

## Remediated Sites: Lumen Prize Virtual Gallery as ephemeral archive, site of memory and digital assemblage

“In the era of the electronic and digital interface, visibility is not simply an issue of the capture, manipulation, and representation of the visible anymore, nor even one of image literacy and cultural status, but, increasingly, one of display and interface. The question of which images have the power to move us is becoming entangled with that of how we move images, or, rather, how technology allows us to do so” (Beugnet, 2020:2)



Figure 1: Leonardo Lumen Prize 2020 Exhibition Catalogue Lobby

In 2004, the curator Steve Dietz asked how curating new media might change the practice of curating altogether. New media brought about a destabilising effect on curation of contemporary art, able to elude specific material boundaries (Manovich, 2002) and in turn to solicit questions about its (re-) production, preservation, and exhibition. As Christiane Paul states, “immateriality is an important element of digital art that has profound effects on artistic practice, cultural production, and reception, as well as the curatorial process” (Paul 2020:10).

Virtual galleries emerge from this immaterial space (Krysa 2006), and exist as remediated sites with rhizomatic and distributed characteristics. Discussed here as digital assemblages and sites of memory, they are able to define the face of virtual exhibitions and one’s experience of them. Positivist discourses on digital technology and Web 2.0 may see these spaces as an opportunity to democratize access to digital art in a global, networked sense, but even in 2021 the reality of digital poverty and global access is one of the challenges faced by virtual curation. It is in the context of these challenges, that the Lumen 2020 exhibition was created by Lumen Art Projects and Leonardo/The International Journal for Art and Science (Leonardo/ISAST). These two global institutions combined efforts to create a hybrid art exhibition space that can act as a resource for research, while facilitating a space for reflection and introspection, and unhindered access to a multitude of artforms for a global audience.

*“The impact of the COVID-19 pandemic has also accelerated the art business's embrace of the digital in order to survive, and many global art professionals and employees have sought to bolster the online viewing rooms and virtual tours of museums, galleries, art fairs” (Asvasirayothin, 2021 )*

With the Lumen Exhibition 2020, Leonardo/ISAST, Lumen and producers of the Virtual Worlds, Lumen Art Projects D.C. Spensley and Gustavo Rincon (University of California Santa Barbara), aspired for a nexus between art, science and technology, aiming for virtual curation that not just informs, but moves us. The result is an exhibition space that sets out to map connections between virtual sites and curated spaces, making visible the longstanding histories of practices in the digital. Building on Bolter and Grusin's concept of 'remediation' - the tendency of new media to borrow mechanisms, concepts and conventions of historic media (Bolter & Grusin 1999) - this virtual space re-frames existing mediated navigation conventions, while introducing new hybrid forms of knowledge curation: An archive of Leonardo journal's historic research in media arts practice is curated to be exhibited side by side with pioneering technology-based art: The exhibition profiles the winners of the Lumen Prize 2020 in combination with a curatorial selection of research resources from Leonardo journals's 52 years of publication on arts & technology.



Figure 2: Christian Loclair's *Helin*, Winner of the Lumen B.C.S AI Award

Bolter & Grusin's theory of remediation introduces two antagonistic concepts, namely hypermediacy and immediacy (Bolter & Grusin 1999, Dobson 2006). Whereas hypermediacy is a visual style that makes explicit the nature of and exposure to the medium, the idea of immediacy describes an unfiltered, unhindered and seamless use of technology. With the Lumen Prize 2020 exhibition, the team of curators, developers and researchers amalgamated these ideas into a new form of collaborative, discursive practice. Developing an experiential perceptual vocabulary, based on the concept of

remediation, and its underlying pillars immediacy and hypermediacy, the curators arrive at a shared visual language that reflects on a multitude of existing mediated experiences: The resulting hybrid virtual space alludes to the concept of hypermediacy in that it is reminiscent of Buckminster Fuller's geodesic domes, 'Tron'-like meanderings, and monolithic temples of art. Pushing past the internet, the catalogue presents virtual architecture as archival knowledge spaces. On the other hand, the design of the exhibition embraces the concept of immediacy, as questions of access and usability played a key role in the design decisions.

In his 'phenomenology of perception', Merleau-Ponty firmly anchors human memory, and perception in an embodied experience of physical space. Through a process of remediated navigation, the curators translate the meta-physicality of art into the virtual realm, whereby research, artistic practice and architecture act as mediators for an embodied experience. How do you protect the aura of the artwork, which Walter Benjamin tied to characteristics of reproduction (Benjamin 1935), in a space where reproducibility is seemingly endless? The great challenges of 'telepresence curators' (Jack Addis, Lumen Art Projects) is to create an infrastructure that is at once perceptually challenging, but also acts as a virtual memory site, combining concepts of archive, sensory-motoric experience and play.

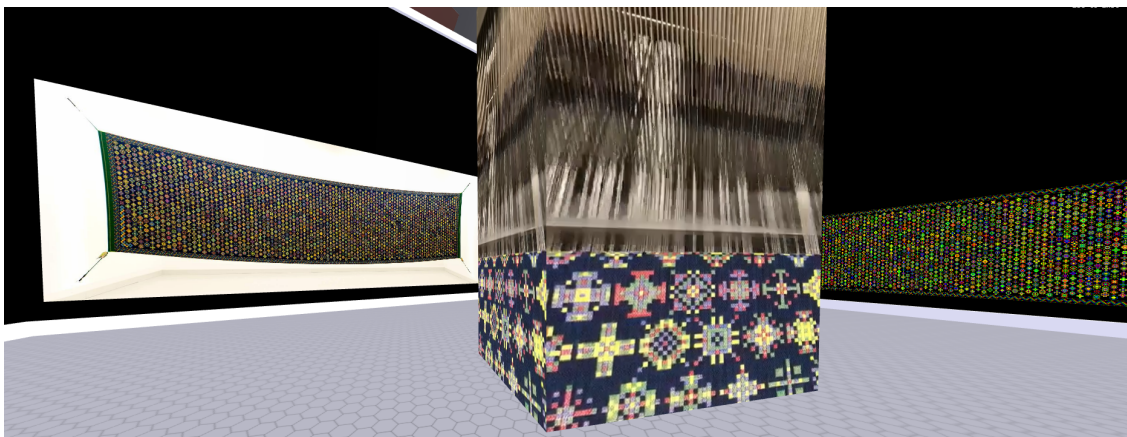


Figure 3: Soren Krag, Weaving of the Tapestry - Winner of the Lumen Prize 2020 Nordic Award

In 'Curating Immateriality', Joasyia Krysa points to the transformative nature of media art curation, possibilities and limitations of curating in the virtual space engendered and confined by technology. Coining the term 'software curating', she considers the directionality of agency and its effect on curation. How does the networked, procedural nature of the internet affect curatorial practice? Lambert, McNeil, & Quaranta (2013) discuss the evolution of online art and its curation in 'Art and the Internet', wondering what post-internet art (Kholeif 2015), would look like. The Lumen 2020 exhibition presents a diversity of remediated digital artforms, from AI-generated 3D virtual sculptures (Loclair's Helin), to tactile VR experiences (Elyne Lagarnisso), the exhibition of this year's winners of the Lumen Art Prize is presented as an eclectic assemblage. The

result is a virtual space that acts as a hybrid, between exhibition, catalogue and exhibition catalogue.

In the words of D.C Spensley, this hybrid space itself is full of functional and experiential possibilities: *'There is a sweet spot between exhibition and documentation. This spot moves around depending on the character of the work and the amount of digital DNA. There's no formula or right answers for this. But the potential to create interesting hybrids exists in virtual space. An exhibition catalog is always going to be referential, but for artworks born digital, or who lend themselves to digital translation, interesting hybrids are possible. It's possible to fulfill arts, entertainment and information functions in virtual space, and that's what we have tried to do.'*

### Leonardo/ISAST - A Global Hub for Discourse on Art & Technology

For the last 52 years, *Leonardo*, the world's foremost journal for research on art and technology has been unifying billions of people. As Danielle Siembieda, Creative Director at Leonardo / ISAST put it, *Leonardo* is not just a journal: *"..We see ourselves as a global creative think tank. How can we address some of the world's most critical issues, to society, to our communities? How do we drive creativity and collaboration to create a platform that allows to address impact and innovation for this coming century, and topics such as decolonization, equitable questions around access and experimentation, that we really allow for our communities to thrive, to become adaptable, experimental and agile"*. With this innovative collaboration between Leonardo/ISAST D.C Spensley and Gustavo Rincon, and their team created more than a virtual 'catalogue', an exhibition space for the Lumen Award winners 2020, as a remediated experience of research in artistic practice.

Lumen Art Project is host to one of the world's most prestigious awards in new media, the Lumen Award. Since Lumen was launched in 2012 by Carla Rappaport, Lumen Art Prize has awarded more than US\$80,000 in prizes, celebrating the world's most pioneering media artists, and providing a truly global platform for artists operating on the intersection between art and science. As Jack Addis from Lumen Art Projects notes, the Lumen Art Prize exhibition 2020, faced key challenges in balancing the display of art and a seamless experience, as well as questions of access, and considerations of the space. Working hand in hand with the team at Leonardo/ISAST, this exhibition explores permeability of the space, limitations and, openness of space through a new form of collaborative 'telepresence curation' (Jack Addis).

As Geoff Cox explored in 'Software Actions', the performative character of code adds to both its dynamism and unpredictability, which can result in particular challenges for the design, curation and programming of virtual exhibition spaces. The Lumen Art Prize 2020 catalogue / exhibition space, is built with a modular, rhizomatic structure in mind, consolidating the ideas of quantum objects with more abstract, non-linear shapes. As D.C. Spensley explains, the designers combined museum conventions, with

user-interface based, heuristic discovery conventions. The concept of remediation, the intuitive use of navigation borrowed from other media such as film, text or gaming (Bolter & Grusin, 1999), served as a conceptual anchor for the design of modes of interaction. The designers treaded the line between the architecture of a Second Life, exhibition space and game, to find an agreed language as a tool to invent new solutions.

The aim was to create a redundant system, so people would feel like they would know where they are going. Marina Vishmidt (2015) points to an 'affinity between code and curatorial practice', both leading to experiments in social relations. The collaborative nature of the telepresence curators between Lumen and Leonardo/ISAST led to questions about the nature of their terra nova, this hybrid non-space (Roger Malina) that acts at once as exhibition and catalogue. The concept of remediation, of borrowing navigational syntax from familiar media experiences (TV, print, gaming), such as the use of arrow keys or mouse, allowed the telepresence curators to arrive at a seamless and spatial exploration of the exhibition catalogue:

#### Physicality of Virtual Space

*"Spaces are culturally and communicatively constituted, and the meanings of spaces are established by the way they are represented (e.g. written and talked about) and by the nature of social inter/actions that take place within them. As such, space is always in the process of becoming, of being spatialized – through the 'animated dialogue' (Kahn, 2003) which unfolds between our ideas/images of space and the material properties/features of space." (Jaworski, 2011: 18)*

As the virtual progressively moves away from layered screens within screens, towards a 3-dimensional, spatial experience, questions about the navigational grammar of these new multi-dimensional places of culture and collective memory need to be asked. The challenge presented to Spensley and Rincon consisted in the overarching question about 'where they would see publishing in the 21st century'. Through a process of Darwinian natural selections (D.C. Spensley), and a use of remediated navigation conventions, they arrived at a hexagonal architectural dome structure that can be explored in a multitude of ways: be it via text, and accessible research resources, through navigation with mouse and keyboard as a 3D space or as a web catalogue. D.C Spensley commented on the dual nature of the architecture as an archival resource and a place of cultural exploration: "Right now architecture is a commodity. What is the cultural value of what we created? How does this space create a contribution to knowledge? The Greeks created the parthenon as a testament to the Gods."

The Lumen gallery space frequently leads the user/viewer into an absence of space. Blacked out rooms with no visible structure to contain, for example, the 3D VR scenes from 'Cosmos within Us' form part of a story and experience, visible only as a screen within the frame. This remediation of a 3D scene in a 3D space brings into light the compatibility made possible by these environments and whether it is possible to view

this immersive scene in the same way as one experiences the gallery? Tupac Martir describes the XR experience of 'Cosmos within Us' as an element within a performance where the user becomes at once part of the wider experience shared with an audience and simultaneously acts as an individual in their experience of the worlds he creates. His piece encourages reflection upon the social and individual experiences made possible through these technologies, an aspect reflected in the New Art City platform that enables a social experience of the gallery. This social aspect belies the classification of the Lumen gallery space as a catalogue even though it contains many of the component parts that one would find in a catalogue.



Figure 4: Elyne Legarnisson, Winner of the Lumen Prize 2020 XR Award

Accessibility for a global audience remained a key criterion in the selection criteria for the design of the space, moreover as several of the artworks (Julieta Gil, Sören Krag) opened up unprecedented possibilities for 3D display within the virtual space as an assemblage, a co-existence of diverse artistic and conceptual strategies.

### Immaterial Assemblage

Gilles Deleuze and Felix Guattari coined the term 'assemblage', not to be confused with Bruno Latour's actor-network theory as 'a multiplicity which is made up of many heterogeneous terms and which establishes liaisons, relations between them across ages, sexes and reigns – different natures. Thus, the assemblage's only unity is that of co-functioning: it is a symbiosis, a 'sympathy' (Deleuze and Parnet 1987, 69 [1977]). In the context of the Lumen 2020 exhibition catalogue, the term assemblage exhibits a technical dimension as much as its conceptual nature of heterogeneity. The space collates diverse artistic strategies, by providing a virtual home, an architectural meta-structure that links between artistic approaches. Sören Krag's 'Deux Mille Fleurs' is a 3-dimensional weaving loom, with the ornate weave suspended as a complex-high

resolution cloth in the space. A detail of the artwork as well as its digital motif are suspended on either side, with the accompanying sound of weaving providing context to the genesis of the project. The artwork is presented as digital as much as tangible, almost haptic piece consisting of warps and wefts, with the virtual space acting as facilitator of an immediate, almost physical experience. The digital sculpture is contrasted with handcraft, and physical production processes.

Christian Mio Loclair, the winner of the Lumen AI award, presents an entirely virtual sculpture based on a multitude of physical genotypes. 'Helin' is a dynamic sculpture created by an AI, that eliminates the idea of authorship and intention (Kant's 'Zweck'), thereby asking important questions on motifs, intentionality and artistic versus natural selection processes: Helin is based on data input of 120.000 sculptures, generating new alternative variants 30 times a second. Both aesthetically mesmerizing, technically as well as conceptually pioneering, the artwork takes centre-stage in the virtual exhibition catalogue, surrounded by powerful images of its creation, adding to the meta-discourse on creational processes. The artefact is a constantly shape-shifting sculpture, created without figurative, representational ambition, an amalgamate of shapes, itself a remediated assemblage, a memory-site of thousands of existing sculptures.

The Lumen 2020 Exhibition is presented within a single crystal-like immersive space, that is at once open, and enclosed, structured through walls, yet permeable, cellular in its presentation of spaces, yet immersive and rhizomatic. Gustavo Rincon specifies: 'The space is a *cosmos within a cosmos within a cosmos, a motif that is neutral and connected to historical and natural phenomena, (..) platonic in its significance. Here, architecture becomes a user interface.*' The diversity of artistic strategies contributes to the perception of space as assemblage - as an interconnected network. Casey Reas and Jan St. Werner's artworks 'Compressed Films' are created using generative adversarial networks (GANs), a machine learning technique that allows to compute new, unexpected visual artefacts based on a database of existing stills. In this case, stills had been created by Casey Reas as documented in her publication 'Making Pictures with Generative Adversarial Networks'. The artworks can be experienced across separate but adjacent rooms, with an immersive soundtrack composed by St. Werner. These audiovisual immersive spaces are positioned within the crystalline structure of the exhibition space, allowing for parallels not just within the artists' work, but relations with other artists to become apparent.

'Hertzian Landscapes' is a near real-time representation of usually invisible radio-spectra displayed with hitherto unprecedented amount of detail as a single panoramic landscape. Richard Vijgen's artwork, Winner of the 2020 Lumen 3D / interactive award, explores a new reading of the electromagnetic spectrum, whereby the audience physically explores the invisible radio signal through movement. Reminiscent of early works by Raphael Lozano-Hemmer and contemporary explorations by United Visual Artists, Richard Vijgen combines diverse creative practices into a new form of intermediate experience of remediation. The audience can select a specific segment of

this radio-signal landscape by positioning themselves in front of the panoramic canvas, in the physical space as much as in the virtual Lumen exhibition. At the same time, the audience observes the artwork in front of a screen within a screen, submerged into a field of possible inter-mediated interactions within the hexagonal-cellular structure of the Lumen exhibition catalogue.



Figure 5: Richard Vijgen: Hertzian Landscapes - Lumen Prize 2020 3D / Interactive Award

The exceptional Winner of this year's Photomonitor student award, illustrates the power of immersive systems through assemblage as a process. Liu Wa's piece 'Racing Thoughts' is a montage of a multitude of techniques in its own right, a combination of hand-drawn animation, filmic narrative, and auto-biographic voice over. 'Racing Thoughts' presents a dystopian account of mind control, of individuals fearing surveillance techniques and transgressions of privacy through technology. Exhibited within this total, immersive environment, the artwork is both intimate and personal, making the invasive natures of these personal accounts even more apparent. The space provides a shared conceptual framework for these discussions. As Gustavo Rincon explains: 'Generative Art, the space doesn't need to abide by a rule set, it is free flowing, you are not held captive.' Together these artists discuss some of the most important tropes in new media art discourse: Invasiveness of media, questions of intentionality and authorship, visual representation, inter-media processes and techniques.

### *Spaces of Inclusion and Exclusion*

The principles of inclusion and exclusion rendered possible through traditionally established spaces such as the gallery are challenged when this space is rendered virtual (Gerin, 2006) - existing in a digital space, dislocation is possible and visitors can



co-experience the space whether they are based in the UK, US, Brazil or Kenya. The design of the New Art City platform ensures that users do not require any installation of custom software, democratizing the tool to a degree from both a curatorial and user perspective. As Gerin states, “in this regard in an age when the local seems to have exploded into myriad fragments, the Internet might therefore provide a platform onto which public art can be deployed specifically for non-localised, interactive, and potentially lasting memorialization” (Gerin, 2006:45). This observation becomes visible in the work by Julieta Gil shown at the Lumen exhibition. However, this technological positivist discourse should also be tempered by a degree of recognition of the politics of access. Limitations, in this instance linked to the amount of data used, that in some countries remains a commodity that is not available to everyone. Therefore, whilst the virtual can be seen as subverting traditional exclusionary sites, the varied global technological landscapes and/or the undemocratic governance of the internet especially across the Global South (Akbari, 2020) still remain a limiting factor and can unintentionally continue exclusionary practices.

The Lumen prize and exhibition goes some way to addressing this, by limiting the design of the space itself to ensure that it is data-light, whilst including renditions of the different artists’ work alongside contextual videos. In another respect, this space is able to cohere previously exclusionary sites of academic discourse and artistic practice by bringing them together in the gallery and making these connections possible and visible. On the virtual walls facing or beside the artist’s own introduction to their work, the user can discover a poster with the first page of an article from *Leonardo* journal, which the user is able to download and read. This juxtaposition between image and text or text presented as artefact in its own right, was as the curators explained, a new way of presenting the archive of Leonardo/ISAST’s publications. The publications offer a historic lens through which to view and reconsider the prize winners’ artworks, drawing attention to the longstanding practices in this field.

### Ephemeral Sites of Memory

“*Lieux de Memoire* are created by a play of memory and history, an interaction of two factors that results in their reciprocal overdetermination. To begin with there must be a will to remember” (Nora, 1989: 19)

In *Nuestra Victoria* [Our Victory], Julieta Gil presents an indexical record of the monument of the Angel of Independence, in Mexico City. Through different modes of documentation using 3D photogrammetry, techniques typically aligned with cultural heritage practices of digital archiving, Gil recreates a specific record of the object in time. Temporality is key to understanding the significance of Gil’s piece, as it documents the protests against systemic violence towards women in Mexico City in August 2019, through the record of specifically ephemeral surfaces, as graffiti envelops the monument. In a context where government censorship dominates, and where the physical monument was subsequently boarded up for restoration, this digital monument offers a testimony of voice and popular

collective memory (Halbwachs, 1980) in response to institutional erasure. As Gils states on her website, “The intention was not to make a perfect replica, but to also allow the materiality of this digital version to show through and reveal new layers of information about its process of preservation and restoration and allow the mistakes and imperfections of the scan to serve as a metaphor for the fragility of patriarchal institutions” (Gil, 2020).



Figure 6: Julieta Gil: Nuestra Victoria - Lumen Prize 2020 Gold Award

*Nuestra Victoria* is an extension of the digital witnessing practices that take place using mobile phone technologies (Kelly, 2008), and an activist intervention that simultaneously reframes the discourse of culture and heritage. Intended “to create a digital archive of the monument in its state of occupation by civil society” (Lumen, 2019), *Nuestra Victoria* re-presents the monument as a dislocated archived landmark and site of remembrance. Remediated on a screen inside the Lumen virtual gallery it connects to *Leonardo* journal articles on the politics of sound (Fiebig, 2015), the feminine, trauma and abuse (Louvel, 2020), and the 3D volumetric reconstructions of found footage (Menotti, 2020).

These diverse practices themselves mirror and reflect on new concepts of remediation, references and reinterpretations of inter-media and intra-media explorations. As a locus operandi, a place of action, the hybrid space of the Lumen 2020 exhibition enables us to ask questions about the future of collective virtual art experiences. Will we be able to enjoy these mediated, virtual art experiences with one another, as a social, shared

cultural experience in the future, as the development of the exhibition platform New Art City suggests? Already, the winners of the Lumen 2020 art prize, with their range of technological approaches are exhibited side by side, an assemblage that remains globally accessible during a time of global travel restrictions, and by combining Leonardo's existing archival resources with new art forms, the exhibition engenders new forms of collective memories. "Modern memory is, above all, archival. It relies entirely on the materiality of the trace, the immediacy of the recording, the visibility of the image" (Nora,1989)

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