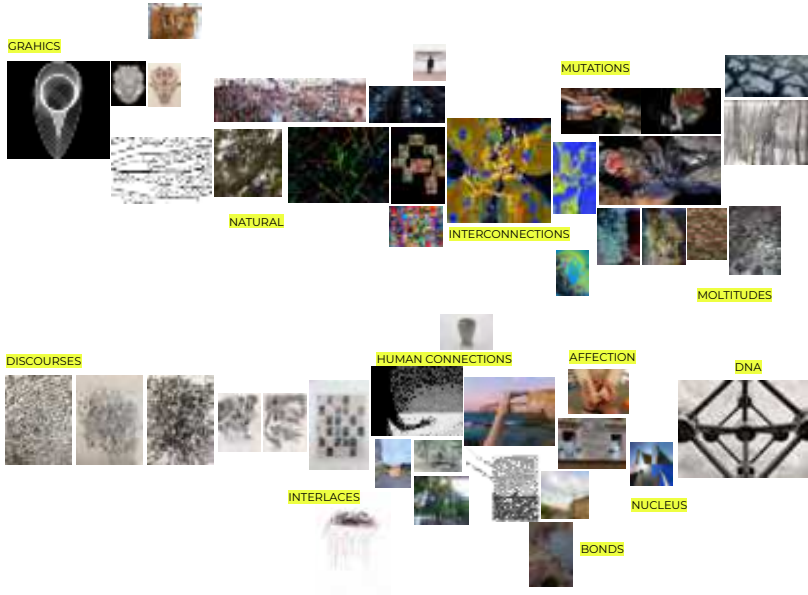
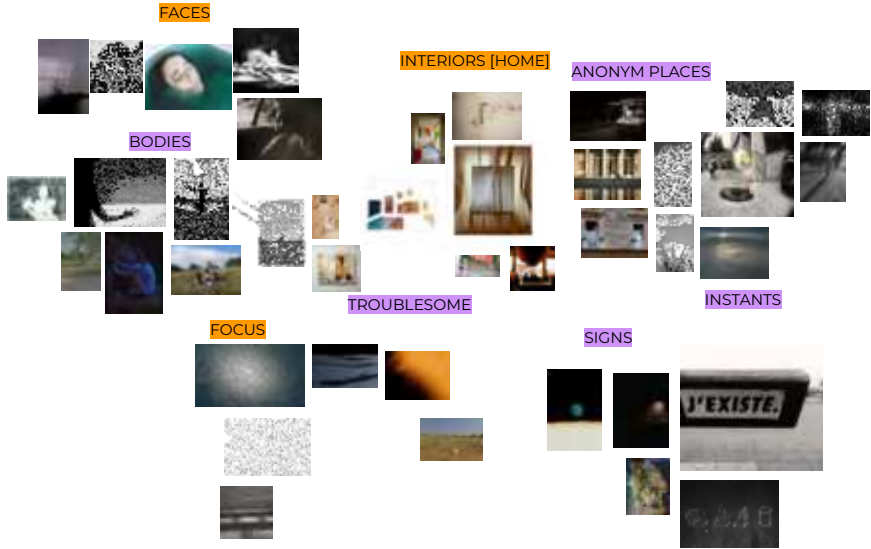


Fig. 7 – “Nets” Mnemosphere Atlas (atmosphere).

INDIVIDUAL MEMORY



COLLECTIVE MEMORY

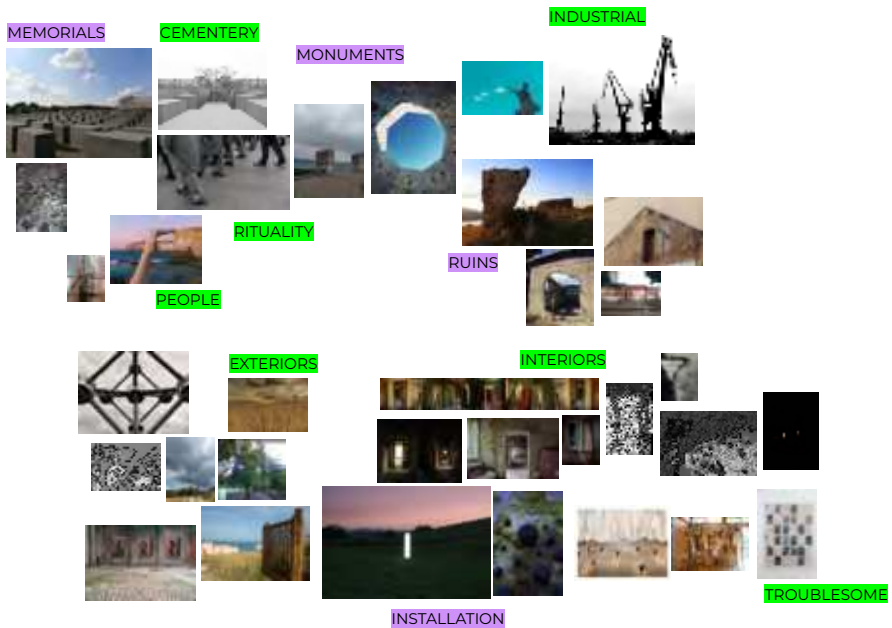
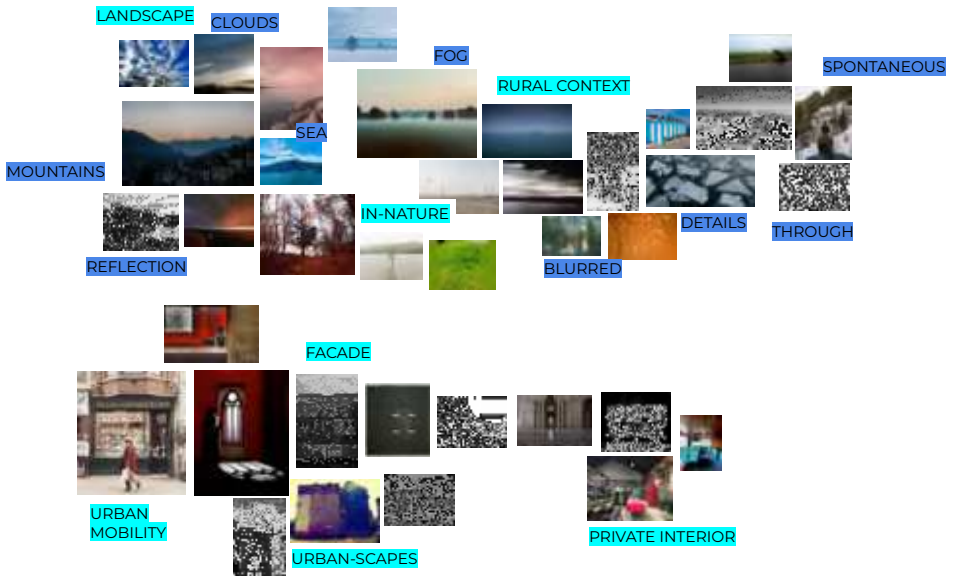


Fig. 8 – “Individual Memory” Mnemosphere Atlas (memory).

Fig. 9 – “Collective Memory” Mnemosphere Atlas (memory).

PHYSICAL ENVIRONMENT



ABSTRACT DIMENSION

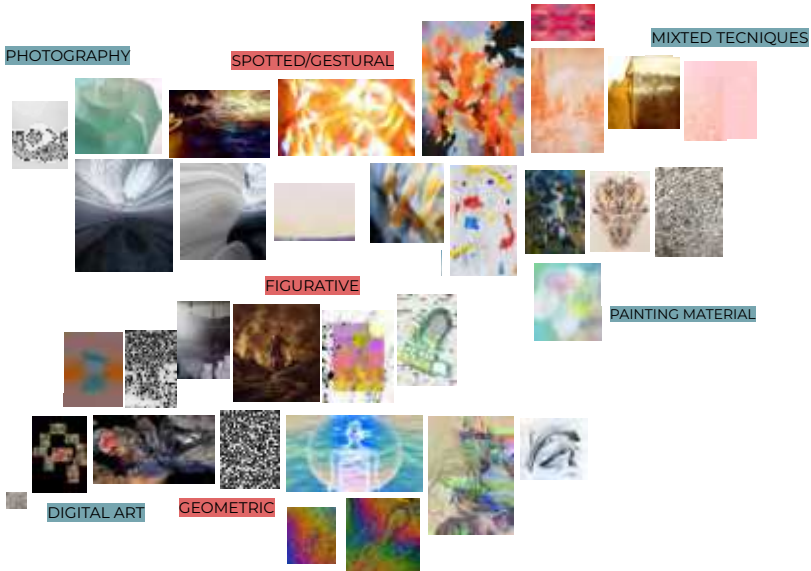


Fig. 10 – “Physical Environment” Mnemosphere Atlas (memory).

Fig. 11 – “Abstract Dimension” Mnemosphere Atlas (memory).

Authors

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This book is a collection of essays written by authors from different disciplinary and professional backgrounds, offering various points of view on *Mnemosphere*, which still does not have an unambiguous definition, drawing inspiration for considerations and insights. The *portmanteau* is nourished by the interaction between the spheres of memories, emotions, and atmospheres, also the sections into which the volume is divided. Its nature is mutable, metamorphic, open to continuous interpretation. What started as a university research project proves to be an engine of reflection and a design driver for multiple theoretical and applicative fields and disciplines. A new composite word becomes an active tool for culture and design. The nuanced essence of *Mnemosphere*, an entity without defined boundaries, is not a weak aspect but is embraced as one of the fundamental elements for the open and interdisciplinary encounter of themes and people around a common subject. From colour to photography, from aesthetics to the history of exhibition spaces, from the urban context to the concept of “emptiness”, and even to the memory of places.

Mnemosphere is a neologism that enhances our ability to communicate the complex realities we live and experience. It contributes to design research, manifesting itself in a visual exhibition accessible to all, which interprets its diverse conformations and meanings on an international level.