

ON GLITCHES:
a deconstructive analysis of archives and experience
by Evan Meaney

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Abstract

Many theorists have taken great care in delineating between personal memory and externalized memory in the form of archival history. Using a framework set forth by Henri Bergson and applying it to modern technological incarnations of both memory and history, we find that the two function, not divergently, but through a parallel process of collaboration and representation. Pushing this idea further illuminates a mnemonic landscape where individual memory serves as an open-source server, where archival history is bound to the creation of even the most private recollections, and where the ruptures of both systems are, in fact, the very means by which we see them joined and humanized.

Memory, Extended

Our perceptions are undoubtedly interlaced with memories, and, inversely, a memory, as we shall show later, only becomes actual by borrowing the body of some perception into which it slips. These two acts, perception and recollection, always interpenetrate one another, are always exchanging something of their substance...

~ Henri Bergson¹

Let us begin, not with the latest understanding of cyborgian interfaces or user-generated representations, but with Henri Bergson in the nineteenth century. At the outset of his *Matter and Memory*, the French neuroscientist and philosopher plots out the practical interface between memory and the moment we call the present in relation to the construction of experience. For him, writing in the 1880's, the importance of, not only what we remember, but how we remember was collapsing into the much larger question of who we are as a society and as individuals. To that end, he put forward the notion of a 'pure memory', functioning to marry the recall of the past to the synthesized perception of the present. For Bergson, a pure memory is a sort of exterior, usable recollection—applied to our current perceptions in the production of our everyday experiences and subsequently, future memories.² By allowing us to see personal memory as an exterior function, this paradigm predicts the current cyber-neurological cusp in which modern memory finds itself. Bergson's text, and its metaphysical implications, begin to approach the current conflation of memory and history; where human beings function via a distributed agency, integrating archival media 'histories' into their personal constructions of experience. This ultimately combines the external (history) and internal (recollection) in the creation of, what we may

¹ Henri Bergson, *Matter and Memory*. (New York: Zone Books, 1988). 67.

² Ibid. 67-68.

call, a synthetic memory. In short, Bergson's notes on synthesized experience give us a classical framework with which to prove ourselves, through shared mnemonic networks, as distributed beings. That framework gives rise to the project of this article, in which we begin to evaluate and appreciate how memory is a networked function, existing somewhere between the speed of parallel systems working in unison, and the inherent protocological flaws of joining two differing forms of memory together. I am, of course, desperate to define these terms further, but such definitions may only come through the evolution of older paradigms. In this spirit, we must return to Bergson in the hopes that he can give us perspective into the act of constructing memory so we may then update his taxonomy for a cybernetic application.

To begin to parse out the manner in which memory, history, and the present conflate, we must first examine two theories of memory working in concert with one another. The first theory being Bergson's notions of mnemonically linked perception, and the second being the delineation between memory and history as explained through Paul Ricœur's study of Plato's *Phaedrus*. These two ideas find an interesting cohabitation as we begin to think of memory, not as something we have invented, but as something we have constructed from parts, both public and private. In *Creative Evolution*, Bergson notes, 'In reality, the past is preserved by itself automatically... it follows us at every instant; all that we have felt, thought, and willed from our earliest infancy is there, leaning over the present which is about to join it.'³ In terms of functionality, Bergson delivers a position of archivally linked synthesis serving as a feedback loop between our present and our past. A basic sketch of the loop operates as such: our memories function in collaboration with perception to inform our present, thereby creating an individual's experiences, some aspects of which are memorable, thereby creating memory-images which may be

³ Henri Bergson, *Creative Evolution*. (New York: Henry Holt and Company, 1911). 5.

applied to the perception of future experiences. His is a simple and perpetual model of stimuli and archival response.

Through the framework of this logic, the present is only useful in that it edits and encodes a usable past from which the future might derive descriptors for its experiences. Still, Bergson speaks of memory as an exterior function, borrowing us, following us, and yet its effects make us imperatively individual. This concept disrupts the traditional model of the brain being the sole center of recollection and remembrance, as it distributes the work of memory beyond the barriers of the brain to some new extension, simultaneously of our mind and beyond. From this line of thought we might choose to view our memories as something functioning through an interface, having no empirical or inert home within the individual. Here perception is a workflow akin to a constantly circulating library, subconsciously and perpetually visited; a place where users might go to interact with the past in the acquisition of a more informed present. While Bergson promotes the idea of an externalized memory, I feel that we can further this concept by using his model to explore an individual's memory as one part of a public databank from which information is borrowed, used and returned; perhaps even, from more than one user.

The dichotomy between an individual's memory (traditionally internal) and a public history (traditionally external) has typically been a staunch binary. However, if we accept Bergson's allusions to memory as an exterior function, distributed beyond the body, then we might also explore how that exteriority intermingles with another, more physical one—the archive. To describe the tense permeability between these two means of recollection, we might look to another French scholar, Paul Ricœur, in his work with traditional archival studies. In *Memory, History, and Forgetting*, Ricœur describes the issues at hand in the creation of the first archives through a Platonic dialogue.⁴ In his *Phaedrus*, Plato asks if the externalization of

⁴ Paul Ricœur, *Memory, History, Forgetting*. (Chicago, University of Chicago Press, 2004). 167.

knowledge (for him this was the remediation of oralities into written texts) is the remedy to the fallibility of human memory or the poison that undoes recollection itself—for if we could rely on externalities, why keep anything inside? Ricœur responds to Plato, falling into line with Bergson, ‘... a document in an archive is open to whomever knows how to read. It is not just silent, it is an orphan.’⁵ Much like Bergson’s paradigm, what we adopt through the externalization of our memories is not something inherently our own, but is simply a memory-object to be interpreted, akin to a book existing on a shelf or a file in a directory—viable only through use. Ricœur does not answer Plato’s question of good and evil definitively, describing instead the interface with the archive as a platform for ‘interpretive testimony’. While this does not blur the line between the archive and an individual’s memory yet, it does prove a very important starting point—that a Bergsonian model of memory mirrors the interpretive model put forth by Ricœur in his archive. I propose that we may practically see memories and archival documents as servants of the same intent; synthesizing both present experiences and subsequent future recollections.

In his description of the French archive, the cultural theorist Pierre Nora also describes the race to externalize, marking the all too human desire for permanence. ‘The imperative of the age is not only to keep everything, to preserve everything (even when we are not quite sure what it is we are remembering), but also to fill the archives.’⁶ I do not think it a secret that we are perpetually linked to our past through both memory and media, but it is important to recognize the trajectory of our use of, and interactions with, these catalogues. Through that analysis we might note how the physical, social, and chronological gaps which separate archive from memory continue to close.

⁵ Paul Ricoeur, *Memory, History, Forgetting*. (Chicago, University of Chicago Press, 2004). 169.

⁶ Pierre Nora, ed., *Realms of Memory: Rethinking the French Past, Vol. 1: Conflicts and Divisions*. (New York: Columbia U Press, 1996) 9.

The French archive and certainly Nora's contribution to it, *Les Lieux de Memoire*, are proper models of the classical catalogue. A governance of rooms, books (which will henceforth be described as media), a system of location and placement, and spaces for people to interact—this, since Alexandria, has been humanity's best chance to publicly remember and personally synthesize perception through the shared interpretation of physical media objects. Moving beyond books, we might note other media collections: the Eastman film archive, Harvard's music recording archive, the Louvre, the Museum of Natural History. Despite the progressive differences between the collected media, its storage, access, and interpretative possibilities, these modern repositories remain spiritually unchanged from the first physical archive. Such libraries are site specific, time specific, and most of all; they promote the notion of stasis, structure, and taxonomy over all objects housed within. These entities, and the media they contain, are static systems of preservation. Despite their seemingly perfect control over the past, without a user present to interpret, there is nothing. Much like Bergson's external memory or Ricœur's orphans, archives are null if left unadopted. As with memory and history, the agency of construction always exists in the user, even if the information does not.

Before we move on to demonstrate that an individual's memory and the archive are not only similar but, in fact, imperfectly permeable; let us pause for a moment to consider Vannevar Bush, the engineer who first proposed a device to which we now aspire and, in some ways, currently approximate. The memex, first noted in a 1945 issue of *The Atlantic Monthly*,⁷ was a device where neurological memory could be literally externalized through a process of encoding and download to a physical device. In short, it was a USB drive for your brain. Bush believed that this synaptic exteriority would allow for a plug and play, modular memory, giving a techno-physical manifestation to Bergson's exterior memory-objects. Bush's device

⁷ Vannevar Bush, "As We May Think," *The Atlantic Monthly*, July, 1945.

provides a thought-provoking example of the permeable barrier between archives and memory, as the memex is both. In the same moment it is an archival apparatus as well as an externalization of the memory of an individual. While his critics felt that Bush peered too far into the future (and perhaps he did, as he died in 1974) in so many ways, the spirit of the memex has been evoked since the first thought was put to paper. Even in that moment of initial exteriority, we were looking at the boundaries of memory extending beyond our own synapses into the physical/archival realm. With every new story committed to text, we engage in the future of a distributed recollection, a future that we now enact every day even in the smallest, most abstract, of ways. While the notion of a modular brain has not been realized to Bush's specifications yet, and while our interactions with digital exteriority through archival media isn't as perfect as a USB driven thought, it is difficult to say where my individual knowledge, memories, and experience end and my computer's hard drives begin.

Our ability to neuro-biologically recollect, and recollect through interface with exterior, archival technologies are not separate endeavors. I propose that, through recent developments in the tools of memory, we are able to see the actions of personal recall on experience as collaboratively integrated with archival materials. It is not enough to suggest that computer databases and video feeds have informed our experiences. In practice, they have intermingled with our memory images, forever augmenting our perception. So, if memory is the means by which we define and understand experience, and if our memory functions in communication with all sorts of media archives on a real-time basis, then it would stand to reason that our understanding of experience is mediated through both networks in a parallel process. It would, then, also be plausible to note that such recollections are susceptible to parallel vocabularies of error and fault, but that will come later.

Parallel processing is a broad term describing multiple applications unified through a single goal, specifically addressing an apparatus's ability to process and respond to simultaneous, disparate stimuli. It should be of note that both the

neurological and computational communities share a common definition when speaking about parallel processes in relation to the brain and silicon processors, respectively. As both neural mapping and supercomputing came about in the last half of the 20th century, it is of little surprise that they share a tight-knit vocabulary. In so many ways, computational interfaces and digital archives have borrowed from the form, function, and organization of both the human brain and its ability to recognize and remember. It is, however, when these two apparatuses work collaboratively that we may reinforce their networked contributions to our cyber-organized, synthesized memory and subsequent perceived experiences.

Imagine, if you will, watching a film. Your visual and auditory responses send electrical signals to your brain simultaneously. These are distributed to centers for recollection, language, et cetera, and produce the experience of watching a film. That is, however, not the whole workflow. Think of watching a film projected from a DVD. Imagine all of the parallel necessities required in that action. Not only are all of the aforementioned biological processes (and many more) at work, but similarly inverse digital processes are at work in the DVD's projection. A red laser reads information and electronically transmits it to a graphics processor, encoding those images into light to mirror the way they will be decoded by your eyes and brain on the other end. This is not to mention the process of the film's inception, creation, and production, which took place before the DVD could be produced. It would seem that the DVD, which serves as a peripheral impetus for memory, has put itself in line with a Bergsonian memory-object, both external and interfacing with individually internal experiences. I submit that archival media and individual memory function collaboratively in an interactively permeable, cyborgian loop, combining the archival exteriority of history and the internal semblance of experience through the distribution of personal, networked perception. This network defines itself through both the creation of an individual's experiences and the archival perpetuation of publicly accessible media. In short, archives and memory-objects function together, synthesized in the mind of the user, to

comprehend and evaluate present experiences, which will, in turn, form new memories and, subsequently, be externalized at some point in the future.

Let us take a moment to re-evaluate, as we have come a long way from the 1880's. The materials of media archives and an individual's memory intermingle in the creation of his or her experience. Used together these synthesize new knowledge for the user. But this knowledge is not static, instead it is re-expressed by the individual in their recordable actions—words, emails, songs—given back to the archive, redistributed to be used by others. So immediate is this act of sense-and-response that it oft goes unnoticed. How, then, are we to recognize such activity if it occurs in every moment of modern perception? How can we respond, artistically or otherwise, to that which not only permeates every moment, but perpetuates it? In the coming sections, I will suggest that we might uncover and critique this hegemony through an active deconstruction of archival technologies, conventions, and materials; as that is the singular part of the equation to which we have evaluative access. We do so in the hope that our deconstruction, even in a representative way, might echo throughout the network of perception, proving linkages between memory and history, and studying the effects of a nodal breakdown between these imperative collaborators. I speak here of the glitch, the hauntological intercedence by which we might examine, explore, and describe the distributed nature of the modern human's experience and even existence. Before this, however, permit me to briefly introduce some post-structural origins of glitch rhetoric as to better locate its presence in the application of our modern archive/memory network.

If we are to speak of the deconstructionist implications of a distributed perception, we should begin with an example that might illuminate the means by which the public (archival media) and private (memory-images) may go beyond permeability, collapsing onto one another. Only by showing that media not only permeates memory—but modifies it, can we fully appreciate the application of any sort of glitch or hacktivist agenda to our new paradigm. Perhaps the best example,

certainly the most user-friendly, is posited by Jean Baudrillard in *Simulacra and Simulation*. There Baudrillard poses the third order of simulation in which the representation interfaces with the user before the original has a chance to, and the distinction between reality and depiction breaks down.⁸ Written in the wake of the newly mediated Vietnam War, this text theorizes that media objects, or simulations, may come to permeate so deeply within a person's perception that the memory created through that perception is mostly predicated on an archival representation and not an 'original' interaction. For our purposes, it is quite easy to see Baudrillard's 'original' as the traditional notion of memory (personal, interior, sequential) and his simulacrum as the aforementioned archivally-infused, cyborgian memory (public, exterior, parallel). In this instance, the modern explosion of ubiquitous media has hastened that conflation, pushing what was an interactive permeability between two adjacent structures, into one unified, read/write network. While not specifically an archive-based version of Bush's memex, we can see the evolution of archival processes and media technologies developing along the same trajectories as human perception. This symbiotic evolution gives further evidence of the incorporated, and at times semiotically interchangeable dialogue between media and memory.

In light of this dialogue, I pose the following: our memory is, in fact, the product of a synthetic network, and we cannot engage in viable debates when we delineate between memory and history. Instead we must deconstructively examine their combined function, informing and substantiating one another through perception. Our physical archives, our memory-images, others, and ourselves are joined together in the synthesis of perception, and through this process we are able to move a step further, together. If our memory-based perception is augmented, then it follows that our experiences, predicated on the interpretive power of that conflation, are also, themselves, augmented. The mathematician Brian Rotman

⁸ Jean Baudrillard, *Simulacra and Simulation*. (Michigan, University of Michigan Press, 1995).

describes this distribution of experience as ‘living beside ourselves,’⁹ but I feel this term falls short in describing the current landscape. His terminology is still centered on the individual’s experience, thereby not fully embracing the open ideology and publicly accessible nature of a distributed memory and perception. A synthetic memory allows us to live, not beside ourselves, but within each other. To better grasp this concept, let us look to theories of protocol, for in that rhetoric, we might examine how far our cybernetic memory may extend and what happens when we reach the limits of that extension.

Protocol, to borrow terminology from the network theorist and artist Alexander Galloway,¹⁰ is the cybernetic discourse of modern existence. It addresses a world that combines biological entities and technological entities into a single, expansive, networked state; operating through both sets of discursive boundaries in the creation of social experience. Discourse, it should be noted here, is borrowed from the Foucauldian understanding of the term, describing the overarching structures at work in the creation of social order. So, protocologically speaking, when engaging with media and memory in terms of a constructed experience (which we all are, all the time), we play by both memory and media’s limitations. Protocol is, here, a simultaneously additive and subtractive function.

I recognize the possibility for confusion at this somewhat conflicting concept. Let us address it in simpler terms. Protocol describes the rules, limitations, and possibilities of experience. Here experience is produced through both a synthesis of an individual’s memory and public media, working collaboratively in a network. These extended rules, as Galloway suggests, simultaneously control and free us. As the map expands, so does the system of roads, stop lights, and tolls. To quote Rotman, ‘Their meditation is that of an external scaffold, a way of allowing these

⁹ Brian Rotman, *Becoming Beside Ourselves: The Alphabet, Ghosts and Distributed Human Being*. (USA: Duke University Press, 2008).

¹⁰ Alexander Galloway, *Protocol: How Control Exists After Decentralization*. (Massachusetts: MIT Press, 2004).

multiplicities to be recognized, to become choate, to crystallize into social practices, and cohere into experientially real, stable, and iterable forms of psychic activity.¹¹ In thinking of experience as the product of a networked interaction, and not of an individual's creation, we gain both the freedom of an open source and the structure of a shared rhetoric. Our synthetic experiences allow us to enmesh ourselves in a collaborative, public memory—a wiki-life. Such a trajectory is not unprecedented; the move from music shops to Spotify, from Blockbuster to The Pirate Bay, from the encyclopedia to Wikipedia; these are not signs of a coming open-source trend, these are expressions of a public evolution. As the theorists at Net Behaviour¹² remind us, we are not so isolated as to be a DIY (Do–It–Yourself) culture; we are an integrated DIWO (Do–It–With–Others) network. We exist, physically, with one another, it seems only right that we should be able to remember with one another too. However, this format does have its own boundaries, and as we get closer to these limits, we can begin to critique the commonality of perception through the unexpected clarity of its breakages.

At last, let us now turn our attention to those breakages—the glitch itself. In the next section we will come to see that a glitch in the system is not something to be lamented, but, in fact, celebrated. Glitches are the ruptured means by which we might appreciate the scope of our networked unity. Borrowing from Foucauldian archaeology and new media dis(u)-topias, we will see how the artistic and social practices of glitch-making resonate in support of synthetic memory networks and distributed experiences, while simultaneously making a case for positive liminalities—mortal, technological, archival, and otherwise.

¹¹ Brian Rotman, *Becoming Beside Ourselves: The Alphabet, Ghosts and Distributed Human Being*. (USA: Duke University Press, 2008). 102.

¹² Net Behaviour. "Do It With Others" (2007). Available from: <http://www.netbehaviour.org/DIWO.htm>

Memory, Modified

Without question, an irrevocable change is happening to the individual self: the thing thought to be fixed in definition of human identity is becoming unmoored as the technological upheaval transforming the landscape of Western culture makes itself felt deep within our heads, within our subjectivities, our personas, our psyches.

~ Brian Rotman¹³

In *The Archaeology of Knowledge*, Michel Foucault reminds readers that the best way to explore or divine the nature of a hegemonic structure is to examine its ruptures.¹⁴ By analyzing the effects of systemic incongruities on the whole form, one can discern the organizational method of the overall apparatus through its responses. Eugene Thacker brings these words into the digital era in his and Alexander Galloway's text, *The Exploit, A Theory of Networks*, wherein he speaks of a ruptured protocol—a glitch in the network of distributed systems. For Galloway and Thacker, it follows syllogistically that if protocol is a digital discourse, then these exploits, hacks, and glitches are neo-Foucauldian ruptures found within modern data-exchanges.¹⁵ They liken the abstract 'exploit' to the common computer virus, citing that viruses do not infect from the exterior alone, instead utilizing pre-existing architecture to propagate. Viruses, for Thacker and Galloway, are 'life exploiting life'¹⁶—and such is the merit of the exploit. We have come to see our individual experiences as entities constructed from, and implicated in, a larger network of external memory and archival history. If we wish to address the

¹³ Brian Rotman, *Becoming Beside Ourselves: The Alphabet, Ghosts and Distributed Human Being*. (USA: Duke University Press, 2008). 81.

¹⁴ Michel Foucault. *The Archaeology of Knowledge* (New York: Pantheon Books, 1972). 129.

¹⁵ Eugene Thacker and Alexander Galloway, *The Exploit, A Theory of Networks*. (Minneapolis: University of Minnesota Press, 2007).

¹⁶ *Ibid.* 84.

structures of our experience, perception, and by extension, knowledge and self, the most apt course is through the study and production of exploitative hacks. Thus, I propose that we invent and curate these ‘viruses’ to see how they move within our archival-mnemonic system, how they interact, and how they may prove the limits of the ever-expanding dimensions of modern perceptive experience.

Historiographers now credit the bubonic plague as one of the greatest historical contributions to the success of modern society. The loss of life suffered in Europe during the plague’s tenure allowed for a brief plateau in global population, thereby allowing the current population of Earth to approach a densely-packed seven billion, and not an intolerably-packed twelve. The writings on this research suggest that such an unexpected, socio-systemic failure actually allowed for a more advanced society to follow, or at least a better appreciation of the hegemony of everyday living.¹⁷ Ultimately, on the largest scale of which we can currently conceive; the greatest glitch to the normalcy of life is the entropic taboo of death. Death is the most notable exploit—sharing both abstract and concrete aspects and applications. Because of its ubiquity and, perhaps, poachable vocabulary—the death glitch is the means by which I would like to initially discuss the conflation of exploits, networks, and experience, in the form of an entropic mortality. This in the hope of re-mapping such an exploration, as an extended analogy, back onto synthetic memory and perception.

As children, we often think our loved ones immortal; or rather, have no concept for their non-existence, nor our own. To a child, uninitiated to death, the system of life is perfect, complete—free from any room for doubt of an exterior to the known; but such a perfect world would hardly a utopia make. As we grow older, one thing becomes perfectly clear: people need to be able to die. We need for the system of life to be imperfect, carrying with it the sense that such entropies also impart a gravity which both practically denies and romantically bolsters the totality of the

¹⁷ Tom James. "Black Death: The Lasting Impact" (2011). Available from:
<http://www.bbc.co.uk/history/british/middle_ages/black_impact_01.shtml#three>

experiences of the living. In other words, to an onlooker, the process of death reinforces aspects of life which would go unnoticed through any other lens than by direct comparison. Thus death's taboo is null—functioning simply as the end point of a system whereby the system is made known to an onlooker. Death is the exploit which both scrutinizes and naturalizes the utopia. Death is a necessary glitch.

In his *Gamer Theory*, McKenzie Wark speaks to the digital interface whereby we experience mediated utopian and dystopian scenarios in literature. 'All dystopian writing is also utopian. It cannot help reminding itself of the limits of writing and a lost world of the sovereign text before other lines sublimated with power.'¹⁸ For him, 'No space is sacred, no space is separate,'¹⁹ and as such, a utopian system is a relativistic thing, requiring (through recognized rejection) dystopic elements. Utopias, for both Sir Thomas More²⁰ and McKenzie Wark, 'point[s] to what is lacking beyond the page.'²¹ A flawless system needs to recognize, even through proxy, what it is not to achieve a semblance of self-definition; but this is not a new nor revolutionary idea. Why then, do we with reckless abandon, attempt to make extinct the glitch, the absence of which would deprive us of an outsider against which to forge our identity? In every moment we look to delineate our systems through an ever-minimizing comparative exteriority to chaos. Archivaly, we develop system upon system to categorize and locate. Technologically, we develop better protocols to keep signal and reject noise. Mortally, we seek time and again the medical community to keep us alive so as not to be anything but. While this, on the surface, may seem like a fearful, anti-glitch rhetoric, in actuality we do these things to support the glitch—to recognize that every utopian dream's definition exists through a tragic lens. To recognize that, in attempting to limit glitches, we

¹⁸ McKenzie Wark. *Gamer Theory* (USA: Harvard University Press, 2007). 108.

¹⁹ Ibid. 106.

²⁰ Sir Thomas More. *Utopia*. (New York: P.F. Collier & Son, 1909-14).

²¹ McKenzie Wark. *Gamer Theory* (USA: Harvard University Press, 2007). 121.

make them all the more rare, all the more spectacular, all the more relevant and impactful when they do act upon the system. In attempting to limit the ruptures of a perfect world, we elevate fault to become supernaturally provocative, and in so doing, create a recognition of the curious, unified space between the utopic and dystopic. So, in the land of the living, the death glitch is the means of producing viable systemic definition. Mapping this analogy back onto synthetic memory, the recognition of forgetting/deletion becomes that mode of production—but how are we to remember that we have forgotten something in the first place?

In his 1994 film, *Roswell*, artist Bill Brown speaks to the construct of amnesia.²² He suggests that a true victim would not be like the amnesiac characters on television—recognizing that missing memories are just out of reach. Instead, his voice-over notes that a real sufferer would be unable to remember that they had forgotten anything in the first place. Drama-less, a real amnesiac would not recognize the presence of a problem; and therein exists the complication to which a glitch becomes the solution. Glitches, in a synthetic memory network, are sites of forgetting, whereby the organic and technological means of remembrance conspicuously conflict or fail. A glitch in the archival lineage of our memory, recognized through synthesized perception, helps us remember to remember that we forgot something. Glitches keep us from being true amnesiacs by allowing us to recognize the system of recognition through its failure. With archival memory and personal memory conflating, a system akin to a perceptive checksum comes into play, constantly comparing stimulus to what we know and what others have shown us. A glitch reminds us of this network, drawing our attention to what has potentially been omitted.

Jorge Luis Borges, the patron saint of language and memory writes of bio-archival informatic omission through an inverse analogy. In *Funes, the Memorious*, a fictional Borges describes his interactions with Ireneo Funes—a Uruguayan man

²² *Roswell*, dir. by Bill Brown. (1994).

who, due to a horseback riding accident, has become crippled, yet now possesses the inability to forget his anything he has learned.²³ Over the course of the story, Funes recites, in perfect Latin, the first paragraph of the twenty-fourth chapter of the seventh book of the *Historia Naturalis*, from memory. He does so, as the end of the story reveals, as a nineteen-year-old boy. Borges leads his reader to believe that this young man, through his accident, now commands a perfect recall; as if by some heavenly transmutation, the diminished capabilities of his body have bolstered his mind to a seemingly utopian over-clock.

In *Funes*, the author makes a case for the simultaneously utopian and dystopian hyperbole of perfection when applied to the conflation of memory and archive. Ireneo Funes, as he remembers everything—both internal and external, is a prototype for a ‘perfect’ synthetic memory. While the story imagines Funes as a wasted savant (an entity which might do so much if not for being trapped in rural obscurity as a crippled farmer from Fray Bentos) the real waste is, perhaps, far more unnerving. Funes spends his hours reconstructing whole days from the past, memory by memory, part by part. Because his recollection is perfect, because there can be no question of his recall nor his integration of archival media (for him, books and oral stories), Funes’ handicap has nothing to do with his shattered spine, instead it exists as a jaded ennui—the main symptom of having mastery over a perfect world. We must, for any mnemonic system to work, not only be able to forget, but to realize when we have made an omission. If a true utopia recognizes the value of absence and deletion as a means to appreciate the value of what is left, then *Funes, the Memorious* may be one of the first informatic horror stories—not for lack, but for abundance. If every memory, every photograph, every story, every hard drive; if they all last for eternity, then how could we really appreciate anything? We would, as Funes does, spend our days revisiting a perfect past, with no need to move to anything new. The archival/mnemonic editing power of a glitch becomes, in this

²³ Jorge Luis Borges. “Funes, the Memorious,” in *Borges: Collected Fictions*, trans. Andrew Hurley. (New York: Penguin Books, 1999). 131.

light, a comfort. It proves and reproves to a user that, once a system is recognized as fallible, what remains unspoiled is, syllogistically, of the utmost value. Glitches, through their intermittent giving and taking, breed appreciation.

We can't save everything, lest we become like Borges' archival golem, Funes. Glitches, ruptures, and failures, as occurrences, keep our expectations for a complete memory in check, recognizing that what we can recall is a function of both our incorporation of archival media to biological memory, as well as the submission of that combination to a system of entropy and time. Our utopia is one of signaled imperfection, allowing for an appreciation of both what is left untouched (as our attempts to keep it untouched indicate value) and the glitch which broke the hegemony, allowing us to appreciate the process of memory in the first place.

Returning to Galloway and Thacker, we might recall the notion that computer viruses are 'life exploiting life,'²⁴ systems which use a pre-existing network to function, calling the discourse of that network into question for scrutiny and appreciation. While not so pointed as viruses, glitches function similarly—existing to rupture the network of archive and memory, highlighting an oft-difficult-to-see connection uniting the two. On a grand scale, a glitchy image file is like a printed photograph missing some of its original emulsion—both artifacts remark that our exterior means of archiving are imperfect. Taken a step further, we might see some of that imperfection echoed in ourselves. A world of perfect archives would collect so much that we would be unable to move, crippled under the weight of our own material history. A glitch is an ontological liberator, giving value to what we can save and giving mystery to what we cannot. It allows us to recognize that we are temporary, and perhaps find appreciation in that.

A rupture, for Foucault, sheds a non-discursive light on the systemic discourse of an interaction. In some ways, his fissures are what we might call secularly holy, being foreign to this world, and yet synthesized and appreciated by its inhabitants.

²⁴ Eugene Thacker and Alexander Galloway, *The Exploit, A Theory of Networks*. (Minneapolis: University of Minnesota Press, 2007). 84.

In the previous sections, we have attempted to explore and explain archival/mnemonic systems and the glitches which act upon them. Rupture has been positioned as a celebratory signifier—affirming those valuable processes which we take for granted. Now, in the third section, I will offer a study on how a glitch may be offered in a specific context—glitch art—as a means of bringing about this conversation in an abstract form. Glitch art detaches the rupture from the imperative to ‘fix’ it, instead allowing its audiences to recognize a failure as something with which to reconcile themselves against, as imperfect, temporary, synthesizers of participatory memory. A glitch, at first, is an obstacle. Soon thereafter becoming a reminder, and finally, perhaps, a new means to communicate.

Memory, Rewritten

I was born during the Age of Machines. A machine was a thing made up of distinguishable 'parts' organized in the imitation of some function of the human body. Machines were said to 'work.' How a machine 'worked' was readily apparent to an adept, from inspection of the shape of its 'parts.' The physical principles by which machines 'worked' were intuitively verifiable.

~ Hollis Frampton²⁵

Hollis Frampton, writing in the late 1970's, speaks to the place of rupture in representational media. As with his Age of Machines, his films functioned in a way that begged audiences to dismantle, explore, and understand them through a mediated, archival deconstruction. While he would later note that the age of machines had ended, it would be wrong of us to assume that none of our new archival technologies could be taken apart for deconstructive analysis in the hope of divining their purposes, meanings, and applicable relevances. *The Ceibas Cycle*²⁶ is my way of addressing that sensibility in a digital age. I have no allegiance to film; but video, with its ease of use and massive proliferation, was a large part of my personal history and now, a major part of my experience. Naturally, as I wish to explore both my experience and my history through media, I would choose to discover how one might take apart video and re-purpose its use to prove not only its ubiquitous nature, but its archival prowess, and by extension, its interface with memory and the construction of my own, distributed, experiences.

The Ceibas Cycle is a multi-media endeavor begun in the spring of 2007 as an attempt to describe a mortal liminality through a technological one. Each installment in the series explores allegorical aspects of the Central American myth of the ceibas tree—the point of connection between this world and the next. The

²⁵ Hollis Frampton, *Circles of Confusion*. (New York: Visual Studies Workshop Press, 1983). 112.

²⁶ *The Ceibas Cycle*, dir. by Evan Meaney. (2007-2012).

Mayans believed that a recently passed soul would go to the tree and climb up its branches to the sky or slip down beyond its roots into the soil. However, the Mayan legend also suggests that if a person entwined their lives with another: a child, a lover, a friend—when that person died, their soul would wait by the ceibas for their partner to come, so the next journey need not be made alone. This story represents,

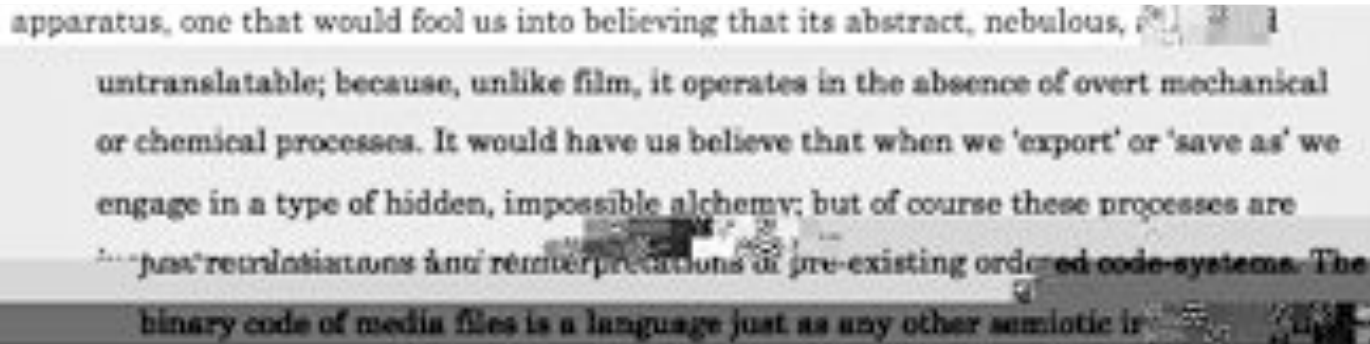
not only a form of digital transmission, and decoding through different media over time. It has been passed down from generation to generation, first orally, then through text and now, existing in the digital era. The ceibas elegy, as with every important story, carries with it the hope of a perpetual, remediative externalization, continuing and transforming the story through the protocol of each new medium it inhabits over the span of many generations. It is a perpetual virus seeking a perpetual host. In *The Ceibas Cycle*, these remediative alterations are allegorically and cybernetically explored through a direct and intentional glitching practice by which digital video files, half of the codified memory implicated in our modern synthetic memory, are altered through a code-based restructuring. The media files, unable to function under altered architecture, begin to rapidly decay, and as they 'die' we are able to see a visualization of deconstructive articulation in a digital world. The file becomes hacked, broken, and overtly indicative of a ruptured systemic protocol, making


direct allusion to the way in which digital files are broken down and restructured, and communication in our modern, distributed age. Not only does this process allegorically mirror the elegy expressed with the ceibas story, but also of the

medium of our own bodies, breaking down, passing away leaving only the hope that what comes after is strange and perplexing.

In this sense, our glitch-art is an active agent, working within the structures of digital media to interrupt, if only briefly, its synthesis with our creation of present experience. Since our society, both medically and psychologically, lacks the ability to hack specific parts of human memory, to deconstruct the synthesis of experience, we

must approach the only part of the equation to which we have direct access—archives and media—to form an interruption. It would be a mean world if one had to conduct amateur brain surgery every time one wanted to speak to memory and forgetting in art. As such, we look to the smallest part of archival memory, code, to explore how it's agency propagates through a much larger system.

All forms of digital media exist as delineated fields of language. As such, one might interpret a flash video or a digital still as an archival container for zeroes and ones. I refer here to binary, that techno-structuralist language of the invisible apparatus, one that would fool us into believing that its abstract, nebulous, 

untranslatable; because, unlike film, it operates in the absence of overt mechanical or chemical processes. It would have us believe that when we 'export' or 'save as' we engage in a type of hidden, impossible alchemy; but of course these processes are just retranslations and reinterpretations of pre-existing ordered code-systems. The binary code of media files is a language just as any other semiotic is 

the delineating ruptures of our digital archives. Glitch-art is an attempt to understand the computational liminality of translation and interpretation through a methodical alteration of electronic files. It aims at the wound of archival discourse and the game involved in accepting a stable permanence. Like scientists performing the first surgeries, glitch artists dissect their medium to find out how and why its heart beats.

It should be noted here that glitch-artists owe a great debt to those 16mm filmmakers who worked directly with alternative processes in their medium. Those celluloid scientists who scratched and warped and, through a process of their own hands, reminded us that cinema was a medium and not just a vehicle. The concepts of glitching owe a great deal of gratitude to this dense work and the ideology it

embodies. However, as film is overtaken by the exponential proliferation of digital

media predicated on computational binary and the coded systems of the archive, rather than physical materials, seem to be once again lost in a sea of re-creation, trying to keep up with our raptures to match an ever-advancing system of expression. So we return to the experimental work of our predecessors in an attempt to determine what it means to make a hand-processed video, one that incorporates the materiality of the video medium into the deconstructed diagrams of the

...chemically dis
...the material of the ... that made for a hand-
...produced, abstraction that implicated both the process and the
...see, everything on our hard drives is slowly forgetting
...forces as wild and chaotic as any sea. Inform...

...a process of migration, a zero
...one or dissolve entirely. This migration is understood to be random,
...even in the hopes of a static preservation there exists entropy — like
...it is life exploiting life. The natural state of the
...randomness of enfeeblement...





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