



**Blending Heritage and Modernity in  
Museography: Reviving Le Corbusier's Legacy  
through Printmaking and Sustainable Interior  
Design**

**Submitted by**

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# Blending Heritage and Modernity in Museography: Reviving Le Corbusier's Legacy through Printmaking and Sustainable Interior Design

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## ABSTRACT

The Museum of Fine Arts in Alexandria is among the most important museums related to the art in Egypt and regards both modern and contemporary art. The interior architecture of it however fails to deliver on the immersive, narrative and experiential potential of the space that is dedicated to the ideal of modernism. Although it has a curatorial vision, the overall interior the museum has today is still lacks sustainable incorporation through the interior, whether in the choice of materials and adaptability of design itself to be environmentally friendly in museographic aspect. Also, the fact that the same permanent collection is held in both central and temporary exhibition halls dilutes the possibility of the space to develop and refer to the innovative curatorial work.

This is a contradiction of the modernist brief that the museum ideally tackles that is accepting change, modular and interpretative. In order to fill

these gaps, the study takes the perspective of descriptive-analytical approach supported mixed-methodology and engages a design-based intervention based on modernist meditations of space by Le Corbusier, especially the concepts of abstraction, proportion, modularity and the color theory, combined with sustainable measures of interior planning and print-based graphic interventions. The current study depends on five related theoretical frameworks, Curatorial Design, Phenomenology of Space, Semiotics of Space, Visual Semiotics, and Visual Semiotics. Collectively, such lenses shift the perception of the museum interior into a construction and a conveying platform.

Through proposing these two intertwined visions of Print-making and Interior Design, the study will enhance the museum as an incubator of cultural perpetuation, design exploration, and eco-friendly Museographic display. It relocates museography in the state of a communication device where visual language obtains an erasure of the demarcation with utilitarian purpose. The results of the study are pertinent to the discussion of functional aesthetics and materiality of print and visual communication of interior spaces in architecture. The outcomes are essential to keep up the current debate over functional aesthetics, print media, spatial storytelling, and can prove valuable to scholars, designers, architects, educators, and theorists working in the area of graphic design and interior design.

## **KEYWORDS**

Le Corbusier, Museum of Fine Arts in Alexandria,  
sustainable design, multidisciplinary collaboration,

Museography, modernist abstraction, Relief  
Printmaking, Linocut.

### الخلاصة:

يُعد متحف الفنون الجميلة بالإسكندرية من أهم المتاحف المعنية بالفنون في مصر، ويهتم بالفن الحديث والمعاصر. إلا أن تصميمه الداخلي لا يلي الإمكانيات الغامرة والسردية والتجريبية التي يفترض أن توفرها المساحات المكرسة لأفكار الحدائث. ورغم امتلاكه رؤيةً تنظيمية، إلا أن تصميمه الداخلي الحالي يفتقر إلى التكامل المستدام، سواءً في اختيار المواد أو في مرونة التصميم ليكون صديقاً للبيئة داخل العرض المتحفي. كما أن عرض نفس المجموعة الدائمة في كل من قاعات العرض المركزية والمؤقتة يُضعف من قدرة المتحف على التجدد والتعبير عن الابتكار في تنظيم المعارضات. وهذا يمثل تناقضاً مع التوجه الحدائث الذي يسعى المتحف إلى تحقيقه، وهو قبول التغيير والتركيب المعياري وإعادة التفسير.

لسد هذه الفجوات، تتبنى الدراسة نهجاً وصفيًا تحليليًا مدعومًا بمنهجية مختلطة، وتعتمد على تدخل قائم على التصميم، مستوحى من تأملات لو كوربوزيه الحدائثية، لا سيما مفاهيم التجريد والنسبة والوحدات النمطية ونظرية اللون، إلى جانب مقاييس مستدامة للتخطيط الداخلي وتدخلات بصرية جرافيكية قائمة على فن الطباعة. تعتمد الدراسة الحالية على خمسة أطر نظرية ذات صلة، وهي: التصميم الكرياتيوري، وظاهراتية الفضاء، وسيميائية الفضاء، والسيميائية البصرية، وفن الطباعة كوسيلة سردية. وتسهم هذه العدسات النظرية مجتمعة في تحويل نظرنا للفراغ الداخلي للمتحف من مجرد بناء مادي إلى منصة تواصل وسرد بصري.

من خلال تقديم رؤيتين متكاملتين لفن الطباعة والتصميم الداخلي، يعزز هذا البحث دور المتحف كمركز لاستمرارية الثقافة، واستكشاف التصميم، والعرض المتحفي الصديق للبيئة وتطويع العرض المتحفي كأداة تواصل تلمس الخط الفاصل بين اللغة البصرية والوظيفة النفعية وتُعد نتائج الدراسة ذات صلة بالخطاب حول الجماليات الوظيفية وصناعة الطباعة والسرديات المكانية، وتعتبر النتائج ذات أهمية للنقاشات الجارية حول الجماليات الوظيفية، والطبيعة المادية للطباعة والتواصل البصري للفراغات الداخلية داخل حيز العمارة والتي يمكن للباحثين والمعماريين والمصممين والمعلمين والمنظرين في مجالات التصميم الجرافيكي والعمارة الداخلية أن يجدها مفيدة.

**الكلمات الدلالية:** لو كوربوزيه، متحف الفنون الجميلة بالاسكندرية، التصميم المستدام، تعاون متعدد التخصصات، العرض المتحفي، التجريد الحدائي، الطباعة الفنية البارزة، القطع علي المشمع.

## 1. Introduction

Museums no longer represent a collection of artifacts but are today an expression of space, carrying meaning, memory and changing values of culture (AH Ghazy et al., 2021). In Egypt, however, museum interior design can be architecturally attentive with little experimentation on the idea of utilizing interior as a curatorial and communicating tool. Although the Museum of Fine Arts in Alexandria represents a stagnated and inactive interior that brings down its purpose to create coherent experience and provide immersion to the visitor experience, there is a distinct lack of experimental interior strategies that consider a modernist abstraction with heritage symbolism and ecology of materials sustainability. Despite the discourse on the narrative and sustainable museum interiority being captured by the world, its interdisciplinary use has been poorly developed in the context of the Alexandrian Museums. There have been no profound studies done tapping on how Le Corbusier legacy may be reinterpreted in the interior spaces in

terms of spatial and visual communication.

The study aims to suggest a future-hypothetical design intervention that will breathe new life into the Museum of Fine Arts in Alexandria, particularly, the main and temporary exhibition halls of the museum, through the combination of the modernist tenets of Le Corbusier, sustainable interior furniture design. It also attempts to revive the artistic heritage of Le Corbusier in terms of a graphic printmaking, relying on his work and his philosophy of color, to create the new printed structures to be directly incorporated within the spatial structuring of the museum, i.e. within its pieces of furniture, paneling, and interpretive surfaces. The project does intend to function in the end as a model that can be reproduced in Egyptian heritage centers as ecologically concerned, culturally immersive, curatorial interior structures.

The literature expounds on global trends in sustainability in museography, modernist space philosophy, and narration directions in the interior design. Whereas the concern over the

conservation of buildings or curatorial subjects is a frequent Egyptian research topic, there is little research on the interior space as a narrative and sustainable system. The reality that is given in the review shows that there is a possibility that local museums need to incorporate modular, ecological, as well as interpretive design concepts to the interiors. Theoretical Lens: The research takes the basis of five interconnected frameworks, namely Curatorial Design, Phenomenology of Space, Semiotics of Space, Visual Semiotics, and Printmaking as Narrative Media. Such lenses turn the space into the functional piece of architecture and communicative interface, in which printed compositions and pieces of the interior are incorporated into the design narrative. As a unit, they succeed in reinterpreting the heritage of Le Corbusier in terms of form, material, image, and meaning.

The study has a design-based method that consists of mixed qualitative and quantitative design. This design-based approach presents a dual vision where space design and graphic communication are combined. In the

first procedure, a **series of sample prints** will be developed, inspiration from **Le Corbusier's visual language, forms, and color theory**. These prints represent a contemporary **printmaking trend** aimed at **revitalizing his artistic legacy**, not merely for display but as integral elements of the museum's interior design. Positioned across surfaces such as **fabrics, modular panels, and interpretive structures**, these printed compositions bridge **historical abstraction** and **spatial storytelling**, reinforcing the museum's dual role as a preserver of cultural memory and a platform for design innovation. Contextual analysis and on-site observation, Interior design proposal, and post-intervention evaluation through a structured Likert-scale questionnaire is adopted in the second procedure. The potential scientific communication or combination of two interlaced design visions, interior architecture and printmaking, are offered to offer a transactive turnover of space and narrative experience.

## 2. Literature Review

The theoretical framework and the proposed literature review will examine the fusion of the global modernism aesthetics and the local culture of the heritage through combining the principles of spatial design theory and visual design theories of Le Corbusier and the sustainable interiors approaches. It uses Curatorial Design Theory to situate the museum as a live story room, augmented with

Phenomenology and Semiotics of Space to sharpen the visitor experience (Yu, 2025). Visual Semiotics lens must include printmaking as one of the storytelling tools where visual art and spatial design overlap (Aiello, 2020). These frameworks jointly create a multidimensional model according to which the process of the sustainable and culturally based transformation of the museum interiors can be organized.

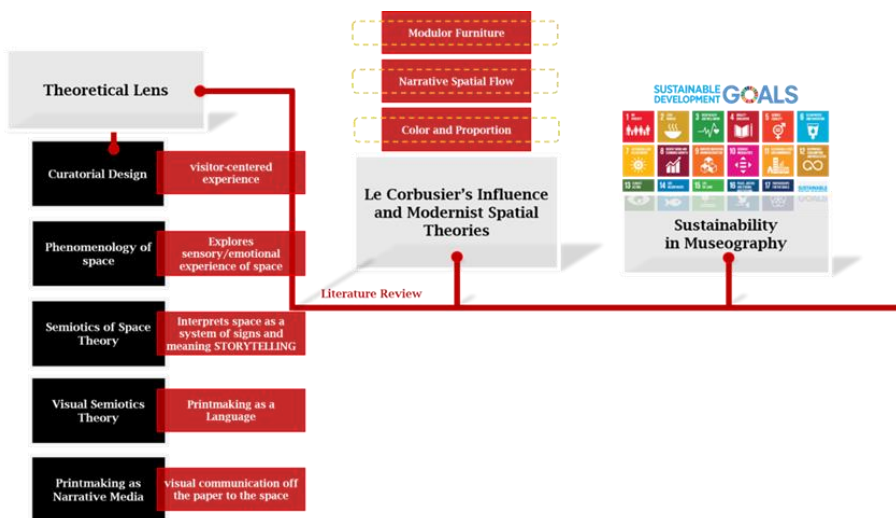


Figure 1. Illustrates the theoretical framework and the proposed literature review of the study.

Source: Researchers, 2025

By adopting a transdisciplinary theoretical foundation that balance one another (McGregor et al., 2004) and reconciles contemporary design theories of the modernist approach to the design of museums, the concepts of curatorial design and environmentally

sustainable aesthetics of interior environments and printmaking, The given research suggest a novel framework based on the concept of multisensory, interdisciplinary approach to space that incorporates visual communication and space-

making and cultural meaning, which would serve as a new dimension to the graphic as well as interior architecture view of the given design proposals.

*Theoretical and Conceptual Background (Interior Design as Narrative and Sustainable Practice)*

The new literature on an interior architecture points to a paradigm shift in interior design away from the interior as a special place of containment of objects to interior as fluidic, narrative and accommodating of the environment. The typological importance of scholarly work to the experiential nature of interiors is evidenced by the likes of Pallasmaa (2012) and Zumthor (2006) who present the conceptual space as a phenomenological place of memory and meaning-making dependent on material, proportion, and atmosphere. Such shift qualifies interior design not only as a technical activity, but also a communicative tool through which cultural legacy extends into modern design language. In museum context, such an attitude is especially important, because the interior acts as a translator of the interpretation, identity, and

visitor experience (Basso Peressut & Pozzi, 2012).

*Interior Design as an expressive Narrative and Sustainable Frame in Museum Contexts*

Modernistic trends of museum design have furthered the idea of interior narrativity that sees the museum area as a means of narrative development rather than neutral ground. As presented by Riva (2019) and MacLeod et al. (2018), curatorial accounts are intensified by the use of modularity, abstraction, and the symbolic use of space in designing interior environments to lead visitors on a path and engages them in a more participatory way. At the same time, sustainability of museum interiors is an issue that is gaining priority regarding research. Brooker & Weinthal (2013) and Chithra & Anbarasu (2015) as the scholars note allude to the incorporation of ecological material, adaptive reuses, and modular systems as the strategies that, on the one hand, are environmentally translucent and, on the other hand, enhance the cultural continuity due to the responsible design decision-making.

In the case of Egypt, studies tend to revolve around preservation and curatorial activities (Elseragy, 2016); discussions on interior as a narrative and ecological systems are at an early stage of development. This paper fills that gap by embracing the modernist tenets of Le Corbusier (spatial abstraction, modular construction and color theory) to propose the museum interiors as communicative medium where sustainability, cultural memory and visitor experience come together. This theoretical framework allows architecture interior design not only to be reduced to the aesthetic level, sighting actively through the prism of heritage rethinking, ecological approach, and modernity of museographic thinking.

### *Theoretical and Conceptual Background: From Visual Message to Tangible Form*

Recent theoretical discourse highlights the evolving role of printmaking as a medium whose conceptual scope has expanded in contemporary design practice. Studies such as *Printmaking Today* (2022) and Ross (2019) emphasize the shift toward

employing printmaking as an integrated, idea-driven component within graphic design, reflecting changes in both creative processes and communication strategies. Lupton (2014) notes the emergence of spatial applications for printed surfaces that encourage audience engagement, while Hughes (2018) and Heller & Vienne (2012) examine how these developments reshape the perception of print as a bridge between visual design and spatial art. This perspective positions printmaking as a discipline that, beyond its traditional technical framework, engages with materiality, context, and interaction to construct meaning in contemporary communicative environments.

### *Printmaking as a Visual and Conceptual Medium in Contemporary Graphic Design*

Recent approaches in contemporary design have introduced the concept of communicative design, where printmaking operates beyond its traditional scope to function as a spatial and tactile medium integrated into interior elements such as seating, tables, and walls (Drucker, 2014). In this

framework, prints become part of a sustainable and experimental design philosophy that values sensory engagement, memory, and functional relevance in shaping meaning. Research indicates that such integration enriches the audience's perception of the intended message and personalizes their interaction with the space (Lupton, 2014; Baines & Dixon, 2005). Within museum contexts, printmaking demonstrates its capacity as an independent visual language—rooted in symbolic reduction and deliberate repetition—to foster active reception and connect the artwork with broader cultural and conceptual narratives, as supported by recent studies on interactive museum experiences (Ahmed, H., & Elshahed, M. 2020)

### 2.1. Le Corbusier's Influence and Modernist spatial theories

The study is based on design principles of Le Corbusier where his modernist style brought architecture, art, furniture, and spatial proportions of the human being together. His Modulor system offers a formative instrument in designing furniture and spaces with relation to the human body (Zhang et

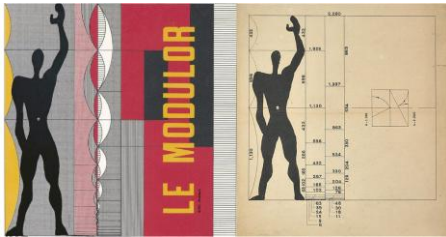
al., 2025), which is the ergonomic and intuitive tack of the central and temporary exhibition halls of the Museum of Fine arts in Alexandria. Le Corbusier was a modernist architecture visionary, painter, and furniture designer that broke down the categories of fine art, the art of space, and humanistic design (Lorenzo-Palomera et al., 2022).

In Purist paintings, particularly the paintings of *Poeme de l'Angle Droit*, see picture 1, he integrates abstraction, modular rhythm, and color theory, and develops a form of visual grammar, rooted in architectural logic. See picture 2, The Modulor system of proportions that Le Corbusier developed contained human and the golden ratio that gave the designer a measurable and ergonomic foundation to work on when creating furniture, spatial layout, and structure (Corbusier, 2000). When we read artists such as Stanislaus von Moos (2009), we find that his aesthetic vision was wielded not just as a form of language and spatial code and to reverberate in furniture, in wall compositions, and surface finishing.



Picture 1. Illustrates Le Corbusier: *Le poème de l'angle droit*, 1955.

Source: Corbusier, 2000

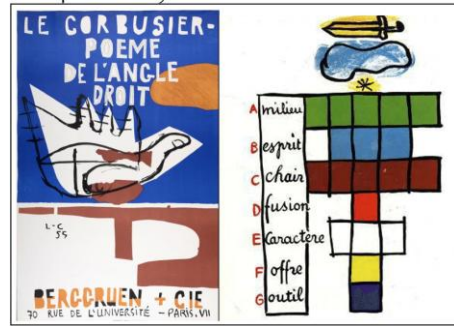


Picture 2. Illustrates *The Modulor system* of proportions that Le Corbusier developed.

Source: Zhang et al., 2025

To apply the principles of visual design taught by Le Corbusier to interior design has greater merit than beauty alone (Lorenzo-Palomera et al., 2022). The achieved design introduces a logic of spaces where the human scale, a visual balance, and abstraction of functionality is central so that it is entirely harmonious with museum spaces where contemplative and directive atmosphere is called upon. Applied in the design proposal is the architecturally progressive color system *Polychromie Architecturale* by Le Corbusier (Scaramuzza, 2023); thoughtfully constructed, the system is

utilized to create an atmosphere, direct movement, and to tell a spatial identity. These colors are neither ornamental but are structural and emotional segments of the spatial story (Zhang et al., 2025).



Picture 3. Illustrates the architecturally progressive color system *Polychromie Architecturale* by Le Corbusier

Source: Scaramuzza, 2023

Comprehensively, theories by Le Corbusier are used to influence both the aesthetics and concept of the project- a hypothetical museum is aimed at combining abstraction of modernism with the aspects of sustainability (Zhang et al., 2025) and the feel of the interior design that can be viewed as a contextual evaluation of the tropism of the environment.

The graphic arts and the visual narrative are also applied to Le Corbusier and his visual philosophy, see picture 4, as observed in the *Poème de l'angle droit*. The deployment of print, whether

analog or digital, is regarded as decorative not merely, but as communications stratum in resonance with poetics of form, text and color which Corbusier adopted (Poulin et al., 2012).



*Picture 4. Shows the graphic arts and the visual narrative applied to Le Corbusier and his visual philosophy*

*Source: <https://lecorbusier-worldheritage.org/en/news/le-corbusiers-architecture-7th-anniversary-of-world-heritage-listing/>, 2025*

Through the convergence of the artistic legacy of Le Corbusier and the present-day techniques of printmaking, the research presents the printed forms not as limiting visual entities, but as storytelling tools that enliven the space (Piotrowski et al., 2016), enrich the interpretation and echo the passion of the museum to preserve the traditions and to innovate.

### *2.1.1. Le Corbusier's Color Integration in the Museum Space*

Prints in this project were not treated solely as independent artworks but were integrated into the overall visual system of the exhibition. They appeared as wall elements, layered color backgrounds, and components of interpretive panels linking form, printmaking, and Le Corbusier's design philosophy. In doing so, the exhibition space became a dynamic environment in which prints communicated living messages that engaged both eye and mind in a contemporary moment of interaction.

Color use in museum display design significantly influences visitor perception of space and content. This approach draws upon modernist principles, particularly those of Le Corbusier, who employed color not merely for its aesthetic value but as an organizational structure that creates visual hierarchy and directs movement within the spatial environment.

### *2.2. Sustainability in Museography*

International museum industry moves towards sustainable museographic display, focusing on

material sustainability, energy-related performance, and occupant well-being. McLennan (2004) and the Journal of Cleaner Production indicates that sustainable interior strategies should encompass life cycle conscious materials, biophilic design and passive comfort design and adaptive reuse where feasible (Pereira et al., 2020). But as is the case with numerous cultural institutions of Egypt, sustainability is generally focused architecturally instead of through interior utilization or material ecology. This research addresses the research gap of developing sustainability into the very fabric of furniture design, wall systems, circulation routes, and visitor experience. It is also concerned with the absence of museum oriented interior strategies in the Egyptian situation that integrate heritage symbolism, sustainability and modernist abstraction.

Sustainability in modern museography shifts the perspective beyond environmental effectiveness to the ethical scope of the used materials, the adaptability of the spaces and continuity of culture. The adoption of

the principles of sustainable interior design in museums, including the principle of recycled materials (McLennan, 2004), modular furniture, non-emitting finishing works, corresponds directly to the UN Sustainable Development Goals (Robert et al., 2005), especially SDG 11: Sustainable Cities and Communities, SDG 12: Responsible Consumption and Production, and SDG 13: Climate Action. In the current study, these commitments have been reflected in the proposed redesign of the Museum of Fine Arts in Alexandria by incorporating eco-friendly and sustainable materialization, energy-saving lights, and modular interpretive designs that minimize wastes and the presence of visitors (Abdalla et al., 2005). The philosophy has created the museum not as a cultural space, but also as the exemplar of the socially and environmentally responsible design of the heritage sector.

Concerted efforts made in these terms reposition the museum as more than a cultural and educational place, but also as a paradigm of socially, visually and environmentally

sustainable heritage design in which spatial, material and visual means of communication facilitate not only

cultural memory, but sustainable resilience in the future (Combes et al., 2005).



Figure 2. Illustrates the global Sustainability Development Goals SDGs adopted for the study.

Source: Researchers, 2025

### 2.2.1. Artistic Prints as a Medium for Interactive Museum Display: Towards a Sustainable Semiotic Vision

In the Le Corbusier Museum project, the exhibition strategy emphasized spatial and sensory engagement through carefully planned presentation methods. Natural and artificial lighting were used to highlight the tactile qualities of relief-printed surfaces, while display heights were adjusted to align with sightlines and movement patterns. The curatorial design created deliberate visual correspondences between the linear compositions of the prints and the architectural geometry of

surrounding walls and corners, reinforcing the material presence of printmaking.

The display incorporated diverse printmaking techniques—including relief, drypoint, intaglio, and digital processes—to produce works that balanced technical precision with conceptual depth. Some prints were positioned on both walls and floors, expanding the field of interaction and contributing to a cohesive visual identity grounded in Le Corbusier's chromatic system and geometric discipline.

### 2.2.2. *The Print as a Sustainable Medium: Environmental and Aesthetic Dimensions*

Anchored in sustainability principles, the exhibition utilized traditional printmaking techniques that allow for the creation of repeatable, high-quality editions with minimal environmental impact. Compared to large-scale sculptural or installation works, printmaking offers an inherently resource-conscious approach, using fewer materials while maintaining strong visual and conceptual integrity (Adam, 2005).

The color palette, derived from Le Corbusier's chromatic system, reinforced the spatial identity and ensured visual cohesion throughout the exhibition. Floor-integrated prints encouraged visitors to physically engage with the artworks, transforming them from passive viewers into active participants—a shift that redefined audience-art interaction (Barthes, 1977).

By merging eco-friendly materials with production processes that support multiple reproductions, printmaking emerged as a medium ideally suited to

contemporary museum display strategies. Its capacity to function as a direct spatial element—such as walkable floor surfaces—positioned it within a broader “comprehensive visual language” that frames the exhibition space as an open, participatory communicative environment.

### 2.3. Theoretical Framework

#### 2.3.1. *Curatorial Design Theory*

Curatorial Design Theory subverts the definition of museum interior space as a vehicle to hold objects, and as the conduit of conversation, significance and exchange (Henning, 2005). It plays with borders separating exhibition design, interior architecture and museography by putting the visitor path as the main design storyline (Bollo et al., 2005).

Unlike the traditional display methods, where displays and interiors are kept as independent aspects, under curatorial design, the furniture, lighting, materiality, circulation and space sequencing is woven together with spatial narrative. The museum is not only a spatial experience that housing something, but it is a communal space

that is interpreted in the hands of living (Yu, 2025).

Curation was first of all about selection and placement of work or object of art or artefact. But since the late 20th century, the position of the curator transformed beyond the process of organizing objects to creating the spatial narration (Pan, 2025). Such a change gave way to the concept of curatorial practices that adopts space as a medium of reading, rather than a vessel.

The neutrality of gallery spaces was called into question in *Inside the White Cube* (1976) by Brian Odoherly and it was postulated that gallery spaces could convey meaning.

Hans Ulrich Obrist and others tried to stress the curator as a storyteller developing journeys as opposed to simply arranging information (Obrist et al., 2008).

Through Visitor-Centered Engagement, A curatorial design replaces a passive view with active involvement. The layout of furniture, lighting, and material finishing are all designed to create emotional, cognitive and sensory engagement whereby the visitor is

made to touch the space-not watch it (Fernandez et al., 2025).

### *2.3.1.1. The Role of Printmaking and Interior Architectural Space in Shaping the Visual Museography Experience*

In selected Le Corbusier-inspired museum displays, relief printmaking was applied using thick, tactile paper stocks and richly inked impressions, rendering the printed surface a tangible component within the architectural setting. This material presence encouraged sensory engagement and allowed the prints to function as structural elements in the spatial composition. Strategic use of side and angled lighting accentuated the interplay of shadows and surface textures, producing a quasi-sculptural quality that extended the work's impact beyond the flat plane and invited layered visual interpretation.

In certain exhibitions of Le Corbusier's work, printmaking was integrated directly into the architectural wall, applying the "speaking wall" philosophy in which the wall itself becomes an active bearer of meaning rather than a neutral backdrop. This approach echoes Le Corbusier's Murals

of the Modulor, where visual compositions align with human body proportions and spatial rhythms.

By embedding prints into the wall plane, curators reshaped how viewers navigated and oriented themselves within the exhibition, using the wall's visual content to guide both gaze and movement. A notable example appeared in Le Corbusier: An Atlas of

Modern Landscapes (MoMA, 2013), where works—some inspired by the Cabanon de Vacances project—were incorporated into the wall structure. This seamless fusion of architecture and artwork reinforced Le Corbusier's vision of uniting human presence, spatial form, and the communicative power of visual art (Cap Moderne, n.d.).



Picture 5. Le Corbusier's painting in the entrance of the Cabanon © Fondation Le Corbusier

Source: (Cap Moderne, n.d.)

### 2.3.2. Phenomenology of Space

Phenomenology of space can provide a guide on the perception, emotion, and movement of space by visitors (Albertazzi et al., 2013). Based on the works by Merleau-Ponty and Heidegger

(Macann, 2005), the theory dwells on sensory and embodied human experiences in a designed environment during the motion. Within the scenery of this study, it is useful in assessing the impact of spatial design of the museum

using light, scale, texture and forms in creating emotional response as well as remembering.

The choice of this lens plays a major role in the design of this project as it focuses on the ideas of atmosphere, tactility, and motion as means of building a compelling and purposeful interior story. It educates the way the combination of sustainable materials and modernism can promote natural spatial cognition and well-documented (Merleau-Ponty et al., 2013).

#### 2.3.2.1. Visual Design in Service of the Message

Three-dimensional spatial elements have evolved into communicative tools that transmit cultural and social narratives through form, texture, and integrated print. Within the framework of the "communicative space," graphic and spatial design merge so that each element, whether typographic, symbolic, or textural, functions as part of a multidimensional narrative. Hybrid methods combining hand-printing and digital processes expand the potential for embedding these elements into unconventional surfaces, broadening the expressive scope of printmaking.

In museum contexts, this approach transforms graphic design from a flat medium into a structural component of the space itself, applied to walls, floors, and sculptural forms. The result is an immersive visual environment that guides sensory perception, fosters symbolic interaction, and encourages visitors to explore and interpret the cohesive narrative woven throughout the space.

#### 2.3.2.2. Visitors' Interaction in the Museum: Print as a Living Message

Visitors Interact with multisensory elements. Augmented Reality (AR) and Virtual reality (VR) further expanded this experience, enabling exploration of prints from different perspectives and manipulation of visual elements such as composition and color (Carulli et al., 2019). Distributing prints across walls and floors to create immersive visual pathways. Within this Artificial Intelligence (AI) framework (See Picture 6, 7), typographic and graphic languages were extended into spatial form, turning static messages into immersive experiences that invite reflection and active interpretation.

In that regard, the AI instruments, like ChatGPT, Midjourney, and DALL-E allowed being the paramount source of creating concept alternative, choosing the progression of visual narratives, and generating flexible print compositions, which are responsive to the limitations of themes and spaces. The programs

facilitated the conversion of Le Corbusier-derived graphics into lively, data-driven designable material, so that every print could be customized in typographic scale, color-relationship and location within space to achieve the maximum aesthetic effect and curatorial purpose.

	
<p><i>Picture 6 Shows Design Proposal for the print that can be displayed in the museum inspired by Le Corbusier</i></p> <p><i>Source: Researcher, 2025</i></p>	<p><i>Picture 7 Shows a visualization of a scene showing the print within an interactive virtual reality environment</i></p> <p><i>Source: Researcher, 2025 by Midjourney</i></p>

### 2.3.3. Spatial Semiotics (Architecture as a Language)

Influenced by the semiology and architectural theory, spatial semiotics examines the way in which the construction exhibits properties of a system of signs that are used to convey

a cultural, emotional, and functional message (Eco, 1968; Jencks, 1995). In the presented study, the paintings and sculptural furniture created by Le Corbusier are interpreted as the units of semiotics - in terms of which color, form, and the size can be seen as the

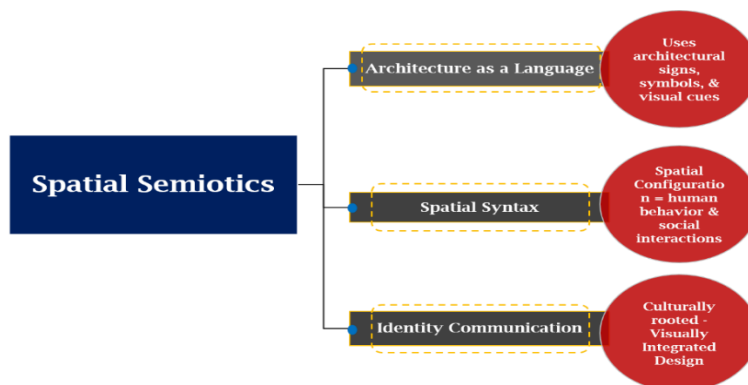
instruments of communication (Terzoglou, 2018).

The developed ideas of semiotics of space are based on the theories of Charles Peirce and Roland Barthes which analyze interior spaces as a system of signs that convey meaning. All the elements of space material, color, geometry, structure are coded elements that can be read as cultural signifier. This theory presupposes that the research can investigate how the museum interior could become a language with the layers and it will imply not only modernist principles but also local heritage.

Emerging out of the works of Charles Peirce and Roland Barthes, the semiotics of space examines space as a kind of language, where meaning is

conveyed with the use of symbols, signs and space arrangement (Tejera, 1988).

Core Idea is that all spatial aspects (color, material, form, and layout) can be read and interpreted. The design will turn into a message which may have a cultural, identity, or ideological meaning (Marotta et al., 2017). Including the peculiarities of the color theory, understood by Le Corbusier, and choosing architectural entities, the intervention makes space itself a medium of interpretation, asking the visitors to interpret the cultural stories through the designed hints. This theory outlines the spatial design, shapes of furniture and the material selection are incorporated into a conscious process of signs, connecting the legacies of global design and the local identity, See figure 3.



*Figure 3. Illustrates the study outlines adopted by Spatial Semiotics theory*

*Source: Researchers, 2025*

#### 2.3.4. *Visual Semiotics (Printmaking as a Language)*

Visual semiotics is based upon the works of linguistics Ferdinand de Saussure (signifier / signified theory) and Charles Sanders Peirce (icon, index, symbol). Cultural theorists such as Roland Barthes later carried it on to visual culture and started examining how with images there is as much meaning underneath the image as there is on the surface (Moriarty, 2004).

The phenomenon of visual semiotics, as applied to the field of museum design, offers a grid to decode through imagery the way in which space, form, and graphic representation do speak their cultural identity, aesthetic sense and narrative richness (Aiello, 2020). Approaching the application of symbolic meaning of color in Le Corbusier through the application of abstract composition, the study employs semiotics as means of designing space elements that a visitor can relate emotionally and intellectually with. That justifies the educative task of the museum and enhances spatial storytelling with purposeful visual

messages carried by finishes, signs, furnitures (Curtin, 2009).

As a development of spatial semiotics, visual semiotics is concerned with the way that graphic symbols, compositions and visual elements convey nested messages (Van Leeuwen, 2001). Here it is especially applicable to the graphic design aspects of the research, which will address how the vision philosophy embraced by Le Corbusier and notably his *Poeme de l'angle droit* (Corbusier, 2000) is transferred into printed designs, wall mapping, and surface designs. These printed forms act as visual texts or contribute to making visitors decipher the thematic intent of the space, as well as mobilizing walls, furniture and pathways as discursive surfaces.

#### 2.3.5. *Printmaking as the Narrative Media:*

The origin of printmaking goes back to the earliest civilizations in China (woodblock printing, c. 200 CE) and developed considerably in the European Renaissance when it became one of the most important methods of mass communication and art reproduction (e.g. Dürer, Rembrandt). In

the 20<sup>th</sup> century, it spread into the modernist artist movements as a mode of individual and political representation (Griffiths, 1996).

In the given work, the method of printmaking is not only a decorative or historic technique but also serves as a sort of device that moves the conventions of visual communication off the paper to the space (Lavoie et al., 2022). As the reading is inspired by the work of Le Corbusier that was titled *Poeme de l'angle droit*, the paper interprets printmaking as a language that defines space meaning and abstraction in the interior of the museum. This strategy re-forms printed images like on-wall graphic, textile patterns and interpretive panels as immersive storytelling media as part of the curatorial and designer process. The area of application of print has undergone a fundamental transformation, realizing print not only as means of reproduction in art, but also as a means to tell histories in space (Abell, 2015). The research has oriented the medium of print as a living message by framing the prints as part of the museum flooring, , wall surfaces, and

modular display systems using Le Corbusier-inspired prints. This theoretical aspect affirms the notion that printed visual forms would not be considered supplementary but a part of the interpretive setting in the museum, as the two designing fields of presentation will bind interior design with graphic design. The method enhances a more haptic, poetic and sustainable museography (Sospedra-Roca et al., 2022).

### 3. Methodology

This is a descriptive-analytical study which presents two interrelated visions in a design based study (Wiek et al., 2015). The intervention is implemented in two Procedures, a Graphic Design/Printing Procedure, entitled, Printed Forms, Living Messages: From Paper to Space and an Interior design Procedure, entitled, Blending History and Modernity: A Sustainable Interior Design Framework incorporating the Legacy of Le Corbusier in the Museum of Fine Arts in Alexandria. Each stage plays an irreplaceable part in rewriting the history of Le Corbusier in terms of both space and visual discourses, See figure 4.

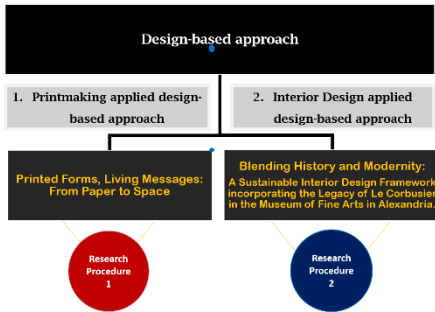


Figure 4. Illustrates the two research procedures for the design-based approach application

Source: Researchers, 2025

### 3. A. Research Procedure 1: Printmaking applied design-based approach

Titled: **Printed Forms, Living Messages: From Paper to Space**

Presented by: *Assoc. Prof. Shaimaa Mohamed Hassan Khodeer*

Utilizing relief printing techniques within contemporary art projects displayed in settings simulating the museum environment. The focus is placed on the practical exploration of the technique, its material processes, and the ways in which it can be adapted to sustainable, narrative-driven interior elements. The procedure documents the transformation of printed works from flat, paper-based media into integrated spatial components, preparing them for incorporation into the proposed museum design.

### 3. A.1. Description of the Applied Project

This experiment reinterprets the visual and conceptual language of Le Corbusier, transforming his distinctive compositional elements—geometric lines, color blocks, balanced structures, and functional abstraction—into relief-printed works that extend beyond paper into spatial exhibition components. Rather than imitating, the process draws from the symbolic and formal essence of his art, reconstructing selected elements through hand-printed techniques that employ color and texture contrasts to produce tactile and visual dynamism. These works, integrated into the museum display, form an interactive environment that engages the visitor both sensorial and intellectually, while reviving modernist values through a contemporary medium.

### 3. A.2. From Paper Printing to Spatial Expression: Transformations of Concept and Medium

This project advances the idea that printmaking can extend beyond paper to inhabit and transform physical space, evolving into a holistic spatial entity.

Relief prints inspired by Le Corbusier's works were reimaged as semiotically rich, interactive components within the museum environment, encouraging visitors to participate actively in the construction of meaning. By integrating sensory engagement, sustainability, and functional design, the prints shifted from being flat visual imprints to spatial experiences that simultaneously reinterpret art and reframe the viewer's relationship to space.

### *3. A.3. Experimental Steps:*

In the practical phase of the experiment, the visual elements characteristic of Le Corbusier's style—intense, high-impact colors; clear geometric lines; and the calculated use of light and shadow—were incorporated to highlight depth and visual rhythm. These traits were deliberately merged into the experimental process to evoke his artistic essence and re-create the aesthetic values of his works, ensuring harmony between the geometric structure of forms and the chromatic treatment to achieve visual balance consistent with his artistic philosophy.

### *3. A.3.1. The Impact of Dense, Flat Colors (Polychromy) on Visual Perception*

Le Corbusier was a pioneer in employing dense, flat colors in visual expression, developing his *Polychromie Architecturale* theory, which combines the psychological effects of tonal harmonies with spatial composition. Such exterior colors—like bright yellow or sky blue—generate strong visual contrast, giving the print a distinctive presence within the museum environment. This chromatic strategy engages the visitor's attention through lighting and color interplay. (See Picture 8 for a detail from one of the prints illustrating the strong contrast between two colors) (Le Corbusier & Oeuvre complète, vol. 5).



*Picture 8 shows a close-in detail from one of the prints illustrating the strong contrast between two colors*

### 3. A.3.2. *Geometric Lines and Rhythmic Harmony*

Le Corbusier became renowned for his use of pure geometric lines in both artistic and architectural compositions, viewing them as instruments of modernity and visual order. When transposed into printmaking, these lines function as organizing elements within the space, directing the viewer's gaze and generating a visual rhythm that aligns with the movement pathways inside the museum. This use of line injects dynamic energy into the space, stimulating visual contemplation. (Curtis, 1996). (See picture 7 for an example of geometric line interlacing across different fields)



Picture 9 "An example of geometric line interlacing across different fields"

### 3. A.3.3. *Light, Shadow, and the Contrast between Mass and Void*

For Le Corbusier, light was not merely illumination but a plastic material intersecting with color and line to reconstruct visual meaning. In printmaking, this concept can be amplified through the use of dark ink against luminous paper voids. Such contrast creates a "light space" within the print, guiding perception toward the relationships between mass and line, and establishing a visual atmosphere with deep expressive resonance. (Le Corbusier, 1951). (See Picture 8 for the distribution of mass and void)



Picture 10 "An example of the distribution of mass and void"

#### *3. A.3.4. Relief Printing Process*

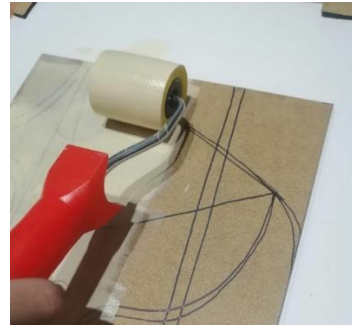
The experiment adopted relief printing using a single linoleum block, with layered color overprinting to achieve multiple aesthetic and compositional dimensions from the same design. The steps were executed as follows:

##### 3. A.3.4.1. Preparing the Base Design

The design was drawn on the linoleum surface, with careful attention to positive and negative areas, and the arrangement of lines and angles in line with the intended geometric and chromatic effects.

##### 3. A.3.4.2. First Coloring (First Print)

The first ink layer was applied to the raised surface using a sponge brayer (See picture 9), which allows more even ink distribution than a rubber roller. The ink's viscosity was reduced to enhance absorption of subsequent dense color layers. Printing was carried out manually on 100 g white paper to produce the first chromatic layer. (See picture 10 for the ink's transparency and spread).



*Picture 11 Applying layer of ink to the surface using a sponge brayer*



*Picture 12 illustrates the Ink's transparency and spread*

##### 3. A.3.4.3. Carving the Block

Negative spaces not intended for printing were carved out using Speedball relief carving tools, leaving raised surfaces that would hold ink during printing.



*Picture 13 illustrates the Carving out Negative spaces using Speedball relief carving tools*

#### 3. A.3.4.4. Second Coloring (Second Print)

The second color—yellow—was applied after the additional carving. The paper was realigned precisely to match the first print's position using linoleum corner guides for registration (See Picture 11), resulting in layered color effects that enriched the composition's depth and visual complexity.

#### 3. A.3.4.5. Block Modification for Overprinting

Additional carving was performed after the first print to remove new sections from the raised surface, leaving specific areas for the second color layer.

#### 3. A.3.4.6. Repetition and Experimentation

The process was repeated sequentially with red, blue, and black inks. Multiple editions of the same block were produced, each maintaining unified line, form, and light-shadow interplay.

#### *3. A.4. Experiments:*


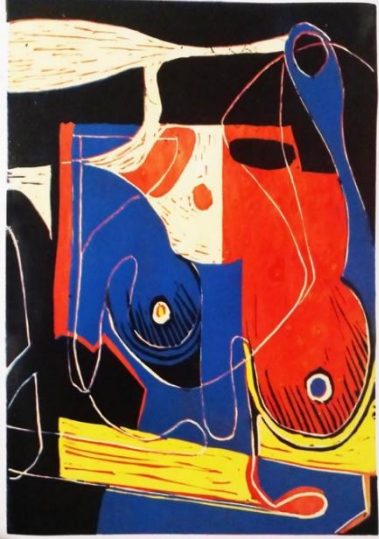
##### *3. A.4.1. Experiment 1: Paths of Die*

In the adapted work, key visual elements from the original—such as compositional structure, spatial distribution, color dynamics, and symbolic language—were retained, while new interventions were introduced. The addition of blue and yellow intensified the sense of polarity, reinforcing the visual dialogue between opposing forces: red as a signifier of vitality and assertive presence, and blue as an emblem of calm and introspection. The superimposed shapes evoke the complexity of human relationships and the inner conflicts of identity, while interconnecting lines between the two chromatic fields disrupt a total division, generating a dynamic visual tension between color and form. Organic human motifs were

also integrated to allude to the continuity of life, thereby achieving a synthesis that preserves the essence of

Le Corbusier's work while offering a contemporary interpretative perspective.

*Table 1 illustrates the design proposal of Experiment 1*

<b>Design Proposals:</b> <b>Experiment 1: Paths of Die</b>	
Original ArtWork by Le Corbusier	Design Proposal By the Researcher
 <p>This print, titled Paths of Die, draws inspiration from Le Corbusier's artwork The Die is Cast (1956–1960), executed in wool with linen and metallic thread, currently displayed in the Western Foyer of the Sydney Opera House (Sydney Opera House, 2020).</p>	
<p><i>Picture 14 Shows "The Die is Cast"</i>  <i>Wool with linen and metallic thread</i>  <i>2.18 X 3.55 m</i>  <i>Source: (Sydney Opera House, 2020)</i></p>	<p><i>Picture 15 Shows Design Proposal 1:</i>  <i>"Paths of Die"</i>  <i>Print Size: 21 × 29.7 cm</i>  <i>Total Dimensions: 40 × 60 cm</i>  <i>Technique: Linocut</i>  <i>Source: Researcher, 2025</i></p>

### 3. A.4.2. Experiment 2: Taureau Azur



In the adapted print, a contemporary vision was pursued in which geometric abstraction intersects with the enduring

symbolism of the bull. The foundational structure of interwoven sharp and curved shapes was preserved, while the chromatic palette was reimaged by

introducing deep blue as a central hue. Here, blue functions as a calming counterbalance to the bull’s inherent energy, creating a new layer of contrast between the force of motion and the stillness of color fields. Red, yellow, and black were blended into this blue-dominated dialogue, guiding the viewer’s gaze through lines and angles while leaving space for personal

interpretation. Just as the bull traditionally symbolizes strength and determination, this print introduces a contemplative dimension—suggesting inner peace amid external conflict—where blue becomes a visual space for breathing within the turbulence of movement. The work thus stands as a celebration of quiet strength.

Table 2 illustrates the design proposal of Experiment 2


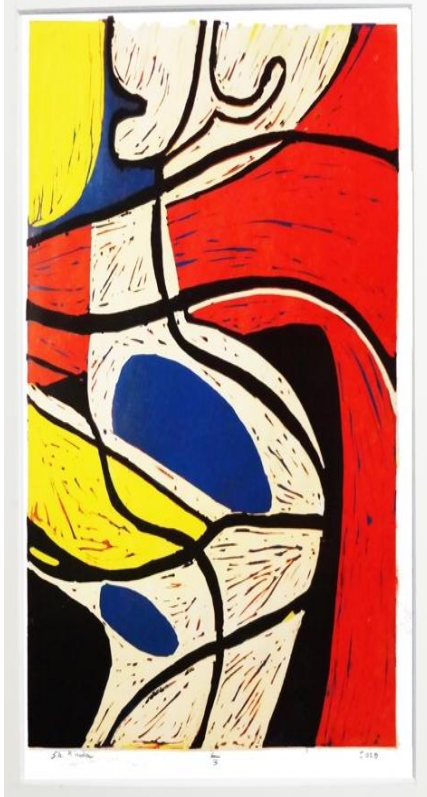
<div>Design Proposals:</div> <div>Experiment 2: Taureau Azur</div>	
Original ArtWork by Le Corbusier	Design Proposal By the Researcher
<div>  <p>This print, titled Paths of Die, draws inspiration from Le Corbusier’s artwork The Die is Cast (1956–1960), executed in wool with linen and metallic thread, currently displayed in the Western Foyer of the Sydney Opera House (Sydney Opera House, 2020).</p> </div>	<div>  <p>Picture 17 Shows Design Proposal 2: “Taureau Azur” Print Size: 21 × 29.7 cm Total Dimensions: 40 × 60 cm Technique: Linocut Source: Researcher, 2025</p> </div>
<div> <p>Picture 16 Shows “Taureau V” oil on canvas 1.95 m × 0.97 m Source: Foundation Le Corbusier, 1954</p> </div>	

### *3. A.4.3. Experiment 3: Fragments de Femme*

In the adapted print, See Picture 19, focus is shifted to the upper half of the woman's figure, creating a gaze that is at once more intimate and more powerful, while omitting secondary elements from the original scene. Black contour lines are intensified and multiplied, forming a visual network that interconnects chromatic fields and directs the viewer's eye. This approach produces both structural cohesion amid strong contrasts and an architectural sensibility consistent with Le Corbusier's style. Red is placed behind the figure's body to evoke strength, warmth, passion, and struggle; yellow is positioned in front of the face to form a luminous halo suggesting radiance or

mental focus, while also isolating the face from the background. Blue fills the interior of the body, offering a counterbalancing sense of calm or psychological depth against the heat of the red. This chromatic arrangement creates a dialogue between interior (blue) and exterior (red), between light (yellow) and shadow (other tonal areas), as if mapping compressed emotional states within a geometric frame. The deliberate cropping of half the face confronts the viewer with an imaginative void to be mentally completed, inviting personal interpretation. The print thus transforms the original's interpersonal exchange into a solitary meditation on the woman's inner and outer identity.

Table 3 illustrates the design proposal of Experiment 3

Design Proposals:	
Experiment 3: Fragments de Femme	
Original ArtWork by Le Corbusier	Design Proposal By the Researcher
 <p>Le Corbusier's tapestry <i>La femme et le maréchal-ferrant</i> (1988), executed in wool and preserved in the Mobilier National collection in France (Paris Art, n.d.). The original work employs reductive geometry through the use of clearly defined color blocks and minimal contours, reconstructing the mythic scene of "the woman and the blacksmith."</p>	 <p>Picture 19 "<i>Fragments de Femme</i>"  Print Size: 21 × 29.7 cm  Total Dimensions: 40 × 60 cm  Technique: Linocut  Source: Researcher, 2025</p>
<p>Picture 18 Shows "<i>La femme et le maréchal-ferrant</i>"  wool tapestry by Le Corbusier  2.18 m × 3.64 m  Source: Paris Art, 1988</p>	

### 3. A.4.4. Experiment 4: *Le Chemin Solaire*



In the adapted print, emphasis is placed on the red pathway cutting through architectural planes. Spatial

divisions are reinterpreted as stacked architectural units, transforming the original's abstract scene into an ordered urban fabric, evoking façades and contiguous urban elements. The red

path is reinforced with a bold black contour and a perspective that ascends before veering to the right, guiding the viewer's eye on a visual journey and instilling a sense of movement. A twisted black line in the foreground introduces an unexpected, humanizing counterpoint to the composition's geometric rigor—appearing almost as a gestural mark amidst the architectural order. Yellow is retained as a luminous focal element, contrasting with the red path to direct visual navigation. One geometric block in the upper portion is split into two tonal values—light

yellow and deep yellow—to create a perceptible play of light and shadow, imparting a quasi-three-dimensional depth. While the work preserves the abstract energy of Le Corbusier's original, it redirects it into a structured architectural vocabulary, engaging light and shadow as core design tools. This balance between precision (lines and perspective) and vitality (the curved mark, chromatic contrasts) renders the print vibrant despite its structural discipline.

Table 4 illustrates the design proposal of Experiment 4

Design Proposals:	
Experiment 4: Le Chemin Solaire	
Original ArtWork by Le Corbusier	Design Proposal By the Researcher
 <p>This print, titled Le Chemin Solaire (“The Solar Path”), draws inspiration from Le Corbusier’s painting Adieu Von (1957), executed in oil on canvas and housed in the Fondation Le Corbusier, Paris (WikiArt, 2023).</p>	 <p>Picture 21 “Le Chemin Solaire”  Print Size: 21 × 29.7 cm  Total Dimensions: 40 × 60 cm  Technique: Linocut  Source: Researcher, 2025</p>
<p>Picture 20 Shows “Adieu Von”  oil on canvas by Le Corbusier  130 × 96 cm  Source: (WikiArt, 2023)</p>	

### 3. A.4.5. Experiment 4: Mystère

In the adapted print, the background is divided into three chromatic zones from right to left: a warm yellow field representing a state of alert; a dense, dominant red area symbolizing imminent danger and the



energy it releases; and a deep blue segment on the far left, closing the composition and signifying the unknown. This progression creates a dramatic visual gradient from light to intensity to depth, guiding the eye from warning, through tension, into mystery.

At the lower portion, red “teeth” partially submerged in a dark mass translate the idea of menace into a visceral visual metaphor—evoking the image of a predatory mouth concealed in shadow, directly linking the print to the original’s thematic charge.

An organic form, rendered in yellow with internal red accents, interrupts the background fields, breaking the severity of the geometric divisions while

introducing a sense of natural movement amid the structural order. This insertion reinforces contrast, disrupts the rigidity, and lends the composition an unpredictable visual rhythm. The interplay between the architectural structure and the organic intrusion preserves the underlying sense of latent danger, keeping the viewer in a state of anticipation.

*Table 5 illustrates the design proposal of Experiment 5*

Design Proposals: Experiment 5: <i>Mystère</i>	
Original ArtWork by Le Corbusier	Design Proposal By the Researcher
 <p>This print, titled <i>Mystère</i> (“Mystery”), is inspired by Le Corbusier’s <i>Menace</i> (1938), executed in oil on canvas and held in modern art collections, such as those presented at Art Basel (Art Basel, 2019). The original work</p>	

<p>belongs to the mid-career phase of Le Corbusier’s artistic journey, a period marked by the synthesis of architecture and visual art.</p>	
<p><i>Picture 22 Shows “Menace” oil on canvas by Le Corbusier 162 × 130 cm 1938 Source: (Art Basel, 2019)</i></p>	<p><i>Picture 23 “Mystère” Print Size: 21 × 29.7 cm Total Dimensions: 40 × 60 cm Technique: Linocut Source: Researcher, 2025</i></p>



3. A.4.6. Experiment 6: Cercles de Vie

In the adapted print, focus shifts to the right-hand section of the original, with compositional rearrangements designed to cultivate a sense of selectivity—emphasizing particular symbolic areas rather than presenting the full scene. Semi-circular blue forms have been added around curved elements, functioning as visual frames that enclose the gaze and redirect attention toward key motifs. A wavy line at the lower section introduces a sense of continuity and motion, symbolizing the flow of life and time.

These interventions disrupt the static nature of the abstract blocks,

enhancing compositional dynamism. The palette is reoriented: a vivid, life-saturated yellow now dominates the scene, replacing the grey and imbuing the work with warmth and luminosity. Red is retained but repositioned as a grounding complement to yellow—its presence reinforcing vitality while symbolizing the organic. Blue appears only as linework, signifying protection and containment rather than dominating the surface, serving as a unifying rather than a leading element. Black is selectively applied to areas of shadow, increasing depth and clarifying the separation between visual masses.

Table 6 illustrates the design proposal of Experiment 6



Design Proposals:	
Experiment 6: Cercles de Vie	
Original ArtWork by Le Corbusier	Design Proposal By the Researcher
 <p>This print, titled Cercles de Vie ("Circles of Life"), is inspired by the lithograph Le Poème de l'Angle Droit by Le Corbusier (1955), produced as part of a limited edition printed on Arches wove paper by Mourlot in Paris (NBMP, n.d.) The original edition comprised 250 standard impressions and 60 special impressions for collectors, each signed by the artist. Conceived as a visual counterpart to Le Corbusier's poetic text, the lithograph is one of a series of 19 plates that integrate his handwritten verses with imagery in his distinct visual language.</p>	
<p><i>Picture 24 Shows "Le Poème de l'Angle Droit" Lithograph by Le Corbusier</i></p> <p><i>13.5 × 17 cm</i></p> <p><i>1955</i></p> <p><i>Source: (NBMP, n.d.)</i></p>	<p><i>Picture 25 "Cercles de Vie"</i></p> <p><i>Print Size: 21 × 29.7 cm</i></p> <p><i>Total Dimensions: 40 × 60 cm</i></p> <p><i>Technique: Linocut</i></p> <p><i>Source: Researcher, 2025</i></p>

*3. A.4.7. Experiment 7: Le Battement*

In the adapted print, focus is drawn to the right-hand section of the original tapestry, narrowing the visual field to direct the viewer's gaze toward a central element reinterpreted as a symbolic "heart." This central motif is enclosed within blue and black boundaries, forming a visual shield that conveys a sense of protection or containment while creating high-contrast dynamics that engage the eye. Blue vascular-like extensions emanate from the heart, introducing linear motion that connects the core to the surrounding space and conveying a sense of vital flow.

Here, blue is used intensively as a metaphor for life and internal circulation, counterbalancing the warmth of the original palette with a contemplative calm. Black accents amplify the work's drama and depth, sharpening boundaries and increasing structural clarity. The heart motif draws conceptual inspiration from the reclining figure implied in *Le Canapé*, transforming it into a metaphorical centre of feeling and vitality within the resting body.

Table 7 illustrates the design proposal of Experiment 7

Design Proposals: Experiment 7: Le Battement	
Original ArtWork by Le Corbusier	Design Proposal By the Researcher
 <p>This work, titled Le Battement ("The Pulse"), is inspired by Le Corbusier's Le Canapé (1956), a wool tapestry produced in a limited edition (Edition 34/50) (Architectural Digest, 2020). The original piece adopts an abstract language, reconfiguring visual blocks through linear overlaps and diagrammatic forms that verge on the symbolic—suggesting, perhaps, the presence of the human figure or the angled form.</p>	
<p><i>Picture 26 Shows "Le Canapé"</i> <i>wool tapestry by by Le Corbusier</i> <i>195.6 × 254 cm</i> <i>1956</i> <i>Source: (Architectural Digest, 2020)</i></p>	<p><i>Picture 27 "Le Battement"</i> <i>Print Size: 21 × 29.7 cm</i> <i>Total Dimensions: 40 × 60 cm</i> <i>Technique: Linocut</i> <i>Source: Researcher, 2025</i></p>


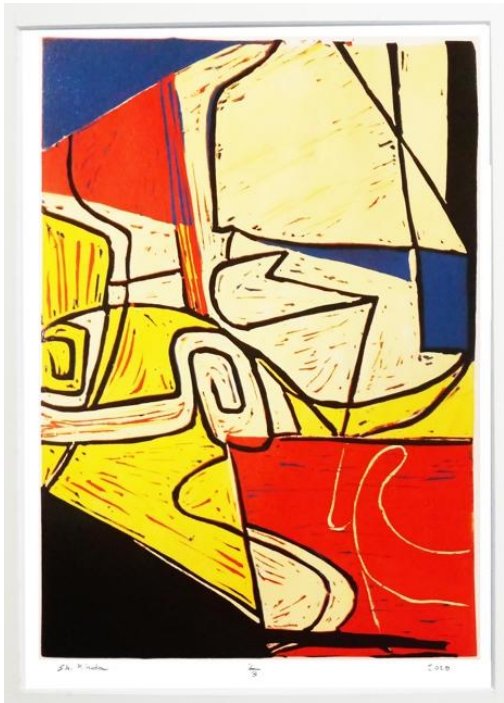
*3. A.4.8. Experiment 8: Main et**Silhouette*

In the adapted print, the focus shifts to the interaction between hands and face through an exchange of colour fields. A lower section of the original—from the slanted square to the edge—is isolated as an independent study, functioning almost like an anatomical close-up of the source composition. This extraction directs the viewer's attention toward the hands and a partial face, retaining the black linear structures as structural elements binding the colour blocks together.

The resulting composition adopts a relatively vertical arrangement, with strong black lines operating as an "internal frame" for the chromatic divisions. While the original's geometry remains, the spaces here open up due to the dominance of yellow, imparting a sense of light. Red is concentrated in

two small areas, acting as visual flashes of emotion or energy. Surrounding certain hexagon-like divisions with blue creates a geometric balance within the field of muted and saturated yellows, which alternate between representing light and shadow. The blue outlining also functions symbolically as a protective enclosure for the human element within the work. The interplay of the three primary colours—yellow, red, and blue—generates a dialogue between warmth and vitality on one hand, and depth and stability on the other. In this reinterpretation, black is not treated as a colouristic gesture but as a constructive framework—akin to the veins of the work's structural anatomy. The emphasis on the hands and face, even in their partial and abstracted forms, preserves the human dimension amidst the surrounding geometry.

Table 8 illustrates the design proposal of Experiment 8

Design Proposals:	
Experiment 8: Main et Silhouette	
Original ArtWork by Le Corbusier	Design Proposal By the Researcher
 <p>This work, titled Main et Silhouette ("Hand and Silhouette"), is inspired by Le Corbusier's Taureau X (1961), executed in gouache with newspaper collage (MutualArt, 2023). The original composition is built from interlocking geometric forms—rectangles, curves, and lines—that create a sense of fragmentation followed by visual reconstruction. This dense geometry reflects the Cubist spirit that underpins Le Corbusier's architectural sensibilities.</p>	 <p><i>Picture 28 "Taureau X."</i> <i>gouache with newspaper collage by</i> <i>Le Corbusier 56,3 X45,4 cm</i> <i>1961</i> <i>Source: (MutualArt, 2023)</i></p>
	<p><i>Picture 29 "Main et Silhouette"</i> <i>Print Size: 21 × 29.7 cm</i> <i>Total Dimensions: 40 × 60 cm</i> <i>Technique: Linocut</i> <i>Source: Researcher, 2025</i></p>


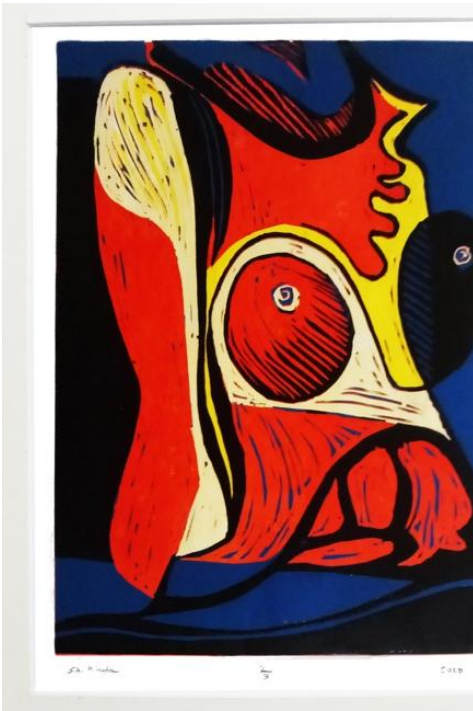
### 3. A.4.9. Experiment 9: *Femme au Corps Rouge*

In the adapted print, the presence of a single female body is retained, yet it is no longer presented as a continuous whole. Instead, the body is fragmented into anatomical segments linked by intersections and lines, as if transformed into a geometric map of a living self. Each segment can be viewed as an autonomous unit, yet together they cohere into a unified image. The inversion of colour assignments introduces an experimental dimension: red becomes the skin, symbolising strength, vitality, and inner energy; yellow operates as zones of illumination, akin to visual revelations highlighting parts of the body; and blue

imparts a sense of shadow and depth, suggesting emotional coolness in counterpoint to the warmth of the red.

By maintaining the blue shadows both within and around the figure, the composition achieves chromatic cohesion, integrating light and shadow as intrinsic elements of the body rather than as mere environmental effects. This approach prompts the viewer to navigate between red surfaces and blue shadows, gradually recognising that the body is not a singular mass but an assemblage of partial views. The work thus invites a reconsideration of the body—not solely as an external form, but as an internal system of chromatic and kinetic forces.

Table 9 illustrates the design proposal of Experiment 9

Design Proposals:	
Experiment 9: Femme au Corps Rouge	
Original ArtWork by Le Corbusier	Design Proposal By the Researcher
 <p>This work, titled <i>Femme au Corps Rouge</i> ("Woman with a Red Body"), is inspired by Le Corbusier's <i>Two Women in the Red Drapery</i> (1935), executed in oil on canvas (Flickr, 2020). The original painting depicts two intertwined female figures, merged within a condensed structural framework that visually unites them. The result is a hybrid composition that balances abstraction with organic construction, creating a mysterious intimacy between the figures.</p>	
<p><i>Picture 30 "Femme au Corps Rouge"</i> oil on canvas by Le Corbusier 88.8 × 129.8 cm 1935 Source: (Flickr, 2020)</p>	<p><i>Picture 31 "Femme au Corps Rouge"</i> Print Size: 21 × 29.7 cm Total Dimensions: 40 × 60 cm Technique: Linocut Source: Researcher, 2025</p>



### 3. A.4.10. Experiment 10: Taureau en Élan

In the adapted print, the compositional framework of the original is preserved, retaining half of the bull's face as the central focal point to heighten the dramatic emphasis on the eye and horn. The central red rectangle remains as a stabilising element, yet it is now surrounded by a more dynamic chromatic environment. Beige is replaced with alternating linear applications of blue and black, introducing a visual rhythm and kinetic vibration that evoke the sense of a bull caught in a moment of sudden thrust or confrontation. A concentrated application of red atop the bull's horn functions as an accent colour, drawing

the viewer's gaze upward and balancing the central red rectangle.

The dominance of blue and black imbues the composition with a nocturnal or shadow-like atmosphere, deepening its dramatic impact. The black contour lines, retained from the original, preserve the work's structural identity and Le Corbusier's abstract aesthetic, while the intensified chromatic layering amplifies the interplay between line and plane. This produces a heightened sense of speed and energy, transforming the bull into not only a symbol of strength but also of explosive motion. The repeated use of red adds connotations of danger and tension, intensifying the viewer's emotional engagement with the work.

Table 10 illustrates the design proposal of Experiment 10

Design Proposals:	
Experiment 10: Taureau en Élan	
Original ArtWork by Le Corbusier	Design Proposal By the Researcher
 <p>This work, titled <i>Taureau en Élan</i> ("Bull in Motion"), is inspired by Le Corbusier's <i>Taureau</i> (1963), a lithograph produced in Paris (MutualArt, n.d.). The original piece exemplifies Le Corbusier's distinctive structural abstraction, in which geometric forms are condensed into flat planes and interwoven through dynamic colour interactions. The bull is deconstructed into symbolic rather than literal elements—its presence is suggested through partial forms such as the snout, horns, and tail—rendered as visual cues rather than direct representations.</p>	
<p><i>Picture 32 "Taureau"</i> lithograph by Le Corbusier Dimensions: 110 × 75 cm 1963 Source: (MutualArt, n.d.)</p>	<p><i>Picture 33 "Taureau en Élan"</i> Print Size: 21 × 29.7 cm Total Dimensions: 40 × 60 cm Technique: Linocut Source: Researcher, 2025</p>


### 3. A.4.11. Experiment 11: *L'Absence de l'Oiseau*

In the adapted print, the compositional framework of the original is preserved, retaining half of the bull's face as the central focal point to heighten the dramatic emphasis on the eye and horn. The central red rectangle remains as a stabilising element, yet it is now surrounded by a more dynamic chromatic environment. Beige is replaced with alternating linear applications of blue and black, introducing a visual rhythm and kinetic vibration that evoke the sense of a bull caught in a moment of sudden thrust or confrontation. A concentrated application of red atop the bull's horn functions as an accent colour, drawing

the viewer's gaze upward and balancing the central red rectangle.

The dominance of blue and black imbues the composition with a nocturnal or shadow-like atmosphere, deepening its dramatic impact. The black contour lines, retained from the original, preserve the work's structural identity and Le Corbusier's abstract aesthetic, while the intensified chromatic layering amplifies the interplay between line and plane. This produces a heightened sense of speed and energy, transforming the bull into not only a symbol of strength but also of explosive motion. The repeated use of red adds connotations of danger and tension, intensifying the viewer's emotional engagement with the work.

Table 11 illustrates the design proposal of Experiment 11

Design Proposals:	
Experiment 11: L'Absence de l'Oiseau	
Original ArtWork by Le Corbusier	Design Proposal By the Researcher
 <p>This work, titled L'Absence de l'Oiseau ("The Absence of the Bird"), is inspired by Le Corbusier's La Femme au Moineau (1963), a wool tapestry preserved in the Harvard Art Museums(Harvard Art Museums, n.d.). The original tapestry depicts a floating female figure, her form light and outlined by fluid, sinuous lines against a balanced, airy background. A bird appears positioned near the woman, establishing a symbolic dialogue between the human figure and nature. Executed in soft tones of beige and off-white, the work exudes a poetic, dreamlike atmosphere.</p>	
<p><i>Picture 34 "La Femme au Moineau"</i>  <i>wool tapestry by Le Corbusier</i>  <i>221.6 × 221 cm</i>  <i>1963</i>  <i>Source: (Harvard Art Museums, n.d.)</i></p>	<p><i>Picture 35 "L'Absence de l'Oiseau"</i>  <i>Print Size: 21 × 29.7 cm</i>  <i>Total Dimensions: 40 × 60 cm</i>  <i>Technique: Linocut</i>  <i>Source: Researcher, 2025</i></p>

### 3. A.4.12. Experiment 12: *La bougie allumée*


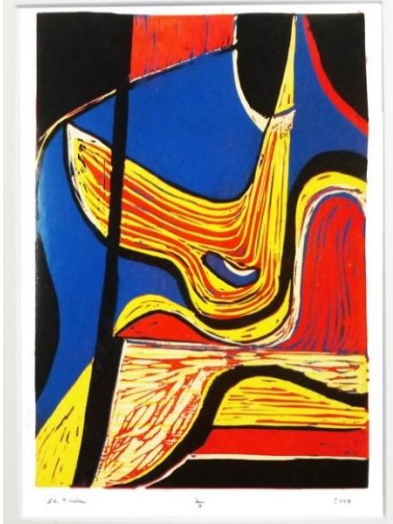
In the adapted print, the scene transitions from a quiet moment of contemplation (the candle in hand) to a moment of dissolution and burning. The candle is no longer a static lamp but a dramatic visual event dominating the centre. The body's features and the hands are erased, focusing all attention on the light/fire and a blackened face—a symbolic witness—transforming the figure into an icon rather than a full narrative subject.

At the centre, the yellow–red core functions as a “fusion point,” encircled by the darkness of the face, which humanises the scene as a shadowed presence. Dominance of yellow and red—interwoven with red linear marks over yellow planes in a relief-print effect—creates the sensation of melting and burning, turning colour

into action. The black face allows the viewer to see only the trace of combustion, offering a dramatic contrast to the surrounding heat, while the body in flat blue, without detail, conveys distance and coldness: a symbolic residue of what was once a body. The blue becomes the chill of remains after fire, suggesting the body as ash or shell after passing through the flame.

In this reading, the candle that melts into fire symbolises the self consumed, while the blackened face stands as witness, contemplative and pained. The blue form marks the psychological and existential aftermath—the loss of form after a violent experience. The composition directs the viewer's eye to the centre, then leaves them questioning the fate of the “woman” and what both the candle and the burning truly represented.

Table 12 illustrates the design proposal of Experiment 12

Design Proposals:	
Experiment 12: La bougie allumée	
Original ArtWork by Le Corbusier	Design Proposal By the Researcher
 <p>This work, titled <i>La bougie allumée</i> ("The Lit Candle"), is inspired by Le Corbusier's <i>Femme à la bougie I</i> (1946–1947), an oil on canvas preserved at the Rosenberg Gallery, New York (Sotheby's, 2018). Created during his stay in New York, this piece marks one of the earliest appearances of a clearly identifiable female figure—his wife, Yvonne—in Le Corbusier's painting, following the strict geometric Purist phase. The composition centres on a woman holding a candle, infusing the scene with a spiritual and contemplative aura.</p>	
<p><i>Picture 36 "La Femme au Moineau"</i>  <i>wool tapestry by Le Corbusier</i>  <i>221.6 × 221 cm</i>  <i>1963</i>  <i>Source: (Harvard Art Museums, n.d.)</i></p>	<p><i>Picture 37 "La bougie allumée"</i>  <i>Print Size: 21 × 29.7 cm</i>  <i>Total Dimensions: 40 × 60 cm</i>  <i>Technique: Linocut</i>  <i>Source: Researcher, 2025</i></p>



### *3. A.5. Conclusion and Discussion of the Experiments:*

The practical experiments demonstrated a clear diversity in the visual treatment of works inspired by Le Corbusier, employing multiple approaches to reconfigure compositional elements in service of new concepts. Some prints focused on specific parts of the original composition (such as the face, the hand, or the heart), while others rearranged the masses and color areas, creating strong contrasts between primary colors such as yellow, red, and blue, alongside the use of black lines to enhance visual cohesion. The introduction of modifications in the perspective and contours of elements contributed to a sense of movement or symbolic depth, granting the prints an independent identity despite their connection to the original source.

The experiments proved that reinterpreting classical or modern artworks through new chromatic and structural approaches opens rich creative pathways. Focusing on selected parts of the original work (fragmentation) enhances the strength

of the visual message and offers viewers broader space for interpretation. Combining strong primary colors with sharp black lines achieves a powerful visual balance while maintaining the clarity of the compositional structure. Re-appropriating Le Corbusier's elements in an abstract or expressive style allows the creation of a personal artistic identity while preserving the imprint of the historical reference.

### **3. B. Research Procedure 2: Interior Design applied design- based approach**

Titled: *Blending History and  
Modernity:*

*A Sustainable Interior Design  
Framework incorporating the Legacy of  
Le Corbusier in the Museum of Fine  
Arts in Alexandria.*

Presented by: *Dr. Amira Hamdy  
El.Sayed Abdou*

In this research procedure, the author uses a design-based, qualitative approach which aims at a multidisciplinary framework to explore the role of modernist spatial theories and especially those developed by Le

Corbusier in the interior design of the Museum of Fine arts in Alexandria within the context of a sustainable and culturally significant curatorial approach to its overall design. Observational studies developed to come up with a clear picture of the museum as far as the space behavior and curatorial structure is concerned. The quantification was carried out by making on-site observations such as visitor flow, their time spent in certain zones and any interaction with the exhibits. Coupled with the on-site analysis also supplied quantitative affirmation of the design based approach, and reinforced the dire necessity of a more immersive, sustainable and visitor focused museographic environment.

All in all, this multi-method method gave the research a chance to conduct a test of design strategies in situ, reflection about theoretical integrations, and proposal of a scalable, culturally embedded model of museum interior design in Egypt and worldwide.

### 3. B.1. On-Site Observation

The on-site observation part of the experiment was planned to integrate measurable information regarding the mobility of the visitors, features and the activity in space at the Museum of Fine Arts Organization in Alexandria. This entailed a methodical monitoring of visitor traffic through various zones and the amount of time they spent in various places, the sit, rest or lie down habit to mention an example. Observations led to a realization that the interaction is restricted by existing un-changing interior with people rushing through this interior and through displays spending a small amount of time in temporary exhibition areas, in contrast to the main hall. This type of data gave essential information about the museums functionality shortcomings, especially its non-spatial flexibility, story-tellings and comfort and gave a benchmark by which the success of the proposed design intervention might be judged.



Picture 38 shows the interior Design of the Temporary Exhibition Hall

Source: On-Site Researcher, 2025



Picture 39 Picture 38 shows the interior museographic display of the Temporary Exhibition Hall

Source: On-Site Researcher, 2025



Picture 40 shows the interior museographic display of the Central Exhibition Hall by 360-degree photo.

Source: On-Site Researcher, 2025

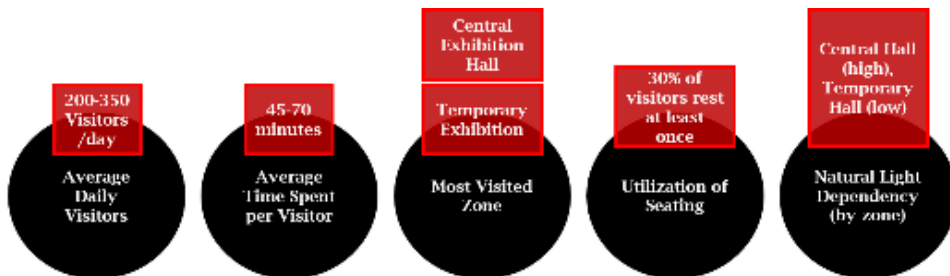


Figure 5. Illustrates On-Site Observation notes of the study.

Source: Researchers, 2025

### 3. B.2. Design-based Approach

In this study, A design proposal is introduced in the aim of which is to examine, prototype, and test an interior intervention in the Museum of Fine Arts

in Alexandria. The sequencing of the approach has been built into two sequentially interconnecting steps, namely, Inspiration and Conceptual

Phase, and the Schematic Design Solutions, See Figure 6.

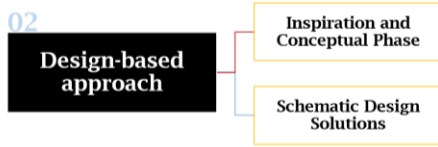


Figure 6. Illustrates the sequencing of the design-based approach of the study.

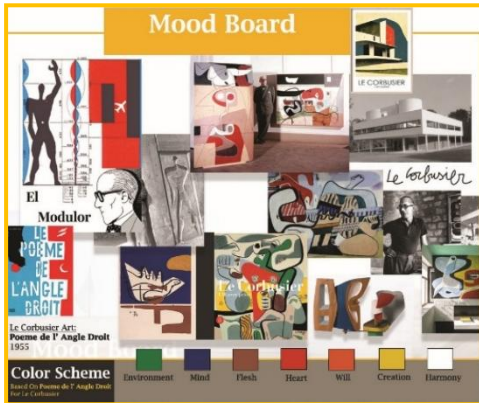
Source: Researchers, 2025

### 3. B.2.1. Inspiration and Conceptual Phase

The initial stage involved the inspirations based on the Le Corbusier architectural and artistic philosophy. The visual language and spatial theories developed by Le Corbusier, particularly the ones found in his *Poeme de l'angle droit* were conceptual comprehensions used to reinterpret the museum internal information. They used it as modular systems of furniture, zoning of the exhibition areas, abstract visualization incorporated into the surfaces and even furniture. The Mood Board is the initial element of the proposed design intervention, as the connector between the artistic philosophy of Le Corbusier and a set of spatial requirements of the Museum of Fine Arts in Alexandria. Based on his *Poeme de l'angle droit*, the board contains the spirit of his visual

code- geometry abstraction, modularity and a thoroughly integrated philosophy of colour. Not only were these elements presented as aesthetic references, but also acted as dynamic means of reinterpretation, informing the reconsideration of exhibition zoning, circulation, and the design of exhibit space furniture. The mood board aids in demonstrating the way in which the abstract visual structures developed by Corbusier could be transformed into structurally modular pieces of furniture, wall paneling and palatable surfaces to extend the experiences of the visitor without losing a cultural connection. Patterns, colors, and shapes were very purposeful to show the adaptation of modernist abstraction and how it turns into physical museum design choices. This phase has been depicted in Picture 41, and as can be seen in the conceptual vision of space in which the design will create an attempt that incorporates the space of art, and all the design interventions will be built around the surfaces, seating, and the rest with all the visuals representative of the modernist vision of Le Corbusier when

it comes to embracing a sustainable and adaptable approach.



*Picture 41 Illustrates the Mood Board of the study.*

*Source: Researchers, 2025*

### 3. B.2.2. The Schematic Design Solutions Phase

The second step was devoted to the synthesis of experimental design in order to converting theoretical to spatial and material practice. The visual language and spatial theories developed by Le Corbusier, particularly the ones found in his Poème de l'angle droit were conceptual comprehensions used to reinterpret the museum internal information. They used it as modular systems of furniture, zoning of the exhibition areas, abstract visualisation incorporated into the surfaces and even furniture. The particular intervention considered was the central and temporary exhibition halls that were to

be selected due to the possibility to house permanent collections and thematic exhibitions.

Another source of inspiration used in the intervention is the artworks of Le Corbusier including his abstract geometries (Corbusier, 2000), which find their way to include the Design of the furniture, display, and zoning in the museum. This leads to a working, expressive, narrative-based design approach that suggests both legacies of modernism and adapting to the Egyptian cultural environment.

#### [Slide 1 – Conceptual Vision and Integrated Design Approach](#)

The first panel presents the whole-design vision, See picture 42. In this case, the intervention is based on three main design drivers:

- Spatial Abstraction: The spatial character is rebuilt in line with Le Corbusier ability to simplify the form to the basic geometrical relations, and this leads to formation of an imaginary route of circulation, stratified foci, and a discovery of the unfolding experience.

- Modular and Adaptive Furniture: exhibition units, display pedestals, and sitting are custom designed to fit in wider modular components that are manufactured using recycled wood, cork, linoleum, and low-VOC eco-paints, making them flexible to re-configuration both in permanent and temporary exhibitions.
- Cultural Referencing of Le Corbusier Poeme de l'angle droit

rework the pieces into new mostly contemporary compositions. They are incorporated into wall panels, exhibition cases, and even seating upholstery and serve as visual story teller elements, as well as a form of interpretive guide.

This slide places the museum as a cultural collaboration zone of global modernism with the Egyptian heritage in line with SDG 11 (Sustainable Cities), SDG 12 (Responsible Consumption) and SDG 13 (Climate Action).



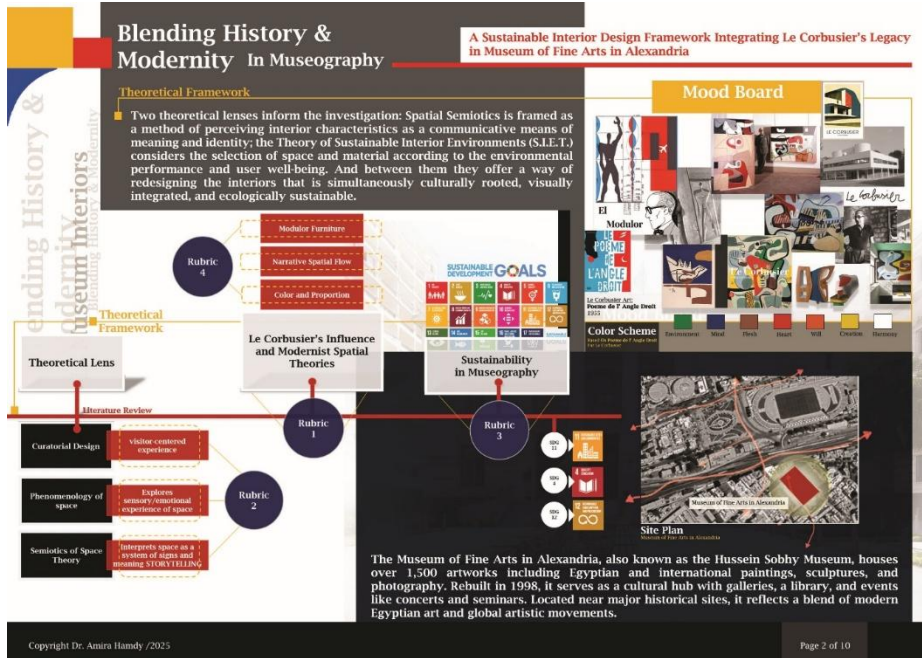
Picture 42 shows the 1<sup>st</sup> slide of the interior design based of the study.

Source: Researcher, 2025

Slide 2 – Theoretical Lens  
Integration and Mood Board  
Development

The second slide plans the intellectual footing of the design. It proves how it incorporates the five chosen theoretical frameworks: Curatorial Design Theory- It sets an exhibition narrative that is visitor-centered. Phenomenology of Space: – Increases sensual and emotional reverberation with the use of space form, light and material texture. Semiotics and Visual Semiotics – Philippines architecture has a semiotics or inlays the meaning through symbolic forms, proportional systems, and color plans. Printmaking Narrative Mediums- Printed artworks are used as the communicative tool and the specific space exploration enables layering of

the narratives. The theories are visually broken down into a language of design by use of the mood board. Color Strategy -Based on the color codex (Poeme de l'angle droit) of Le Corbusier, who gave areas chromatic names (e.g. green = Environment, red = Will, ochre = Creation). Modulor Scale Usage Practices -First determines ergonomic and proportioned rules of height of furniture, sitting, and display, determined as low discomfort and harmonious beauty. Sustainability Goals- pictured as guiding principles that determine ethical sourcing of materials, a long-term adaptation, and thinner temple print. Site Plan- Identifies areas and justifies areas of intervention within the museum architecture.



Picture 43 shows the 2<sup>nd</sup> slide of the interior design based of the study.

Source: Researcher, 2025

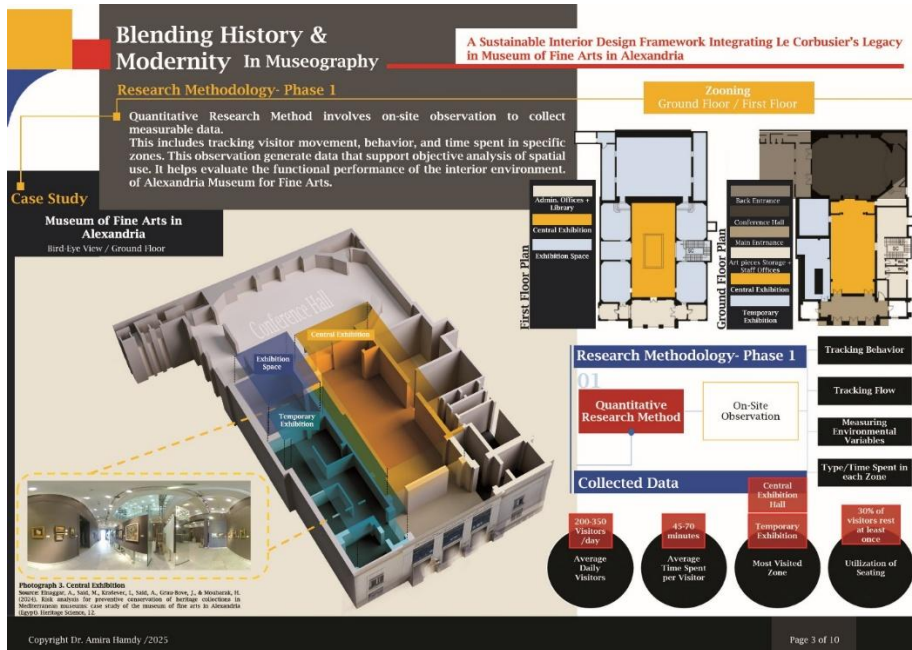
### Slide 3 – Spatial Diagnosis and Programmed Zoning

The third slide is devoted to the used space strategy with the help of the outcomes of the Phrase 1 quantitative investigation on-site.

- 3D Birds-Eye and Floor Plans: This will give a spatial analysis of the museum spaces with the Central Exhibition and Temporary Exhibition spaces identified as the main areas of actual intervention.
- Color-Coded Zoning: Differentiates clearly between the permanent art

areas, transient installation, and interactive visitor response areas.

- Visitor Movement Data: reveals an average stay time of between 45-70 minutes and names the central hall as the single most popular souped-up but least modifiable space, and the temporary hall as curatorial overkill. Functional Gaps- Poor seating capacities, duplication of display materials and lack of environmentally sensitive interior materials are severe problems.



Picture 44 shows the 3<sup>rd</sup> slide of the interior design based of the study.

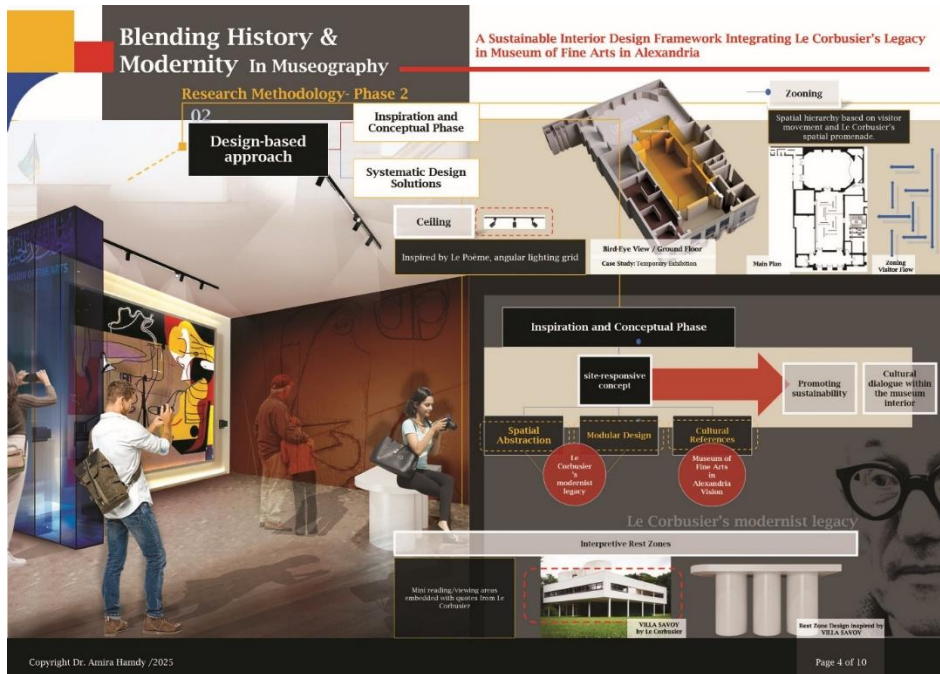
Source: Researcher, 2025

#### Slide 4 – Inspiration and Conceptual Phase & Systematic Design Solutions

This slide shows the conceptual foundation of the intervention. The design was inspired by Le Poeme de l'Angle Droit, angular lighting grids on the use of the ceiling this re-interpretation of the geometric abstraction by Corbusier into museographic functionality lighting. The zoning diagram mimics flow analysis of the visitors with a spatial hierarchy that would be both in the spirit of sustainability (efficient circulation, flexible plans) as well as the

promenade logic of architecture by Corbusier. It outlines Spatial Abstraction (recurring modernist Abstraction in connection to surfaces and geometry), Modular Design (replaces movable, adjustable buildings and furniture to use adaptively), Cultural References (insertion of Egyptian identity into the Modernist ethos of Corbusier). In addition to Interpretive rest areas based on Villa Savoye are created, introducing the reader/viewer to a physical resting space but also to a reading/viewing space where quotes of Le Corbusier are

also provided connecting the thoughts of rest and reflection and interpretation.



Picture 45 shows the 4<sup>th</sup> slide of the interior design based of the study.

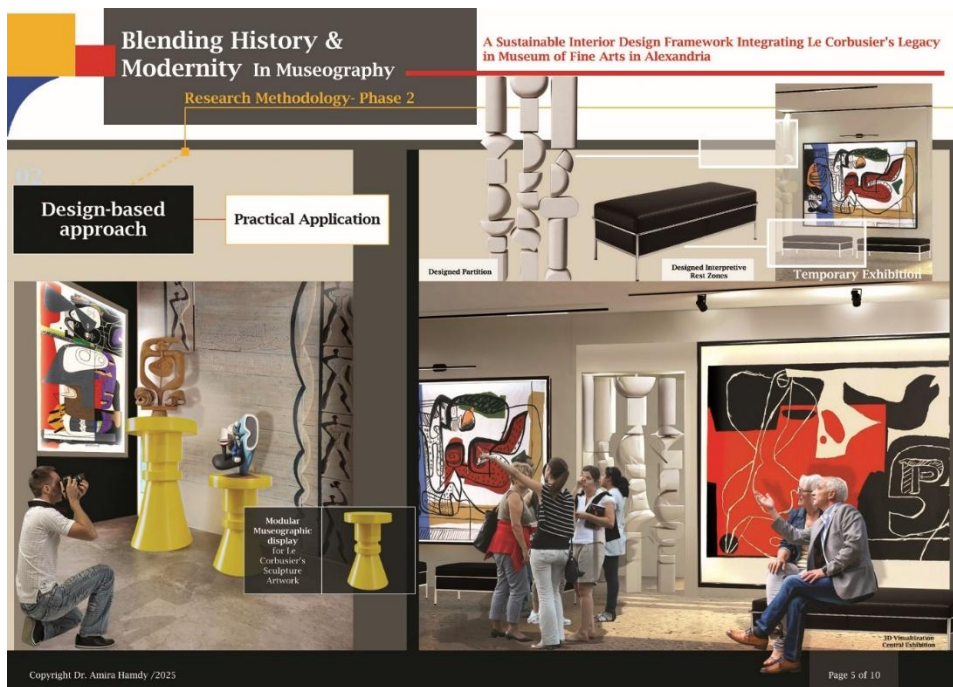
Source: Researcher, 2025

### Slide 5 – Practical Application (Modular Museographic Solutions)

In this Slide, the conceptualized ideas are realizable to come up with the functional designs of the temporary spaces of exhibition. The designed partitions reverberated with Corbusier sculptural language at forming rhythmic background to art works. Rest zones redesign modernist furniture into a sustainable seat, inviting longer stay by visitors.

In focus is the Modular Museographic Display of sculptural works of Le Corbusier. The pedestal-like stands re-read his modularity as colourful geometric bases in yellow that represented adaptability and modernist optimism. As well, this modularity contributes to the sustainability that facilitates the reconfiguration of displays that can be used in new exhibitions, which fits the criticism of the museum due to its stagnation in terms of reusing the same pieces of

artifacts across the halls. The activation of visual semiotics and phenomenology of space is demonstrated in this slide: the visitors do not interact with artifacts, but with the curated dance between the form, the surface, and the space.



Picture 46 shows the 5<sup>th</sup> slide of the interior design based of the study.

Source: Researcher, 2025

### Slide 6 – Wall Panels & Narrative Rhythm

This slide shows the focus on the wall panels and modular exhibition museographic displays. Driven by Corbusier and his golden ratio and his modulator, the panels are framed and colour blocked in a sense to generate a

rhythm of narrative throughout the exhibition space.

The urge to use color (reds, blacks, yellows) reminds the color palette used by Corbusier in *Le Poeme de l'Angle Droit*, turning the inanimate walls into the carriers of messages. The oversized prints can be interpreted as artifacts and

discursive elements that resuscitate the work of Corbusier in the graphic element to the modern narrative of museography. Its modular proportions allow it to be flexible and long lasting because panels may be repurposed and

reorganized. In this case, the legacy of Corbusier has not become a referential item in times past but has been resuscitated to change into living language in the interior of the museum.



Picture 47 shows the 6<sup>th</sup> slide of the interior design based of the study.

Source: Researcher, 2025

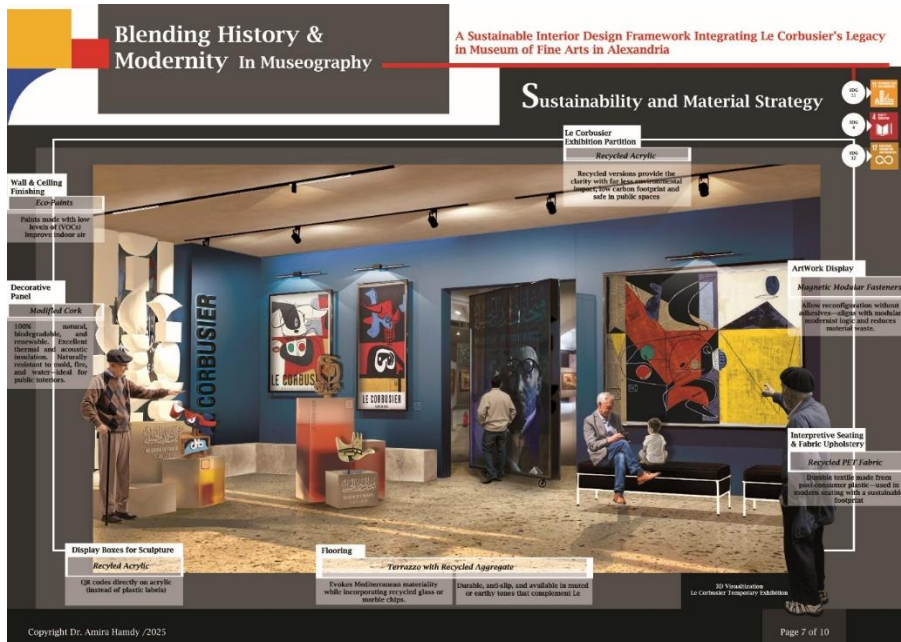
## Slide 7 – Sustainability and Material Strategy

The suggested interior design will involve a combination of sustainability and a commemoration of modernism presence as envisaged by Le Corbusier by using tactility, education, and eco-friendliness in making an exhibition zone.

- Wall & Ceiling Finishing Eco-Paints: Low-VOC, eco-friendly paints improve indoor air quality, but still present the color pallets with vivid, long-lasting color schemes that are based on chromatic theories championed by Le Corbusier.
- Decorative Panels: The Modified Cork: 100 percent natural,

biodegradable, and renewable material that provides acoustic and thermal insulation, and is resistant to molds, fire, and wetness, is ideal public building interior.

- Le Corbusier Exhibition Partition: Recycled Acrylic, Clear acrylic panels are resistant, long lasting, eco-conscious and make displays more clear to the eye, so visitors are not at risk in open environments.
- Arrangement of Art work: Magnetic Modular Fasteners: Unlike adhesive-based systems limitation, adhesive-free, reconfiguration systems follow the modular design philosophy, and Hence, allows curation without restrictive poses and minimal waste to materials.
- Sculpture Display Boxes: Recycled Acrylic: Recycled to create new product, display labels using integrated QR codes provide visitor with touch free, interactive experience.
- Flooring: Terrazzo containing Recycled Aggregate: The Mediterranean-style surfaces have durability, minimized slip, and warm earthy tones; these are achieved through incorporation of recycled glass and marble chips in a terrazzo.
- Interpretive Seating: Recycled PET Fabric Comfortable seating upholstered with textile system made of post consumer plastics that present a modern design with environmental proportions.



Picture 48 shows the 7<sup>th</sup> slide of the interior design based of the study.

Source: Researcher, 2025

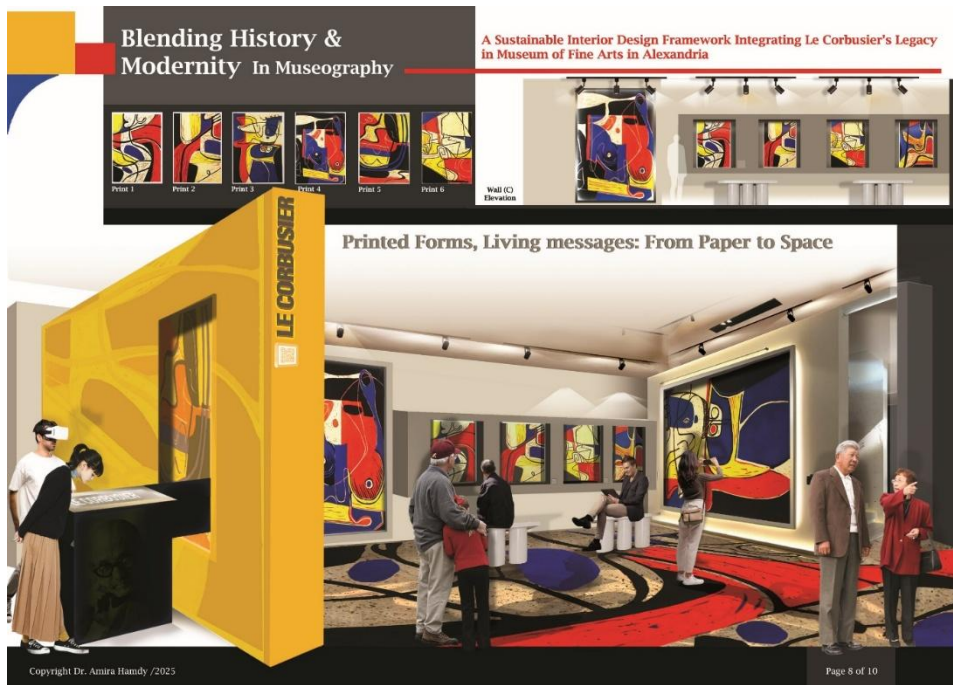
### Slide 8 – Printed Forms, Living Messages

This exhibition area reinterprets the strong graphic work by Le Corbusier who was well within his right element as a print work as a spatial narrative.

- Paper to Space: Full replicas, framed using the museum-quality modular frames provide the viewer with a feeling that the paper is surrounding them.
- Dynamic Presentation: Prints are set on different scales and arrangements which create impression of rhythm and

proportion of Le Corbusier Modular system.

- Interactive Interpretation: Visitors are made to wander with visual storytelling using the means of digital interfaces and augmented reality (AR) and expanding the physical display to virtual space.
- All-absorbing Flooring Design: Personal flooring provides abstract shapes and blocks of color that were directly influenced by Le Corbusier palette to lead the way visitors move about and solidify the thematic linkage of the space.



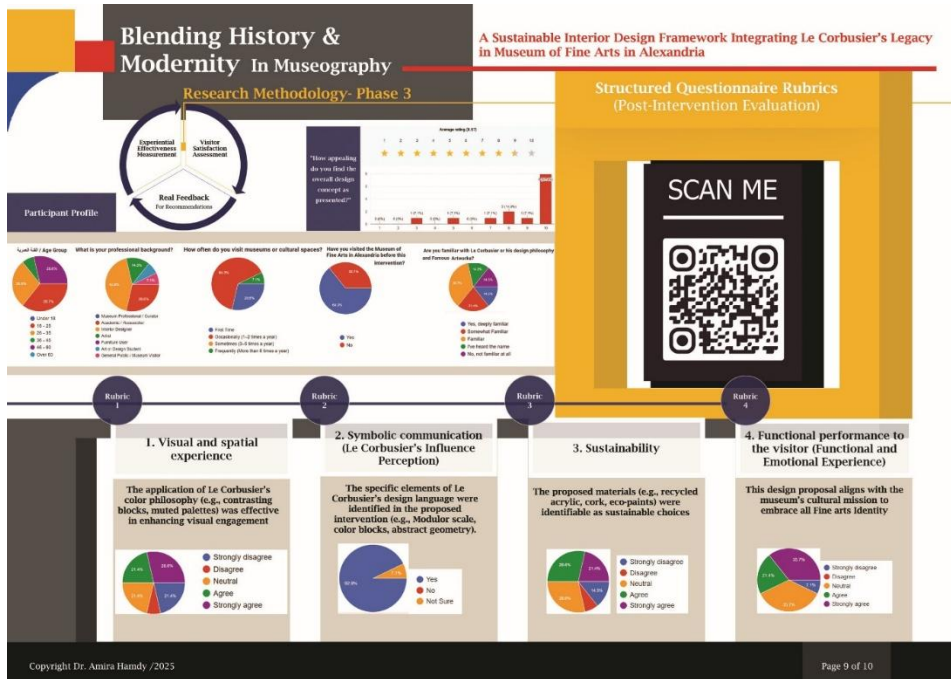
*Picture 49 shows the 8<sup>th</sup> slide of the interior design based of the study.*

*Source: Researcher, 2025*

### 3. B.3. Quantitative approach: Well-Structured Questionnaire

The evaluation of the proposed intervention followed a user-centered research methodology through an On-Site and On-line distributed questionnaire, through QR Code

scanning, to determine the influence of the design intervention on the visitor experience, symbolic communication, sustainability awareness and functional performance (Fathy et al., 2022), See picture 50.



Picture 50 shows the 9<sup>th</sup> slide of the interior design based of the study.

Source: Researcher, 2025

### 3. B.3.1. Participant Profile

Demographics of participants: Answers to the questions produced a wide variety of age, occupation, and degree of acquaintance with the work of Le Corbusier.

- **Age Groups:** There was a broad range of demographics that participated in the study, where 36.7 percent was between the age range of 26y-35y, 28.6 percent between 18y-25y, and 20.4 percent between 36y-45y, making the study relatively even when it came to

representing the younger audience, as well as the middle-age audience.

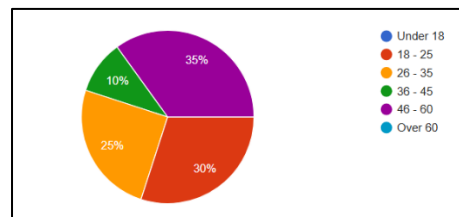


Figure 7 the age group analysis of the participants

Source: Researcher, 2025

- **Professional Background:** Within the respondents there was representation of museum professionals and curators (30.6%), academics and

researchers (24.5%) and representation of general public and art enthusiasts (44.9 %) as well.

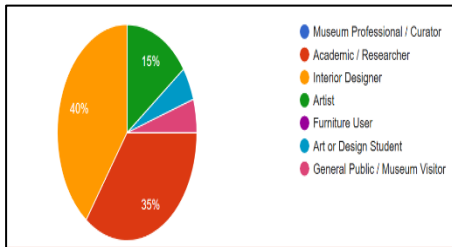


Figure 8 the Professional Background analysis of the participants

Source: Researcher, 2025

- **Museum Area Frequency:** After asking "How often do you visit museums or cultural spaces?" and "Have you visited the Museum of Fine Arts in Alexandria before this intervention?", 28.6 percent of the respondents attended the museums 2 to 3 times a year with 26.5 percent visiting the museums over 5 times a year which indicates high familiarity with cultural institutions.

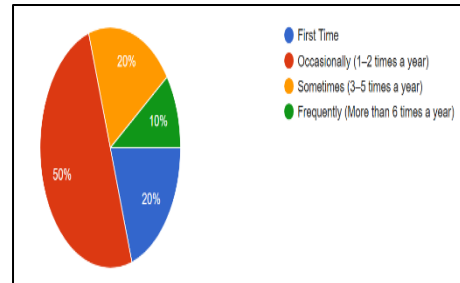


Figure 9 the Museum Area Frequency analysis of the participants for the question "How often do you visit museums or cultural spaces?"

Source: Researcher, 2025

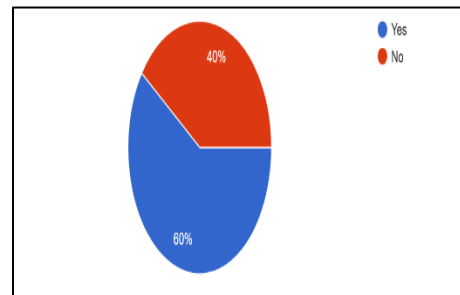


Figure 10 the Museum Area Frequency analysis of the participants for the question "Have you visited the Museum of Fine Arts in Alexandria before this intervention?"

Source: Researcher, 2025

- **Knowledge of Le Corbusier:** Although approximately one-third of the employees had not heard of his ideas, a balanced range of 34.7 and 26.5 percent were fairly or extremely conversant with his philosophy respectively.

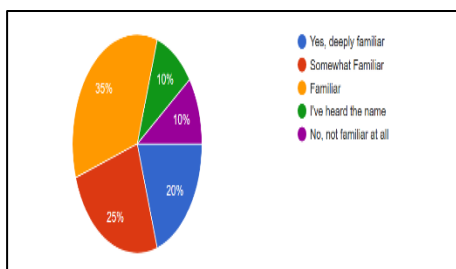


Figure 10 the Knowledge of Le Corbusier  
analysis of the participants

Source: Researcher, 2025

### 3. B.3.2. Rubric 1 Visual and Spatial Experience:

The following points were addressed in  
the aim of visual interest and spatial  
experience:

Table 13 illustrates the responses for Rubric 1.

Rubric 1: Visual and Spatial Experience	
<p>1. The proposed spatial organization and flow in the central and temporary halls enhanced the spatial perception and Aesthetic Integration.</p>	<p>2. The application of Le Corbusier's color philosophy (e.g., contrasting blocks, muted palettes) was effective in enhancing visual engagement.</p>
<p>3. The proposed modular furniture pieces reflected Le Corbusier's legacy and supported visitor comfort and viewing.</p>	<p>4. The proposed design achieved a balanced dialogue between modernist themes and the Museum Vision.</p>

The results showed that use of color philosophy of Le Corbusier (the contrast blocks, muted palettes) was seen as

extremely interesting. Strongly agree and agree proportion was 42.9% and 21.4, whereas disagreement was 7.1,

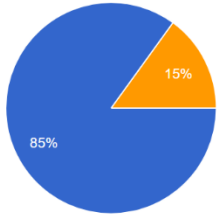
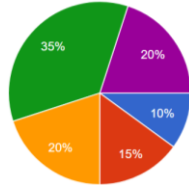
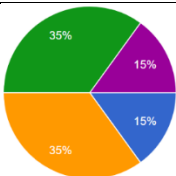
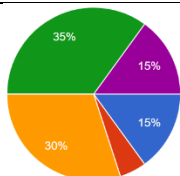
fully confirming effectiveness of the design in increasing visual appeal.

### 3. B.3.3. Rubric 2 Symbolic

#### Communication:

Visitors were able to identify some of the major components of the design

*Table 14 illustrates the responses for Rubric 2.*

Rubric 2: Symbolic Communication	
 <p>1. The specific elements of Le Corbusier's design language were identified in the proposed intervention (e.g., Modular scale, color blocks, abstract geometry).</p>	 <p>2. The incorporation of Le Corbusier's legacy fits the cultural and artistic mission of the museum.</p>
 <p>3. The conceptual theme of 'Blending History and Modernity' was clear as communicated through the proposed design.</p>	 <p>4. The design helps tell a story or provide new interpretive value for the artworks on display.</p>

The results showed that viewers were in no doubt about the style of design that Le Corbusier had proposed including modular scale, abstract geometry and the large blocks of

language of Le Corbusier which included: modular scale, abstract geometry, and bright color blocking.

The following points were addressed in the aim of Symbolic Communication:

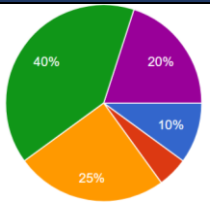
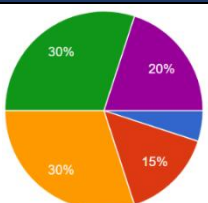
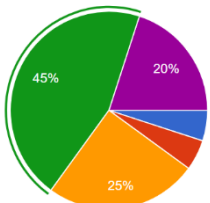
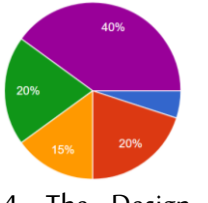
colors. 62.2% stated that they did and 27.6 % said that they did not know and only 10.2 %proved that they could not find the influence, which means the success of symbolic communication.

3. B.3.4. Rubric 3 Sustainability:

Material such as recycled acrylic, cork, and eco-paints were obviously found to

be a sustainable material. The following points were addressed in the aim of Sustainability:

*Table 14 illustrates the responses for Rubric 3.*

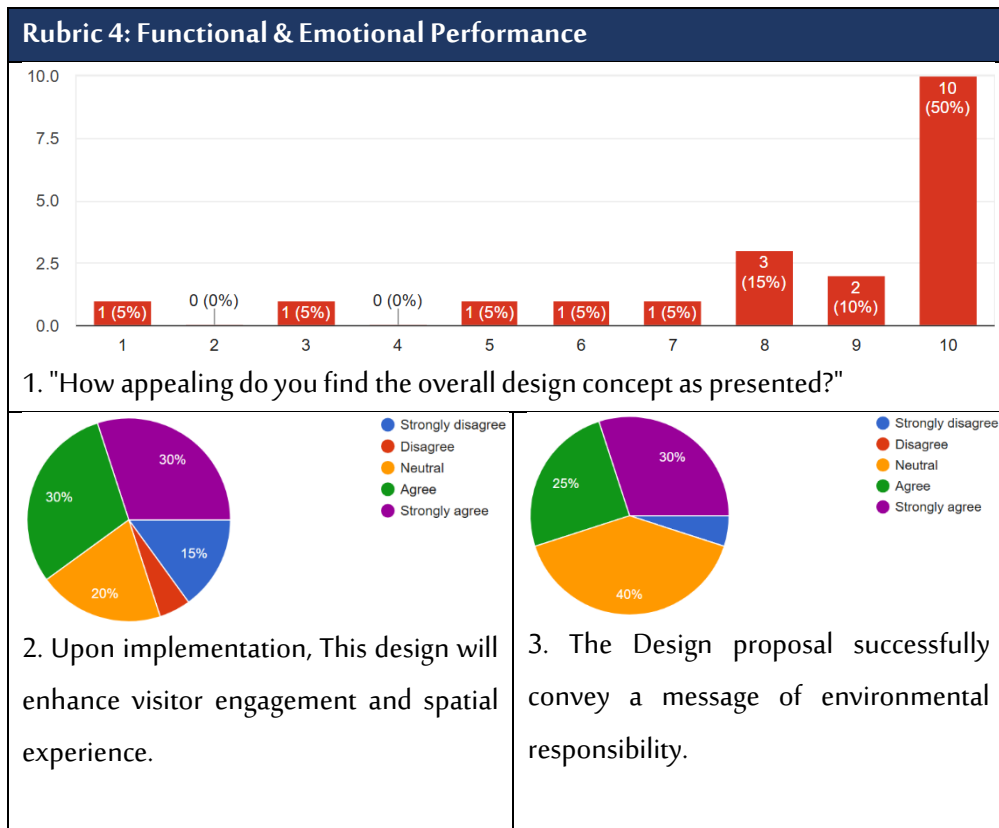
Rubric 3: Sustainability	
 <p>1. The proposed materials (e.g., recycled acrylic, cork, eco-paints) were identifiable as sustainable choices.</p>	 <p>2. The use of sustainable materials in the proposed furniture and finishes was appealing.</p>
 <p>3. The use of eco-conscious materials supports both aesthetic and functional needs of the museum.</p>	 <p>4. The Design proposal successfully convey a message of environmental responsibility.</p>

The results showed that visibility of the eco-conscious strategies is confirmed, with 35.7 percent strongly agreeing and 28.6 percent agreeing and only 7.1 percent disagreeing.

3. B.3.5. Rubric 4 Functional & Emotional Performance:

The findings from this demonstrated that the proposed design concept is perceived as both appealing and aligned with the museum's cultural mission, while also enhancing visitor engagement.

Table 15 illustrates the responses for Rubric 4.



The results showed that in total, 60 percent agree that the design proposal is appealing and the most people think that the design will improve engagement and spatial quality. The 20 percent neutral and 20 percent disagree, however, indicate that not all visitors were convinced of the exhibits, and it is therefore necessary to adopt the help of clearer interpretive schemes/or more immersive engagement practices. As 55% agreed

or strongly agreed, affirming alignment with the museum's mission. However, the 40% neutral responses suggest that while the design is seen as visually and materially innovative, its cultural symbolism may require stronger communication to ensure visitors clearly connect it to the museum's identity. While many appreciated the eco-friendly approach, citing satisfaction with recycled acrylic, cork, and sustainable finishes.

### 3. B.4. Results and discussion of the Interior Design-based Approach

The idea of the proposed framework moves beyond the traditional museography and introduces sustainability, cultural identity, and the legacy of Le Corbusier as the modernist combined into one design strategy. The results show an overall positive response, particularly having a large approval toward the overall appeal of the design (75% are 8-10), widespread agreement toward its ability to increase engagement and the likelihood that it will meet the mission of the museum (60% and 55% agree, respectively). The high percentage of the neutral segment (20-40%), however, indicates that in further versions, the most effort should be made to reinforce the symbolic message of cultural identification and extend the involvement tactics to transform the comfortable acceptance to active participation.

As the study has proven, the combination of the design philosophies of Le Corbusier and sustainable interior design would provide an exceedingly effective solution to the renewal of the museums and especially in the case of

the Museum of Fine Arts in Alexandria. All the rubrics have shown positive reception to the proposed design, the results showing high appeal, sensible utility, and the acknowledgement of a symbolic and environmental values.

Most (60%) either agreed or strongly agreed that the design will improve the experience of visitors and spatiality, which characterizes confidence in the proposed design task of promoting an immersive experience at the museum. 62.2% of participants successfully recognized elements of Le Corbusier's philosophy, including modular scaling, abstract geometry, and bold color blocking. This shows that the design captured its symbolism well, but such a low percentage (27.6 unsure) is indicative that more direct interpretive tools would help reinforce the recognition.

The use of sustainable materials like recycled acrylic and cork and eco-paints were hugely cited as being core to design strategy with 64.3 percent of the respondents agreeing or strongly agreeing with the rubric on sustainability.

Open-ended responses extolled the environmental awareness of the proposal and said it was modern, clear and environmental friendly. The highest percentage of the respondents (55%) concurred with the idea that the design fits well with the cultural mission of the museum to acquire an identity in the Fine Arts.

The discussion ended with Qualitative Insights from the results. The comments made by the participants also focused on the productive combination of the ideas of sustainability and modernism in the aesthetics stating that the application of the principles of Le Corbusier increased functionality and form. The importance of flexible modular systems and sustainable materials also received a number of feedbacks.

In general, the research proves the assumption that the design oriented, interior approach based on the thinking of Le Corbusier and on the principles of sustainably used material can contribute to visual input, reinforce symbolic message, ecologically responsible approach to museum environments. Though visitor

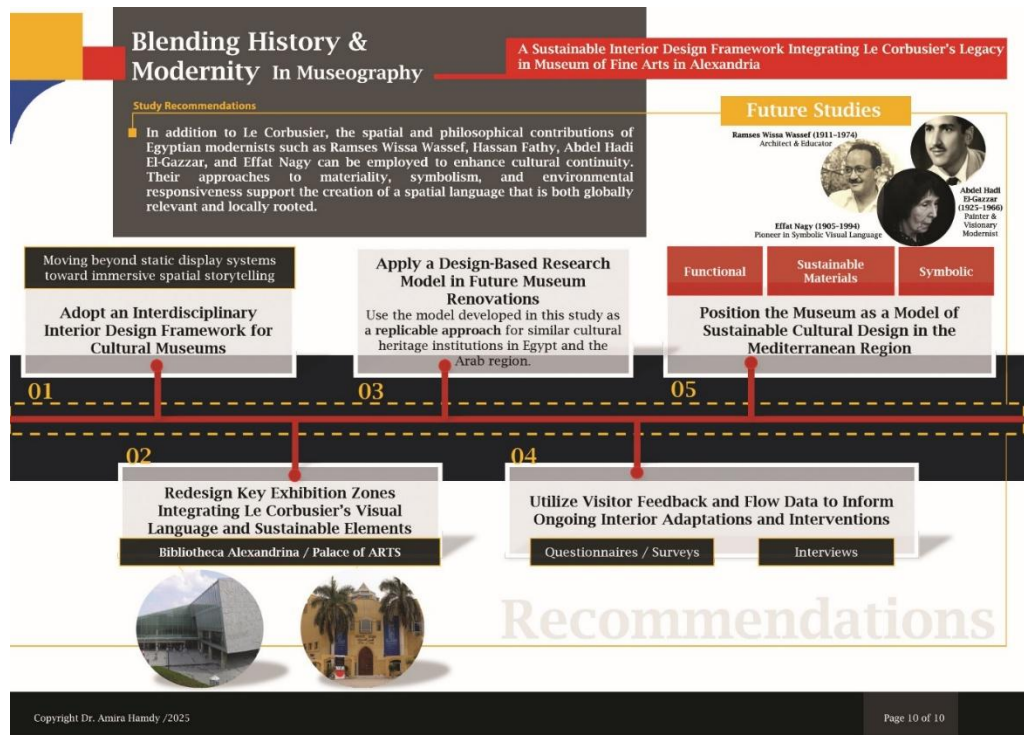
responses were largely favorable, the findings also suggest that far greater interpretive clarity and cultural contextualization is necessary so that symbolic and mission-driven aspects can be realized and accessible to culturally diverse audiences.

### 3. B.5. Key Recommendations of the Interior Design-based Approach

The results of the present research indicate that the combination of the principles of the modernist architecture by Le Corbusier with the idea of sustainable materials approach form a persuasive paradigm of the revamping of the cultural institutions. Considering these findings, it is necessary to define a series of recommendations that could guide the present work in the context of the Museum of Fine Arts in Alexandria as well as future practice in the Mediterranean region, See picture 51. These guidelines stress the interdisciplinary, design-centered focus on the balance of functional performance and the symbolic meaning of the structures in respect to their positive attitude toward the environment. The combination yields a guidebook to help museums become

lasing, immersive, and sustainable cultural destinations without losing their identity and perceived heritage worth.

## Slide 10, Recommendations and Future Directions



Picture 51 shows the 10<sup>th</sup> slide of the interior design based of the study.

Source: Researcher, 2025

### 3. B.5.1. Key Recommendations of the Interior Design-based Approach

- Use an Interdisciplinary Interior Design Model

Museums need to shift the start line beyond mere display systems and into dynamic stories immersive experiences. That involves an amalgamation of architecture, interior design,

museology, conservation science, and digital media and that the cultural narratives must be delivered in a manner which is conducive and render the same contextually authentic.

- Redesign Key Exhibition Zones with Le Corbusier's Visual Language

As well as restructuring key exhibition zones with the visual language of Le Corbusier, we seek, with the visual language of Le Corbusier, to recreate the visual spaces (i.e. the Le Corbusier visual language) on large-scale screen-rendering. Reinterpretation of the main exhibition spaces must be taken first priority and mostly they are in institutions of national importance like the Bibliotheca Alexandrina, and the Palace of Arts. Embedding the characteristic vocabulary that Le Corbusier used, in block of color, modular scaling, abstract geometry, into sustainable material and technology, the spaces can provide the model of building of contemporary, but rooted in heritage of the museums.

- *Use Future Design-Based Research Model of Renovation*

The research conducted in the study has created a replicable way of renovating museums. Based on the designing, testing, and comments of the visitors, this model allows the integrity of the institutions balancing between historical reality and the modern

requirements of the viewers through cyclical design.

- *Use Adaptive Interventions on Visitor Feedback and Flow Data*

Iterative interior changes should be based on constant observation of visitor satisfaction, circulation, and what is known as experiential feedback. The combination of digital tracking, systematic surveys and on-site interviews will enable museums to become adaptive spaces that allow them to both customize experience to the needs (Fathy et al., 2022) of a wide range of audiences but also maintain design integrity.

- *Establish the Museum as an Example of Mediterranean sustainability*

In addition to its local context, which is locally important, the Museum of Fine Arts in Alexandria can become one of the models of sustainable cultural design in the Mediterranean frame. Remedying a pair of irreconcilable opposites, functional efficiency and sustainable materiality, by uniting them with a symbolic representation of the heritage, it is possible to introduce a

new paradigm into the museum: one where conservation and environmental consciousness go hand in hand (AH Ghazy et al., 2024).

### 3. B.5.2. Future Directions of the Interior Design-based Approach

To further elaborate on this framework, the philosophies of the Egyptian modernists (Elshaer et al., 2025), namely Ramses Wissa Wassef, Hassan Fathy, Abdel Hadi El-Gazzar, and Effat Nagy, whose attitudes towards the concept of materiality, symbolism, and the community-grounded design should be used as a suitable counterbalance to Le Corbusier. The combination of their input will result in a language of the museum that has universal appeal and a strong local identity.

## **4. Discussion**

This paper redesigned the Alexandria Museum of Fine Arts interior as it offered a design intervention harmonizing the modernist beliefs of Le Corbusier with the sustainable interior design technique. The combination of methods, both qualitative and quantitative methods were used, mixed approach was applied-on-site

quantitative observation, structured questionnaires, and design-based application, which brought back a lot of gaps between the curatorial mission of the museum and its interior environment. In spite of its modernist's background, the spaces of the museum are stagnant, except that there is limited history dimension, environmental sustainability practices, as well as flexibility in terms of the exhibitions. Design intervention dealt with these gaps with the help of spatial abstraction, modularity and cultural contextualization. Principles of proportion, aesthetics of color, and modular thinking of Le Corbusier were placed into the context of print-making and the retellings, as well as the surfaces were considered immersive narratives, as objects of art, and tools of communication. Material selection, modularity and flexibility of display systems were designed in sustainable strategies, being ecologically responsible and therefore giving flexibility to the curator. The results emphasize the point that printmaking in museography is far more than an aesthetic tool: it can be transformed into

another method of narration that enhances visitor interpretation, promotes cultural-specific dialogue and revives the memory of modernism into a contemporary arena. The integration of functionally innovative aesthetics with narrative interpretation makes the museum a rich point of cultural interface, rather than a flat portfolio, of art. By offering a framework of museum interiors as a hybrid communication platform, the proposed framework goes beyond examining museum interiors as architectural constructions and argues that heritage, design and sustainability converge in museum interiors.

To sum up, the study provides a new interdisciplinary paradigm that can refresh the modernist tradition of Le Corbusier in the contemporary museography. The integration of printmaking, spatial design and sustainability collectively, the research provides a replicable tool, which can help change the museum interiors into a story of living culture-a bridge between heritage and modern (AH Ghazy et al., 2021), memory and innovation, intermixing beauty and responsibility.

## 5. Future Directions

Coming out of such findings there are a number of avenues that possible research and application of these can be formed:

- *Superior Technology Integration*

Future research directions would be to intersect two or more of the following tools Augmented Reality (AR), Virtual Reality (VR), and Artificial Intelligence (AI) to further the narrative beyond the printed page to the modular design. Interpretation layers powered by ChatGPT (Fathy, et al., 2025) or an AI-powered visual customization tool might also enable visitors to engage with Le Corbusier-inspired prints in real time to modify color schemes, compositions or modular layouts to taste.

- *Cross-Museum Applications*

The framework can also be experimented on other regional museums nationwide in Egypt and beyond, particularly those who experience the same problems of stagnant exhibit, not fully utilizing the facility and lack sustainability. Comparative studies have the potential

to show how the modernist legacies of the globe get modified to suit varying cultural settings.

- *Longitudinal Visitor Studies*  
*Longitudinal Visitor Studies*

Although this study had the ability to capture immediate perceptions of the visitors, further studies are needed to establish long term analysis of how spaces redesigned can affect learning, cultural identity development and even repeat visitation of visitors.

- *Innovations in material and sustainability*

Subsequent testing of the more sustainable materials, as well as renewable energy solutions and modular furniture technologies, can bring sustainable museography to a new level, ensuring museum interior not just environment-friendly but adaptive.

- *Educational Extensions*  
*Pedagogical Extensions*

Education of interior architecture and design may also be based on the resulting observations stressing the need to balance the heritage, sustainability and digital innovation. Studios of design or design workshops

(Hamdy, 2023) might employ this research as the basis of training designers to implement narrative-based design and practices that exhibit an awareness of ecological considerations.

## References

1. Adam, R. (2005). Printmaking: Traditional and contemporary techniques. Thames & Hudson.
2. Ahmed, H., & Elshahed, M. (2020). Typographic space: Arabic letters in interior environments. *Design Issues*, 36(4), 62–74. [https://doi.org/10.1162/desi\\_a\\_00612](https://doi.org/10.1162/desi_a_00612)
3. Lorenzo-Palomera, J., Fuentes-Pérez, C., & Aranda-Jiménez, Y. (2022). Le Corbusier's Modulor—Anthropometric Myth. *Civil Engineering and Architecture*, 10(1), 112-120.
4. Corbusier, L. (2000). The modulator: a harmonious measure to the human scale, universally applicable to architecture and mechanics (Vol. 1). Birkhäuser.
5. Von Moos, S. (2009). Le Corbusier: elements of a synthesis. 010 Publishers.

6. Zhang, M., & Baek, J. (2025). Wang Shu's promenade of strolling in shan-shui and its dialogue with Le Corbusier's concept. *Journal of Asian Architecture and Building Engineering*, 24(1), 139-153.
7. Scaramuzza, P. (2023). Le Corbusier and Pierre Jeanneret's Cité Frugès: The Polychromy Issues. *Journal of Civil Engineering and Architecture*, 17, 558-564.
8. Pereira, R. M., MacLennan, M. L. F., & Tiago, E. F. (2020). Interorganizational cooperation and eco-innovation: A literature review. *International Journal of Innovation Science*, 12(5), 477-493.
9. Ghazy, A. H. (2024). Integrating nano-plastics into interior architectural practices to enhance the spatial experience and sustainable behavior of conference halls. *Arts and Architecture Journal*, 5(2), 255–267.
10. McLennan, J. F. (2004). *The philosophy of sustainable design: The future of architecture*. Ecotone publishing.
11. Robert, K. W., Parris, T. M., & Leiserowitz, A. A. (2005). What is sustainable development? Goals, indicators, values, and practice. *Environment: science and policy for sustainable development*, 47(3), 8-21.
12. Abdalla, K. L. (2005, November). Introduction: Using energy indicators to achieve sustainable development goals. In *Natural resources forum* (Vol. 29, No. 4).
13. Combes, B. P. (2005). The United Nations decade of education for sustainable development (2005–2014): Learning to live together sustainably. *Applied Environmental Education and Communication*, 4(3), 215-219.
14. Ghazy, A. H. S. A. (2025). Preserving heritage through interior space identity: A contemporary vision for Egyptian furniture design. *Journal of Qualitative Education and Technology: Scientific and Applied Research*, 25(9), 707–745.
15. McGregor, S. L. (2004). The nature of transdisciplinary research and practice. *Kappa Omicron Nu*

- human sciences working paper series, 1-12.
16. Henning, M. (2005). *Museums, media and cultural theory*. McGraw-Hill Education (UK).
  17. Bollo, A., & Dal Pozzolo, L. (2005, July). Analysis of visitor behaviour inside the museum: An empirical study. In *Proceedings of the 8th international conference on arts and cultural management* (Vol. 2, pp. 1-13).
  18. Yu, L. K. (2025). *Curating otherwise: Queer intersectional practices in contemporary art institutions*.
  19. Pan, P. (2025). Preliminary exploration of multisensory experiences in museums: a phenomenological perspective. *Museum Management and Curatorship*, 1-13.
  20. Fernandez, M. A. (2025). Art as a Mirror of Cultural Values: A Philosophical Exploration of Aesthetic Expressions. *Cultura: International Journal of Philosophy of Culture and Axiology*, 22(3).
  21. Basso Peressut, L., & Pozzi, C. (2012). *Museography: The architecture of museums*. Milano: Mimesis International.
  22. Brooker, G., & Weinthal, L. (2013). *The handbook of interior architecture and design*. London: Bloomsbury.
  23. Chithra, K., & Anbarasu, K. (2015). Sustainable practices in interior architecture: A review. *Journal of Sustainable Built Environment*, 4(2), 211–219. <https://doi.org/10.1016/j.scs.2015.01.003>
  24. Elseragy, A. (2016). Museum architecture in Egypt: Between conservation and contemporary curatorial practices. *International Journal of Heritage Studies*, 22(7), 595–610.
  25. MacLeod, S., Hanks, L., & Hale, J. (2018). *Museum making: Narratives, architectures, exhibitions*. Routledge.
  26. Pallasmaa, J. (2012). *The eyes of the skin: Architecture and the senses* (3rd ed.). Wiley.
  27. Riva, G. (2019). *Museum spaces as narrative systems: Designing for interaction and interpretation*. Museum Management and

- Curatorship, 34(4), 398–414.  
<https://doi.org/10.1080/09647775.2019.1614217>
28. Zumthor, P. (2006). *Atmospheres: Architectural environments, surrounding objects*. Birkhäuser.
- Fayed, H., & Fathy, E. A. (2022). The impact of transformational leadership on front office employees' satisfaction and organisational commitment. *Pharos International Journal of Tourism and Hospitality*, 1(1), 49–63.  
<https://doi.org/10.21608/pijth.2022.264824>
29. Fathy, E. A., & Fouad, A. (2022). Testing the theory of planned behavior TPB in determining intention and behavior to hire people with disabilities in Egyptian hotels. *Journal of Tourism and Hotel, Mansoura University*, 11(2), 747–819.  
<https://doi.org/10.21608/mkaf.2022.254025>
30. Obrist, H. U., Bovier, L., & Theiler, B. (2008). *A brief history of curating*. Zurich: JRP/Ringier.
31. Albertazzi, L. (2013). *Handbook of experimental phenomenology: Visual perception of shape, space and appearance*. John Wiley & Sons.
32. Merleau-Ponty, M., Landes, D., Carman, T., & Lefort, C. (2013). *Phenomenology of perception*. Routledge.
33. Macann, C. (2005). *Four Phenomenological Philosophers: Husserl, Heidegger, Sartre, Merleau-Ponty*. Routledge.
34. Marotta, A., Spallone, R., Turco, M. L., Zich, U., Vitali, M., Marchis, E., & Pavignano, M. (2017, November). Visual images and language in architecture: signifier semiotics and meaning semiotics. In *Proceedings* (Vol. 1, No. 9, p. 964). MDPI.
35. Terzoglou, N. I. (2018). Architecture as meaningful language: Space, place and narrativity. *Linguistics and literature studies*, 6(3), 120–132.
36. Tejera, V. (1988). *Semiotics-From Peirce to Barthes: A Conceptual Introduction to the Study of Communication, Interpretation, and Expression*. Brill.

37. Aiello, G. (2020). Visual semiotics: Key concepts and new directions. *The SAGE handbook of visual research methods*, 367-380.
38. Curtin, B. (2009). Semiotics and visual representation. *Semantic Scholar*, 4.
39. Van Leeuwen, T. (2001). Semiotics and iconography. *SAGE Visual Methods*, 83.
40. Moriarty, S. (2004). Visual semiotics theory. In *Handbook of visual communication* (pp. 249-264). Routledge.
41. Griffiths, A. (1996). Prints and printmaking: an introduction to the history and techniques. Univ of California Press.
42. Lavoie, M., & Caine, V. (2022). Contemplating framing: Unpacking the possibilities of printmaking in narrative inquiry. *International Review of Qualitative Research*, 15(1), 42-61.
43. Abell, C. (2015). Printmaking as an Art. *The Journal of Aesthetics and Art Criticism*, 73(1), 23-30.
44. Sospedra-Roca, R., Hernández-Cardona, F. X., Feliu-Torruella, M., & Boj-Cullell, I. (2022). Social museography and sustainable historical heritage. *Sustainability*, 14(11), 6665.
45. Wiek, A., & Lang, D. J. (2016). Transformational sustainability research methodology. In *Sustainability science: An introduction* (pp. 31-41). Dordrecht: Springer Netherlands.
46. Piotrowski, A. (2016). Le Corbusier and the representational function of photography. In *Camera Constructs* (pp. 57-68). Routledge.
47. Carulli, M., & Bordegoni, M. (2019, September). Multisensory augmented reality experiences for cultural heritage exhibitions. In *International Conference of the Italian Association of Design Methods and Tools for Industrial Engineering* (pp. 140-151). Cham: Springer International Publishing.
48. Architectural Digest (2020). Tapestries exhibition at the Bechtler Museum of Modern Art illustrates the forms continuing relevance. Retrieved from <https://www.architecturaldigest.com/story/tapestries-exhibition-at-the-bechtler-museum-of-modern->

- art-illustrates-the-forms-  
continuing-relevance
49. mutualart (2023). Taureau X – Le Corbusier 1961. Retrieved from <https://www.mutualart.com/Artwork/Taureau-X/42A4D81104134690345D276189E642E0?utm>
  50. Barthes, R. (1977). *Image-Music-Text* (S. Heath, Trans.). Fontana Press.
  51. Curtis, W. J. R. (1996). *Modern architecture since 1900* (3rd ed.). Phaidon Press.
  52. Drucker, J. (2014). *Graphesis: Visual forms of knowledge production*. Harvard University Press.
  53. Elshaer, I. A., Azazz, A. M., Fayyad, S., Kooli, C., Fouad, A. M., Hamdy, A., & Fathy, E. A. (2025). Consumer boycotts and fast-food chains: economic consequences and reputational damage. *Societies*, 15(5), 114.
  54. Flickr (2020). Gandalf's Gallery – صورة. Retrieved from <https://www.flickr.com/photos/gandalfsgallery/51308300576>
  55. Fondation Le Corbusier (n.d.). *Peintures - Taureau V* (1954). Retrieved from <https://www.fondationlecorbusier.fr/oeuvre-plastique/peintures-taureau-v-1954/>
  56. Harvard Art Museums (n.d.). Object 312191. Retrieved from <https://harvardartmuseums.org/collections/object/312191>
  57. Heller, S., & Vienne, V. (2012). *100 ideas that changed graphic design*. Laurence King Publishing.
  58. Hughes, P. (2018). *Printmaking in the expanded field: Hybrid techniques and contemporary practice*. Bloomsbury Visual Arts.
  59. La Cabanon (n.d.). Retrieved from <https://capmoderne.com/en/lieu/le-cabanon/>
  60. Le Corbusier. (1951). *Oeuvre complète*, vol. 5. Fondation Le Corbusier.
  61. Le Corbusier. (1957). *Oeuvre complète*, vol. 5. Éditions de l'Architecture d'Aujourd'hui.
  62. Lupton, E. (2014). *Thinking with type* (2nd ed.). Princeton Architectural Press.

63. Fathy, E. A., Zidan, H. A. K. Y., El Sayed, A. H., & Fouad, A. M. (2025). Integrating ChatGPT in tourism and hospitality education: A systematic and bibliometric analysis of research trends, applications, and implications. *Tourism and Hospitality Research*, 14673584251357510.
64. Museum of Modern Art (MoMA). (2013). *an Atlas of Modern Landscapes*. New York, NY: MoMA.
65. MutualArt (n.d.). Artwork: Taureau by Le Corbusier. Retrieved from <https://www.mutualart.com/Artwork/Taureau/F1B1A7702AF6D8DE>
66. NBMP (n.d.). Original Le Corbusier lithograph 'Le Poème de l'angle droit' 1955 Mourlot. Retrieved from <https://www.nbmposter.com/products/original-le-corbusier-lithograph-le-poeme-de-langle-droit-1955-mourlot-1>
67. Printmaking Today. (2022). the art of contemporary print. *Printmaking Today Journal*, 31(2), 10–15.
68. Ross, J. (2019). *The complete printmaker: Techniques, traditions, innovations*. Free Press.
69. Sotheby's (2018). *Impressionist & Modern Art Evening Sale – Lot 31*. Retrieved from <https://www.sothebys.com/en/auctions/ecatalogue/2018/impressionist-modern-art-evening-sale-n09930/lot.31.html>
70. Hamdy, A. (202٣). Enhancing accessibility and sustainability in school design: An evidence-based approach to inclusive design in interior architecture. *Journal of Qualitative Education Studies and Research*, 9(4), 1329–1352.
71. Sydney Opera House (2020). *The Sydney Opera House tapestries*. Retrieved from <https://www.sydneyoperahouse.com/our-story/art-at-the-house/tapestries>
72. Paris Art (n.d.). *Le Corbusier – Le Quadrilatère Mural Nomade*. Retrieved from <https://www.paris-art.com/le-corbusier-le-quadrilatere-muralnomad/>

73. WikiArt (2023). Le Corbusier - Adieu von 1957. Retrieved from <https://www.wikiart.org/en/le-corbusier/adieu-von-1957>
74. Art Basel (2019). Le Corbusier – MENACE. Retrieved from <https://www.artbasel.com/catalog/artwork/55799/Le-Corbusier-MENACE>
75. Poulin, R. (2012). Graphic design and architecture, a 20th century history: a guide to type, image, symbol, and visual storytelling in the modern world. Rockport Publishers.