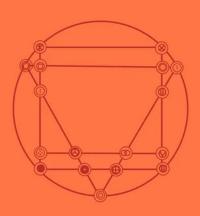
Poetics of Encryption Art and the Technocene Nadim Samman





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Dark Arts

Contemporary life plays out amid a profusion of technical systems whose inner workings are obscure—if not locked. There is no master key. And yet, this encrypted world must be borne *somehow*. Fortunately, the term "encryption" contains a latent spatial imaginary. And this imaginary yields insight into what is hidden by and within tech. In the face of information asymmetries, and when cryptographic de-coding cannot (or does not) happen, this perspective affords aesthetic purchase.

A spatial imaginary enables *poiesis*—the sense of making or creation which lies at the core of art—even in the face of the uncrackable. If an encrypted matter cannot be opened up and inspected, it may yet be rescored. *Poiesis* supplies narrative and pictorial inroads, a kind of endogenous psychological map of strange terrain—or, at least, certain points of orientation. While reviewing select artworks from the last decade, this book runs counter to Big Tech's erroneous claims regarding a new culture of transparency and openness—showcasing, instead, a *poetics of encryption*.

The word "encryption" is built around the image of a crypt, as a primary figure for an enclosed or hidden place. Harking back to ancient funerary practices, the "crypt" contains a latent history that far predates modern technology. As an implicit corollary, the question of burial techniques, and the ritual and performative aspect of sealing-up are raised (like the dead) by the term itself. A crypt, by definition, contains a body. Negotiating its built structure thus activates drama concerning whether the buried figure can rest in peace, whether it may be disinterred by a sanctioned practice, such as archeology, or de-crypted by grave robbing.

A crypt is an occult place. The knowledge that it contains is esoteric, and may be gleaned only through recondite or suspect methods. As a work of criticism, this book oscillates between both poles, but leans more towards the latter. If cryptography exemplifies a lawful right-hand path for dealing with digital encryption—a scientific method—then *poiesis* and its interpretation pursue the left-hand path. It is the road of images and their dynamic imagination. This path may seem suspect if judged incorrectly. Yet, as the philosopher Gaston Bachelard reminds us, "Images are not concepts. They do not withdraw into their meaning. Indeed, they tend to go beyond their meaning." Furthermore, "If the image that is *present* does not make us think of one that is *absent*, if an image does not determine an abundance—an explosion—of unusual images, then there is no imagination." Through such abundance, the alienating, guarded,

Gebru, American Artist, Kate Crawford and Trevor Paglen, Hito Steyerl, Zach Blas, Chim↑Pom, and Eva and Franco Mattes.

Finally, "Black Hole" unseals a monstrous triangulation between the myths of Bitcoin and QAnon, astrophysics, and the riddle of the Sphinx. The artists discussed do not escape its event horizon, including Jonas Staal, Émilie Brout and Maxime Marion, Omsk Social Club, Ed Fornieles, Joshua Citarella, UBERMORGEN, Brad Troemel, Jalal Toufic, Eva and Franco Mattes, Paola Pivi, Marguerite Humeau, Davide Quayola, Egor Kraft, and Nora Al-Badri.

But what of the term "Technocene"? It denotes a way of thinking about the contemporary from the perspective of art, addressing how the overwhelming prevalence of technology in all corners of life (and death) becomes the subject of cultural reckoning. A significant feature of this moment is a preoccupation with periodization-not least "Anthropocene," "Capitalocene," "Chthulucene," and so on-which is arguably a result of tech both preserving and putting to work everything that can be datafied: unsettling our place in time. The Technocene is punctuated by anachronism: from a cryogenically frozen human head awaiting reanimation, to the roars of prehistoric mammals echoing through museums; from a zombie social media profile, still active after the passing of its subject, to the DNA of ancient-unknown-viruses, revived in laboratories; indeed, from a return to archaic religious affect in the presence of consumer electronics, to the possible next moves of a powerful AI. Such examples, among countless others, testify to the Technocene as a simultaneous provisional assembly of disparate historical traces, encountered in flux.

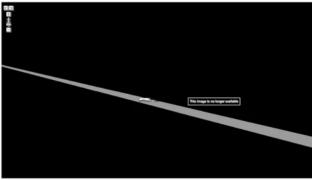
In the context of a *poetics of encryption*, the term "Technocene" fixes upon the scrambled or open experience of temporality that is generated by a landscape of black sites, black boxes, and black holes. It names the phenomenon of cultural superposition—simultaneous location and dislocation in time. In the Technocene, what has been buried, or has died, manifests in the present, both as what it is (or was) and as something new. Perhaps as a consequence, while the Technocene is not the "end of history," it is epitomized by intensive efforts to *be in the now*. This dynamic unites new-age seekers and the non-human agent, scratching at the walls of its chrysalis.



Earthrise, December 24, 1968

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Jon Rafman, You, the World and I, 2010 Video, sound, 6:23 min.

narrative—persons on the street, Rafman's Orpheus, and Eurydice—are seen to be located beneath or within a planetary surveillance system. The work's drama turns around the loss and recovery of identity.

Thematically, You, the World and I transposes the early Greek conception of Orpheus as revealer of mysteries into the figure of a platform user, parsing the inner space of a gigantic image-machine in an attempt to recover a picture of their lost love. In this respect, the work allegorizes the search function, conflating this most ubiquitous aspect of Internet use with a profound rite-framing the user as a seeker through their filiation with the mythical protagonist.13 The latter's status as both poet and adept (founder of a mystery school) begs the question concerning user-effected poiesis, as opposed to mere browsing. Pace mytho-logic, this is a question of initiation. For the followers of the ancient Orphic religion, the trial involved successfully navigating the underworld; shunning its river of forgetfulness, concealment, and oblivion (lethe, per Classical Greek) to drink, instead, from a lake of memory and truth.44 You, the World and I's premise concerns the narrator's struggle to recover a photographic representation of his departed lover. His success hinges upon remembering the exact time and place where she was captured by a Google Street View camera, and then retrieving her from the map-archive. Plotting her whereabouts within the system is a performance that is both art and craft (technê). The operation involves passionately identifying someone, not confusing her with another, and not forgetting. At first, the viewer's own lesson consists in successfully recognizing these conditions, not mistaking them for alternatives, and-one presumesbeing able to apply them skillfully: a lesson for all users. But the true initiate of Rafman's artwork acquires a deeper and more disturbing instruction. Namely, that their everyday lifeworld is the house of Hades. Moreover, that they have confused themselves with Orpheus when they are, in fact, Eurydice-captured and enclosed within a tomb.

The video begins with a God's-eye perspective above a spinning globe, before cutting closer in to parse ancient sites like the Pyramids of Giza (crypts for kings), and geoglyphs including the Westbury White Horse. The montage is a visual genealogy of megastructures that goes on to encompass sprawling cityscapes. At the apex of this trajectory towards increasing complexity and scale, cataloguing humanity's ever more outsize register, the video features a satellite constellation surrounding the planet, red beams of light bouncing

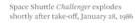


Juliana Cerqueira Leite, Anthropometry, 2019 Aquaresin, aluminum, glass fiber, steel, pigment, clay, 170×140×130 cm Installation view: Orogenesis, Museo Archeologico Nazionale di Napoli (MANN), Naples, 2019

Leite's bodies appear demoted—with respect to kinesis.⁹⁸ Moreover, when it comes to trolls, incels, or cocks in a pit, the abyss stares back: In 2017, a young neo-Nazi drove a Dodge Challenger into a crowd of anti-fascist protesters in Charlottesville, Virginia, killing one and injuring twenty-eight people.⁹⁹ The incident was captured on live television. That same perpetrator had, on previous occasions, assaulted his own mother and threatened her with a knife after she told him to stop playing video games.¹⁰⁰

At this point, the outline of a new funerary art appears on our radar, along with attendant sacrificial concerns. Moving on from Rafman, Leite, and outright horror, its spectacular plane becomes visible. It is signaled by British artist Roger Hiorns's burial of a military passenger aircraft in 2016—an installation ventured as the first in a series to play out on each continent. With visitors able to enter the subterranean body of the vehicle, through a passage beginning above ground, the artist suggests that "the human occupant of the newly buried plane will become influenced and more attuned to the powerful systems [that] we pass through." This work is, I assert, the creation of a contemporary pilgrimage site under the Orphic sign. It announces, off-screen, in the earth, at the scale of monumental sculpture, an art concerned with modalities of encryption.







Dodge Challenger involved in a vehicleramming attack in Charlottesville, Virginia, August 12, 2017

Coffin

As should be clear, the nature of the crypt is a live issue in contemporary art, but one should not move on without attending to comments offered by another artist from the United Kingdom, the author Tom McCarthy, concerning the "Google era"-so defined by "every moment of our urban transit ... recorded and archived by close-circuit cameras, our location logged by the miniature recording caskets that we carry in our pockets [phones],"102 and every keystroke and click-through "notated, copied, cross-indexed and correlated with the others." 103 This amounts to the advent of "a communal black box—expanding to contain whole populaces."104 The figure that he invokes is present in all commercial airplanes: famously, it is the flight and cockpit-voice recorder, engineered to withstand even the most violent event-so that its content may be retrieved from a crash site and aid forensic investigation. McCarthy installed such a device (lent by Boeing) at Stockholm's Moderna Museet in 2008. 105 Four years prior, at London's Institute of Contemporary Arts, he set up a large Transmission Room, in which feeds from various media sources (from Ovid to stock market prices) were transcribed and then recombined in various metric formats, before being read aloud and broadcast throughout the city over radio. His inspiration was Jean Cocteau's 1949 film Orphée (Orpheus), in which the updated Thracian poet transcribes and publishes verses by another rhapsode who, confined to the underworld, is broadcasting on a frequency that can be picked up on a car radio. Of intermittent quality, the protagonist must collage together the snippets that he hears. Here, as before, the techno-Orpheus navigates undeath, both for others and himself, capturing the voice of the buried poet (Eurydice? Him?) through the constitutive act of recording-in this case, a technê that involves searching for an adequate or meaningful composition.

One might expect that McCarthy, a novelist, should develop a somewhat logophilic iconography of encryption-as-recording (radio, microphone, etc.). This approach is also apparent in his comments on Bram Stoker's *Dracula* in a recent article. There, McCarthy asserts that boxes and records form the "main props" around which the novel is built.¹⁰⁵ Both come together, he claims, in a single device: the phonograph used by Dr. John Seward to record his psychiatric assessment of the mystery figure (the vampire). McCarthy offers the following rhetorical question: "Don't all the novel's other boxes of undeadness serve as fantastic doubles, phantasmatic satellites



Roger Hiorns, *The retrospective view of the pathway, (pathways),* 1990–2016 Jet airliner, burial, dimensions variable

we must attend our relationships with the surfaces of artifacts that possess inaccessible depths. Our encounter with these occult elements (or companions) is a key locus of desire and disappointment in contemporary technoculture. It is for this reason that artistic critique explores the tension between the visible interface and its opaque backend. The works considered hereafter crystallize different facets of this problematic modus, which should feel eerily familiar to most readers. From these works we glean diagnostic images, and, perhaps, curative proposals.

The Black Box

In cybernetics, a black box denotes a unit of software or hardware that interacts (with the system that it is embedded within) entirely through its interface. The details of its implementation are obscure. More generally, a black box is a device that can be viewed in terms of input and output, observing only their pattern, without any knowledge of a conversion mechanism. What happens inside it is opaque, veiled in shadow: black. In terms of user relation, a black box instantiates an imperfect or partial understanding of a thing that, nevertheless, does not affect one's ability to make some use of it, and to observe its effects in the real world. "The Black Box cannot be opened.... Knowledge gained from examining a Black Box is based on a profound ignorance."

A dark monolith dominates the gallery space, towering over visitors, a droning noise emanating from within that intensifies according to their proximity. Carsten Nicolai's anti (2004) is a distorted black object, truncated to obtain rhombic and triangular facets—its shape inspired by the geometric solid in Albrecht Dürer's Melencolia I (1514). Wailing, sometimes shrill, anti's acoustic dimension is powered by a theremin—a musical instrument that reacts to the invisible magnetic field of human bodies, thus "enabling an interaction ... while its mechanism remains hidden." According to Nicolai, anti "refuses instant recognition" even as it confronts the viewer, "trying to mask its form and disguise its function," but all the while "absorbing information."

Further touching upon *anti*'s symbolic resonance, Nicolai claims that "regular geometric forms represent systematic thinking and the interrelationship between mathematics, optics, art, and philosophy." ¹⁸ Certainly, with respect to Dürer's masterpiece, this relationship is set



Carsten Nicolai, *anti*, 2004 PP lightweight structure, sound module, theremin module, transducer, amplifier, light-absorbent black paint, 255×255×300cm

cajole. Beyond echoes of pre-Columbian magic, European divination through crystal gazing (running from the Druids through to carnival sideshows) flickers in the collective unconscious of those who are interested less in what they are *looking with* than *what they see*. With respect to Plato's cave, the bright icons of the graphical user interface (GUI) stand akin to shadows, standing in substitution for the unhidden/sun; a folly re-presented in Saint Paul's diagnostic concerning obscure sight: vision *quasi speculum in oenigmate*—"as in a mirror darkly."²⁴

Black denotes the screen or veil separating a viewer from what is inside. It invokes an epistemic relation. This is not only an optic metaphor but, in some products, a literal condition. However, with respect to certain objects, and the works thus far considered, another occlusion may be observed: the smooth geometric surface design of recent consumer electronics (presaged by Dürer's rhomboid, and echoed by Luque's dodecahedron) suggests plenitude-fullness, self-sufficiency, and frictionless value proposition. Such devices set their own terms of use. A digital politics registered, once again, in the human digitus, its image apparent in an early series of photographs by the artist Britta Thie. Sweat on Retina (2012) comprises various scans of turned-off (black) iPhone screens, each bearing the greasy marks of fingertips in patterns ranging from the seemingly random to the loosely calligraphic. In contrast to the buried-but-alive fingerings of Juliana Leite's Anthropometry (attempting to claw a way out of the techno-cave; a work, it should be noted, that employs tropes of volcanic burial), Thie's photographs capture the non-stick exterior of a box whose interior is fundamentally inaccessible to the embodied user. While on first view, the images engage the history of painterly abstraction, suggesting a logical next step whereby the screen takes the place of the canvas, the messiness—and diminutive scale—of the artist's bodily interaction hints at something more. Indeed, their sweaty pawing at it suggests a field of effort that straddles both work and (stunted) eroticism. This spatial rhetoric stages a reverse situation to the untimely entombed, yet it similarly reduces the user's person(a) to the index of a poor interaction with some interface.

What is the difference between opening the black box—cracking the system—and unboxing? The latter would appear to be the epitome of the commodity fetish, and the former closer to its refusal. Yet, Luque's *Chapter I* suggests that things are less clear. The video components of the exhibition, all of them apparently disclosing historical facts about the ambiguous object in question, might at first appear



Britta Thie, Sweat on Retina, 2012 Digital scan of iPhone 4 touchscreen, dimensions variable



Tilman Hornig, GlassBook, 2013– 15 in. GlassBook on stand. Installation view: Art Berlin Contemporary, 2015



Tilman Hornig, GlassPhone (Stille Nacht no. 13), 2020 Photograph printed on glass, 40×60 cm

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In both series, the glass stand-in is less visible than the device invoked. However, within Hornig's photographs, this disappearing act establishes the dramatic principle of the depicted scene: the "coming into sight" of the pictured users. Offering a visible parallel to unseen surveillance techniques, Hornig's transparent sculptures serve them up for inspection. It is a move that parallels the computational staging and/or extraction of the data body—that "fascist sibling of the real body" whose real home, as we have already observed, is not a crystal palace but a cave/coffin.45

What Hornig's glass works convey is that, counterintuitively, the computer cannot be seen. While ubiquitous and proximate it is, effectively, blackboxed—receding from view even as it occupies the central space of attention. But how does this happen? On the one hand, powered by the phenomenon of Moore's Law, tech is ever shrinking. "In no other sector are the tendencies of technology and design towards their own vanishing so clear," 46 writes philosopher Johannes Thumfart in an exhibition text about Hornig's work: "A true obsession to minimize everything reigns, which has already compressed the capacity of the room-sized machines of the fifties into the size of a pants pocket." To this we must note the further movement from pocketsize to subcutaneous, with "significant research efforts on a global scale" pursuing the end goal of an effective brain–computer interface. 46

Crucially, this scopic vanishing is a useful register of its phenomenological disappearance-something that is much harder to attend, and which the artist's work fixes upon. As intensely ready-to-hand, tech is seamlessly incorporated into the choreography of desire and action throughout society. In its everyday mode, it may even be unreadable. By Thumfart's account it comes across as being without qualities, pushing the user's intellect towards anything but itself: "It is easier to believe we are looking at different things, when in fact we are just staring, over and over, at the same screen."49 We have already stated that this hides (its) power. Thumfart paints the picture more starkly: "Instead of a new golden age, we are witnesses to the dawning of cyber-totalitarianism, invulnerable as it remains without a face, without a form, without a space, without a body."50 It is a stark claim, and one that stands to be modified in light of Hornig's images. As seen in certain photos where the user's distorted face is reflected in the surface of the transparent object, we understand that part of the phenomenological invisibility of cyber-totalitarianism is that it leads users to confuse it for themselves. Transparency is a hall of mirrors.

Black Box

structure, a crypt, where its status as living or dead is unknown."103
Bolstering the previous observations on the funerary function of
the barrel-vault/kamára (latent within the world-camera), Derrida's
argument highlights the architectural component of the crypt concept: an arch. What this indicates, in his view, is that encryption
provides structure—being constitutive of an edifice. Indeed, Haiven
notes, Derrida "uses the metaphor of the archway (a term that shares
an etymology with crypt in French) to illustrate how a crypt is, in fact,
part of a system of mutual supports."204 Haiven further explains that

encryption is the process by which a lost object of projection and attachment is secretly maintained in a state that is both life and death. This act of inner encryption exhibits outwardly as encrypted speech or utterance that evades or actively avoids decryption *in order to preserve the system or structure between life and death.* 105

With respect to our current concerns, a "cryptonymic" system need not be speech per se. It may be an artwork whose compositional structure straddles life and death (visible and hidden) in favor of never resolving this tension. A cryptonymic aesthetic holds part of the artwork (or exhibition) away from view as a key aspect of its mode of exhibiting. While performing encryption, cryptonymic art goes beyond masking a person or body in the service of privacy, opening onto broader textures of the inaccessible. Perhaps in order to exhibit anything but the ostensible contents of a crypt. By way of example, my own curated project, Treasure of Lima: A Buried Exhibition (2014), was a collection of forty works buried in a locked box at a secret location, on an island in the Pacific Ocean that it is illegal to visit; the exact GPS coordinates encrypted, and the resulting eight-hundred-character cipher 3D-printed as a steel scroll, then sold at auction without decryption key-in order to facilitate the visibility of a narrative, legal, economic, biological, and ecological framework, rather than art objects. 106 Among other concerns, a key question (contained within the project title) was whether the exhibition might be considered open or active only if it remains buried. 107 And conversely, whether it may be deemed closed if the contents of the box are recovered and viewed.

A year later, another signal project, *Don't Follow the Wind* (2015), took place in the Fukushima nuclear disaster exclusion zone—initiated by Tokyo-based artist collective Chim†Pom and curated by Kenji







Treasure of Lima: A Buried Exhibition, 2014
Project of the TBA21-ACADEMY, Isla del Coco, Costa Rica, 2014

Laocoön series picks up the task of finishing them, deploying the power of virtual and physical tools, including multiple generative adversarial networks (GANs). This strategy has been adopted by other artists working on Classical statuary, including Egor Kraft, whose Content Aware Studies (2019) also proposes to complete broken Classical busts and relief sculptures—in the name of "quasi-archeological knowledge production and interpretations of history and culture in the era of ubiquitous computation."⁷² While producing three-dimensional models, leading to machine-cut marble sculptures, in which the blanks are filled in, both artists' procedures undercut the notion that a work (of art) may ever be finished.

Indeed, if connoisseurship of pre-modern art once involved interrogating (and policing) distinctions between original and copy, advanced tech renders this task increasingly difficult, while raising other pressing concerns—among them, the prominence of the *version*. In a post-digital landscape, appeals to the "finality" of judgment—established by Immanuel Kant as the basis for any aesthetic claim—are eclipsed by the truly *disinterested* intelligence of the machine, and a surplus of viable endings. Working against any instinct for rest, conclusion, and completeness, the robot keeps working; the versions



Egor Kraft, Content Aware Studies, 2019 Marble, polyamide, machine learning algorithms, custom software, original dataset, multi-channel video installation, dimensions variable



Nora Al-Badri, Neuronal Ancestral Sculptures Series, 2020 GAN art

emotion or concern for meaning. Their work engages with high-water marks in humanism, antiquity, and expression, only to subject them to radical formal alteration. The bass notes in this iconographic chord are prelapsarian, one suspects, in order to set up the ultimate incommensurability of the higher ones. So what is emerging or gestating behind the mask? A leopard's reordering of the temple that is (human) cultural space, on its own terms; a vision or mode of influence that will continue to develop over time, regardless of whether or not we make good sense of its progress.

Theophanies of AI

What happens to the content of the archive, and wider cultural space, when tethers are further loosened? For *Babylonian Vision* (2020), Nora Al-Badri set a GAN to work on images of ancient objects. Its training data comprised ten thousand photographs of archeological items, gathered from five of the world's largest museum collections of Mesopotamian, Neo-Sumerian, and Assyrian art. Her bot then *imagined* two hundred new objects: archeological deepfakes.²³ The items,



Nora Al-Badri, Babylonian Vision, 2020 GAN video



Nora Al-Badri, Babylonian Vision, 2020 GAN video

displayed in a video slideshow, look "dream-like, with misshapen vessels, vaguely human-shaped statues, and incomplete pieces of jewelry." And yet, though warped, these "neuronal ancestral sculptures"—as Al-Badri terms them—eerily track the visual feel of the source material.

While compiling the training data, Al-Badri sought permission from each museum. Only two had APIs that allowed for easy and clear use of their photographic holdings. "The other three either charged or had onerous rules to get [at the volume of data] needed." One stated that she would have to request individual clearance for each photo required. Undeterred, Al-Badri worked around the rights restriction, performing a jailbreak—collecting images through web crawling, and scraping. Because training data is never discernible in a GAN's algorithm, her method benefitted from legal deniability—of the same kind exploited by corporate machine-learning projects. As Al-Badri relates, "the largest collections in the world ... cannot prove that I used their datasets to train the system. In many instances, the black box aspect of AI can be a problem but in some cases, it can also be liberating."