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# (Re-)Viewing Paik

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2021

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Research direction by fabric | ch, in collaboration with Sang Ae Park (Head Curator at NJPAC)

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Clients: ECAL, HES-SO (CH), Nam June Paik Art Center / NJPAC (KOR)

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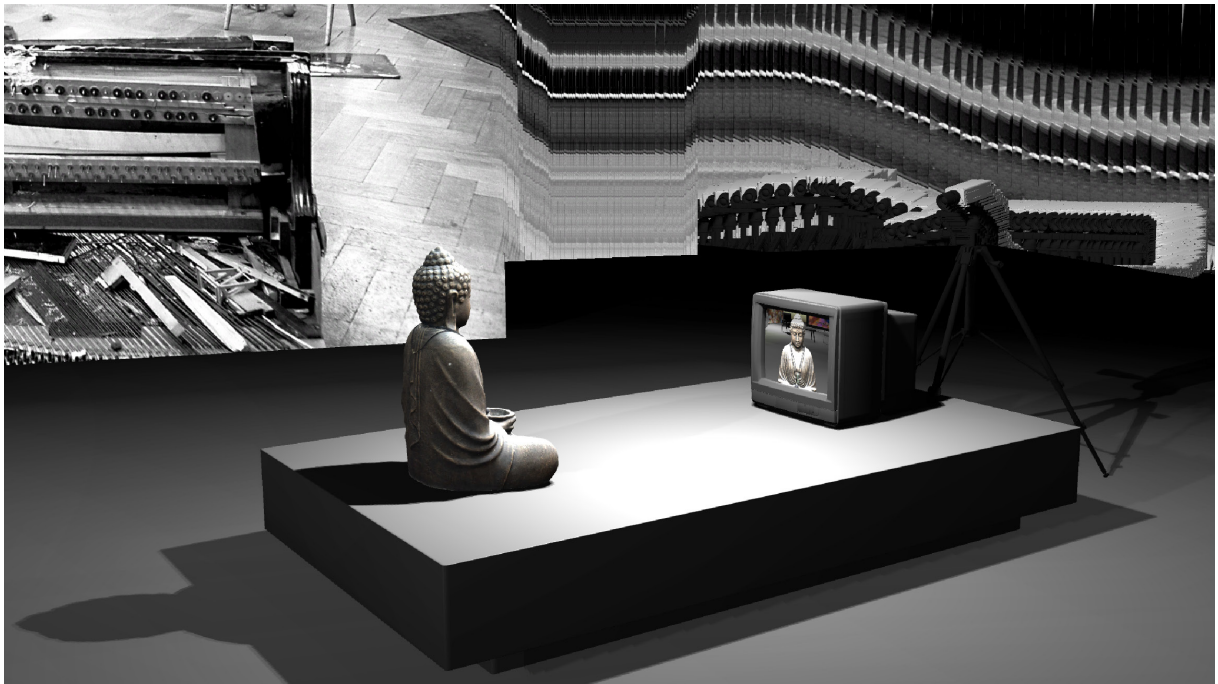
Yearlong exploratory research developed jointly with the Nam June Paik Art Center (KOR), around the Nam June Paik archives and collection

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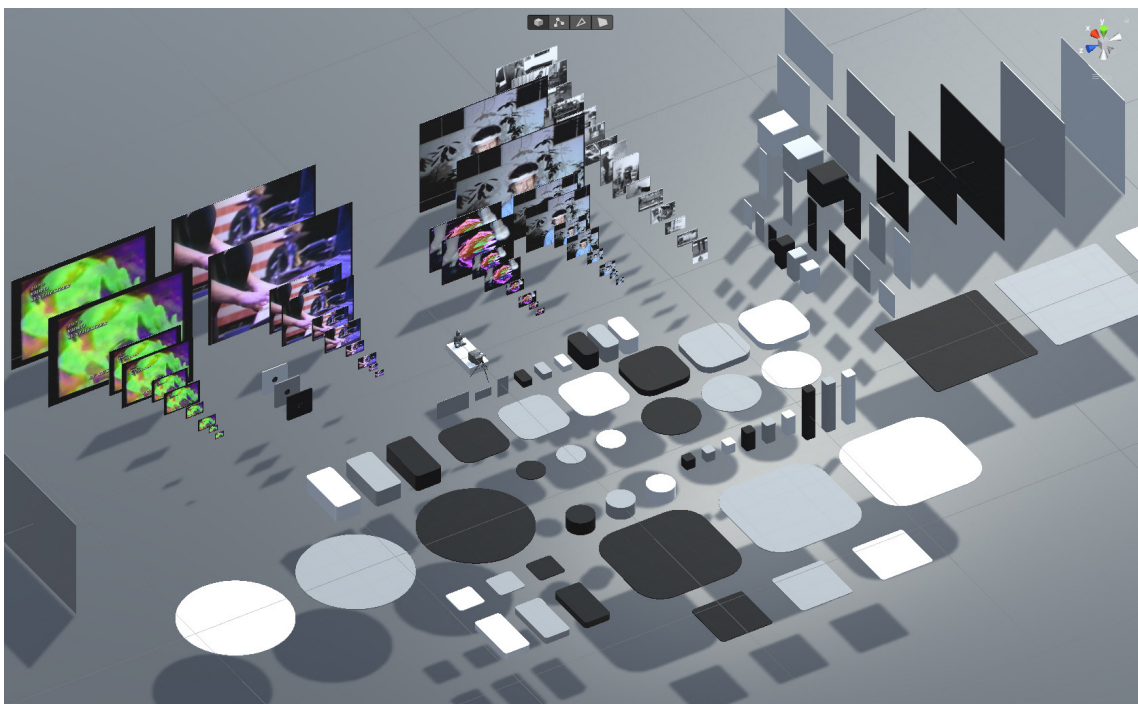
Location: Internet

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- Hypothesis: a personal museum (with Paik's artworks), at any time, in anyone's home
  - Automated scenography and curating based on a specific dataset of artworks, and the sensing of the potential exhibition environment
  - AI layer for autonomous spatial and functional exploration, in addition to base algorithmic software piece and its rules of association
  - Hybrid or augmented display to experience the resulting dynamic exhibition at a distance / at home



[Img. 1 - 3]



[Img. 4 - 6]





[Img. 7]



[Img. 8]





[Img. 9]



[Img. 10]





[Img. 11]



[Img. 12]

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Image captions:

- [Img. 1-3] First phase and early transposition sketches with a digital twist in the aesthetic and rendering of the works. Nam June Paik's TV Buddha (1974) digitally reconstructed and transposed, with Klavier Intégral (1963) and Paik-Abe Video Synthesizer (1969/1970) glitched in the Background.
- [Img. 4-6] View into the 3D dataset of artworks by Paik as well as complementary elements (floors, walls, pedestals, etc.) Multiple clones of A Tribute to John Cage (1973) and Global Groove (1973), at different sizes.
- [Img. 7] Phase two of the research, with exploratory sketch and 3D collage of Paik's artworks, scaled to the immersive viewpoint and point cloud of an existing "room", as a dynamic "viewing room" hypothesis.
- [Img. 8] First real-time and software simulations of an AR experience within a domestic or office environment.
- [Img. 9-10] Third phase of the research as a "proof-of-concept": real-time and dynamic experience of the selected Paik's artworks withing a domestic environment. In the views are twice Global Groove (1963), Klavier Intégral (1963), and Good Morning Mr. Orwell (1984). The overall experience takes free inspiration from two exhibition projects by Paik: Symphony for 20 Rooms (1961, but unrealized at the time of Paik), and his Parnass exhibition from 1963 in Wuppertal (Exposition of Music - Electronic Television).
- [Img. 11] (Re-)Viewing Paik research (2021), third phase. Early implementation of an AR viewing room application, "at home", which uses automated processes and some of Paik's digitally transposed artworks. Images from the Nam June Paik's exhibition Exposition of Music - Electronic Television (1963), photo by M. Montwé.
- [Img. 12] Fourth and last phase of the yearlong research: automated curating and scenographic setup of a VR exhibition, using both fabric | ch software tools (Atomized (") Functioning) and the digitally transposed artworks of Nam June Paik.

Images & 3D: Patrick Keller – fabric | ch & ECAL / University of Art and Design Lausanne (HES-SO), original artworks by Nam June Paik.

Viewing Room automated technology (Atomized (") Functioning) and knowledge by fabric | ch, under the responsibility of Christian Babski.



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# Txt

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## A Symphony for Nam June Paik, Digitally Sang Ae Park in discussion with Patrick Keller

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A discussion between Curator and Archivist Sang Ae Park, from the Nam June Paik Art Center in South Korea, and Patrick Keller, from fabric | ch / ECAL. The discussion took place online in June 2021, in the context of the Swiss Korean Science Club held in Seoul.

*The joint research-creation initiative (Re-)Viewing Paik, which is conducted between ECAL / University of Art and Design Lausanne (HES-SO), the Nam June Paik Art Center in South Korea and fabric | ch - studio for architecture, interaction & research, in Switzerland, aims to study and establish new types of curatorial approaches and design principles for immersive online exhibitions. These must take digital form in each remote location belonging to "visitors" (home, office, etc.) and populate it virtually with a selection of artworks, in an autonomous but responsive way. Literally, a "Museum @ Home" to be experienced in Augmented Reality.*

*In the long term, the (Re-)Viewing Paik project aims to contribute to the strong phenomenon and analytical debate towards digital museums and online "Viewing Rooms", by generalizing its learnings to a broader range of museums and collections.*

*(Re-)viewing Paik has benefited from the support of the Bilateral Research Program of SERI / Leading House Asia (ETHZ), from the Nam June Paik Art Center and from fabric | ch.*

Patrick Keller (PK) Sang Ae Park, you are the Head of curatorial department and archivist at the Nam June Paik Art Center in Yongin (Seoul Capital Area, South Korea), and you are one of the main contributors to this research. Could you explain in a few words the nature and missions of the Nam June Paik Art Center?

Sang Ae Park (SAP) The Nam June Paik Art Center was opened in 2008, following the will of the artist Nam June Paik. He wished to build a museum named after him in Korea, where he was born, while he was still alive. So, we had a discussion with him in 2002, and then we built the museum in 2008. We have been hosting various exhibitions, educational programs, research, and publications since we opened. We also hold art collections including 120 works by Nam June Paik, as well as works by other contemporary artists. The archive collections include 2285 analogue video tapes of Nam June Paik. This is the only and unique video archive of the artist. We also have a collection of Nam June Paik's primary materials, such as video footage, audio recordings, drawings, and correspondence.

PK Could you tell us more about Nam June Paik himself and how he defined his artistic practice? How, from your point of view, could a selection of his works shed light on our research objectives, which concern the digital museum?

SAP Nam June Paik was born in Seoul in 1932. He studied aesthetics at Tokyo University, then moved to West Germany in 1956, where he studied philosophy and music. There he worked with artists of the contemporary avant-garde and carved out his artistic identity through radical performance art with Fluxus colleagues. In 1963,

he used television as a new artistic medium for the first time in the world, in his first solo exhibition in West Germany, at the Galerie Parnass in Wuppertal. Before that time, Nam June was one of the active Fluxus members. Fluxus, known as the *avant-garde* movement, was a loose but revolutionary art network. They broke boundaries, challenged social taboos, organized social political interventions, and countered what they considered as "high art".

In 1964 he moved to the US where he developed video art, creating *Video Synthesizer* with engineer Shuya Abe and collaborating with public broadcasting stations in the US, while later using satellite systems to diffuse his work. This initiative strongly resonates with the contemporary idea of viewing art from a distance, networked, and making it accessible to a wide audience. Following this, Nam June created many remarkable artworks, and from that point he became known as the "father of video art". He went on to win the Golden Lion at the 1993 Venice Biennale and passed away in Miami in 2006. So unfortunately, he didn't see his museum in South Korea. John Cage was also a very important figure in Nam June's art and life. Cage is known as the pioneer of experimental music. Nam June once mentioned that his life could be divided into BC (Before Cage) and AD (After Cage's Death).

PK Before we started the research (*Re-Viewing Paik*), about digital ways of exhibiting at a distance, potentially in an autonomous way and at anyone's place, I was thinking of the major exhibition *Exposition of Music - Electronic Television* that Paik implemented in a private house in 1963. I was also thinking of the *Symphony for 20 Rooms*, which had never been performed until recently. I thought they could both serve as early references for our research objectives. Could you give us a few insights into these two projects and the artworks that were presented?

SAP Nam June's first solo exhibition took place in Wuppertal in 1963. In this exhibition he presented the piece *Klavier Intégral*, a prepared piano. The piano was installed with many unexpected objects from everyday life, producing experimental sounds and noises. The work *Random Access*, consisting of audio tapes applied to the wall in abstract forms, was played individually and in a participatory way by the audience, each using an audio head. The audience could also play the signal at the tempo and in the order of their choice. He displayed 12 television sets, most of which had manipulated images or scan lines influenced by external audio or electrical signals. The audio could change the level of the signals and the images on the monitor were improvised. *Dragging Suite* is one of Nam June's scores, where he gives indications on how the subject should act. The score suggests the artist's basic ideas. And people can interpret or play these scores as they wish. Nam June performed the score at the *Exposition of Music - Electronic Television* exhibition in 1963, by dragging a violin.

PK And then the second project, *Symphony for 20 Rooms*, which is in fact older but took this idea of instructions even further, in this case to create an entire exhibition?

SAP Nam June's *Symphony for 20 Rooms*, which was created in 1961, is indeed one of the inspiring works for this research. It could be read as a curatorial idea combining architectural space, "rooms", and the senses. The project and its rules describe each room with different levels of light, sound, object components, and type of audience participation. For example, the score for Room 1 includes running water and various sounds, as well as light levels. For Room 3, Nam June included

incense. Room 4 has readings, while Room 13 is vacant. Room 14 and 15 require audience participation, etc.

PK So, would you agree with me to say that these two exhibitions, which could be seen as artworks in themselves to some extent, could feed into the idea of virtual and remote exhibitions or distributed exhibitions in unknown locations, or "rooms"? Resonating with the current dynamics towards "Viewing Rooms" and virtual reality exhibitions, but with the addition of "rules" or instructions on how the artworks could "exhibit themselves", almost autonomously?

SAP It is certainly one of the ways to understand it, especially nowadays. The *Symphony for 20 Rooms* can be understood as providing the basic idea and rules of how Paik's works would be explored in a physical, but also a virtual environment.

PK Since you talk about virtual and augmented environments, do you believe we should adapt the curatorial approaches in relation to the new digital nature of these types of exhibitions? Would we need to change them at all?

SAP Patrick, you came to us with the *(Re-)viewing Paik* research, along with *ECAL* and *fabric | ch* which already had preliminary experiences about digital exhibition and automated curating, and I'm clearly interested in this project since this is an exciting experiment to see the possibilities of virtual creation.

Therefore, I also think that in this case we must change our point of view. In the physical context of a museum, the artwork must be preserved and displayed in its original identity. It cannot be altered, and no one can change the way the artwork can be displayed without the artist's permission. However, in this personalized virtual or augmented museum, I personally think that there could be a bit more experimentation and that it would be stimulating to see the context of the museum in a more radical way.

My first assumption for this project would be to change the starting point. Virtual space becomes the new paradigm for displaying artworks.

PK We must then select the appropriate works when they are not "virtual native", especially Paik's artworks and archive in our case, because some are likely to be better suited to this type of environment than others. It is indeed a different artistic and museography experience, which certainly does not replace existing ones but offers alternative possibilities. We can then also consider artworks that would not benefit from this transfer into the digital environment, like very large and complex installations by Paik, with lots of screens and videos, or some long videos.

Sang Ae, following these early considerations and references, you chose several works in the collection for the initial phase of the research. Would you give us some details about them?

SAP Virtual experiences on a spatial, sensory, and cognitive level, as well as on a temporal one, are remarkable attributes and this partly guided my choices. I wanted a concise selection of works to deploy and help test these dimensions. So, I suggested nine artworks in different media to start working with in the initial phase of the research: *Klavier Intégral* (1963), *Random Access* (1963), *Experimental Television* (1963), *Dragging Suite: Zen for Walking* (1963), *Paik-Abe Video Synthesizer* (1969/1970), *A Tribute to John Cage* (1973), *Global Groove* (1973), *TV Buddha* (1974) and *Good Morning Mr. Orwell* (1984). Out of these choices, single channel



videos are: *Paik-Abe Video Synthesizer* (1969/1970), *A Tribute to John Cage* (1973), *Global Groove* (1973), and *Good Morning Mr. Orwell* (1984). Many are in the form of documentary images, others as videos digitized from their original media, while some could be emulated.

Virtual Reality is the environment in which all objects exist in the form of data. In this virtual environment, how does the audience experience art? How can the overwhelming sensory experience that people feel in the museum be changed in the virtual spaces? These were the kind of questions I was asking myself.

PK These are indeed important questions that lie at the core of the research *(Re-)Viewing Paik*. We are still in its early phases, so these issues are not resolved at this stage.

SAP But would you like to give us more information about the goals and current state of the research, from your point of view?

PK From a broader perspective, we are trying to define an automated curatorial process. We are looking to achieve a general type of system, and its tunable rules, that helps create a curatorial environment, but also its exhibition set at the same time.

It is likely to be automated, and possibly be experienced anywhere through augmented reality sensing and displays. The research is focused on automated curation and this fictive goal I'm describing acts as a "designerly" research hypothesis, and possibly an artifact, that we'll help us identify the gaps, guide the work, learn from it and its potential reception. We need to translate our hypotheses in exhibit design and curatorial languages, to collect learnings in and for these disciplines.

SAP You thought Nam June Paik's works and experimentations could serve this goal?

PK We are indeed very interested in the work of Nam June Paik for this project. Certainly, at first as an historical case study in media and "tele-"art, which would naturally fit our research objectives, as some of his works were already meant to be "televised" and seen at a distance. But then the *Symphony for 20 rooms* that you introduced also serves as a major reference, linked to Paik's and Fluxus' ideas about exhibition outside the museum. Paik implemented these ideas in the Wuppertal house, for the *Exposition of Music. Electronic Television* exhibition. He entirely modified the house by temporarily transforming it in different ways and by following the ideas of rule-based "preparation" inherited from John Cage, who was so important to him. We now know that this exhibition opened many new paths that were later followed and developed by artists and musicians.

The concepts of non-deterministic participation and then interaction are part of those paths. So, for us, as we come back almost 60 years later with this similar idea of bringing an exhibition to everyone's home digitally, which would become the distant museum crawled by remote visitors, it naturally resonates with these early projects and exhibitions by Paik.

SAP How can this personalized virtual space and museum, which is supported by your platform, be experienced, if one of Nam June Paik's *TV Buddha* was realized in

it? How can this sensory and cognitive experience be changed in these virtual spaces?

When you see this piece in a physical museum, you sense the time, the temporary feedbacks, and loops, and all these functions of the piece are experienced instinctively. But in these virtual spaces, if I place this work in my room and then see this piece, how does this experience, like the sensory, or the cognitive and the temporary experiences, be rebuilt to the audience or the user?

PK It is certainly a difficult challenge and I think we must go through a learning phase first. Learning by doing in a reflexive and comparative process, while being aware of other experiences, but also by evaluating what is being done with different audiences of artists, curators, and visitors.

It is therefore very instructive to work with the different types of works that you have selected, because we have so far kept liberties with them and did not choose to respect the physicality or size of the works. They don't really have any specific ones either way, once in a digital environment that is meant to be viewed on so many screens and various contexts. We simply took the works, "translated" them into digital in the most direct way possible, guided by the willingness to provide an immersive experience to the end users. As a result, some of them became much larger than they were in reality, while others became smaller to fit the destination spaces.

For example, the Manfred Montwé's black and white photographs are displayed in the augmented space at the size of the people or objects that are present in the pictures, and not at the size of the original picture, to turn them into immersive experiences. This is something we can easily do digitally, but it is a big change compared to the small original images, which are however in themselves a transcription of an original "life-size" event.

And then, as you mentioned *TV Buddha*, it is also a very interesting and important question that you're raising, because in the long run some people will probably only see this work in its digital form, as they might not have the opportunity to see it physically or in a conventional museum. This question of replicability is not new, but again transformed by a new medium of copy. Thus, what is still present in this work once "translated" remains to be evaluated.

SAP In which way is the *TV Buddha* translated into the virtual?

PK I would first say that there are certainly more than one acceptable transcript of the same original work, which therefore become kinds of altered copies, or even "poor copies" to paraphrase Hito Steyerl. For now, and in our case, we just tried to reproduce *TV Buddha* by keeping this idea of staying direct and "simple" in the transcriptions, especially regarding the closed video circuit. This is feasible without too many complications in virtual and by using current game software. But the experience will be different since you won't see yourself in the closed circuit anymore, only Buddha and maybe your avatar beside it. In an augmented environment it is a different question that we still need to address: how could a virtual camera placed in a digital environment see in the real one? It would be some sort of reverse augmentation, but algorithmic tricks exist for that too.

However, I think that we are still learning how these different transcriptions do or do not change the reception of the artworks. We might end up with a vocabulary of possible transcriptions, which could be discussed and debated before any digitization. Coupled with automated procedures and rules - this could be the additional

role of an NFT attached to a work for example - artworks could "know" in the future how to be transcribed.

SAP This could perhaps work as the conclusion of our discussion, don't you think?

PK It could be our provisional conclusion indeed, at this stage of the research. I would just like to add that I think Paik would probably have been happy to experiment with such approaches to his own body of work, and to test them as well. To me, he wasn't too reverent with that and wanted the artworks to be played and interpreted, to be involved in different contexts of reception and change over time. I just hope we're playing them well!

SAP Yes, I agree with you. He would have certainly been joyful about it.



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# Txt

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## (Re-)Viewing Paik

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*(Re-)Viewing Paik* is a joint research initiative between Switzerland and South-Korea that involves Prof. Patrick Keller from ECAL/University of Art and Design Lausanne (HES-SO) and from fabric | ch, Dr. Sang Ae Park from the Nam June Paik Art Center and archives (NJPAC) in South Korea, and Dr. Christian Babski from fabric | ch, an architecture and information technology collective based in Lausanne.

The main long-term objective of this joint and interdisciplinary research, based on the archives of Korean artist Nam June Paik (1932–2006), is to establish novel types of online exhibition curating and design, which must take shape digitally at any viewer's (visitor's) place or housing, and to virtually populate it, in an autonomous yet objective way (based on the objective sensing of the targeted environment). The results of this initial joint work, which will take the form of a functional "demo" (proof of concept), will be used in parallel to formulate a more detailed research project which will then be submitted to a national funding agency.

This research combines new artificial intelligence/machine learning techniques (AI/ML) and automated rule-based design, or computational design (CD), with augmented reality displays (AR) on personal smart phones or tablets, to set up personal digital museums, "viewing rooms" and galleries. These latter are then experienced in an immersive way (both AR, VR and projections are possible), respecting a relationship of scale between the viewer and the artworks, from any remote location and from the viewpoint of the visitor, while being autonomously tailored to it.

*(Re-)Viewing Paik* thus offers an innovative and personalized form of remote exhibition, while the research results remain dedicated to both curators ("tool side", or server side) and online visitors ("exhibition side", or client side). They are linked to the valorization of media art forms and archives, which are naturally adapted to digital screens and displays, while they nevertheless seek a versatile and immersive potential in the ways they are presented to the public.

The Nam June Paik archives, located in Yongin (Seoul Capital Area), are an exceptional and almost perfect case study for these objectives, as the main purpose and relevance of the research is to provide access to a selected part of the Nam June Paik archives (and later, by generalizing, to the entire archive or to any type of digital art, or digitized art content). This is a unique opportunity for practice-based research, and for importing innovative insights into the algorithms of the automation tool to be further elaborated, temporarily entitled *Atomized (\*) Functioning*.

fabric | ch, September 2021

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