en[crypted]: A memorial archive for the preservation and sanctification of digital remains.

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en[rypted]

A memorial archive for the preservation and sanctification of digital remains.
The Garden Cemetery typology was established in the 19th century as cities grew during the industrial revolution and corpses were viewed as disease-ridden threats to sanitation that had to be removed. The previous model of the graveyard, located next to churches within the city, was exported to the countryside to form separate cities of the dead. These pastoral landscapes are highly effective spaces for performing burial ceremonies and representing collective death.

Pere Lachaise Cemetery outside Paris opened in 1804, is the most famous example of this typology. It attracts hundreds of thousands of visitors each year who view the grave-stones and mausolea, experiencing it as a museum of past lives. Abraham Lincoln’s burial at Oak Ridge Cemetery, IL, in 1865, was an early high profile interment in this manner in the United States. He was the first president with a funeral train - his funeral and burial were progressive for the time.
The Garden Cemetery typology has changed very little since the middle of the 19th century. Arlington Cemetery, pictured at right in 2008, operates almost identically to the day it opened in 1864. Here, in a most traditional ceremony, the automobile has not even replaced the horse-drawn hearse. There is something valuable about tradition and timeless typologies, but even the architecture of death should adapt as the way we live evolves.
The Cemetery Hasn’t Changed.

But we have.
Humans no longer leave behind solely physical remains. We accrue countless digital files, photos, etc. that are part of our lives and reveal who we are. We have well established architectural typologies for physical living, spaces for viewings and funerals (the threshold) and typologies for storing and curating physical remains. There is a pragmatic “architecture” for the living digital in the form of vast server warehouses, which additionally house digital artifacts from deceased users out of necessity as there has yet to be an established typology for their permanent archiving. There is also no respectful digital equivalent to the funeral or burial of the physical corpse. This needs to be addressed.

The architecture of death is arguably the most universal of all programs and already contains aspects of virtuality embedded in the traditional typologies. Funerary architecture was once the most important part of the field, evidenced by the Great Pyramids and ancient mausolea, but has now been largely relinquished by architects to tradesmen in the secularized world.

Applying the digital to the architecture of death is an opportunity for transforming multiple aspects of a program that has remained the same since before the electronic era.
PHYSICAL BODY

DIGITAL BODY

VIRTUAL LIFE

PHYSICAL LIFE + POSSESSIONS

LIVING VIRTUAL

DIGITAL OeUVRE

VIRTUAL (INDIVIDUAL) THRESHOLD RITUAL

ARCHITECTURE OF THE (INDIVIDUAL) THRESHOLD

DEAD VIRTUAL (COLLECTIVE)

ARCHITECTURE OF (COLLECTIVE) DEATH

ARCHITECTURE FOR LIVING
VS.

Corporations have begun to address the problem of digital death. Half a decade ago, Facebook realized some of its users were dying. The memorial profile was created in order to differentiate deceased users and handle their data more respectfully. In this state, accounts are frozen and only visible to existing friends but allow users to revisit photos and past communication. Interestingly, given a stable world population, the number of memorial profiles will one day theoretically surpass the number of living users. Facebook will symbolically transition from a primarily social media site to a digital archive.

In April of 2013 Google rolled out an “Inactive Account Manager” feature that allows users to specify whether their data is forwarded to a trusted friend or deleted forever after they die.

Digital artifacts can in some respects be a better way to remember the deceased than visiting their physical graves. How can Architecture balance this with the strengths of the traditional cemetery and create a sacred space for digital remains?
In *Art in the Age of Mechanical Reproduction*, Walter Benjamin explores the negative impacts of rapid duplication technology on the “aura” or sanctity of original artworks. Virtual files were not yet around in the 1930s, but the implications are still the same. There is a significant shift in the importance of the physical or original when duplication is possible.

Art was always somewhat reproducible, originating with casting and stamping, and escalated with the printing press and photography. However, reproductions do not have the same existence history. Only the original is authentic/authoritative. Technical reproduction removes work - reproductions are depreciated in quality. There is no history and no respect, the aura of the art is diminished. Underlying this is a cultural drive to make things accessible. Benjamin concludes his essay by assigning two values to art; cult value and exhibition value. Exhibition value is not sacred. Cult value is hidden, sacred, and ritualistic art.

Digital remains must be authenticated originals, tied to a physical archive and accessible only under controlled circumstances in order to be sacred. Additionally, an architecture that houses the ceremony of digital interment will further sanctify the remains.
ART + ART = ART

SANCTITY = \frac{1}{X \text{ COPIES}}

PHYSICAL ARCHIVE

VIRTUAL ARCHIVE

REPRODUCABILITY vs. SANCTITY

? → FIGURE → $\rightarrow$ DOCUMENT → NOT SACRED

SACRED EXPERIENCE

? → FIGURE → $\rightarrow$ DOCUMENT → NOT SACRED

SACRED EXPERIENCE
Digital remains are not inherently sacred.

A physical Architecture designed for the ritual of digital interment and proper curation of the remains is necessary for their sanctification and memorialization.
Memorials have always had virtual elements. They can be tangible or ethereal. Text, imagery, symbolism, reflection, projection etc. are all pre-digital “virtual” devices, which represent something beyond themselves.

The Lincoln Memorial, arguably a standard for neoclassical revival memorials, can be distilled down to a classical landscape leading axially to a Doric box that contains virtual artifacts of Abe Lincoln - a sculpted likeness/image and text from his most historic speeches. Frank Gehry’s Eisenhower Memorial is a deconstructivist take on this typology, exploding it and turning it inside out. The [virtual] imagery inhabits the perimeter and the circulation and landscape flows through the center, scattered with engraved text and QR codes that layer additional information. The same elements are used in both projects but Gehry’s treatment desanctifies the virtual, overly exposing rather than protecting it.

The success of architecture that utilizes these virtual components is dependent on their strategic deployment, not just their inclusion. Successful monuments / memorials curate the virtual intelligently, presenting it in a respectful way.

Venturi Scott Brown’s College Football Hall of Fame project is the ultimate take on pure monumental virtual imagery. Their analysis in Learning from Las Vegas suggested an architecture of signage [virtual in itself] affixed to boring “decorated sheds”. The virtual begins to take on a sublime scale but also becomes banal. Text and imagery is no longer precious. The memorial shares too much with the billboard and becomes unappealing.

Maya Lin’s Vietnam Veterans Memorial strikes a balance between the virtual, the physical and the sacred. The text is curated in such a way that it begins to quantify the magnitude of the event in conjunction with the wall’s growing sectional relationship with the body. The engraving combined with the physical quality of the marble reflect the viewer, simultaneously making visitors conscious of their presence and projecting them onto the deceased. The Vietnam Memorial shares similarities with the screen and the billboard, yet differentiates itself from the profane to respectfully honor the fallen soldiers.
The formula for housing digital remains is a synthesis of the cemetery, the museum, the archive, the memorial and the virtual, all of which Michael Foucault discusses as having “heterotopic traits” in his essay Of Other Spaces. Heterotopias are fragments of realized utopias that have a specific relationship to society’s other spaces and understanding of time. The museum, the archive and the cemetery are all spaces that accrue history, yet operate timelessly. They already share features and overlap.

Rosalind Krauss’ diagram from Sculpture in the Expanded Field, which she uses to define unconceptualized new categorizations for progressive sculpture, can be repurposed to extrapolate this new programmatic combination. Various burial typologies overlap with the museum and library, by storing or displaying artifacts, so an archive that accumulates digital data and curates it respectfully is a logical conclusion and functions well as a solution to the digital online memorial.

The virtual is arguably a better heterotopia than Foucault’s favorite, the boat. It is a place without a place, exclusive, always evolving, spatially connected yet disjointed and it relates to the physical world.
Heterotopic Typological Hybrid

"CEMETERY" / LIBRARY / MUSEUM

DIGITAL BODY

CEMETERY (BURIAL)

PERSONAL DATA ARCHIVE

TOMBS W/ INFO

CHURCH BURIALS

NOT MUSEUM

NOT LIBRARY

NOT LIBRARY

NOT LIBRARY

VIRTUAL EXHIBITION

VIRTUAL ARCHIVE

VIRTUAL EXHIBITION

CEMETERY

MUSEUM

EXHIBITION ARCHIVE

CEMETERY

MEMORIAL
Inverting the Cemetery

The cemetery’s location outside cities is particularly obvious in the United States where our
densit urban areas were built largely during and after the 19th century establishment of the
Garden Cemetery, spurred by New York’s Rural Cemetery Act in 1847. This century and a
half long condition of deathless cities can be reconciled since digital remains take up rela-
tively little space versus physical corpses and pose no disease threat.

A national system of these digital cemetery/archive/museums can be imagined, with branch-
es in each major city. Washington DC stands out as the ideal candidate for the primary loca-
tion, particularly since such a large percentage of the surrounding burials take place outside
the city boundaries in Arlington Cemetery.
The project is symbolically situated in between the city of the living and the city of the dead, adjacent to the National Mall, which is filled with other physical and virtual memorials. The project houses digital remains and becomes a memorial to the past citizens of the US.

The specific site chosen occupies an unbuilt node of the 1901 McMillan Plan, which already relates it axially to other monuments on the mall. Boulevards link it to the Washington Monument and the Lincoln Memorial, and align it with 21st St. A clear view to Arlington, the place of physical death, is visible across the Potomac. The circular parti is contextual and creates an immersive interior courtyard with program radiating around it. By blocking out references to the context, the project starts to become a ‘virtual’ place. The project is entered on axis with the Washington Monument from the mall, or from the Potomac, opposite Arlington.
LIVING CITY
MONUMENTS / MEMORIALS
SITE
DEAD
THE MALL
Collective Digital Death

Visitors flock to the large, central media facade that displays imagery from the data of each deceased person. Together the images create the experience of collective digital death, operating similarly to the field of gravestones that gives the traditional cemetery its power. The interior landscape provides areas for viewing, remembrance and contemplation. Everyone who visits the memorial can project themselves onto the wall, knowing that they will eventually join it. The center light well provides a glimpse into the vast expanse of servers below that house the data. Only the Washington Monument links the space back to DC and the city of the living.

The memorial/archive is accessible from sundown until midnight, symbolically opened by the setting sun and closing on the hour of the new day. Its limited accessibility further sanctifies the project.

SUNDOWN - OPENS  DUSK - COMES TO LIFE  TWILIGHT - FULL SWING  MIDNIGHT - LAST CALL
SUNDOWN - OPENS
DUSK - COMES TO LIFE
TWILIGHT - FULL SWING
MIDNIGHT - LAST CALL
SUNDOWN - OPENS
TWILIGHT - FULL SWING
MIDNIGHT - LAST CALL
DUSK - COMES TO LIFE
SUNDOWN - OPENS
MIDNIGHT - LAST CALL
DUSK - COMES TO LIFE
TWILIGHT - FULL SWING
Lobbies, services, administration, and IT support are located on the ground floor. Circulation around the perimeter of the courtyard allows the project to operate much like a cloister, the space in the monastery that separates the sacred and the profane.

Galleries are placed on the Piano Nobile level, which display rotating exhibitions of the virtual remains. Small, medium and large spaces are available. Interior circulation allows for views back through the media facade to the courtyard.

The top floor houses the archiving facilities where digital remains are processed, and features a perimeter balcony.

The basement levels contain the servers and their support spaces, with massive air handlers in the HVAC system to cool the electronics. Service can be done off-site with a subterranean connection to the parking area.

Program Distribution
The project's large media facade utilizes technology similar to GKD's MediaMesh, a system of wires, rods and LED lights in tubes that make up individual pixels in a large screen. The LED tubes contain RGB lights, with each group spaced 1 inch apart in half inch tubes, providing a 50% transparency to the overall facade and a relatively high DPI. The system displays a cohesive image from afar that is more abstract at shorter viewing distances. Its rear transparency is vital to the relationship of the peripheral program to that of the central collective detail.
The archiving facilities on the third floor accommodate visitors who come to ritualistically deposit digital remains. This moment about the individual, analogous to physical burial, is the transition to the last step of digital life and death. Accumulated images, files, etc. are uploaded onto the first computer. An archive technician scans the digital artifacts, verifies them, encrypts them and then uploads the data to the protected server network.

Visitors at this “digital funeral” see images of their loved one proximate to them on the interface, which upon uploading transfers a just-visible single portrait to the media wall opposite. The person has joined the collective digital dead.

The cathartic ceremony is followed by a moment of repose on the balcony along the perimeter of the top floor that offers views of Washington DC’s monuments and a connection back to the living city.

Digital Interment
A Virtual Monument

Light pollution from the mullions of LEDs on the media facade cast a glow into the sky far above the courtyard. Rather than simply adding another phallic object to the nation's capitol, the light creates a "virtual" monument that dialogues with the other physical monuments along the national mall.