

Lev Manovich

From Museum Without Walls to Generative AI Museum

Published in *European Photography*, issue 116 (Fall 2024).



Examples of styles of well-known Renaissance artists as simulated by Midjourney GenAI image tool. From Maria Laikova, *15 Truly Renaissance Styles*, <https://midlibrary.io/tops/top-15-renaissance-styles-in-midjourney>, May 2, 2024.

We can now in principle create an **infinite museum filled with endless AI-generated images** that simulate artworks from every period in history, for all genres, artistic techniques and media. In fact, reference sites like Midlibrary (<https://midlibrary.io/>) that contain names of thousands of famous artists, architects, designers, photographers that AI can confidently simulate are already such museums - but we can scale them up and expand the examples dramatically. GenAI is making possible, both theoretically and practically, a new type of universal "museum without walls."

The question then arises: why would such an endeavor be interesting or valuable? One obvious possibility is to populate this museum with "additional" works by artists who actually existed, attempting to generate pieces that would be as historically probable as possible. This approach could provide insights into **the potential evolution of an artist's style or explore "missing" works from certain periods of their career.**

A more intriguing application, however, is **to explore alternative possible art histories.** We can re-imagine **art history** (and history of culture in general) as a **speculative discipline** - similar in spirit to *speculative fiction*, *alternative history* or *speculative design*.

For example, we could generate works that imagine what a famous artist might have created if they had traveled to a different part of the world or immersed themselves in a vastly different culture.

Another fascinating direction: **examining the potential alternative paths an artist's style could have taken between two known periods of their work.**

We could even explore **hypothetical collaborations**, generating works that might have resulted if **two unique but very different artists had worked together.**

These examples merely scratch the surface of the directions a "generative museum" could explore. In my view, AI-generated works open up very interesting possibilities for reimagining and expanding our understanding of art history.

These examples merely scratch the surface of the directions a "generative museum" could explore. The potential for reimagining and expanding our understanding of art history through AI-generated images is vast and multifaceted.

This concept of a generative museum can be seen as a further development of the earlier and highly influential idea of the *museum without walls*. To fully appreciate the significance of such AI-driven evolution, it's important to examine the

origins of this concept and the various stages in the development of digital culture that can be viewed as its implementation.

1) **The original formulation of the “Museum Without Walls”** concept was developed by French writer (and later first minister of culture in France) André Malraux in late 1940s. Malraux realized that during the previous decades of the 20th century, technologies of photographic reproduction and printing redefined our understanding of art. By bringing together photos of different artworks created in very different periods, in different media and different size within single publications, a book filled with such reproductions creates and legitimizes the idea of a single global art history.

Malraux’s own art history books acted as demonstration of this idea. They included the three-volume *Psychology of Art* (1947–49). The first of the volumes (1947) was called *Imaginary Museum* (Le musée imaginaire.) The book included several hundred art reproductions - a radical approach for its time. This publication allowed readers to experience a vast array of artworks from different periods and cultures, with images of very different artworks on purpose arranged in dramatic juxtapositions.

2) The second iteration emerged with the **World Wide Web** (1993-). This facilitated the gradual sharing of digitized historical cultural content by millions, and later billions, of people. Unlike Malraux's curated approach, this iteration was not planned or structured. The resulting web of content was enormous, often messy, with redundancies and errors, but its vastness and accessibility fundamentally changed our relationship with cultural artifacts. This iteration was supported by web protocols and browsers (1990s) and later enhanced by social networks (2000s).

3) The third iteration took shape in **the 2000s**, characterized by several key developments:

- Many art museum started to share online images of all the works in their collections from the late 2000s.

- Projects like Europeana emerged, aiming to connect individual digital collections across Europe into one cohesive "museum without walls" using computer protocols and unified metadata.
- Networks such as deviantArt (2001-), Behance, ArtStation, and others emerged to function as "live, growing museums" of user-generated art and professional portfolios.
- Survey art books evolved into comprehensive websites, and reference sections of many major museum websites came to function as extensive online art encyclopedias (for example, The Met, MoMA and Tate all have such extensive online resources).

4) The fourth and current iteration is defined by the emergence of **generative AI** from approximately 2020 onwards. This development makes possible a new concept of the "generative museum." Generative AI models are trained on the vast content of "museums without walls" created in earlier stages of digital media evolution - encompassing the digitized collections, user-generated content, and encyclopedic art resources developed in previous iterations.

The technology driving this fourth iteration is deep neural networks combined with enormous datasets of images and associated information. These AI systems can then generate new images that simulate various artistic styles, techniques, and historical periods, opening up new possibilities for exploring and expanding our understanding of art history.

To conclude, let us note that **this fourth iteration is certainly not the final stage in the evolution of the "museum without walls" concept.** As technology continues to advance and our relationship with digital culture evolves, we can anticipate the emergence of new types of "museums without walls," each building upon and transforming the foundations laid by its predecessors.