

Quantum est in libris

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Figure 1: Installation view of *Quantum est in Libris* in the museum

Abstract

"Quantum est in libris" explores the intersection of the archaic and the modern. On one side, there are manuscript materials from the Estonian National Museum's more than century-old archive, describing the life experiences of Estonian people; on the other side is technology that transforms these materials into a dynamic and interactive experience. Connecting technology and cultural heritage is the visitor, who turns texts into inputs for a screen sculpture.

Historical narratives come to life visually through contemporary technological language. Because the employed text-to-video AI

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models by Runway Gen-3 and Gen-4 have not previously interacted with Estonian heritage, we see how machines today "read the world." "Quantum est in libris" introduces an exciting yet unsettling new dimension to the concept of cultural heritage: in a world where data is fluid and interpretations unstable, heritage status becomes fragile. In the digital environment, issues related to heritage are no longer just about preservation and transmission, but also about media representation, machine creativity, and interpretive error. Who or what shapes memory processes and memory spaces—and how?

CCS Concepts

• Applied computing → Media arts; • Computing methodologies → Artificial intelligence.

Keywords

Interactive art, AI-generated video, AI art, Cultural heritage, Media art, Museum archives

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1 ARTWORK DESCRIPTION

This interactive artwork invites participants to explore a curated selection of 84 historical handwritten pages from ethnographical diaries. This archival material, carefully chosen by the research personnel of the National Museum of Estonia (ERM) and the artists, offers insight into Estonian life in earlier times. This piece creates a new method for public engagement with heritage materials such as old diaries using AI videos and interactivity, bringing archival material with significant historical and cultural value into an engaging, interactive experience for the public.

2 ABOUT THE ARTWORK**2.1 PROJECT CONCEPT**

This year marks the 500th anniversary of the written Estonian. Over centuries, the ways we write, read, work, and live have changed significantly. Technology is evolving rapidly, offering new possibilities for both the preservation and adaptation of culture.

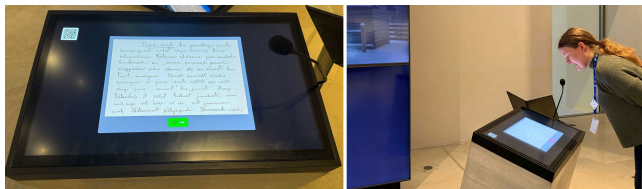


Figure 2: Top: the interface. Bottom: a participant interacting with the art piece by reading a page from the diary

“Quantum est in Libris” explores the meeting point between the archaic and the contemporary, extending our ongoing inquiry into how artists can steer machine perception and output [3], continuing threads from our site-specific, generative image practices [2], and building on our interactive, speech-driven explorations of genAI in gallery settings [1]. On the one hand are handwritten materials from the archive of ERM, more than a century old, describing the life experiences of Estonians. The other side is technology, turning these materials into a dynamic and interactive experience.

At the heart of the installation is a sculpture consisting of a totem of six screens along with an interactive station. Visitors read aloud randomly selected excerpts from historical texts, which the installation records and transforms into visual imagery traveling across the screen sculpture. The images displayed on the screens are generated based on interactions with the five most recent visitors. The installation bridges past and present, transforming centuries-old descriptions of daily life into digital art through visitor engagement.

“Quantum est in Libris” reflects how contemporary machines perceive the world and how humans navigate information in the age of artificial intelligence. It is a visual spectacle in which historical narratives come alive through the language of contemporary technology.

2.2 WORKFLOW

This project follows this workflow: (1) New page from diaries of the museum archive is selected and display. (2) The participant presses a button to begin reading. (3) The participant reads the page aloud. (4) The participant stops reading. (5) The words spoken fall onto the screen. (6) Once all words have fallen, they enlarge and dissolve, revealing a new AI-generated video emerging from the diary page. Figure 2 illustrates steps 1-3. See steps 4-6 in Figure 3



Figure 3: Installation states (left to right): (a) falling words triggered by visitor speech; (b) words expand and reveal a generated video of the diary page; (c) screen tower showing the last six audience-generated videos from archival texts.

3 ABOUT THE ARTIST

Prof Dr VG and MCS are the renowned media artist duo Varvara & Mar and scholars collaborating since 2009. VG is an Associate Professor at VCUarts Qatar, while MCS is a PhD candidate at CUDAN, BFM Tallinn University. Together, they also serve as substitute professors for Spaces as Processes at KHM (Cologne, Germany).

Acknowledgments

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References

- [1] Mar Canet Sola and Varvara Guljajeva. 2022. Dream Painter: Exploring creative possibilities of AI-aided speech-to-image synthesis in the interactive art context. *Proceedings of the ACM on Computer Graphics and Interactive Techniques* 5, 4 (2022), 1–11.
- [2] Varvara Guljajeva and Mar Canet Sola. 2022. POSTcard Landscapes from Lanzarote. In *Creativity and Cognition*. 634–636.
- [3] Varvara Guljajeva, Mar Canet Sola, and Isaac Joseph Clarke. 2023. Artistic Strategies to Guide Neural Networks. *arXiv preprint arXiv:2307.07521* (2023).