

Design for social impact

*'The tinkling sounds of desert bells can be heard in the distance. It must be team of camels transporting silk
to the town of Anxi.'*

Redesign:

NGV Chinese Art Gallery

Design & Research
Project Report

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The spatial layout, exhibition scale, and
interactive experience

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Part 1. Introduction & Background

1.1 Design Proposal

This design proposal aims to restructure and enhance the spatial narrative and visitor experience of the Chinese Art Gallery at the National Gallery of Victoria (NGV). Given that the NGV's Chinese exhibition spaces are not permanently fixed—as evidenced by the different spatial arrangements in previous exhibitions such as "China – The Past Is Present (2022-23)"—this proposal leverages the flexibility of the gallery's existing architectural elements to introduce a clear and culturally resonant layout.

Currently, the lack of distinct navigational paths within the gallery has led to fragmented and superficial engagement from visitors, limiting their understanding of curatorial narratives and the deeper cultural contexts behind exhibited artifacts (see Figure 1.1). Research demonstrates that unclear visitor pathways significantly decrease audience engagement and learning outcomes in museum spaces (Falk & Dierking, 2018; Bitgood, 2011).

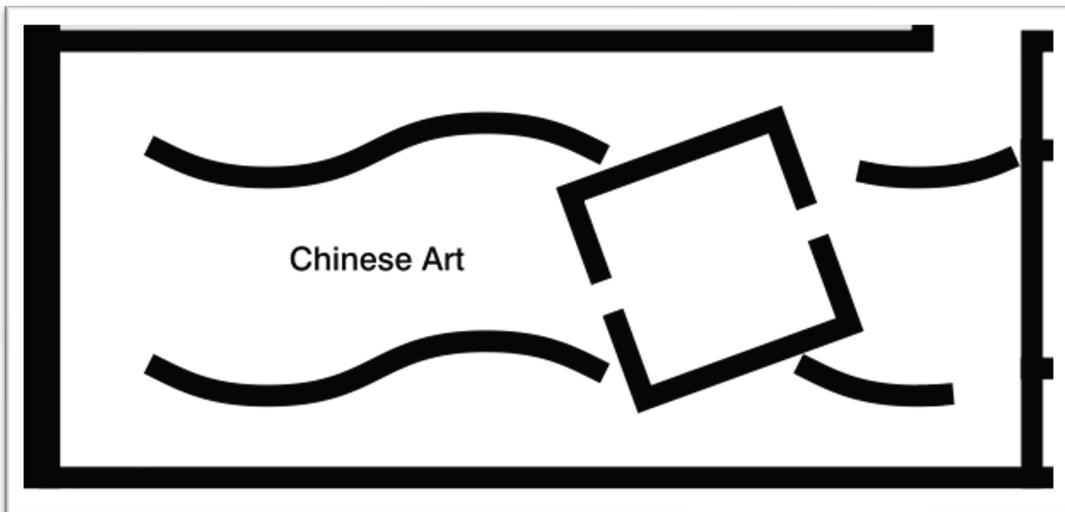


Figure 1.1: Map of the Chinese Art Collection Exhibition located on the second floor of NGV.

To address these issues, the proposed redesign employs two curved wall structures symbolizing the Yellow and Yangtze Rivers, strategically dividing the exhibition space into three culturally distinct regions: North, Central, and South China. This layout provides a coherent, intuitive path that guides visitors seamlessly through the gallery. Interactive technologies, particularly individualized immersive installations inspired by the 'individual hoods' at Museo Nazionale dell'Automobile (MAUTO), will offer multimedia experiences that deepen visitor understanding without overwhelming the limited gallery space.

Overall, this approach will integrate narrative clarity, intuitive spatial guidance, and immersive technological interactions, significantly enhance visitors' cultural comprehension and provide a richer, more coherent engagement with the exhibited Chinese heritage.

1.2 Background Research

Although the National Gallery of Victoria (NGV) has not released specific visitor traffic data for its Chinese Art Collection, the extension of its exhibition period implicitly indicates robust public interest and acceptance. However, field observations reveal significant issues with the current spatial organization. Upon entering from the main entrance, visitors encounter multiple directional options. And the arrangement of the exhibits does not seem to follow a specific order. Despite the freedom to explore, the sequential labeling of artifacts contradicts this non-linear pathway, creating confusion (Bitgood, 2011). Unlike the concurrent "Yayoi Kusama" exhibition, which employed strong spatial logic and intuitive visitor flow despite limited space, the Chinese exhibition appears random and unstructured, mixing historical and contemporary artworks without clear thematic or chronological coherence.

A notable consequence of this unclear curatorial logic is diminished visitor engagement and comprehension. Falk and Dierking (2018) emphasize that coherent spatial arrangements significantly enhance museum visitor experiences, facilitating better understanding and emotional engagement with exhibits. Current visitor experiences, as noted in observational studies, suggest superficial interactions due to spatial ambiguity, reducing educational and cultural enrichment (Hooper-Greenhill, 2000).

European and International contemporary galleries within NGV provide exemplary case studies for optimized spatial arrangements. For example, NGV's modern furniture exhibition maximizes visitor experience through carefully structured chronological and thematic layouts within constrained spaces (MacLeod, 2013). These exhibitions demonstrate how clear pathways, and intuitive layouts significantly enhance visitor satisfaction and educational outcomes.

Based on these precedents, the redesigned Chinese Art Gallery will strategically separate historical from contemporary works, situating modern pieces along the final corridor to facilitate chronological narrative progression. This spatial logic aligns with visitors' cognitive processing patterns, aiding in memory retention and deeper cultural understanding (Bitgood, 2011).

To further enrich visitor interactions, this proposal integrates individualized multimedia stations modeled on the "individual hoods" from Museo Nazionale dell'Automobile in Turin (Figure 1.2). These hoods offer focused, immersive multimedia experiences in confined spaces, making them ideal for NGV Chinese Art Gallery's spatial limitations (Pallud, 2017). Such interactive installations provide personalized cultural narratives, significantly increasing visitor dwell time and depth of engagement (Falk & Dierking, 2018).



Figure 1.2: Under individual hoods, a screen allows people to watch global car commercials from the '50s to the present-day.

In summary, this background research highlights the critical need for improved spatial organization, clear thematic progression, and interactive multimedia

enhancements to optimize visitor experience and cultural education in NGV's Chinese Art Gallery. The proposed redesign, supported by observational findings, visitor studies, and exemplary museum practices, aims to transform the gallery into a coherent, engaging, and culturally enriching environment.

1.3 Design Objectives

The primary objective of this exhibition redesign is to facilitate a clear and culturally coherent visitor experience, enabling audiences to appreciate the rich diversity and intrinsic unity of Chinese art from the northern, central, and southern regions. By structuring the gallery along the symbolic trajectories of China's major rivers—the Yellow and Yangtze Rivers—visitors can intuitively navigate through varied regional art forms, reflecting distinct historical, geographical, and cultural narratives yet unified by a shared philosophical and aesthetic core (see Figure 1.3).

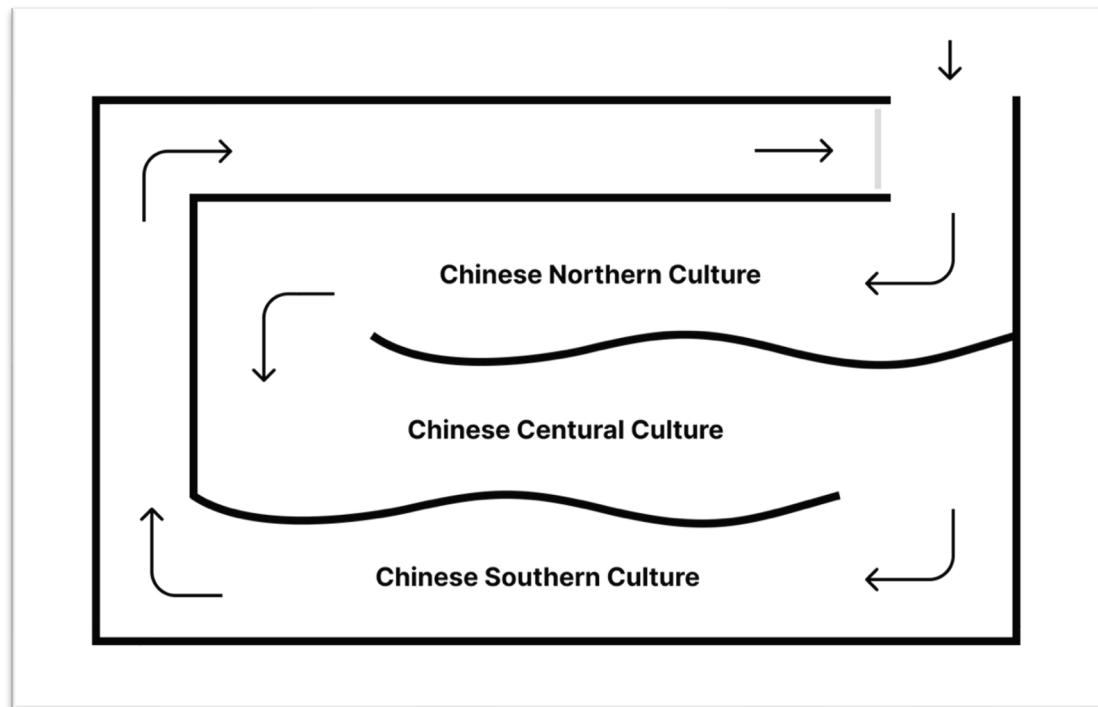


Figure 1.3: Map of the redesigned layout of the exhibition hall has a clear visitor route, marked with arrows.

This design strategically responds to several critical cultural and social imperatives. Firstly, enhancing cross-cultural understanding and appreciation among diverse visitor demographics, including both Chinese-descended and non-Chinese visitors, is central to this project. According to Falk and Dierking (2018), clearly structured exhibition narratives significantly enhance visitor

understanding and engagement across cultural boundaries, fostering greater inclusivity and intercultural dialogue.

Secondly, interactive design components, such as individualized immersive installations, significantly improve accessibility and inclusivity, addressing diverse visitor needs and preferences (Simon, 2010). These installations encourage deeper personal engagement with artifacts, enabling visitors to connect emotionally and intellectually with Chinese cultural heritage.

Lastly, this project addresses broader societal issues regarding cultural representation and accessibility in museum environments. It aims to immerse visitors in a “miniature China” by integrating regional culture into the entire exhibition, allowing them to feel as if they are truly in the distant land of the East and strengthening the “sense of communication” between the audience and Chinese culture.

Through these integrated strategies, the redesign seeks not only to enhance visitor comprehension and enjoyment but also to foster a more inclusive, accessible, and culturally insightful museum experience.

Part 2. Creative Outcome

2.1 Design Process

The design process began with an immersive on-site research at the NGV (National Gallery of Victoria). I initially felt an intuitive connection with the exhibited content. However, through careful reflection and analysis, it became clear that the fragmented layout, ambiguous exhibition sequence, and lack of geographical or temporal order often resulted in the intended curatorial information being lost.

This project does not negate the exhibition's original architectural and curatorial intentions but seeks to preserve and build upon them. The two iconic curved walls—I imbued them with design intent to evoke the Yellow River and Yangtze River. This allows for a culturally authentic progression within the space while maintaining the visual metaphor embedded within the existing architecture.

Preliminary design sketches, 3D prototypes, and spatial simulations were created to test the visual and functional feasibility of the proposed changes. These were informed by visitor behaviour observations, feedback from design peers and supervisors, and relevant museology and spatial design literature. Throughout the process, cultural sensitivity and accessibility remained guiding principles, ensuring that the final proposal invites diverse audiences into a meaningful and immersive experience of China's heritage.

2.2 Design Outcome

To support the overall spatial redesign, a 3D-rendered model (Figure 2.1) was developed to simulate the proposed gallery structure. This visualization captures the conceptual layout of the redesigned NGV Chinese Art Gallery, where two iconic curved walls—symbolizing the Yellow River and Yangtze River—serve as both architectural partitions and narrative devices.

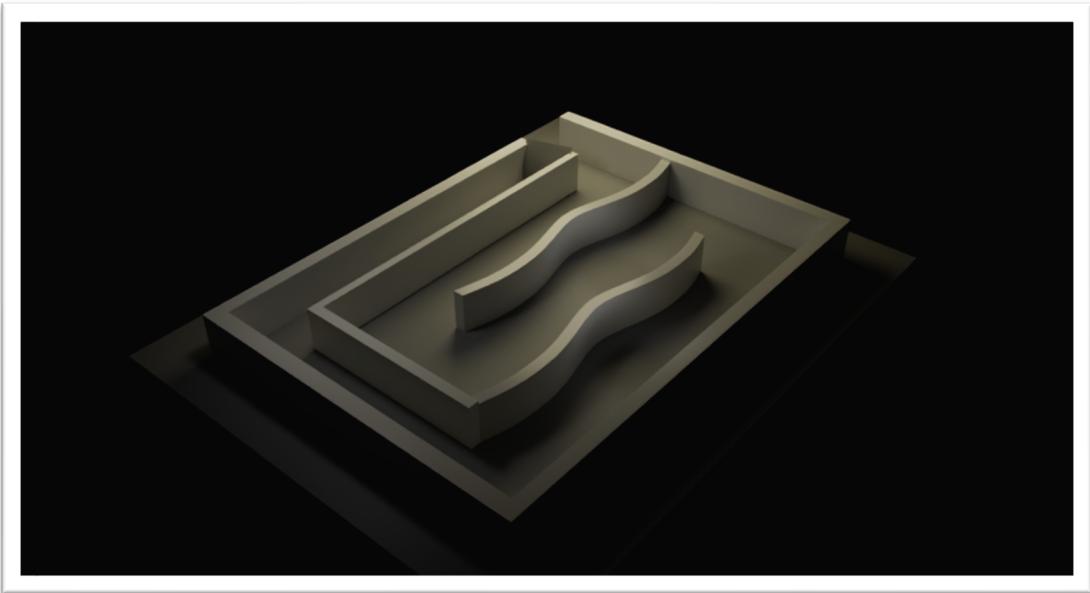


Figure 2.1: Conceptual 3D model of the redesigned gallery layout with curved walls and directional visitor flow.

As **Part 1** (1.3) mentioned above, visitors will first tour the S-shaped area (See the blue section in Figure 2.2), which focuses on Chinese historical arts, and culture, the space is divided into three longitudinal zones: the Northern, Central, and Southern regions of Chinese cultural geography. At the end of the S-shaped area, visitors will enter an L-shaped corridor (See the pink section in Figure 2.2), which begins with a VR interactive area and then transitions to a display area featuring modern Chinese art. This path ensures spatial continuity and thematic coherence, allowing visitors to gradually immerse themselves in the stylistic and cultural distinctions of different regions.

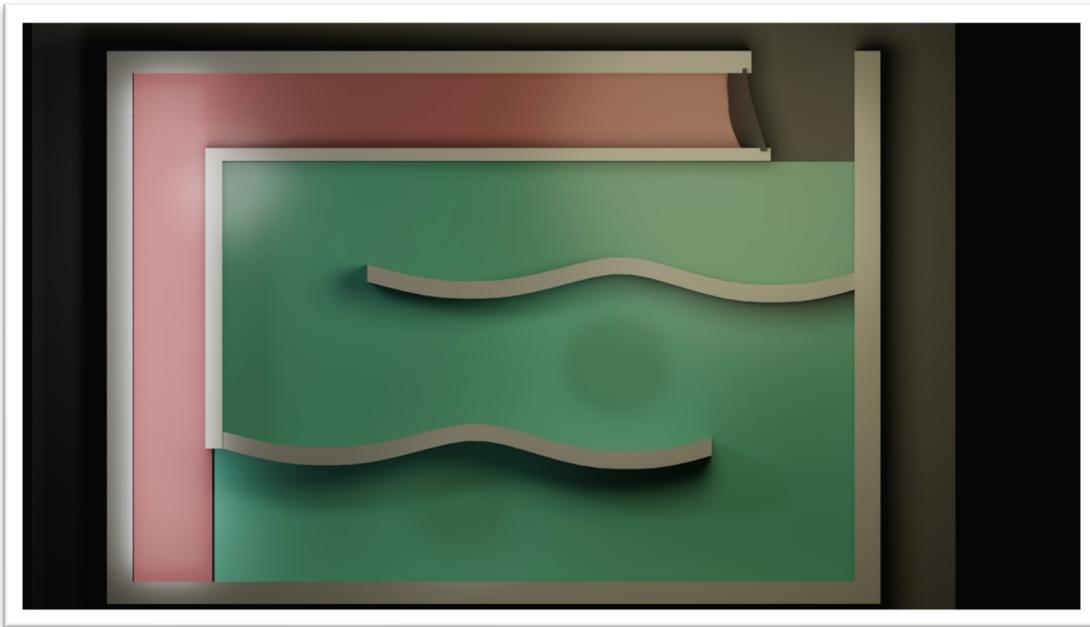


Figure 2.2: Conceptual 3D map model of the exhibition hall layout, with two colors used to distinguish between exhibitions.

The lighting variations play a critical role in influencing perception, directing the flow of attention, and evoking a sense of progression and rhythm. The open ends of the curved walls suggest a journey rather than a segmented exhibition, aligning with the Chinese aesthetic principle of continuity and flow.

This structural logic forms the backbone of all subsequent interactive and content-based layers of the exhibition, including VR-based immersion points and screen-enhanced collective learning modules. It not only anchors visitors spatially but frames their mental journey through Chinese cultural history.

Figure 2.3A shows the redesigned corridor features a VR-based interactive experience in which visitors assume the role of a traveling artist — perhaps even Marco Polo himself — on a journey through historical and cultural landscapes of China. By engaging in this role-playing narrative, visitors virtually explore stories behind key artworks, transcending temporal and spatial limitations. This simulation enables encounters with national treasures that cannot physically leave their home institutions, offering an authentic yet accessible engagement.

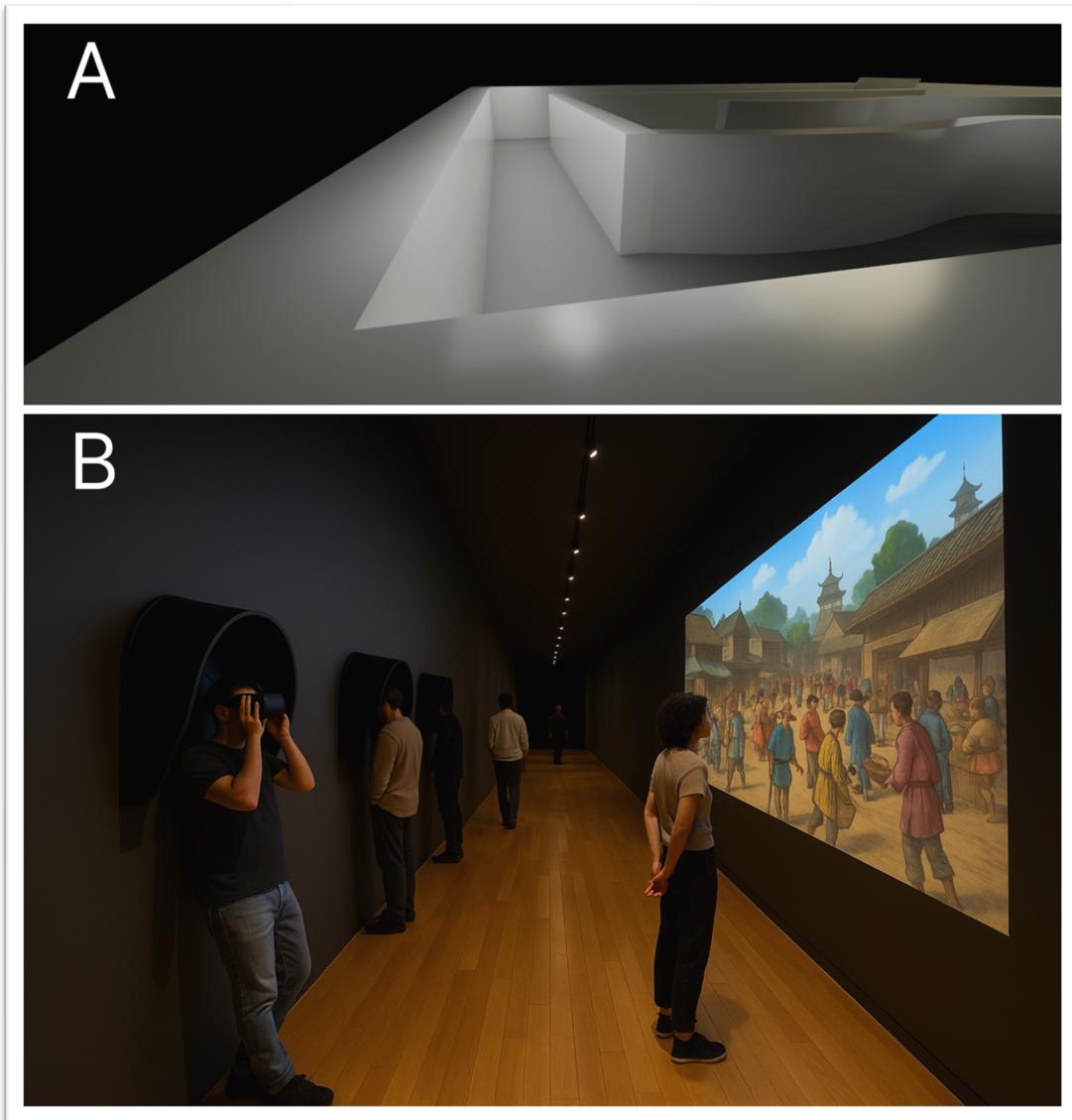


Figure 2.3A: Concept Space, where interactive experience devices will be installed, transitioning from historical art to modern art. **B:** Interactive VR corridor with HMD participant and shared projection wall to foster communal engagement and narrative transition.

Meanwhile, a large wall-mounted screen displays the virtual journey in real-time, allowing other visitors to witness the interaction and fostering spontaneous conversations and shared learning (As shown on the right side of Figure 2.3B). Social interaction in museums has been shown to enhance memory retention and emotional engagement (Pekarik et al., 1999; Falk & Storksdieck, 2005). The purpose of this composite experience design is to address the limitations of individual interactions and the lack of communication between experiences. Imagine how disappointing it would be if a family could only experience the exhibition individually, with no way to share their experiences. This predictable collaborative interaction not only deepens the communication between family members, but also enhances visitors' impressions of the exhibition hall, making them more willing to learn more about Chinese culture.

2.3 Reflective Analysis

While the core concept of narrating Chinese cultural diversity through spatial transitions—symbolized by the Yellow and Yangtze Rivers—has been well received, I recognize that the visual and communicative clarity of the design requires further refinement. During prototyping, it became evident that the spatial gestures alone were insufficient in conveying the intended narrative. Viewers unfamiliar with the curatorial logic may find it difficult to intuitively grasp the regional storytelling embedded within the layout. This highlights a gap in the design's ability to communicate meaning effectively through spatial form.

Following feedback from Lecturer Jenna, I reconsidered the structure of the interactive experience. Originally designed as individual VR interactions, the proposal was reconfigured to incorporate shared projection walls that allow passive viewers to engage with the experience. This change shifts the interaction from an isolated act to a collective cultural encounter—reinforcing inclusivity and mutual understanding.

Nonetheless, the current design still lacks detailed consideration of exhibit presentation, such as how to sequence and label artifacts in ways that enhance learning and accessibility. In future iterations, I intend to conduct audience testing and behavioural mapping to better align exhibit organization with visitor habits. These insights will be critical for improving both the educational potential and the cultural sensitivity of the final design.

Part 3. Conclusion

This project reimagines the Chinese Art Gallery at NGV as a spatial narrative of cultural geography, connecting artifacts and audiences through thematic sequencing, immersive interaction, and inclusive access. While initial prototypes highlight strong conceptual potential, further refinement in exhibit detailing and communication clarity is needed. Future work will involve deeper audience testing and the development of more intuitive interpretive tools to enhance visitor comprehension, emotional engagement, and intercultural understanding.

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Figure 1.2: Under individual hoods, a screen allows people to watch global car commercials from the '50s to the present-day. White, J. (2025, May 22). The Visitor Centre today is . . . MAUTO (National Automobile Museum), Turin. *VisitorCentre*. <https://www.thevisitorcentre.com/post/the-visitor-centre-today-is-mauto-national-automobile-museum-turin>

OpenAI. (2025). Figure 2.3B: Interactive VR corridor for the Chinese Art Exhibition. Generated using ChatGPT (DALL·E). Unpublished digital rendering.