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AI AND DIGITAL TECHNOLOGIES FOR A NEW NARRATIVE OF ARCHAEOLOGICAL HERITAGE

Alessandra Cirafici, Carla Langella**, Alice Palmieri*, Giulio Giordano**

*University of Campania "Luigi Vanvitelli" – Caserta, Italy.
**University of Naples "Federico II" – Naples, Italy.

Abstract

The 'Gens' project developed as part of a research project carried out by the University of Campania 'Luigi Vanvitelli' and the MANN Archaeological Museum, aimed at investigating fruition and storytelling strategies for experience design. The use of digital technologies, in particular AI, has led to the definition of processes for the construction of imagery and historical scenarios, combining iconographic testimonies and contemporary narratives, aimed at the emotional involvement and improved accessibility of cultural content. By integrating AI-driven media with traditional museum displays, GENS bridges the gap between classical artifacts and contemporary storytelling, offering a new paradigm for interactive and immersive heritage interpretation.

Keywords

Archaeological heritage; digital storytelling; AI images; narrative museum; edutainment.

1. *Introduction*

In the ever-evolving landscape of museum experience design, the use of digital technologies has become a crucial tool for audience development, particularly in engaging younger generations, whose attention can be more challenging to capture.

While digital technologies can be effective in attracting visitors, their widespread and prolonged use exposes individuals (especially young people) to an overwhelming volume of visual stimuli: images, photographs, videos, and colours presented at an increasingly rapid, intense, and frenetic pace. This constant exposure can lead to a reduced attention span and difficulty in focusing on the details of artifacts, limiting the ability to fully appreciate their qualities. A study published in European Child & Adolescent Psychiatry analysed data from over 11,000 adolescents and found that increased time spent on online social activities was associated with a rise in ADHD symptoms during early adolescence (Deng et al., 2024).

In archaeological museums, particularly, the excessive use of digital applications, augmented reality, virtual reality, or video-based content may prove counterproductive, as it risks shifting visitors' focus from the physicality of artifacts to their digital representation. This, in turn, weakens one of archaeology's most defining characteristics: its materiality (Langella, 2018). What makes the visit to an archaeological museum particularly compelling is the tangible proximity to objects that were once part of everyday life in distant civilizations. Objects that shaped the relationships, experiences, and narratives of those who used them. Today, these artifacts act as powerful, almost magical, space-time connectors between visitors and the people of the past, having survived for centuries to serve as valuable witnesses to ancient civilizations, within which our cultural roots lie (De Falco et al., 2021). Emotional attachment to archaeological objects is regarded as a positive and meaningful element, contributing to a deeper understanding of human experiences throughout history (Lipkin, Bell, & Väre, 2024).

Therefore, design —particularly when applied to digital interventions— must aim to enhance awareness of the importance of the analogue dimension of archaeological artifacts, reinforcing their emotional and empathetic potential (Cirafici, Langella & de Vita, 2022).

Digital technologies should thus be employed with a high degree of awareness, integrating insights from the latest neurocognitive research on spatial perception, orientation, the relationship between emotion and attention, and the capacity

to construct cognitive hierarchies within museum environments (Zeyuan & Euitay, 2024). Visitors should not be regarded merely as users but as individuals with unique identities and diverse cognitive and perceptual abilities. A key objective is to "enhance" inclusion, agency, and perceptual engagement, tailoring museum experiences to accommodate a wide range of needs, according to an approach that can be defined as 'neuroinclusive' (Hutson & Hutson, 2024). This approach fosters innovation in the cultural heritage sector by framing museum experiences as complex systemic realities that require interdisciplinary strategies (integrating cultural, relational, psychological, social, and technological dimensions) to create meaningful, inclusive, and engaging visitor experiences (Cesário & Campos, 2024).

This paper presents the findings of a research project conducted as part of an agreement between the MANN Archaeological Museum and the Department of Architecture and Industrial Design at the University of Campania "Luigi Vanvitelli." The project aimed to enrich the visitor experience of the museum's "Campania Romana" section by integrating emotional, relational, and creative dimensions alongside historical, didactic, and cultural content through the use of innovative tools such as generative text-to-image artificial intelligence.

Through interviews and user observations, the study confirmed that the emotional impact of observing a valuable archaeological artifact is closely tied to an individual's awareness of its historical and artistic significance as well as its uniqueness. Visitors with lower levels of awareness tend to perceive artifacts in a more homogeneous and emotionally neutral manner, whereas those with a deeper understanding naturally establish a hierarchy of significance within the collection, which enhances their engagement and emotional response.

Visitors who lack these selective interpretative filters experience lower emotional engagement, as they struggle to construct the necessary cognitive hierarchies that foster feelings of wonder, awe, empathy, and appreciation—sensations that could otherwise define a meaningful museum visit (Alelis, Bobrowicz & Ang, 2013).

It is therefore essential to develop strategies and methodologies that assist visitors in constructing value maps that heighten their awareness of cultural heritage. By fostering recognition of the privilege of being in close proximity to rare and unique artifacts: tangible objects preserved through history and testaments to the craftsmanship and lives of their creators (Schou & Løvlie, 2020).

Emphasizing the human dimension of artifacts (the personal histories that complement cultural information) can be highly effective in fostering empathy toward the individuals connected to these objects. This, in turn, evokes emotions and psychological states that stimulate curiosity, a desire for knowledge, and a stronger inclination to learn. A culturally and emotionally rich museum experience is not only more memorable and cognitively impactful but also encourages visitors to return, explore other museums, and share their experiences with potential new audiences (Gokcigdem, 2019).

As part of the scientific research project on experience design and digital innovation at MANN (conducted between 2022 and 2023), the research team from the DADI Department[1] explored cutting-edge digital tools and technologies, including Artificial Intelligence, photogrammetric scanning, digital sculpture, and web TV. These technologies were analyzed and implemented in various iterations to assess how design can effectively guide and enhance advanced digital systems. The objective was to create visitor experiences that amplify the cultural and social impact of museums while respecting and reinforcing the curatorial vision established by museum professionals.

2. Narrative Strategies for Emotional Interaction

The most recent definition of "museum" formulated by ICOM - International Council of Museums, in 2022 introduces several contemporary approaches that emphasize the need to consider the museum as a profoundly modern space, based on values of inclusion, accessibility (both physical and cultural), and

[1] Scientific research project for experience design in the "Campania Romana" Section of MANN Archaeological Museum; scientific coordinators: Alessandra Cirafici, Carla Langella. Research group: Alessandra Cirafici, Carla Langella, Alice Palmieri, Giulio Giordano, Gianpaolo Tucci, Michela Musto.

incorporating the concept of "edutainment"[2] (Rey-López, Fernández-Vilas, & Díaz-Redondo, 2006) which merges entertainment with educational purposes. The ICOM definition states that "a museum is a not-for-profit, permanent institution in the service of society that researches, collects, conserves, interprets and exhibits tangible and intangible heritage. Open to the public, accessible and inclusive, museums foster diversity and sustainability. They operate and communicate ethically, professionally and with the participation of communities, offering varied experiences for education, enjoyment, reflection and knowledge sharing"[3].

The contemporary conception of the museum, as outlined in the latest ICOM definition, departs radically from the traditional notion of a mere repository of artworks. Instead, it redefines the museum as a cultural apparatus capable of generating new forms of expression and knowledge. In this perspective, the museum functions as a catalyst for cognitive and emotional processes, guiding visitors toward an enriched and multidimensional experience. This conceptual evolution highlights the importance of the right to fruition, which implies transcending passive and uncritical reception in favor of active and conscious participation.

Among the first theorists to embrace this vision, Giulio Carlo Argan (1965) interpreted the museum as a relational and dialogic space, emphasizing the need for dynamic and interactive exhibition designs that stimulate learning and engagement. From this perspective, the museum environment extends beyond its traditional roles of conservation and display, becoming a site of cultural mediation that fosters dialogue between the artworks, the public, and the urban context.

The roots of this discourse can be traced back to John Dewey, who, in '*Art as Experience*' (1934), criticized the conception of art as a static object, isolated on a pedestal and confined within a museum space detached from everyday reality. Dewey instead proposed a vision in which art coincides with experience: an interactive process grounded in understanding and imagination. Accordingly, museum space design must aim to create meaningful interactions between visitors and the exhibition environment, reconnecting art with daily life and restoring its continuity with social and cultural contexts (Dewey, 1934).

In this framework, the museum is not merely a place for preservation and display but a spatial and relational device where individuals and groups interact both with each other and with the exhibited works, whether material or immaterial. As a result, museum architecture and exhibition design play a crucial role in shaping these dynamics, fostering interconnections between space, artifacts, and visitors, and redefining the institution as an active node within the contemporary cultural and urban network (Richards, 2021).

Thus, the contemporary museum abandons its former role as an austere institution reserved for the few and embraces an active narrative approach to its collections, making them accessible to a wider audience (Hidayat, 2018). Consequently, the exhibition space can no longer be conceived as an uncritical assemblage of display rooms but rather as a living, complex system: a space of storytelling and revelation, a stage for cultural *mise-en-scène*. This shift gives rise to a new vision in which collection-based museums transform into "narrative museums" (Studio Azzurro, 2011), leading to the concept of the museum as a narrative habitat, an immersive site of artistic experimentation and a territory of memory. The integration of multimedia technologies enhances experiential engagement and interactive storytelling, reinforcing audience participation and expanding the possibilities for knowledge transmission (Valzano, Mannino, 2020) (fig. 1).

In this perspective, the museum paradigm shifts from the traditional notion that an archaeological museum cannot exist without its artifacts to a more contemporary vision in which a museum cannot exist without its visitors. The visitor assumes a fundamental role in the design of the museum experience, particularly through new storytelling techniques, which come to life only through the presence and interaction of the audience. Storytelling serves as a tool for constructing and organizing a narrative within the museum, aiming to meet contemporary expectations and achieve significant social objectives (Roussou, Ripanti& Servi, 2017).

[2] The noun "edutainment" is a neologistic portmanteau used by Robert Heyman in 1973 while producing documentaries for the National Geographic Society

[3] In Prague, on 24 August 2022, the Extraordinary General Assembly of ICOM approved this proposal for the new museum definition.

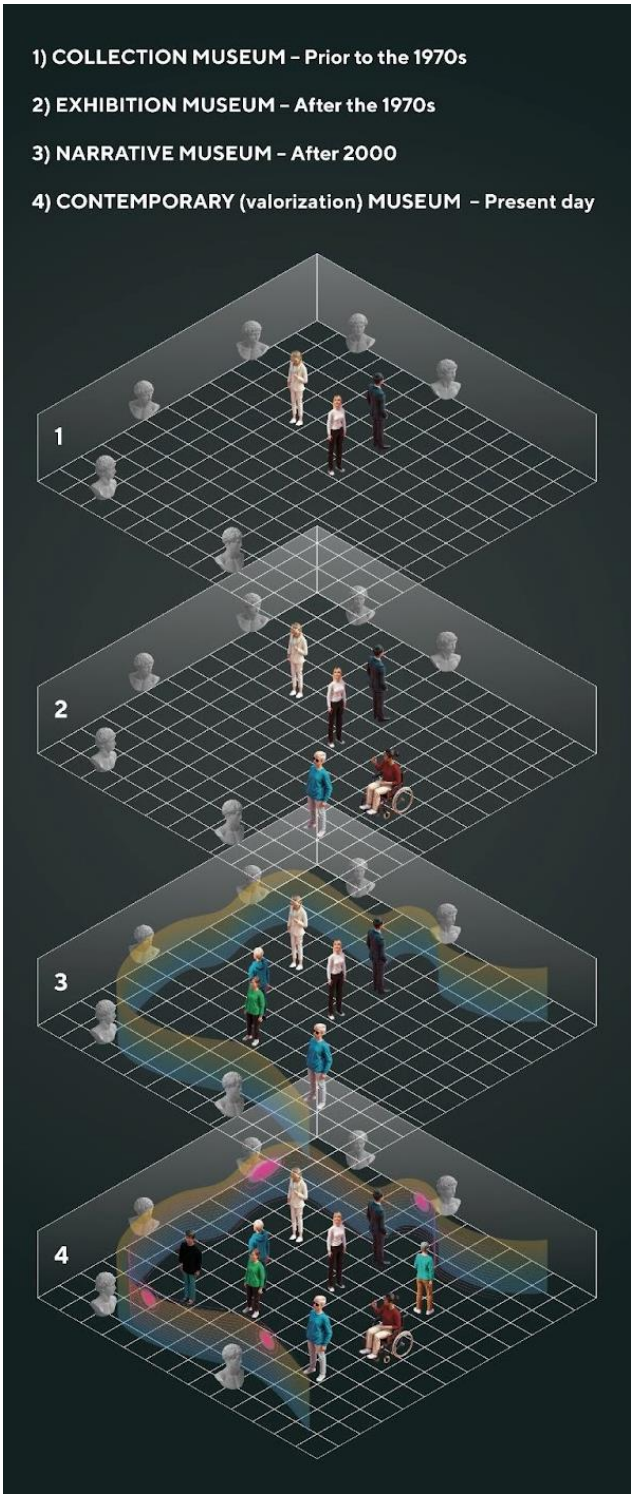

Fig. 1: Schematic representation illustrating the evolution from the concept of the collection site of artifacts to their contemporary narration and valorization. The diagram outlines key stages in shifting perspectives on artifact curation and presentation over time (Giulio Giordano, 2025).

Considering the idea that the value of a cultural asset lies in its ability to create relationships, storytelling seeks to establish active connections between the exhibited artifacts and visitors, proposing a narrative thread that guides them through a coherent and engaging experience. The goal is not merely to provide information about the artifacts but to encode history using expert yet accessible and stimulating language, as if narrated by a charismatic curator. This approach enhances visitor engagement, adding an interpretative layer that enriches the standard didactic information accompanying the exhibits.

Through this narrative densification, the storytelling approach extends the museum's reach to a broader audience, regardless of their educational background, fostering the sharing of experiences and promoting a sense of belonging, inclusion, and social cohesion. Furthermore, the interpretation of narratives through a contemporary lens and the possibility for visitors to identify with or recognize familiar elements from their own lives contribute to deeper emotional involvement, making the museum experience more meaningful and immersive (Da Milano et al., 2023).

Storytelling strategies allow for multiple versions of the same narrative, encouraging visitors to reflect, interact, and perceive the exhibition and historical content from different perspectives. The reference points for these narratives can be found in the museum's galleries, artifacts, architecture, or multimedia installations. In the case of the project, presented in this paper, the recurrence of narrative elements in the video productions creates a connection between the stories of the characters and, consequently, the statues displayed in the section.

In recent years, museums have initiated a significant phase of experimentation with generative AI across multiple domains: from the real-time analysis of visitor behavioural data, including movement trajectories and focal points of interest, to the automated creation of narrative and visual content such as descriptive texts, generative text-to image speculative reconstructions, and the design of personalized and interactive visitor paths.

AI is also being employed to enhance multilingual accessibility and to adapt content to specific sensory needs. These innovations are progressively transforming the museum into a more emotionally engaging, immersive, and user-centred environment. Furthermore, machine learning models are increasingly integrated into curatorial processes, supporting collection management and interpretative frameworks for underexplored artifacts.

3. Scientific research project for museum experience design

The National Archaeological Museum of Naples, through the funds PON CULTURE AND DEVELOPMENT, FESR 2014-2020, has launched a project to fit out the western wing on the ground floor, which has been closed for about 50 years. The new 'Campania Romana' section houses around 240 works of classical Roman culture, including marble and bronze sculptures, epigraphs, portions of wall coverings and decorations belonging to funerary elements and public buildings. In contrast to the exhibition criterion that has always characterised the MANN in proposing the archaeological finds on display by emphasising their material qualities, in a true subdivision between exhibition halls on metals, marbles, etc., for the "Campania Romana" section a criterion has been chosen that privileges the context instead, as if walking through the halls one could imagine the public buildings that once housed the exhibits (fig. 2-3).

As part of the MANN digitisation project, the DADI Department's research team experimented and tested advanced technologies, including artificial intelligence and photogrammetric scanning (the latter are intended for the digitalization of archaeological heritage, with the goal of documenting and preserving the museum's artifacts)[4]. The aim was to explore the potential of these tools to understand how design can guide the most innovative technologies, ensuring results in line with the curatorial vision of a museum, exhibition or display. The use of digital devices in the enhancement of archaeological heritage is not always the most appropriate solution. However, it is crucial to investigate its limits and potential, assessing the constraints imposed by the current technological landscape and the possible margins of adaptability. In particular, artificial intelligence represents a topic of great relevance for the present and the future of the fruition of cultural heritage, as it makes it possible to generate images, voices, sounds and videos useful for the construction of immersive narratives. It is therefore interesting to question to what extent these tools, based on apparently rigid and

Fig. 2: The photograph taken during a survey at the MANN Museum, captures the magnificent statues of the new "Campania Romana" section gathered in the same hall, "waiting" to be positioned in the exhibition setup (Chiara Scarola, 2023).

[4] The three-dimensional models of the colossal statues housed in this hall can be explored via the MANN museum app, which is available only within the museum and is intended as a support for the visit.

Fig. 3: The collage shows some of the roman statues during the installation phase, waiting to be placed in their final location.

automated algorithms, can actually prove effective in producing visual representations capable of arousing emotions and empathy. In this sense, artificial intelligence can help to enhance the human factor of artefacts, transforming them from simple inert fragments of stone or metal into narrative elements endowed with an intense evocative charge (Palmieri, 2023).

In this experience, it was crucial to reflect on the people represented through the statues, which in the form of very large works, often placed on a pedestal, create a detachment with the public and seem to belong to a different dimension from the human one.

An analysis of the contents of the exhibition halls clearly shows how some of them are united by the presence of representations of divine figures, while the four central halls house reproductions of illustrious personalities linked to the political sphere of ancient Rome. This predominance of political themes suggests a particularly effective narrative strategy, capable of coherently connecting the different exhibition spaces through thematic paths and meaningful interrelationships between the exhibits. The importance of the political dimension in ancient Rome becomes the narrative expedient that allows for an in-depth analysis of the interaction between earthly power and the divine sphere, highlighting the ideological and symbolic function assumed by these representations in the culture of the time. Moreover, the inclusion of profoundly human elements (such as Claudius' stuttering described in the second episode) in the narrative allows for an empathetic bond with the audience, revealing not only the magniloquent and idealised dimension of the protagonists, but also their vulnerabilities and distinctive traits.

4. Concept of the "GENS" Project

The analysis of the artifacts displayed in the various museum sections served as the foundation for developing the storytelling. The primary aspect emphasized is the intricate political and familial relationships that define many interactions among the key historical figures. The central narrative, initially identified in the figure of Agrippina the Younger, whose iconographic presence is particularly prominent in the exhibition corpus, unfolds along a single narrative thread connecting four main characters: Agrippina, Claudius, Nero, and Tiberius. In this way, the representation of the Julio-Claudian dynasty focuses on dynastic dynamics and the ongoing pursuit of power, giving rise to the four-episode mini-series titled "*Gens*" (fig. 4). The miniseries consists of short episodes, each lasting approximately three minutes. Through an intense and emotional narrative of

events related to the public and private lives of the characters depicted in the statues of the Campania Romana section of the MANN museum, the series allows visitors to empathize with the protagonists of history and to more easily retain the historical events narrated. The choice of a serialized format stems from the widespread popularity of TV series, especially among younger generations, who favor modular yet self-contained content that does not require prolonged attention spans. The series is accessible exclusively within the museum, via QR codes placed near the statues, through the MANN app, managed by Artware. This system ensures a direct connection between the episodes and the museum artifacts. The release of the series followed a progressive schedule, similar to that of television series, generating anticipation among users and encouraging repeat visits to view subsequent episodes. At the end of each episode, a photograph of the related statue is shown, inviting the visitor to observe its face, expression, and posture more carefully, in light of the new insights gained through the narrative.

The project aims to achieve effective museum storytelling by optimally leveraging the exhibition space and available material artifacts, in order to construct a clear and accessible narrative that maintains a balance between scientific rigor and public engagement. To ensure an immersive experience, the narrative structure follows a format similar to a musical composition, with an introduction, moments of tension and resolution, a climax, and a conclusion. This approach, oriented towards conveying a central message rather than merely presenting data, is based on the concept of the "Big Idea" (Wills, 2019). This principle guides the construction of the exhibition path, serving as its conceptual core and providing visitors with tools for critical reflection.

Furthermore, museum interpretation is not limited to simply conveying information but aims to stimulate connections with the individual experiences of the audience. This entails transforming content into a deeper level of meaning, capable of provoking intellectual engagement and fostering active participation. Such an approach is particularly significant for younger visitors, who require learning methods based on sensory and hands-on interaction, including direct engagement with materials, exploration, and play.

Most of the information used to construct the storytelling derives from primary historical

Fig. 4: Logotype and covers of the four chapters of the first season of the series '*Gens. Family Intrigues*' with related depictions of the protagonists and episode titles.

sources, including Tacitus and Suetonius. However, to make the content more accessible to a diverse audience, it was necessary to adopt a linguistic register aligned with best practices in accessible storytelling, without compromising the scientific accuracy of the transmitted information (Bonacini, 2021). Through storytelling, simple yet reliable narratives are reconstructed based on the documentation provided by Latin authors, interwoven in the same way as the statues are

arranged in the exhibition halls, highlighting relationships while also addressing significant "gaps" that are not left to chance but are instead clarified for the public. From this point arises the need to experiment with an innovative system capable of creating unprecedented images and storylines, bringing statues to life and revealing what lies beyond their surface. The most suitable tool for this purpose has proven to be AI-based platforms, particularly the well-known "text-to-image" system, which is especially appropriate for visualizing the texts of ancient writers.

Artificial intelligence plays a fundamental role in reconstructing the scenarios and imagery connected to the museum narrative, generating representations derived both from prompts based on historiographical sources and from the iconographic reinterpretation of the figures displayed in the exhibition. Specifically, the use of Midjourney software allows access to a vast database of images, which, through algorithmic fusion processes, reconstruct visions of lost contexts, recreations of vanished objects, and reinterpretations of historical environments.

This technology also contributes to a dynamic reinterpretation of the exhibition framework, attributing a new expressive dimension to the statues, which become humanized and transformed into narrating subjects, capable of conveying emotions, interacting with visitors, and fostering a sensory immersion. Digital reconstruction extends to the reproduction of atmospheres, colour schemes, and visual suggestions, evoking environments permeated by symbolic mists that allude to historical narratives and intrigues. The museum experience is further enriched by the combination of a narrating voice, explanatory texts, and a carefully designed soundscape to evoke a multisensory engagement. The use of digital thematic portals captures the visitor's attention, guiding them through an immersive journey that seamlessly reconnects them to the physical museum environment. This transition occurs fluidly and without spatial

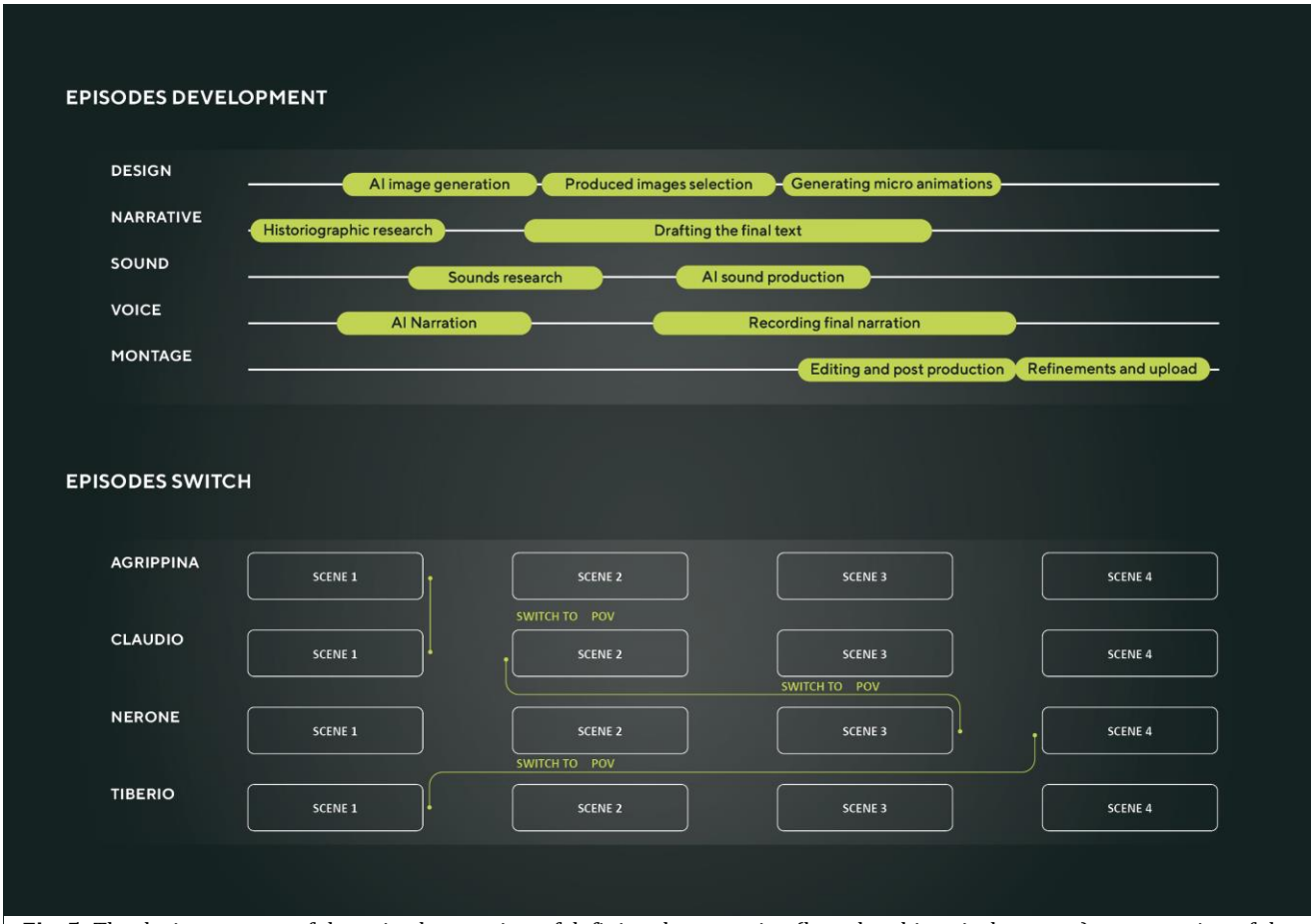

Fig. 5: The design process of the episodes consists of defining the narrative (based on historical sources), construction of the images and animations, integration of sound and voiceover and finally the editing. The four episodes intertwine through the repetition of significant storytelling elements and by defining different points of view (Giulio Giordano, 2025).

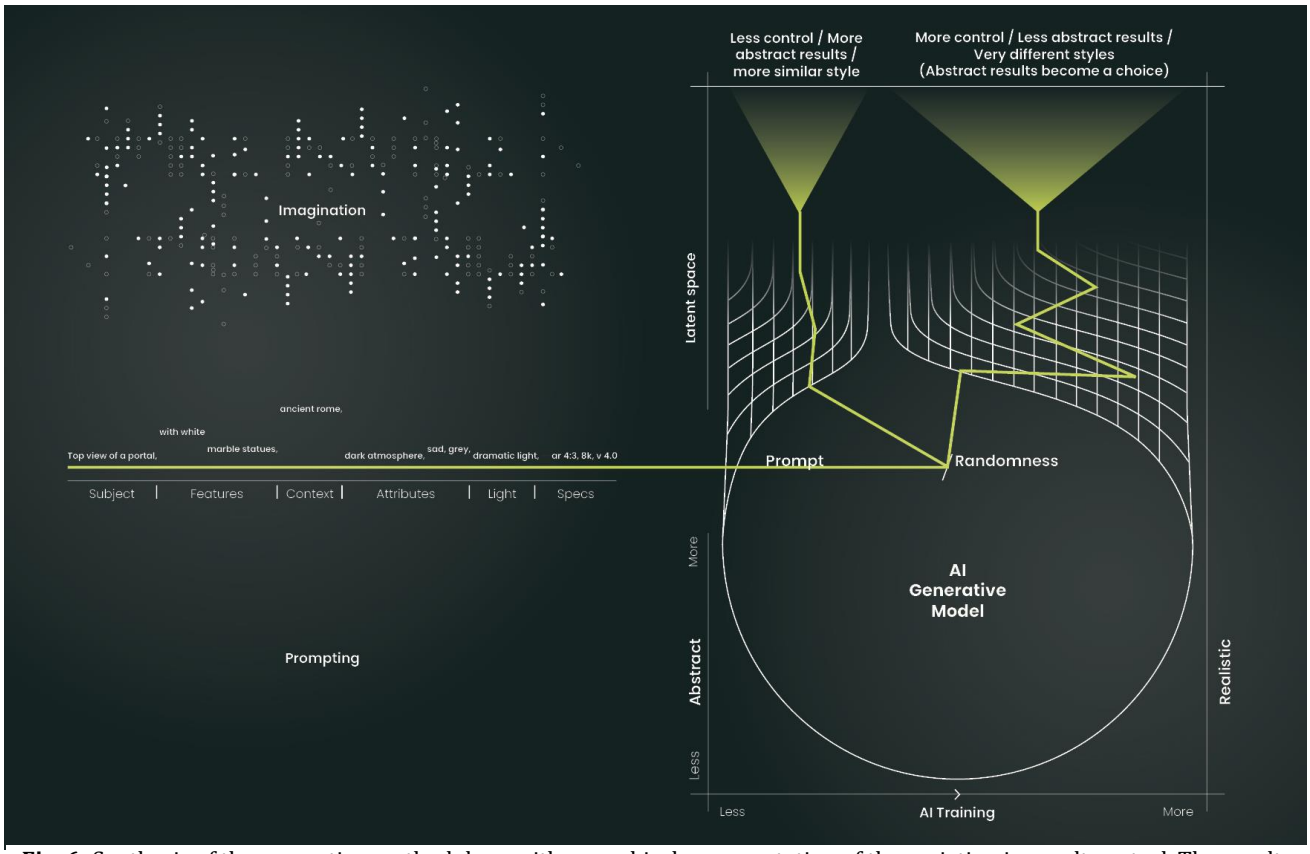

Fig. 6: Synthesis of the prompting methodology with a graphical representation of the variation in result control. The results change according to the algorithm's training level (Giulio Giordano, 2025).

interruptions, thanks to the use of personal mobile devices, eliminating the need for architectural barriers or intrusive installations within the exhibition spaces.

Among the recurring figures in the museum narrative, Agrippina the Younger assumes prominence, her role standing out markedly across multiple exhibition sections. She has been identified as the central pivot of the narrative due to her historical and cultural significance, as well as her ability to connect different thematic dimensions. Selecting Agrippina as the reference character enables the development of a multifaceted discourse, intertwining public and private spheres as well as political and biographical aspects.

The depictions of Agrippina the Younger preserved among the artifacts constitute an iconographic corpus of particular value in structuring both the exhibition path and the storytelling. These representations serve as a foundation for analyzing her political role, life, and cultural dimension as the infamous mother of Emperor Nero. This approach ultimately shapes a museum experience that harmonizes historical rigor with the visitor's emotional engagement.

5. *Methodology: from image production to video animation*

The generation of images through artificial intelligence is the result of an iterative process, characterized by repeated attempts to transfer graphic sensitivity and expressive intent from the human operator to the automated system. In this context, the user acts as a mediator, guiding the selection of AI-generated images and contributing to the redefinition of visual registers that highlight an authorial presence within the creative process.

One of the main challenges in producing visual content related to Agrippina, Claudius, Nero, and Tiberius was achieving stylistic consistency among the generated graphic elements. The goal was to obtain a homogeneous visual language in terms of style, forms, and colour schemes, ensuring that the visual narrative was not only harmonious but also closely connected to the archaeological artifacts displayed in the museum halls.

The prompts were developed by considering two main conditions: the text's structure, as it is effective for Midjourney (point of view, subject, lighting, attributes, context, secondary subjects and related attributes, style, type of atmosphere,

Midjourney version, and aspect ratio), and consistency with the specific requirements of the narrative. To meet these requirements, were used documents and historical sources made available by the museum. From these, key elements were extracted to guide the design choices, in alignment with the narrative objective focused on the theme of family intrigue. Once established the narrative thread to be developed, it was structured around the perspectives of the main characters and broken down into a sequence of scenes. Each scene was defined in relation to one or more elements among subject, object, or location, along with a specific point of view, a dominant emotion of the character, and an atmosphere functional to the definition of the chromatic aspects of the representation.

An example to illustrate prompt design could be: “Front view of a statuary male Emperor Claudio from behind, walking inside Sibilla's cave, the AD 40, fog, suspenseful, dark, ground colour, brown, monochrome 8k --ar 3:2”.

The use of generative AI platforms, such as Midjourney, is therefore configured as a dynamic and progressive interaction between the user and the system (fig. 5). The AI’s interpretation of prompts is not always immediate or perfectly aligned with the initial intent. However, thanks to the software’s advanced functionalities, it is possible to gradually refine the generated results. This optimization process, enhanced by the user’s accumulated experience, allows for a more precise alignment of visual production with the project’s objectives. The process begins with the input of a descriptive prompt, after which Midjourney generates a mosaic of four images, each representing an alternative interpretation of the provided text (fig. 6).

This mechanism enables an evaluation of different possibilities and the selection of the most suitable direction for further development (fig. 7). If one of the generated images partially meets the project’s requirements, the user can either produce a high-resolution version of the selected image or create variations based on the initial outputs using the "Vary" (V) command.

This iterative methodology facilitates a progressive refinement of the final result, combining the user’s ability to perfect the prompts with the machine learning system’s capability to identify and replicate specific visual features.

Within the GENS project, this approach has enabled the creation of images that blend elements of reality and imagination. The protagonists were depicted with bronze or marble-like features, ensuring visual and symbolic continuity with the archaeological artifacts on display, thus reinforcing the connection between digital components and the museum’s material heritage.

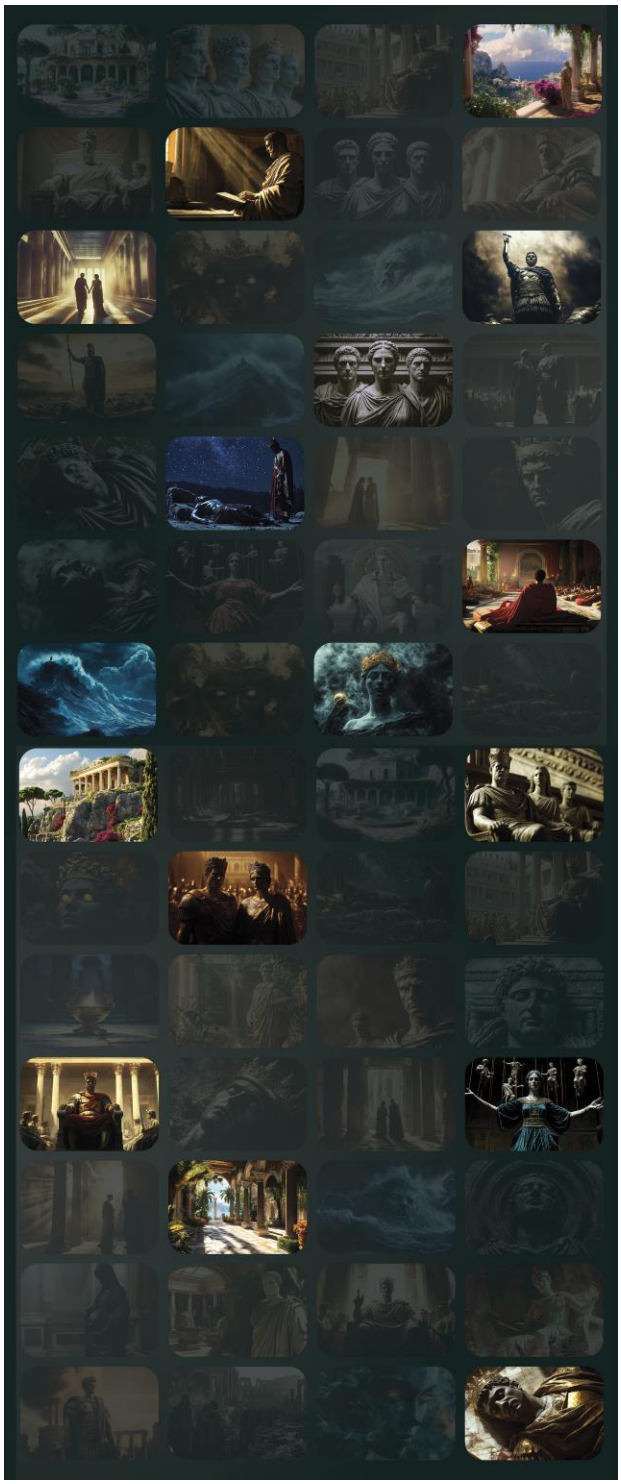

Fig. 7: The grid shows some of the many representations produced with Midjourney for the narrative on the Emperor Tiberius, highlighting the proportion between the number of images created and those actually used.

Fig. 8: Some working steps to achieve a result consistent with the narrative and visual language to represent the Emperor Claudius inside the Cave of the *Cumaean Sibyl*.

In cases where textual interaction with AI does not produce satisfactory results, or when a more reality-based visual anchor is required; the "blend" functionality is employed. This tool allows for the combination of two source images, generating a new representation that integrates the visual characteristics of both. This option is activated directly from the dialogue bar using the "/blend" command. A notable example of this technique is the depiction of Emperor Claudius within the Cave of the *Cumaean Sibyl*. The process unfolded in two successive phases: first, an image was generated showing the emperor from behind inside a cave; then, the resulting digital composition was hybridized with a real photograph of the Cave of the *Cumaean Sibyl*. This integration aimed to merge the morphological and lighting characteristics of the archaeological site with the intended narrative elements (fig. 8).

This methodology has enabled the creation of a visual representation that evolves gradually, starting from a more idealized and creative version and progressively transforming into a depiction that is more recognizable and faithful to archaeological and environmental evidence.

For the conversion of generated images into video, the AI platform Genmo was utilized: an advanced tool for creating micro-animations from static images. Within the project, Genmo was used in synergy with Midjourney to transform previously generated images into animated video sequences. This process enriches the visual content with dynamic elements, fostering an immersive narrative experience.

Genmo's initial interface offers two main operational modes: generating a video directly through a prompt or creating animations based on a given image. In this project, the animation of images previously developed with Midjourney proved particularly useful, as it allowed for the preservation of stylistic and narrative consistency while expanding the expressive potential of the visual representations through animation. Even when using a static image as an input, Genmo allows for a textual prompt specifying the desired action in the video. Once again, the challenge lay

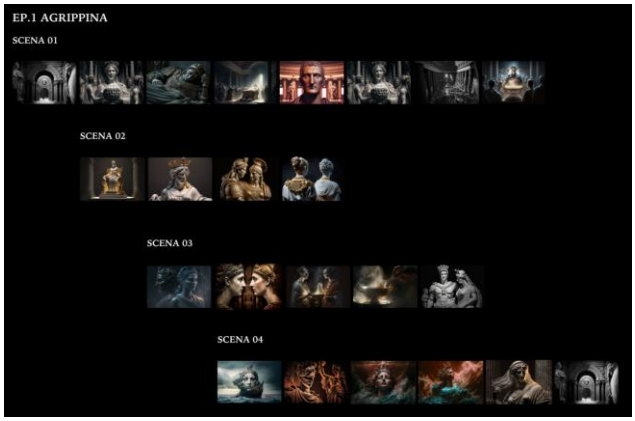

Fig. 9: Storyline of the first episode briefly identifying image sequences for editing.

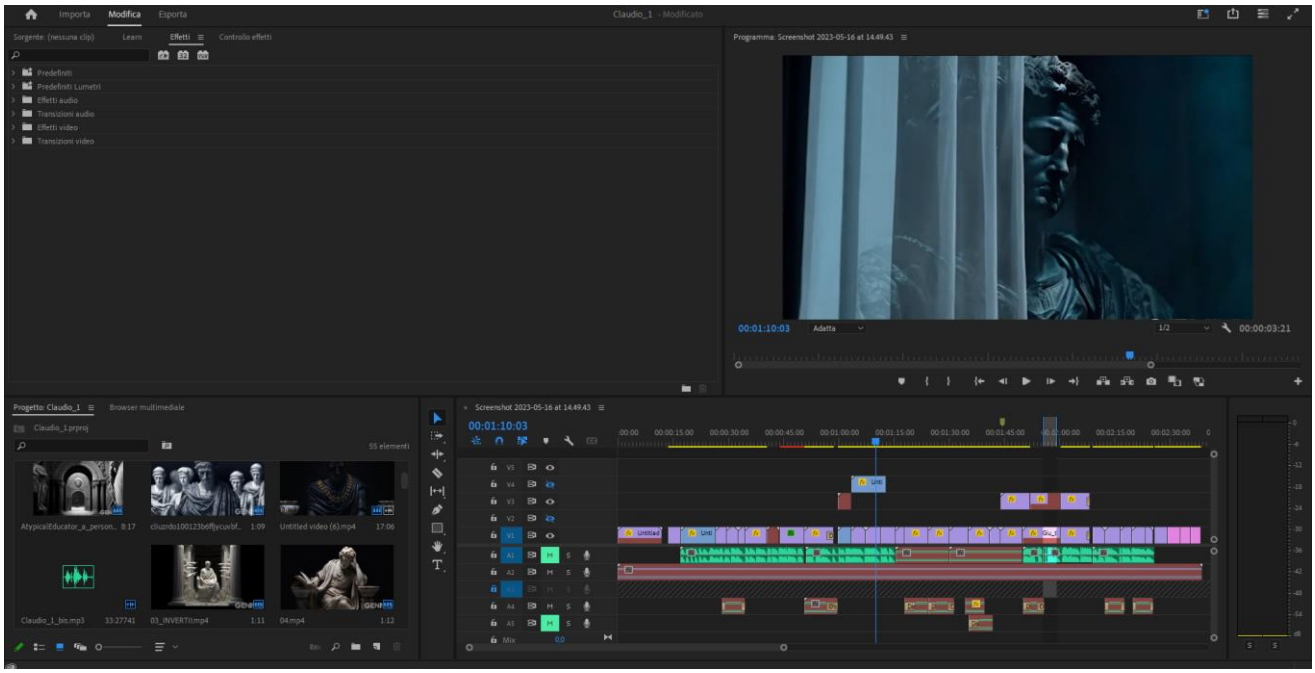

Fig. 10: Workspace during the editing process of one of the episodes of the "Gens" series. The lower section displays the timeline, showing the video sequences and audio channels used in the production.

in crafting prompts that maintained the distinctive features of the characters (such as Agrippina's characteristic curly hair) and their contextual setting, ensuring that recognizability and coherence were preserved throughout the animation process. The frames generated by Genmo primarily act on small details and subtle movements, which introduce dynamism into the sequence, suggesting motion and bringing the characters to life. This approach makes it possible to humanize and animate traditionally static elements, such as statues, creating a bridge between classical art and contemporary storytelling. A completely different methodology was applied to the construction of the sound dimension, which was developed across three distinct levels: a primary soundtrack, which serves as a background throughout the episode; the narrator's voice track, perfectly synchronized with the visuals to enhance the storytelling; additional sound effects, used to create immersive atmospheres through ambient noises and sounds consistent with the actions (such as the murmur of a crowd or Messalina's ominous laughter). Each track was enriched with "fade in" and "fade out" effects to ensure smooth and natural transitions.
Finally, during the editing phase of each episode in the mini-series, micro-clips were arranged in sequence, with the insertion of titles and images of statues both at the beginning and the end.

To ensure seamless transitions between scenes, fade effects were applied, creating visual intervals that contributed to the overall rhythm of the narration (fig. 9-10). In more dynamic sequences, however, transitions were accelerated, and black screen passages between clips were removed to intensify the impact of the visuals and sustain the narrative's momentum. This approach ensured a balanced stylistic coherence, harmonizing fluidity and narrative tension in accordance with the project's requirements.

6. Results and conclusions

The project, developed as part of the agreement between the MANN Museum and the Department of Architecture and Industrial Design at the University of Campania 'Luigi Vanvitelli', was conceived with the aim of enhancing the museum experience by integrating the educational, emotional, relational, and creative dimensions into the didactic content of the *Statuaria Campana* section.

The final outcome took shape in four short episodes, rich in human impact, yet deeply connected to the statues displayed in this section of the museum. From a conceptual standpoint, the project worked on the interpretation of an existing iconographic apparatus (at times abundant, at times scarce, as in the case of Nero and his *"damnatio memoriae"*) in order to construct a

Fig. 11: An evocative and dramatic image of Agrippina risking death at sea, while the narrator's voice (of Agrippina herself) says: "When a fortune-teller told me that Nero would ascend the throne and then kill me, I replied without hesitation: 'Kill me, as long as you reign!" (Gianpaolo Tucci, 2023).

broader imaginative framework. This framework intertwines places, people (rather than mere characters), and actions, which are too often simplified and conveyed in a sterile manner, lacking a compelling narrative tone. Thus, some of Campania's most stunning landscapes (such as Capri, Lake Avernus, and the Sibyl's Cave) become inseparable from the men and women who shaped their personal stories, even before becoming part of the larger history of our cultural heritage.

When the project was launched in 2022, AI-driven visualization laboratories had only recently made their way into creative processes, sparking complex discussions and critical reflections. These early debates revolved around the meaning and implications of the intersection between architectural/spatial thinking and Artificial Intelligence, particularly in relation to design, visual culture, and the emergence of a new aesthetic that would inevitably follow.

Today, there is a broader and more assured acceptance of the ever-expanding role AI is playing (and will continue to play) across all fields of science and knowledge soon. However, this does not diminish the value of those initial, sometimes hesitant reflections. Instead, they should be seen as a catalyst for a growing awareness of the pace and nature of what is, in every sense, a paradigm shift: one that challenges our traditional understanding of design and, more broadly, the creative process itself.

What we are witnessing is a true ontological transformation of imagination (the most human of faculties!) and its representation. This shift aligns, within the cultural specificity of visual expression, with what Luciano Floridi argued in 2012: "ICTs are not just reconstructing our world; they are re-ontologizing it" (Floridi, 2012, p.13).

This is a semantic transition that goes far beyond the analog vs. digital debate, placing itself firmly in a post-digital dimension. We are now in a mature phase of the digital revolution, which is why the call for digital humanities has grown stronger. The recent surge of intellectual debates, sparked by the introduction of AI into contemporary cultural processes, only underscores the urgency of addressing these profound transformations.

Fig. 12: Construction of the metaphorical image of Livia Drusilla's obsession with control, represented here as a puppeteer manipulating her family through strings.

The GENS project presents itself as an experiment, an exploration of limits, and a challenge: a test to see how much of the contribution and sensitivity of a group of researchers can emerge despite the use of AI-driven platforms. The fundamental question, then, is how we should position ourselves as architects, designers, and visual narrators in the face of a rapidly evolving reality that risks overwhelming us. The goal is not to resist change but to navigate and shape an inevitable transition, cultivating a level of awareness that is still in the making.

To rethink a pedagogy of imagination, as Italo Calvino suggested, in an era dominated by supercomputers and the overwhelming rise of AI, remains the most profound human endeavor. The true challenge is precisely this: "How can we develop a pedagogy of imagination in the face of technologies that transform the impossible worlds of imagination into digital realities where we can move and interact?" (Prencipe & Sideri, 2023, p. 34). Perhaps the first step toward coexistence between humans and machines lies in remaining the masters of the right questions. Not fearing technology means starting from the fundamental inquiry: what kind of society do we want to shape with the advent of Artificial Intelligence?

In doing so, we must safeguard what Calvino called the "jealously guarded models of human experience": curiosity, wonder, and unease[5].

[5] All authors collaborated in the development and structuring of the paper. The introduction was curated by Carla Langella; sections 2, 3 and 4 were authored by Alice Palmieri; section 5 was authored by Giulio Giordano and the conclusion was curated by Alessandra Cirafici.

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