



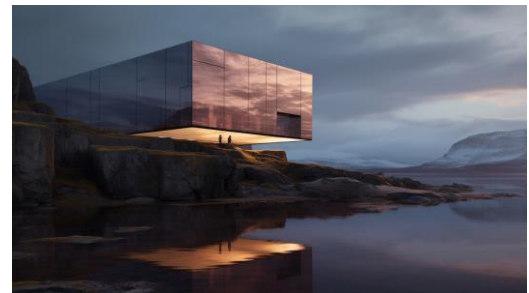
## Can AI Make Architects Better Storytellers?

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John Marx, AIA  
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Artificial Intelligence is at the genesis of creating fundamental changes in the way we design and construct buildings and cities. Some of these changes will be abrupt and disruptive to normative practice. Others will take more time to feel the effect of this new

technology, but the change will be pervasive. When combined with the Metaverse, AI will also offer vast opportunities for the profession to expand and grow. The kinds of spaces and environments we design in the Metaverse will be, in some aspects, very different from what we currently design in the physical world alone. AI evolves every day, and we are compelled to learn while we innovate. AI has proven it is a powerful tool to assist designers and offers the potential to challenge us to alter our design process. Combining AI with narrative design is one of those challenges.

Today I have the pleasure to interview Michael Maggio, a Director at Ralph Appelbaum Associates, (RAA), the world's largest practice dedicated to the planning and design of museums and narrative environments. I have known Michael for many years. In the summer of 2021, I led a team of designers and technologists on a \$500B design competition for a Portal to the Metaverse and a large city that would surround it. Fundamental to understanding the potential of the Portal was the opportunity to explore experience design. Michael was our team expert on this topic, and through working together I discovered the richness of humanity that can be brought into the design of environments through experience design, especially through the use of narrative storytelling. The subject of narrative in architectural design has been controversial since the dawn of Modernism. Michael showed me how essential narrative design can be in expanding our emotional reach to the people we design for.



**John Marx: As a practicing architect and someone who designs for "experience," first, how do you see the ascension of AI impacting the profession?**

**Michael Maggio:** The advent of Artificial Intelligence (AI) has brought about remarkable transformations across various industries, and the architectural profession is no exception. AI's influence on architecture has emerged as a pivotal force, optimizing how architects analyze, design, and construct buildings. AI can also help architects build better narrative structures that underpin our physical compositions. Constructing buildings that communicate narratives allows our design to transcend aesthetics and function. Having a strong narrative as the basis of design helps architects dream of buildings that teach us about our past and create space to contemplate our future.



**JM: You design visitor experiences for museums, public education, and entertainment attractions. Can you describe how you use "experiential narrative" in the context of your work?**

**MM:** Narrative is a powerful and essential element of our designs, transcending the boundaries of various creative disciplines, including graphic design,

architecture, product design, and user experience. It is the backbone of human-centered design, anchoring aesthetics and functionality into a coherent and meaningful whole.

First and foremost, the narrative provides context. It gives users or viewers a story to connect with, fostering a more profound emotional engagement. Whether it's a brand's visual identity, the layout of a museum exhibit, or the interface of a digital application, a well-crafted narrative helps convey purpose and meaning, making it easier for people to relate to and understand the design's intent.



Architects can use narrative design to facilitate information retention. People remember stories far better than isolated facts or images. By structuring a design around a narrative, designers can enhance the memorability of their creations, whether it's a logo, a building, or a website. This aids in effective communication and leaves a lasting impression.

**JM: Architects are physical designers. Do aesthetics, materials, and form-making impact the narrative?**



**MM:** Narrative design enables innovation. It encourages designers to think holistically, considering how various elements combine to tell a coherent story. This approach often leads to breakthrough ideas and solutions that transcend the mundane and create memorable experiences.

Ultimately, the importance of narrative in design lies in its ability to connect with people on a deeper level, making designs more relatable, memorable, and impactful. Form and aesthetics are essential; ultimately, this is how the visitor encounters the narrative in the physical world. However, it's not just about aesthetics; it's about weaving a compelling story that resonates with the audience, turning a design into a memorable and meaningful journey. Architects have a new

tool to aid them in translating words into tangible physical environments. Text-to-image programs use text prompts to visualize scenes. Imagine writing the script for an impactful visitor journey and creating an architectural storyboard using AI programs like MidJourney; the pathway from descriptive text to architectural visualization is shortened, creating a faster feedback loop.

**JM: One way to think of the rise of AI is that it is a tool that can help strengthen what is historically considered a weakness for architects: using narrative in architectural design to tell a story that transcends the architect's form-making process. Can you tell us more about this?**

**MM:** Memorable stories have a clear beginning, middle, and end. Architecture can tell stories through its form, layout, material, and details. This narrative can be based on the site's history or a broader cultural or social narrative.

Suppose we are to express human stories through the buildings we create truly. In that case, we as architects must have a narrative arc that carries through the building. Furthermore, the narrative arc





must consider how the physical experience unfolds for the occupants or users. How will they interact with the space? How will it make them feel? How does the building connect with each user personally? Will they remember the experience in the future?

**JM: How does AI help designers achieve this storytelling component you describe?**

**MM:** AI offers many tools and capabilities to improve architectural design's narrative element. AI collects statistical data that can be used to determine what is compelling. Perhaps. AI tools such as ChatGPT, Mid Journey, and other generative

image AI tools can instantly create interlinked stories with physical form and material. By leveraging these AI-powered tools, architects can create more engaging, functional, and meaningful narratives that find physical manifestation; think of the narrative as an epic journey unfolding in the physical world.

**JM: It sounds like you are recasting the architect as a feature film director.**

**MM:** ChatGPT's Natural Language Processing (NLP) models can assist architects in writing compelling design narratives. Generative image programs like MidJourney and OpenAI's DALL-E can generate a frame-by-frame storyboard to become the foundation for material expression. So yes, we should act more as storytellers and Directors where our buildings offer an accessible, meaningful, and memorable story for our guests.

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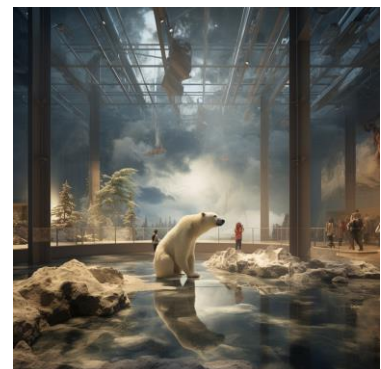
**JM: Does AI offer us, as architects, the tools we might need to navigate the world of the metaverse? What happens when the physical world's limitations are removed? Do architects still have a job?**

**MM:** Absolutely! The metaverse needs architects to design human-centered narrative journeys that facilitate participant interactions. Symbolism and metaphor must infuse our designs with more profound meaning and can symbolize ideas or concepts, creating a rich subtext for the virtual experience.

The transference of personal human experience to architectural creation in the metaverse has the potential to elicit emotional responses from those who experience the spaces we create. Emotions are a powerful way to make meaning in physical or virtual architecture.

We must find ways to imbue the virtual world with authentic human experience as the foundation, informing the narrative creation process. Translating the narrative into virtual journeys through places allows us to create an empathetic architecture in a virtual world.

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End Note:

Thank you, Michael for scratching the surface of the potential AI has as a tool for improving the spaces we design for people around the world, and soon in the Metaverse. The future is evolving before our eyes, and in some ways much faster than we can collectively keep up with. I was especially taken by your comments about how we can use AI to create more empathetic spaces ... which might seem counterintuitive to having a machine help in the design process.

Michael Maggio, Principal, Director of MENA Operations, Ralph Appelbaum Associates: Michael's passion and 20+ years of experience as an architect and educator inform his role as Principal and director of MENA Operations at RAA. Michael has led RAA's most complex projects in the MENA region, working on project strategy and creative direction, leveraging architectural and multimedia design principles to express Clients' missions and goals to their audience. He excels at unifying interdisciplinary creative teams of architects, designers, curators, producers, and executives. Michael's training as an architect and over ten years of work in the region inform his perspective on visitor experience, fabrication, and the seamless integration of narrative and cultural experiences into the built environment.

Ralph Appelbaum Associates: Nearly a half-century ago, Ralph Appelbaum Associates (RAA) pioneered a new approach to learning in public. We are now the world's largest practice dedicated to the planning and design of museums and narrative environments. We work on commissions of all sizes to use physical space as a medium for communication and dialogue. Past and current projects—over 850 commissions in 52 countries—include many of the world's most recognizable cultural attractions. We believe that connective and transformative experiences in public spaces are essential for individuals, communities, cities, and nations. Since our founding in 1978, our work has been honored with every major award for design and communication, including the first-ever National Design Award for Communications Design. More than 75,000,000 people encounter our work every year.

"Can AI Make Architects Better Storytellers?" is written by architect John Marx, AIA, the founding design principal and Chief Artistic Officer of Form4 Architecture, an award-winning San Francisco-based firm that designs prominent buildings, campuses, and interiors for Bay Area tech companies such as Google and Facebook, laboratories for life-science clients, and workplaces for numerous other companies. In 2000-2007, Marx taught a course on the topic of place making in cyberspace at the University of California, Berkeley, and in 2020 he designed his first project in the Metaverse for Burning Man: The Museum of No Spectators. The following year, John Marx led a design team charged with creating a \$500B portal to the Metaverse.