

THE PROJECT AND REPRESENTATION OF EMOTIONS IN INHABITED SPACE

Vincenza Garofalo¹, Maria Milano²

¹Università degli Studi di Palermo
Dipartimento di Architettura

²ESAD — Escola Superior de Artes e Design, Matosinhos
vincenza.garofalo@unipa.it
mariamilano@esad.pt

ESSAY 180/12

ATMOSPHERES
EMOTIONS
REPRESENTATION
COLLAGE
SPACE

This paper analyses the role of atmospheric representation in architecture, focusing in particular on the use of collage as an expressive tool to evoke the emotional and immaterial dimension of environments. Beginning with a theoretical reflection on architectural atmospheres and their perceptual construction, the paper explores how various architects and designers have utilised collage to represent spaces and experiences. Through historical and contemporary case studies, this study highlights how collage can transcend the limitations of photorealistic rendering, enabling greater expressive

and imaginative freedom. Furthermore, the paper presents two educational experiences conducted at ESAD in Matosinhos and the University of Palermo, where collage was employed as a tool to foster students' critical awareness of the atmospheric quality of designed spaces. The outcomes demonstrate that the visual representation of architectural atmospheres not only enriches the creative process but also translates the emotional experience of inhabiting into visual images. Collage is thus identified as a pivotal instrument in the design and communication of contemporary architecture.

INTRODUCTION

The elements of an environment, of an architectural space, exert an influence on human beings because they profoundly affect their sensory and emotional perception. “And what mediates objective factors of the environment with ambient feelings of a human being is what we call atmosphere. The atmosphere of a certain environment is responsible for the way we feel about ourselves in that environment. Atmosphere is what relates objective factors and constellations of the environment with my bodily feeling in that environment” (Böhme, 2017, p. 1). Thus, the atmosphere of an architectural space can be defined as the set of immaterial qualities that determine the multisensory experience of an environment. In this sense, atmosphere emerges from the dynamic interplay between human presence and the physical space, encompassing elements such as light, sounds, odours, temperature, colours, and materials.

“Architecture and design have always produced atmospheres, but the thinking about architecture mainly concentrated on buildings and their visual representation” (Böhme, 2017, p. 5). However, when the methods of Representational Science are employed to provide an objective and accurate representation of architectural design, architects and designers often resort to collage and photocomposition to evoke the atmospheric qualities of a space. These expressive techniques are tasked with conveying the complexity of spatial perceptions and the sensations a place can evoke.

This paper proposes an exploration of collage as a means of representing atmosphere in architecture, with the aim of consolidating it both as a practice capable of expressing a particular emotional and intangible dimension of architecture and, simultaneously, as a tool for critical design. Compared with other media, collage offers multiple layers of interpretation and evokes, in a more immediate way, the emotions elicited by a space for those who inhabit, traverse,

or move through it. It thus provides numerous avenues for further research, given its considerable didactic and scientific potential. The research methodology adopted begins with the critical observation of selected modern and contemporary experiments in architectural representation, supported by a range of bibliographic sources on the subject. These enable the contextualisation of issues related to architectural design and the representation of atmosphere. The study culminates in two teaching experiences carried out at ESAD – Escola Superior de Artes e Design in Matosinhos –Portugal– and at the Department of Architecture of the University of Palermo – Italy–, aimed at fostering in students a heightened awareness of the space they design and represent, and at confirming several of the hypotheses that emerged during the course of this research.

ATMOSPHERES IN THE CONSTRUCTION OF MEANING

In 1944, Mario Praz, a great traveller, art lover, and scholar of English literature and linguistics, wrote an essay, entitled *La Filosofia dell'arredamento*. At the time, this essay held minimal relevance in Italy; however, it swiftly evolved into an indispensable reference for scholars worldwide specialising in interior design culture. More than an essay, it is a reflection on interiors and the sense of interiority of the home. Praz was the first to question *Stimmung*, the “sense of intimacy, of the interior” (Praz, 1993, p. 55), which is not only expressed through the objects one surrounds oneself with, but is the result of a care that only a sensitive soul, open to the world, can truly perceive.

How is this sense of intimacy, which Praz discusses, designed and expressed? What atmosphere best conveys the sense of intimacy?

In his *Filosofia della Casa* Emanuele Coccia (Coccia, 2021) introduces the concept of domestic intimacy, no longer in stark contrast to the city – the cradle of philosophy, the in

which to free the soul, to let it fly. Both the city and the home are understood as part of a whole, as flux, where one cannot exist without the other. The city is the place of social contracts, of mutable relationships between the individual and the collective, but it cannot exist without the home. Sooner or later we always and inexorably return home, because this is the space that allows us to mediate our relationship with the city. According to Coccia, inhabiting a space is not merely a physical presence or occupation of a specific area, but rather an intricate weaving of relationships with the world around us (Coccia, 2021).

In the periods preceding the pandemic, the tensions and contrasts between public and private, domestic and urban spaces had progressively diminished, due to a more fluid and hybrid mode of living that integrated spaces for work and domestic atmospheres, leisure and productive and working activities. The proliferation of coworking and cohousing spaces demonstrated a new inclination towards the hybridisation of spaces, where public and private dimensions coexisted rather than being in opposition.

Today, the project of inhabiting has acquired new significance while maintaining an ambiguous relationship between public and private dimensions. The home is increasingly configured as a refuge, an absolute space of intimacy, yet simultaneously hyper-connected, opening up to the world. Simultaneously, spaces for leisure or work are designed to express a domestic atmosphere that enhances the experience of comfort, directly reflecting a private dimension of inhabiting materialised through atmosphere.

Peter Zumthor asserts that his design process never begins with a predetermined concept dictated by the characteristics of the site or the parameters of the programme. Instead, he originates from the pursuit of establishing an ambience. Designing the atmosphere of spaces is revealed as one of the most crucial aspects of an architect's or interior designer's practice. Atmosphere creates an emotional tension, for better or worse; it induces behaviours and proposes spatial

experiences. Coccia reminds us that “one can die of too much home” (Coccia, 2021). The pandemic period, with its frequent instances of violence due to excessive intimacy, exposed the ambivalence of the home as both a refuge and a space of imprisonment and abuse. A housing project that addresses these issues can help to ensure the appropriate balance between public and private dimensions. In this process, the design of the atmosphere assumes paramount importance.

The architect's role, therefore, is to utilise their sensitive skills in order to unite the various objects, qualities and properties of matter, thereby producing meaning. It is essential to ensure that space does not merely represent the concrete reality of things and materials, but rather produces emotions in human beings. For Zumthor, atmosphere speaks to our emotional perception. In his renowned book *Atmospheres* (Zumthor, 2007), he delineates nine spatial conditions that, individually or collectively, can create a certain atmosphere.

The Body of Architecture. An image that clearly illustrates the concept of the ‘body of architecture’ is Antonello da Messina's painting *San Girolamo nel suo Studio* (1475). The saint is portrayed there, intent on his writings, within a small space, a micro-architecture enclosed within a much larger environment that evokes the scale and monumentality of a cathedral. The disproportion between these two spaces contrasts with the small wooden cabin that houses the saint: a comfortable, domestic, and measured space. The factors that contribute to this sense of intimacy and comfort include the material of the structure, wood, the specific quality of light reflected upon it, its scale, which ensures a close relationship with the human body, and various everyday objects that hint at a domestic dimension of inhabitation, such as a hat, a cloth, cases, a pen holder, and many books. Size, scale, the relationship between load-bearing and supported structure, the relationship between solids and voids. All this, in relation to human proportions, represents the turning point of the humanistic culture of the Renaissance.

The Consonance of Materials. This concept refers to the ability to harmonise different materials so that they ‘vibrate’ in unison, much like the notes in a musical score, which may be numerous, varied, and even dissonant individually, yet together produce a harmonious melody. Reflecting on the work of Carlo Scarpa or Giò Ponti, one can appreciate the knowledge and skill required to combine a multitude of materials to achieve a coherent, unified, and harmonious composition. Often, for fear of making mistakes, designers opt for the simpler path of monochromatic and mono-material solutions, legitimised by modernist legacies that have led to formalist tendencies, which today risk being devoid of meaning. Carlo Scarpa, in the Querini Stampalia Bridge in Venice, masterfully integrates different materials - wood, brass, and iron - demonstrating his nuanced approach to materiality.

Scarpa embraced the concept of “intolerance an empathetic attitude towards imperfections, but also literally, as a margin for implementation. In his work, tolerance becomes an expressive pursuit. The wood of the handrail in the Ponte Querini Stampalia does not bend, it curves slightly, it looks like a prosthesis that works like a knee and at the same time softens and beautifies the object. The same happens with the uprights, which are independent of the attachments and are fixed at the end by simple screws”¹.

The Sound of Space. Zumthor sees every space as a great musical instrument: it collects, amplifies and transmits sound. In a highly evocative yet exemplary vision, the architect articulates this concept with the following words “I imagine removing noise from a building; at that point, there is nothing left. Nothing that creates contact between surfaces. At that point, silence can be perceived as a new element to make architecture, a new component that characterises a building. The image generated by this silence is beautiful”² (Zumthor, 2007, p. 29). Imagine the sound of the church of Sant’Andrea in Mantua, deserted, enveloped in fog creeping through its unusually open doors on a November evening. Imagine the

sound of your footsteps, amplified by the echo of the empty space. Similarly, Tadao Ando's Church of the Light invites contemplation and silence. Here, the resonance chamber is formed by the interplay of light and shadow, in a carefully balanced relationship capable of creating an atmosphere that naturally calls for quiet introspection.

The Temperature of Space. The ability to assess the various material qualities based on their respective perceptual temperature is another significant aspect on which Peter Zumthor focuses. He explains both the objective and subjective characteristics of this perception, which is not merely physical, related to touch, but above all psycho-perceptual, capable of evoking sensations of happiness, comfort, or their opposites. This theme is particularly relevant to the use of materials, colours, and light. It is well understood that wood is a 'warm' material, not only in its physical properties but also in its symbolic dimension, as it evokes everyday life and the comfort of the domestic environment. It recalls the myth of the primitive hut, the archetype of architecture³, a generator of ancestral memories, and a paradigm of shelter.

Objects that Surround Me. The objects that surround us contribute to shaping history and identity within spaces. This is crucial in creating an atmosphere that resonates with our emotional sphere, activating memories and feelings. The role of architecture is to ensure the presence of spaces for spontaneous individual appropriation, places to be filled with memories and personal affections.

Consider the house of Ray and Charles Eames in Los Angeles, built in 1949, Lina Bo Bardi's Casa de Vidro nestled in the forest, or Sergio Fernandez's house in Caminha, built in 1973 in northern Portugal. They are real containers of meaning, as well as of memory and everyday life.

Between Calm and Seduction. Architecture is the art of space. However, when life unfolds within a space, one inevitably engages with time as well; to the three-dimensional parameters of concrete space, a fourth dimension is added, that of movement, the measure of time.

Space can guide us unambiguously towards specific directions and functions, or it can 'seduce' us, inviting us to explore different paths and offering a broad capacity for choice. In a dwelling or a space designed for public activities, the interplay of multiple routes can embody the art of seduction, just as the alternation between spaces of contraction and expansion can ensure a balance between contrasting impulses.

Tension between Interior and Exterior. We inhabit the interior because there is always an exterior in which to seek refuge. The exterior provides a certain defence against excessive intimacy. It is worth remembering that it is often within the domestic sphere that the most atrocious acts of violence occur. Conversely, even though we spend much of our day in the exterior, we always feel the need to return home. The exterior allows us to expand, while the interior enables us to gather ourselves. This dynamic is central to the experience of dwelling in the world, ensuring that we feel we are part of it.

Degrees of intimacy. Dimensions, materials, and light modulate the degrees of accessibility within a space and, consequently, its levels of intimacy. The relationship between public and private has always been one of the fundamental parameters defining and characterising architecture. While it seems evident that the atmosphere of a space is influenced by its degree of privacy, the underlying rules governing this relationship remain complex and elusive. An intimate space encourages individual and spontaneous appropriation, fostering a process of identification between its inhabitant and the space itself. As a result, it is more likely to generate a domestic and familiar atmosphere. Conversely, an out-of-scale environment can hinder this process of 'domestication', making the space feel impersonal, tense, or cold. Herman Hertzberger (Hertzberger, 1996) acknowledges the significance of the relationship between public and private, demonstrating that these concepts are not in opposition but rather relative. A space is public only in

relation to another that is more private. There are different nuances in the relationships between public and private that generate different degrees of intimacy. The more intimate a space is, the more its inhabitant feels comfortable, at ease, appropriating it spontaneously and naturally.

Light on Things. Light is what makes things visible, Le Corbusier once stated. And Peter Zumthor reiterates this, showing the importance of light in building the right atmosphere. Light is not only that which filters through a window; it is also that which is reflected by materials and surfaces. In Junichirō Tanizaki's *In Praise of Shadows*, written in 1933 (Tanizaki, 2000), light is an entity that only makes sense in relation to shadow. Indeed, shadow is just as significant as light in the composition of atmosphere.

The rooms of traditional Japanese houses are filled with a muffled atmosphere, thanks to the use of wood and rice paper instead of glass for doors and windows. It is the darkness that makes these dwellings intimate. The objects within them serve to maximise the limited light available, which is why traditional Japanese artefacts are often finished with glazed and lacquered surfaces. Mastering the balance between light and shadow – rather than adhering to the Modernist legacy of excessive brightness, characterised by vast expanses of glass, transparency, and a seamless connection between interior and exterior – is essential in the creation of atmosphere.

THE REPRESENTATION OF ATMOSPHERIC QUALITY

Every interaction with architecture engages multiple senses, through which spatial, material, and dimensional characteristics are perceived. In this way, “an architectural work is not experienced as a collection of isolated visual pictures, but in its fully embodied material and spiritual presence. A work of architecture incorporates and infuses both physical and mental structures. The visual frontality of the architectural drawing is lost in the real experience of architecture” (Pallasmaa, 2005, p.

44). Moreover, methods and techniques of representation often neglect the sensory and immaterial dimension of architecture. To express its atmospheric qualities, it is necessary to resort to expressive techniques that allow for the representation of the subjective perception of spaces. Collage, with its combination and layering of images, fragments, colours, and textures, proves to be an effective tool for representing the complexity of spatial perceptions and the sensations linked to the experience of a place and its atmospheric quality.

While photorealistic rendering tends to limit imaginative capacity, collage presents itself as an expressive alternative that broadens the possibilities for visual exploration, encouraging new modes of imagination (Galofaro, 2019). From its appearance in the Modern Movement to the conceptual experiments of radical architecture and contemporary approaches, collage has established itself as a tool to support the design process through evocative representations of three-dimensional space.

Among the most famous examples, Mies van der Rohe's collages suggest the spatiality and transparency of his architecture through understated compositions, often monochromatic or featuring only a few notes of colour derived from the identification of materials, in a combination of photographs, cut-outs, and drawings (Beitin et al., 2017). The interiors represented are large spaces characterised by a few elements – pillars, dividing walls, artworks – and transparent surfaces that relate the interior to the landscape, as seen in the interior perspective of the *Ron Bacardi y Compania, S.A., Administration Building, Santiago, Cuba* project, 1957 (Figure 1). The space is sometimes defined by perspective grids, as in the interior perspective of the *Museum for a Small City* Project, 1941 – 1943 (Figure 2). “In the original collages one can discover that Mies van der Rohe used to draw into his students' works, for example a tree or a chair or something else that mostly served to give the design a more precise atmosphere” (Hammers, 2017, p. 90). In the architectural scene of the 1960s and 1970s, collectives such as Archigram in London and Superstudio

Fig. 1 Ludwig Mies van der Rohe, *Ron Bacardi y Compania, S.A., Administration Building project, Santiago, Cuba (Preliminary version: interior perspective)*, 1957. <https://www.moma.org/collection/works/781>

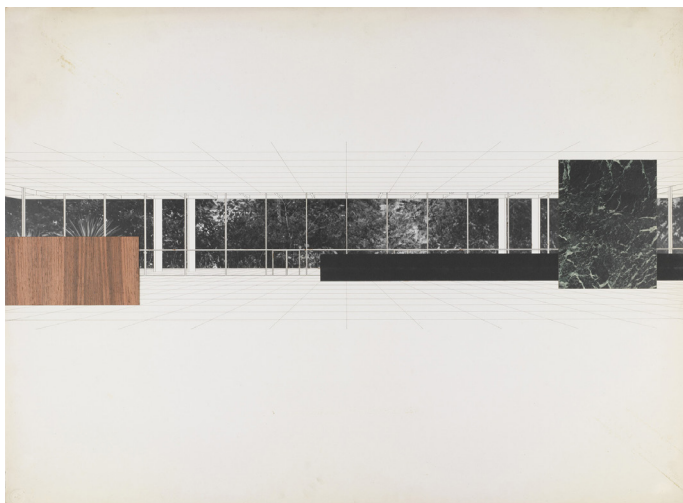
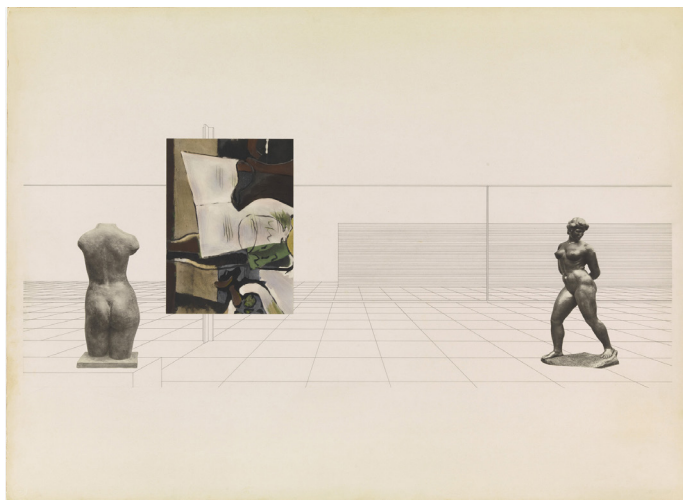
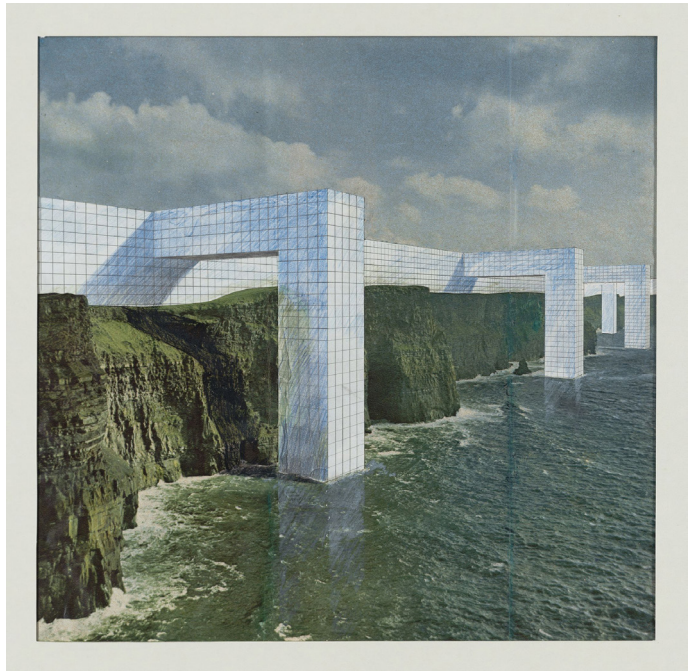


Fig. 2 Ludwig Mies van der Rohe, *Museum for a Small City project (Interior perspective)*, 1941-43. <https://www.moma.org/collection/works/756>



in Florence brought the collage technique to a visionary and provocative dimension, using it not only as a means of representation, but also as a tool for social criticism and design reflection. Through this expressive mode, they developed visions of futuristic cities and utopian or dystopian scenarios, exploring new possibilities for architecture and urbanism beyond traditional conventions. Significant examples such as *Walking City* (1964) and *Instant City* (1968) demonstrate Archigram's use of collage to blend technological

Fig. 3 Superstudio, Gian Piero Frassinelli, Alessandro Magris, Roberto Magris, Cristiano Toraldo di Francia, Adolfo Natalini, *The Continuous Monument: On the Rocky Coast, project (Perspective)*, 1969. <https://www.moma.org/collection/works/936>



elements, science fiction imagery, and references to mass culture in order to represent a dynamic city that evolves with its inhabitants. In the project *Il Monumento Continuo* (1969), Superstudio imagines a single modular architectural structure that extends indefinitely, overlapping both natural landscapes and existing urban settlements, critically investigating the consequences of extreme standardisation in the built environment (Figure 3).

The evolution of digital technologies has led to a significant transformation in the practice of collage. Increasingly, contemporary architects use digital collage as an expressive means of synthesis to represent the immaterial qualities of architectural space, combining digitally generated visual elements with photographs, textures, and three-dimensional models (Santibañez, 2017). In these cases, the collage is not merely a graphic translation of the design idea, but an integral part of the design process itself, an active tool in the creation of atmospheres through the careful combination

of heterogeneous elements. In contrast to the increasingly pronounced hyperrealism of digital renderings, the collage retains the ability to stimulate the viewer's imagination in representing a design intention. For the Belgian Office KGDVS, "the process of collage, with images, lines, and colours layered in Photoshop, avoids the realism of rendering, adding conceptual density and depth to the perspective view and making the digital drawing resemble those created with conventional techniques in the 1960s and 1970s, but with a sense of proportion, a sophisticated innocence in the imagery, a fantastic realism, and a perspective view deliberately altered in a painterly manner"⁴ (Gargiani, 2019, p. 121).

Mexican architect Tatiana Bilbao relies on collage to communicate the materiality and scale of her designs, avoiding digital renderings as they are seen as a limitation to the creative process. For the Portuguese Fala Atelier, collage is a tool for imagining space that evolves alongside the architectural idea. The project is accompanied by a series of digital images in which the framing, viewpoint, structural elements, and flooring remain fixed. The final result of the creative process corresponds to the last version of the collage, to which the photographic image of the completed architecture can therefore be superimposed. The similarity between the digital image and the realised architecture is very high, proving that even collage can convey the qualities of the design.

A TEACHING EXPERIENCE AT ESAD IN MATOSINHOS

To explore how to design and convey the appropriate atmosphere of a space, students of the Master's in Interior Design at ESAD –Portugal– in the 2024-2025 academic year were tasked with designing and representing the atmosphere of either a hotel room or a hotel lobby, situated in three distinct locations around the world, New Orleans, Tokyo, and a desert setting, following the guidelines outlined below:

Fig. 4 Ana Branquinho, *Coven Hotel a New Orleans*, digital collage. Sun Room, daytime and nighttime setting.



- The place, its culture, and its materiality had to be an integral part of the project and contribute to the construction of a unique experience for a specific, detailed audience. The design process starts from these premises and develops through the construction of a series of *moodboards* capable of progressively leading to a certain experience, depending on the place and its specificities and on the target audience;
- In a second moment, students are asked to create a story board capable of graphically communicating the experience proposed to the customer, from the moment

Fig. 5 Ana Branquinho, *Coven Hotel a New Orleans*, digital collage. Sun Room, bathroom.



enter the lobby, check in or arrive in their rooms. The student is thus able to understand that today's hospitality project is consumed, more and more, by an immersive experience that involves the guest, stimulating their senses, imagination and exceeding their expectations;

- The design of the atmosphere becomes the next step.

The atmosphere anticipates and evokes the promise of a certain experience and is a decisive moment in the design. Students are then asked for a moodboard that synthesises the experience and atmosphere of the space;

- The design of the proposed space, its dimensioning, the articulation of spaces and functions begin, but from very different premises than those usually referred to by the architect: no longer site and programme, but the desire to achieve a specific atmosphere;

- The last step required of students is, therefore, to represent the atmosphere of the space and the experience of the designed space.

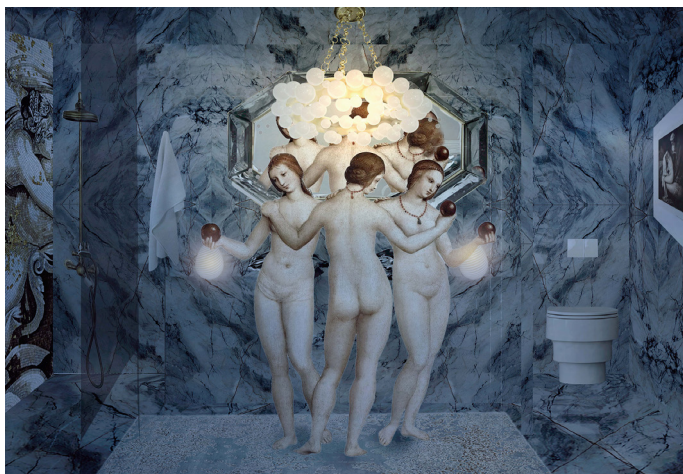
Naturally, it is relatively straightforward to describe atmospheres when analysing concrete, already realised spaces. We can perceive their scents, sounds, and overall ambience through our psycho-perceptual faculties. However, when designing a space, how can we anticipate and represent an atmosphere that will only materialise in the future?

Fig. 6 Ana Branquinho, *Coven Hotel a New Orleans*, digital collage. Moon Room, daytime and nighttime setting.



The technical drawing, the sketch, the physical model or the digital 3D, are important tools for investigating and verifying the project, but the tool that seems most appropriate for representing atmospheres, capable of introducing different levels of reading, is the collage. It does not presuppose a realistic representation of the project and the proposed atmosphere, but evokes memories, environments, suggests moods, digging into the folds of emotions as no other design tool is able to do. Moreover, it is the only medium capable of integrating diverse disciplines and techniques, such as technical drawing, photography, sketching, and illustration.

Fig. 7 Ana Branquinho, *Coven Hotel a New Orleans*, digital collage. Moon Room, bathroom.



Beyond offering a space for imagination, collage opens up multiple avenues for expression and design, becoming an essential tool in the designer's creative process. Rich in potential, it possesses a unique ability to evoke atmosphere. Collage is an invitation to density, meaning, dream, memory, simultaneity, and multidimensionality.

According to the provided guidelines, students developed a project for each of the proposed locations.

For the *Coven Hotel* project, designed for New Orleans, student Ana Branquinho envisioned a clientele seeking an

Fig. 8 Gloria Sousa, *Native Healing Hotel & SPA nel Mojave Desert*, digital collage. Yoga Room.



experience centred on mysticism, the occult, mystery, magic, and a certain hedonism. The hotel becomes a kind of 'portal' introducing guests to an alternate world, with an atmosphere constructed around mystical themes of the sun, moon, and celestial bodies, imagined both during the day and at night. At night, in particular, the mystery and magic evoked by the space, its finishes, and the objects inhabiting the interiors intensify the overall atmosphere (Figures 4-7).

With the *Native Healing Hotel & SPA* project, student Gloria Sousa explores the indigenous culture of the Mojave Desert, United States, offering visitors a sensory experience shaped by

Fig. 9 Gloria Sousa, *Native Healing Hotel & SPA nel Mojave Desert*, digital collage. Bathroom and SPA, daytime and nighttime setting.

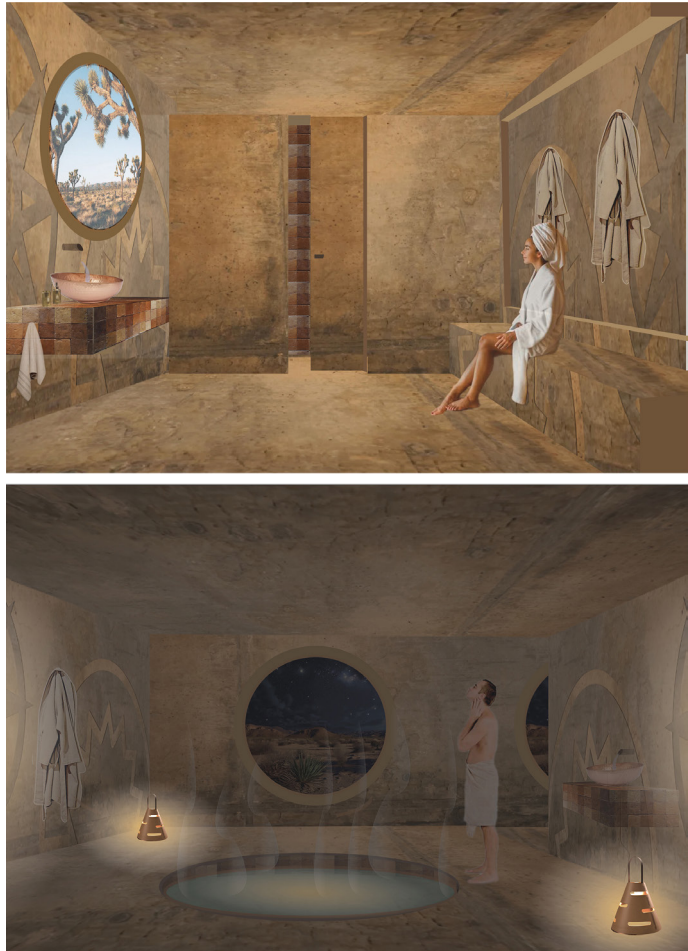


Fig. 10 Giada Guerrero, *Sento Hotel a Tokyo*, evocative collage of a potential atmosphere – initial phase.



the colours and materials of the desert landscape. The space, a reinforced concrete structure incorporating locally sourced sand rich in iron, presents a raw, tactile atmosphere designed to encourage reflection and relaxation (Figures 8 and 9).

For the *Sento Hotel* project, student Giada Guerrero drew inspiration from Tokyo's long-standing public bath culture, proposing a spacious *Ofuro* bathing area within the hotel lobby. The atmospheric quality of the space is achieved through the selection of essential materials: concrete, wood, and handcrafted green tiles. Warm water and steam, together with the minimalist furnishings, contribute to creating a rarefied, muffled and silent atmosphere, becoming an integral part of the project (Figures 10-15).

Fig. 11 Giada Guerrero, *Sento Hotel a Tokyo*, left: story telling – the promise of an experience; right: sketch of the driving project idea – distribution and conceptual space design.

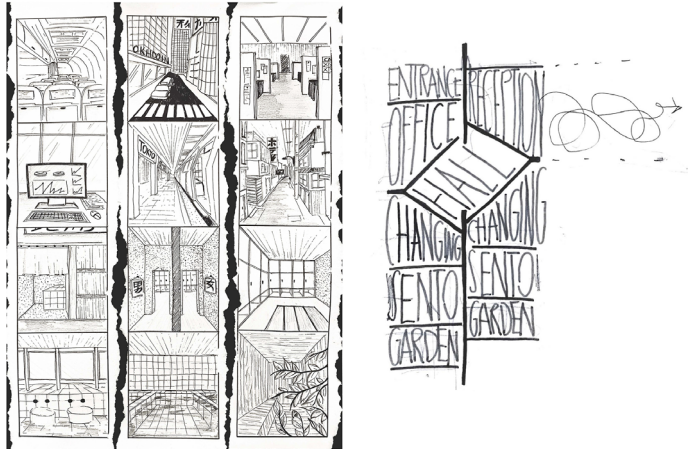
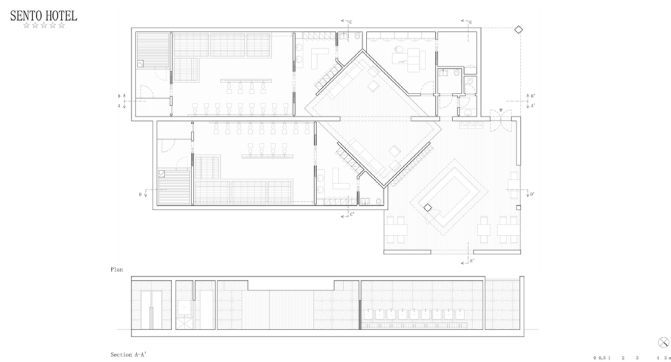


Fig. 12 Giada Guerrero, *Sento Hotel a Tokyo*, plan and section of the project.



A TEACHING EXPERIENCE AT UNIVERSITY OF PALERMO

In December 2024, students from the Department of Architecture at the University of Palermo, enrolled in the Multimedia Drawing and Representation course –Industrial Design programme–, participated in the workshop *The Representation of Design: Atmospheres, Environments, Spaces*. The educational path was inspired by the nine spatial conditions theorised by Peter Zumthor in his text *Atmospheres*, offering a reflection on architecture's ability to evoke sensations and emotions through graphic representation. Students were asked to explore the concept of atmosphere by representing an imaginary space capable of conveying an emotion, sensation, feeling, or vice, choosing from fear,

Fig. 13 Giada Guerrero, *Sento Hotel a Tokyo*, digital collage. Lobby view.



Fig. 14 Giada Guerrero, *Sento Hotel a Tokyo*, digital collage. Lobby view.



Fig. 15 Giada Guerrero, *Sento Hotel a Tokyo*, digital collage. Bathroom area view.



love, joy, anxiety, anger, solitude, lightness, suspension, lust, or disorientation. The expressive tool for the development of these concepts was collage, either analogue or digital, leaving students the freedom to define the visual language most suited to their interpretation.

After investigating the role of collage in developing critical spatial awareness, the work was divided into two main phases: a first phase of analysis, in which students identified the atmospheric characteristics of their space, and a second phase of visual translation, in which they created analogue collages using various materials –paper, photographs, magazine cut-outs, drawings– or digital collages, combining raster images and vector elements, to evoke the sensory experience of their designed space. The combination of heterogeneous visual fragments allowed for the construction of scenarios capable of provoking specific moods, transforming graphic representation into an expressive device capable of translating the atmosphere of an imagined environment into a visual and sensory experience. The collection of collages produced by the students reveals a repertoire of recurring visual and perceptual modalities through which atmosphere is represented as an immaterial and emotional quality of space. A first tendency concerns the use of perceptual ambiguity and spatial instability as tools for evoking complex states of mind. Some collages depict impossible figures and elements that destabilise the perception of place and of the body's position within the represented space. In *Disorientamento* by Alessandra Picone, for example, an ambiguous space articulated by different elements is represented. The presence of flights that recall the spatial paradoxes of Escher's staircases –in which the intrados becomes the extrados and vice versa–, reflective surfaces that duplicate elements, and an impossible prism that simultaneously combines contradictory viewpoints, generates a sense of disorientation and disruption in perceptual coherence, made explicit by the presence of a labyrinth depicted in a painting (Figure 16). This pursuit of ambiguity and geometric instability recurs in other collages in

which the fragmentation of space or the denial of perspectival coherence are adopted by the students to evoke atmospheres of uncertainty and precariousness. A second tendency concerns the evocative use of colour and materiality as devices that generate atmosphere. If, on the one hand, the use of warm or saturated colours suggests an intensely emotional atmosphere, on the other, the choice of cold or neutral colours, sometimes limited to black and white, emphasises sensations of detachment and solitude in rarefied spaces.

In *Lussuria* by Sara Polisano, a theatrical space with a sensual atmosphere is represented (Figure 17). The use of gold, red,

Fig. 16 Alessandra Picone, *Disorientamento*, 2024, digital collage.

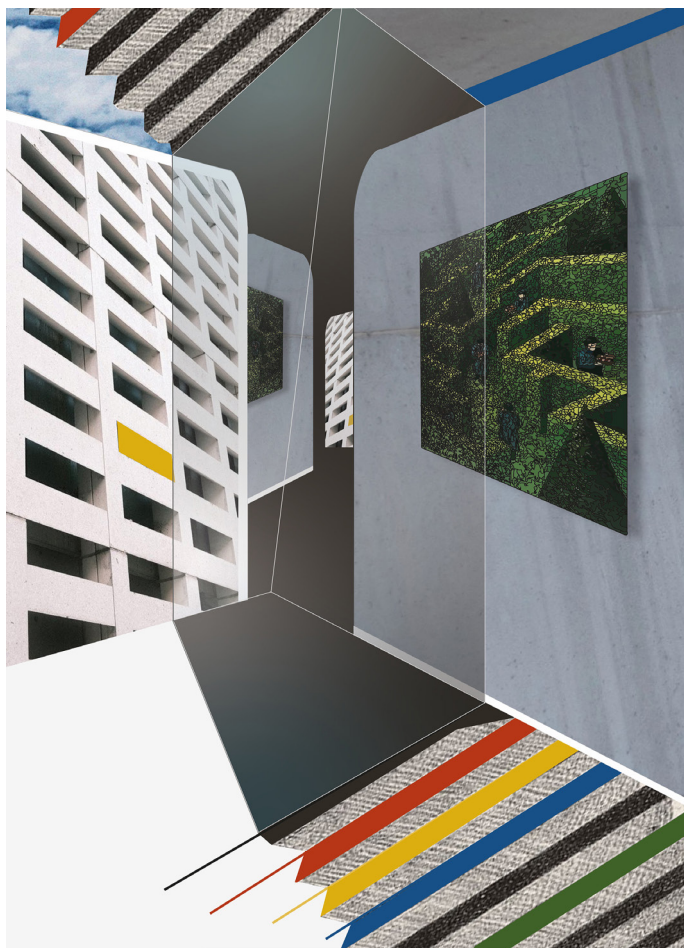


Fig. 17 Sara Polisano, *Lussuria*, 2024, paper collage.



black, and green produces a rich and enveloping sensorial register, in which the scenographic elements converge to construct a perceptually overloaded, almost immersive space. All elements share a consonant colour scheme and contribute to defining an atmosphere that stimulates the senses. By contrast, *Solitudine* by Giulia Pipi adopts a palette of black-and-white cut-outs which, together with the compositional fragmentation, generates a distance, drawing attention to the cold and abstract quality of the space and to the condition of isolation of the three human figures in the scene (Figure 18).

Angoscia by Manuela Belli, Alessia Giambanco, and Giusi Lentini likewise employs chromatic selection as

Fig. 18 Giulia Pipi, *Solitudine*, 2024, paper collage.



an atmospheric device: the cold surfaces, the choice of furnishings, and the absence of human figures all contribute to defining an unsettling space. The sensations of coldness and discomfort are amplified by the dense, mist-filled forest visible through the large windows (Figure 19).

From a compositional standpoint, some collages employ the juxtaposition of heterogeneous elements to articulate different layers of the image and its meaning. Space is represented through the combination of architectural fragments, human figures, furnishings, and landscape elements which, though drawn from distinct contexts, are arranged according to evocative rather than narrative logics.

In *Sospensione* by Nina Grasso and Sara Lo Pinto, the association of disproportionate Corinthian columns, empty seats, marble walls, and a material sky filled with dense clouds from which a female figure hangs creates an environment that could not physically exist, yet remains coherent in its atmospheric intent. Here, the composition of elements serves as a device for representing psychological states rather than realistic spaces (Figure 20).

In the cases examined, the observer is invited to reconstruct mentally the spatial and sensory conditions represented through partial and deliberately manipulated

Fig. 19 Manuela Belli, Alessia Giambanco, Giusi Lentini, *Angoscia*, 2024, digital collage.



visual clues. The process of assembling fragments becomes a tool capable of subverting the constraints of mimesis in favour of an 'affective' representation of space. This suggests that collage, beyond its representational function, may be adopted as a didactic research method to explore and communicate perceptual dimensions that are difficult to attain through more codified media.

CONCLUSIONS

In the examples analysed, collage emerges as a true expressive language, capable of exploring the sensory and immaterial dimension of architectural space. Furthermore, the educational experiences discussed have highlighted the potential of collage as a tool for constructing an atmospheric image of architecture, allowing students to translate spatial sensations and emotional dimensions that would otherwise be difficult to represent into visual form.

The integration of advanced software and rapidly evolving generative algorithms is expanding the possibilities for the production, manipulation, and combination of images, opening new scenarios for architectural representation. It is plausible to imagine that, in the near future, digital collage could establish itself as a dynamic and interactive tool, capable

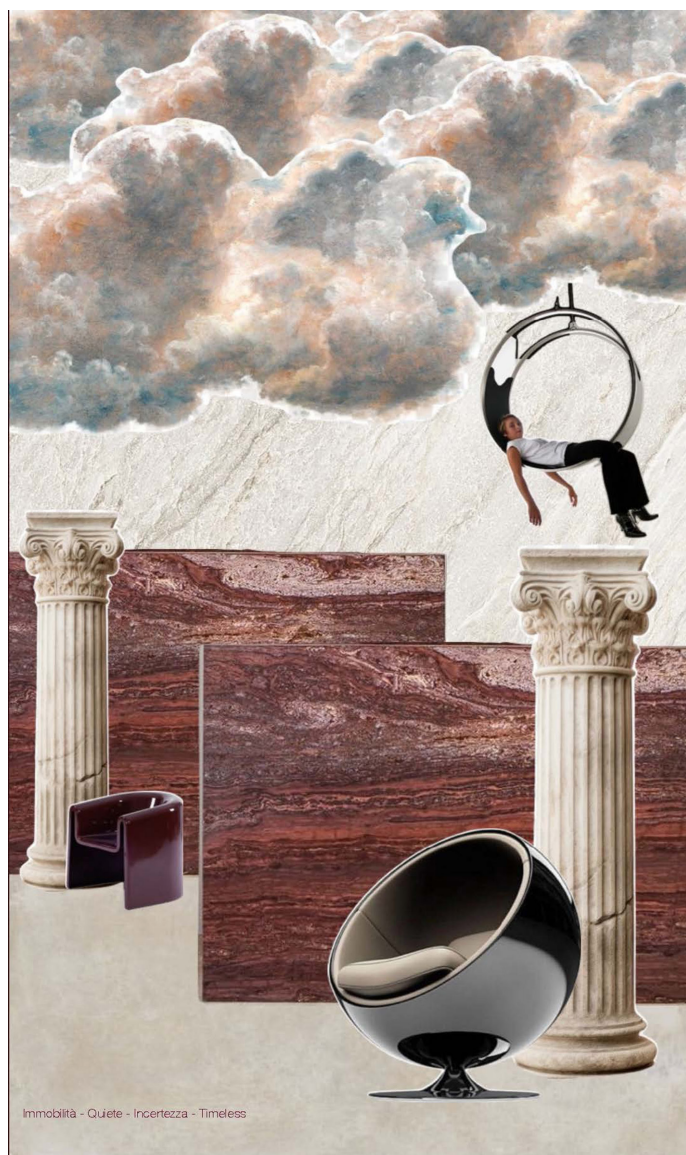


Fig. 20 Nina Grasso, Sara Lo Pinto,
Sospensione, 2024, digital collage.

of simulating in real-time the variations in the perception of a place. In this context, the new aesthetic emerging from Artificial Intelligence and from innovative technologies for immersive spatial representation –when placed in dialogue with the highly layered and fundamentally analogue technique of collage– may open new avenues for research and development in the fields of architectural design and representation.

NOTES

- 1 Giancarlo Carnevale, during a lecture in the Architectural Composition Course held at the Faculty Architecture in Palermo in 1993.
- 2 The quote, originally in Italian, was translated into English by the authors.
- 3 According to the abbot Marc-Antoine Laugier in his famous *L'Essai sur l'Architecture* of 1753, the hut more than the cave or the tent –of Egyptian or Chinese memory– is the typology that has most influenced the evolution of architecture and the art of building. For Laugier, quality architecture must be legitimized by both nature and reason (Laugier, 1753).
- 4 The quote, originally in Italian, was translated into English by the authors.

CREDITS

The paper is the joint work of the authors. For the sole purpose of paragraph attribution, it is noted that Vincenza Garofalo wrote *The representation of atmospheric quality* and *A teaching experience at University of Palermo*; Maria Milano wrote *Atmospheres in the construction of meaning* and *A teaching experience at ESAD in Matosinhos*.

REFERENCES

- Beitin, A.F., Eiermann, W., & Franzen, B. (2017). *Mies van der Rohe: Montage, Collage*. Koenig Books.
- Böhme, G. (2017). *The Aesthetics of Atmospheres*. Routledge.
- Coccia, E. (2021). *Filosofia della Casa. Lo Spazio Domestico e la Felicità*. Einaudi.
- Galofaro, L. (2019). Il montaggio come forma di progetto. *Piano B. Arti E Culture Visive*, 4(2), 18-31. 10.6092/issn.2531-9876/1085.

- Gargiani, R. (2019). I primi collage digitali di OFFICE -Kersten Geers, David Van Severen: intenzioni narrative dei visionari eclettici del XXI secolo. *Piano B. Arti E Culture Visive*, 4(2), 119-143. 10.6092/issn.2531-9876/10638
- Hammers, B. (2017). Mies van der Rohe. The MoMA Collages. *Docomomo*, 56(1), 88-90.
- Hertzberger, H. (1996). *Lezioni di Architettura* (M. G. Cusmano, Trad.). Laterza.
- Laugier, M.-A. (2024). *Saggio sull'architettura* (V. Ugo, a cura di). Aesthetica
- Pallasmaa, J. (2005). *The Eyes of the Skin. Architecture and the Senses*. John Wiley & Sons.
- Praz, M. (1944). *La Filosofia dell'Arredamento*. Documento Libraio Editore.
- Santibañez, D., (2017, April 4). 12 Offices that Use Collage to Create Architectural Atmospheres. *ArchDaily*. <https://www.archdaily.com/784648/12-ways-of-representing-multi-layered-architectural-atmospheres>.
- Tanizaki, J. (2000). *Libro d'ombra* (A. Ricca Suga, Trad.). Bompiani.
- Zumthor, P. (2007). *Atmosfere. Ambienti architettonici. Le cose che ci circondano* (A. Ricca Suga, Trad.). Mondadori/Electa.

Article available at

DOI: 10.60923/issn.2724-2463/21528

How to cite

Garofalo, V. & Milano, M. (2025). The project and representation of emotions in inhabited space. *img journal*, 12, 264-293.



© 2025 The authors. The text of this work is licensed under a Creative Commons Attribution 4.0 International License.