

MASTER'S THESIS
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Ephemeral Archives

Towards a Lasting Impression

ON THE SUBVERSIVE POLITICS OF ARCHIVES, MEMORY AND NEW MEDIA ART

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Abstract

Regardless of how you define the archive – be it a collection orientated to the past, the present or the future – it is a space of influence on the construction of our past. The selection of what is and is not archived gives state and private institutions significant control over our collective cultural memory. With the rise of new media technologies, archives are changing and the possibility for collaborative digital archives built by users creates the potential for decentralised, non-institutional memory. Though new media technologies change archival structures, the preservation of new media art brings with it its own set of challenges.

Born-digital new media artworks lack the universal and codified system of care for posterity that older media enjoy, leaving it more vulnerable to obsolescence. As new technologies become old, new media artworks will atrophy into forgetfulness while leaving a gap in art history and our cultural memory. The longer we wait, the more we lose. How can future digital art archives at once preserve new media art and wrest cultural memory from the clutches of political and state institution? The de-centralised, connectivity brought on by globalism and the internet creates the potential for subversive action. By working together and using participatory new media technologies against the normative service economy users can create spaces outside of the capitalist hegemony.

Media's constant innovation changes the way we remember, and the increased diversity of media technologies continue to challenge the possibility for a coherent cultural memory of new media art. This thesis will acknowledge these issues while suggesting improvements to current preservation and archival methods in order to move new media art preservation efforts forward.

Through an analysis of Rhizome's ArtBase, I investigate the vices and virtues in one of the largest public archives of new media art – what works and what does not. In order to create a comprehensive and representative archive of New Media art, I suggest that archival institutions should adhere to the internet's participatory principles if they wish to promote and place new media art in the cultural memory of art history, while preserving its unique criticality and subversive potential. Finally, this thesis will suggest a possible solution to the challenges facing the preservation and cultural memory of new media art.

Transforming Rhizome's ArtBase into an open source, collaborative network between artists, archivists, engineers and programmers enables an archive fit for the wide variety of preservation challenges in an ever-changing technological landscape.

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Introduction

Regardless of how you define the archive – be it a collection orientated to the past, the present or the future – it is a space of influence on the construction of our past. The selection of what is and is not archived gives state and private institutions significant control over our collective cultural memory. With the rise of new media technologies, archives are changing and the possibility for collaborative digital archives built by users creates the potential for decentralised, non-institutional memory. Though new media technologies change archival structures, the preservation of new media art brings with it its own set of challenges.

Born-digital new media artworks lack the universal and codified system of care for posterity that older media enjoy, leaving it more vulnerable to obsolescence. As new technologies become old, new media artworks will atrophy into forgetfulness while leaving a gap in art history and our cultural memory. How can future digital art archives at once preserve new media art and wrest cultural memory from the clutches of political and state institution? The de-centralised, connectivity brought on by globalism and the internet creates the potential for subversive action. By working together and using participatory new media technologies against the normative service economy users can create spaces outside of the capitalist hegemony. Media's constant innovation changes the way we remember, and the increased diversity of media technologies continue to challenge the possibility for a coherent cultural memory of new media art. This thesis will acknowledge these issues while suggesting improvements to current preservation and archival methods in order to move new media art preservation efforts forward.

So far, the majority of digital art archives have been the product of established art museums and archives, trying to reach out to a novel art form. These institutions bring with them decades of experience with archiving and preserving analogue art, but little understanding of preserving new media art and the cultural codes of the digital sphere. While most museums have archival techniques to safeguard the cultural memory of traditional artworks, the lack of maintained new media art archives leaves the artworks vulnerable to atrophy.

Archives help create stepping-stones for cultural memory to develop and take hold, which is central to building a critical and historical perspective on new media art. Opening with a deconstructive investigation of the basic

components and different approaches to understanding archives, these theoretical observations serve as a platform to discuss various views on the immanent political structures of archives. And how these archives help shape our cultural memory of their collections. Networks of users working outside of the service economy illustrate how collective action can take root within technologies, and even create archives with the potential for political action. Through an analysis of Rhizome's ArtBase, I will investigate the vices and virtues in one of the largest public archives of new media art – what works and what does not. Finally, this thesis will suggest a possible solution to the challenges facing the preservation and cultural memory of new media art.

Archive Fever

*Archive Fever: A Freudian Impression*¹ is a lecture by French philosopher and literary critic Jacques Derrida, given in London on 5 June 1994 during the international colloquium, *Memory: The Question of Archives*. An English translation by Eric Prenowitz was published in 1996. In his book, Derrida explores the archives of the Freud Museum through his own findings and a critique of Yosef Hayim Yerushalmi's 1993 book, *Freud's Moses: Judaism Terminable and Interminable*, which again is an exploration of Sigmund Freud's *Moses and Monotheism*. The convoluted structure and constant citation in *Archive Fever* is indicative of the way Derrida has worked since the publication of his *Of Grammatology* from 1967, in which he introduces the concept of deconstruction.²

The archive is a space of ongoing negotiation between historical origins, truths, users and institutions. These negotiations present an image of the constitutive structures that emerge from the act of selection. The archivist preserves objects of the past only to be retrieved later in the creation of cultural memory. Derrida describes the archive's relation to the future; "The archive has

¹ Originally published in French as *Mal d'Archive: une impression freudienne* (1995). Translated to English as: Derrida, J., 1996. *Archive Fever: A Freudian Impression*, Chicago: University of Chicago Press.

² Deconstruction in the Derridean sense is to pick apart a text through investigations into its key concepts. It is always a double movement of affirmation and undoing, in order to reveal contradictions and vague propositions.

always been a pledge, and like every pledge [gage], a token of the future.” (Derrida 1996, 18) In this sense, the archive is always orientated towards the future to create a past for tomorrow. Derrida traces the origins of the archive back to ancient Greece to reveal the archive’s root in juridical state institutions. In practical terms Derrida’s archive is one of political structures where objects consigned to the archive are raised to a special status in the hierarchy of archival institutions. The archive’s relation to a state or institutional authority forms a hierarchy where the objects in the archive are imbued with the political or economic ideologies of its institution. The political power of archives is born out of the continuous choices of what to include or not include, which ultimately gives the archive its frame and purpose. With that in mind, this initial section seeks to define the archive as a space for origins, constructing the past, and how archival structures shape the structure of what we remember.

The Origins of ‘Archive’

Derrida begins not with the archive of the Freud Museum – the subject of large parts of *Archive Fever* – but by looking at the very origin of the word ‘archive.’³ Its labyrinthine etymology is at once an informative look at the word’s original authority and an exercise in Derridean investigation. The deconstructive method Derrida employs explains as much about the issue as the results of the analysis itself.

Within the etymology of the word archive, a picture is painted of the ancient Greek city-state’s power relations, which are integral to our current understanding of what an archive is. In ancient Greece, the city-states stored their documents in the arkheion – the residence and domicile of the city’s superior magistrate. These documents contained notes on disputes, court cases, and other juridical matters accounting for the citizens of the city-state. The superior magistrate – the archon – implemented the power of these documents as laws in society and interpreted these laws as he saw fit. The powers of these documents lie in the government or magistracy – the arkhē – that can be implemented by the archon at any time or place. The arkhē is where things begin – where the laws are created – which draws its power from being (literally)

³ The root of the English word archive comes from the French ‘archives,’ which in turn comes from Latin ‘archivum,’ which is the Romanised form of the Greek ‘arkheion’ (ἀρχεῖον), “public records, town-hall, residence, or office of chief magistrates [the *archons*]”, itself from ‘arkhē’ (ἀρχή), “magistracy, office, government”, which again comes from the verb ‘arkhō’ (ἀρχω), “to begin, rule, govern,” (“ἀρχεῖον,” “ἀρχή,” “ἀρχω” in: Liddell and Scott 1940)

original. The origin is a central concern of Derrida in *Archive Fever*, since the archive first and foremost contains the origins of memory in the shape of documents and objects. Derrida describes the power of the archons; “The archons are first of all the documents' guardians. They do not only ensure the physical security of what is deposited and of the substrate. They are also accorded the hermeneutic right and competence. They have the power to interpret the archives.” (Derrida 1996, 2) Understanding the political structures in the archive is thus to understand the structures at the root of cultural memory.

The political power gained from controlling the archive was evident then as it is now. However, the political influence of the archive is not simply restricted to a magistrate or other singular entity, but created through the authority and workings of the institutions surrounding the archive. The move from the magistrate's private space of the *arkheion* to the public space of the execution of the law marks the same passage from the archival material's house arrest to the public institution of the museum. Derrida reminds us that this move from the private to the public is not necessarily an exposure of the secret to the non-secret. (Derrida 1996, 2) The private space of the archive can be open and accessible, just as the public space of the museum can seem esoteric and closed in on itself. The move is indicative of imbuing the object with a new authority, as when an artwork is brought out of an archive and into the exhibition space.

The Nature of Archives

It is worth noting that Derrida's use of the word *archive* is at times elusive and denotes numerous connotations. The archive represents at different points in the text the act of committing memories to writing (books); the holdings of the Freud Museum; circumcision (as a mark of Judaism on the body of the young boy) and the more conventional understanding of an archive as a repository for records, documents and other information of historical interest. For Derrida, these and all other archives are all places of origin, where an internal memory is consigned to an external physical space. In his words, consigning something to the archive is an inscription that leaves a mark as a lasting impression. (Derrida 1996, 26) In keeping with the theme of this thesis, focus will be on the latter understanding of the archive as a collection of documents and objects.

As has been Derrida's mission throughout large parts of his academic career, the deconstruction of concepts and history also features in his description of the archive. The creation of an archive is also a deconstructive progress, where putative limits and classifications are questioned. Publication rights, access rights and questions of privacy might be reassessed through the archived content. What are historical documents and what is private correspondence? What is biographical and what is autobiographical? In Derrida's example: which objects in the Freud Museum can be classified as theoretical writings and which are merely personal letters? And just as important, how do we decide what makes a piece of text theoretical? Is it up to the spectre of Freud? Derrida does not answer these questions, but simply notes how these distinctions and classifications have been uprooted; "[...] the limits, the borders, and the distinctions have been shaken by an earthquake from which no classificational concept and no implementation of the archive can be sheltered. Order is no longer assured." (Derrida 1996, 5) The implementation of an archive is not safe from this lack of order, but must instead exist in and with this uncertainty.

This decision of what to include in the archive and whether to include it as theoretical text, biographical information or otherwise, is paramount to the creation of the archive. As the archive is created, these decisions simultaneously define the shape of the archive. Derrida describes this by what he calls the 'exergue',⁴ which accumulates capital in advance and prepares the surplus of the archive. Every archive is in this sense both conservative and institutive, in that the creation of an archive simultaneously institutes the archive *and* the law – or method – of archiving.

The Death Drive

What to include in the archive is also a decision about what we are most likely to lose. We must archive lest we forget. Since human memory can only contain so much, memories have to be deposited in a different container. The violence of the archive is what Derrida calls the power that at once consigns and conserves the objects in the archive. As he says, it is at once revolutionary and

⁴ "Exergue" is the second largest chapter (after the foreword) in *Archive Fever*. An exergue is the place on a coin beneath the design, where the date and location of its making is inscribed. In French, the use of an exergue to denote an epigraph or similar preliminary inscription is more common and translates to "that which is outside of the work." ("exergue" in: *Webster's New World College Dictionary* 2010)

traditional in that it respectively wrests the memories from the individual and preserves them in suspended time.

In line with this sense of archival violence, Derrida introduces Freud's concept of the death drive. The death drive is a result of the finiteness of human memory, where forgetfulness is constantly threatening to erase objects in our memory's archive. Derrida describes the death drive as "an irresistible thesis, namely the possibility of a radical perversion, indeed, a diabolical death drive, an aggression or a destruction drive: a drive, thus, of loss." (Derrida 1996, 9) In this sense, the archive can function as an externalised memory technique of virtually limitless capacity.

According to Derrida; "There is not archive without a place of consignation, without a technique of repetition, and without a certain exteriority. No archive without outside." (Derrida 1996, 11) The consignation is a primary part of the archive – in order to create an archive, it is necessary to part with and entrust objects to the archive. The repetition Derrida mentions in the above quote is the repetition that happens when an object is placed – or repeated – from 'the world' into the archive. Repetition is inseparable from the death drive, because our compulsion for consignation in an external place – the archive, removed from our individual memory – ensures the preservation of that same memory. However, the archived material is not the same as the active lived experience that it represents, but rather a structural dissection of the preserved memory. As an object in the archive the memory can only be represented in an altered form. From this, Derrida concludes that our memory always, a priori, works against itself, introducing an inbuilt personal forgetfulness. A part of the memory is always lost when an active lived experience is consigned to the archive. Therefore, committing something to the archive is necessary to save it from the death drive (amnesia) within the individual. If a memory is not placed in the archive it will eventually be forgotten due to the finiteness of human memory.

Historical and Material Truths

When uncovering an object from the archive, that object presents itself as a claim about the past. Understanding the past depends on how we understand the object and the claims of truths it presents. In *Moses and Monotheism*, Freud distinguishes between two truths about the past: the 'material truth' and the 'historical truth'. The first regards the documents and

objects as direct referents in the archive, which represent a literal truth – the story/experience/structure of what actually happened. The latter represents the realisation that no recorded history can lay claim to any sort of objectivity – that history is constructed and written by fallible men and women. Further in the lecture, Derrida introduces the ‘truth of delusion’, which is similar to the historical truth, but relates more directly to a truth of insanity and hauntedness. Delusional truth is repressed or suppressed, but simultaneously resists and returns as what Derrida calls a ‘spectral truth’.

Derrida introduces the spectral in his 1993 *Spectres of Marx*, as a historical awareness that comes from the paradoxical state of neither being nor non-being. It is the anticipation of a death that is not certain to come because it may have already passed the point at which it could be present. (Derrida 1994, 48) A spectral truth is thus a truth that is at once repressed and present. Freud explains it this way; “If a patient believes in his delusion so firmly, this is not because his faculty of judgement has been overturned [...] On the contrary, there is a grain of truth concealed in every delusion.” (Freud, Sigmund in: Derrida 1996, 87) Freud thus says that delusional truths are not to be simply dismissed as fantasy, but that they contain a certain amount of truth. According to Derrida truth of delusion is spectral exactly because historical truth is always in the limbo of being at once repressed, forgotten and present in the minds and documents of the archive. (Derrida 1996, 87) The delusions of Freud’s patient contain a grain of truth and the source of the patient’s conviction deserves belief (especially from an inquisitive psychoanalytic perspective). In the same sense, the source of history’s delusions needs to be investigated to understand the truth and cause of its suppressions and repressions.

The Archive Fever

The true nature of the object and its original memory is found at the origin of its consignment. Derrida explains the archive fever as a *need* for origins. A burning passion for searching restlessly through the archives – so much that the desire to fathom it all through compulsive repetition persists even when the archive slips between the fingers of the persons inflicted with the fever; “It is to have a compulsive, repetitive, and nostalgic desire for the archive, an irrepressible desire to return to the origin, a homesickness, a nostalgia for the return to the most archaic place of absolute commencement.” (Derrida 1996, 91) It is a nostalgic yearning for the source and point of origin.

The point of origin is rarely found in this feverish search through the archive. This is where the constructed nature of the historical truth – attempting to assemble the various threads – falls short compared with the material truth uncovered in the archive. According to Derrida, the origin in the archive speaks for itself in the moment of its uncovering. (Derrida 1996, 93) The power of the archive – the *arkhē* – becomes archive-less and thus capable of standing alone without the concept and binds of the archive together. The object uncovered in the archive thus presents itself with the archive’s power, but as a singular object, no longer attached to the archive. The archive becomes irrelevant, because the object is able to present itself *by itself*. As Derrida states, in this unique instance we see “*Anamnēsis* without *hypomnēsis*!”⁵ (Derrida 1996, 93)

This is not to say that Derrida proposes a general metaphysical opposition between the concepts of internal recollection (‘*anamnēsis*’) and externalised memory (‘*hypomnēsis*’). Plato’s opposition between the two terms is exactly what Derrida attempts to escape in *Of Grammatology*, where his deconstruction of metaphysics’ dualistic nature takes its outset in Plato’s *Phaedrus*. Plato sees the internal remembrance of *anamnēsis* as a true form of knowing inherited by previous generations, whereas *hypomnēsis* is presents itself only as a supplement. Bernard Stiegler – student of Derrida – summarises Derrida’s thinking by saying, “[...] it is impossible, [Derrida] shows, to oppose living memory to externalized, dead memory since externalized memory, as a supplement, constitutes living memory as knowable.” (Stiegler 2010, 69)

For Derrida, the fact that externalised memory (*hypomnēsis*) is a supplement to *anamnēsis*, logically creates a procedural rather than a hierarchical relation between the two types of memory. Derrida exemplifies this with the act of writing (*hypomnēsis*) and speech (*anamnēsis*); “There is an originary violence of writing because language is first [...] writing.” (Derrida 1997, 37) He shows here that language cannot exist without writing, as writing is already assumed within the spoken language. Similarly, external memory is already present in our internal memories, making the two procedurally linked.

⁵ Derrida uses an array of ancient Greek concepts to talk about memory. His two core concepts are borrowed from Plato’s ‘*anamnēsis*’ and ‘*hypomnēsis*’ as described in *Phaedrus*. ‘*Mneme*’ is the memory itself, which is the result of ‘*anamnēsis*’ the act of remembering without the use of external memory supports (recollection or remembrance). ‘*Hypomnēsis*’ is the making-technical, externalising of memory through all kinds of memory substitutes such as writing, photography or machines.

Changing the Archive from Within

Just as the external memory exists within the internal memory, the way we archive shapes the way we remember. The ‘outside’ of the archive is the same as the hypomnēsic principles, where memory is committed to writing or other memory technology and thus creates a memory external to our cognitive abilities; an extended mind. In the age of computers, Derrida discusses how the archiving of our memories onto external technologies is not only determining the way we archive, but also the archived content itself. Echoing philosopher of communication theory Marshall McLuhan seminal adage “the medium is the message,” (McLuhan 1994, 7) Derrida states that the structure of our archival technologies shapes the structure of the archivable object itself. Thus, the archive concurrently records *and* produces information. The information produced by handwriting something in a notebook is different from what is typed in an email. It follows that archival technologies change not only the archival objects, but also the very institution of the archive.

The proliferation of new technologies results in an ever-increasing gap between current archival efforts and archived objects of past technologies. The archived objects of the past are moving away from us at great speed, because “[w]hat is no longer archived in the same way is no longer lived in the same way.” (Derrida 1996, 18) It is important that archivists remember this, since many archived objects are rendered obsolete because of the archived digital format. We see this especially in libraries, where enormous efforts are being put into digitising literary works in order to make them searchable in online catalogues. New publications are available as digital and searchable PDF-files off the bat, whereas pre-digital publications have to rely on the institutions to find and digitise them in order to obtain the same “ease-of-access”.

An Archive of What?

Derrida questions the limits of the archive, when he asks how archivists know whether or not an object belongs to an archive. (Derrida 1996, 33) In the case of the Freud Museum, how far removed from Freud’s work can an object be before it no longer belongs in the archive of the Freud Museum? Should the archive include Freud’s secret or personal correspondence; objects belonging to Sigmund Freud’s father; objects pertaining to the psychoanalytic institution as a whole? At what stage does the archive of the Freud Museum become an archive of something more than Sigmund Freud?

According to Derrida, this quest for an established ‘concept’⁶ of the archive is misplaced in that it presupposes that a concept already exists. The question of concept is aimed at the past, since it asks the archive (which never finishes expanding) about what it holds. Although the idea of an archive seems to be positioned and looking towards the past, the concept of the archive should always look to the future – to what it wishes to become. The concepts of the archive do not deal with objects of the past that are already at our disposal. The archive is far more concerned with the future and a responsibility to the future. (Derrida 1996, 36) In their role as architects of cultural memory, archivists have a responsibility to the present and the future, just as they have a responsibility to preserve and present the past. If we want to know what the archive “is about” or “means,” we will have to wait. Only in the future may it be possible to look back at the archive and (perhaps) discover its concept. For Derrida the concept is thus something that is shaped by the future and the objects in the archive, rather than the other way around, where the concept of the archive is already decided upon before the inclusion of its objects.

Derrida’s notion of the future is important for our understanding of the relationship between the archive and its concept. We cannot know the concept of the archive – the theme, structure, hypothesis, etc. – until its documents have already been archived. There is thus no way of determining the concept of the archive before we have started the process of archiving. The future is not known and cannot be knowable, because the future does not deal in knowledge. Rather, it deals in allowing knowledge of an event to appear. (Derrida 1996, 72) Allowing for the future to come – waiting – is a performance that has no relation to the archive of the present.

Distinguishing History from the Archive

There is a key difference between the archive and its subject or theme. The subject has its roots in the archive and the past, but it must never be defined by it. When an art form (historical or contemporary) presents itself *as* said art form, it presents itself not just in relation to the name’s historical representation, but also in relation to the name and law of a nation or people. That is to say, an art form cannot present itself without presenting itself as an

⁶ The Derridean ‘concept’ is a term for the general description of what could also be called the archive’s principle, objective or mission.

art form *of* or *for* a certain group of people. An art form is to a certain extent determined by its history.

In the example of psychoanalysis in the Freud Museum, Derrida remarks how psychoanalysis is presented as a Jewish science. This profoundly alters the concepts of – and relationship between – psychoanalysis and its own archive (now suddenly tied to a specific religion and history). Derrida writes: “In the *classical* structure of their concept, a science, a philosophy, a theory, a theorem are or should be *intrinsically* independent of the singular archive of their history.” (Derrida 1996, 45) That is to say that the practice of science should not be tied down or limited by its historical context. With the present concern in mind, the same can be said about art and art history.

The problem about the close relationship between art and its archive is that art – as classical concepts – should be independent of its history. The structures of theoretical and philosophical investigations into art should not have an intrinsic need for a reference to history – or the authority endowed by the institutions tied to the archive. Art does not need the archive to lay claim to truths, since the archive is created through the very developments of art through history. Through artistic advances, art creates its own authority. This is not to say that artistic advancements as such are only possible *without* reference to the archive. Innovative art, such as Aby Warburg’s Mnemosyne Atlas could never be created without an archive. Derrida’s point is that art is not dependent on its history in order to assert its value or autonomy. Art archives should therefore not be important in order to legitimise art. Art is able to legitimise itself by its own innovations.

On the other hand, it is important to recognise that, to speak of art, one must know its history – its archive. In this sense, the archive is a core aspect of talking about the future of art. As mentioned above, archives are always pointed towards the future, but investigations into art do not need the archive’s green light of authorisation in order to discover the future.

Repetition and Citation

Repetition is a recurring theme in *Archive Fever*. When speaking about Yerushalmi’s book *Freud’s Moses*, Derrida notices how the interpretation of Freud in Yerushalmi’s book is a performative repetition of Freud himself – an animation of Freud’s spectre. The only way for Yerushalmi to interpret – in his

way – the archive and inheritance of Freud is to inscribe himself (his spectre) into Freud’s corpus (archive) – “...by enriching the archive enough to have a place in it.” (Derrida 1996, 67) These spectres exist in every archive in the form of entries, referents, artists and authors. Yerushalmi’s book even carries the name of Freud, which only gives further incentive to include it as property of Freud’s archive. This is relevant for every archive, as references to information surrounding the content in the archive augment the archive and give it authority. Repetition may at first glance seem like a feature of the past but that is not the case. Through repetition the archivist is able to produce more archivable material and expand the archive further, which is exactly the reason for which archives are never just looking to the past, but always open to the future.

Derrida’s Archive

Although Derrida’s conception of the archive is comprehensive – where practically everything can be an archive of something – it is also an in depth investigation into the organisation of archives and archiving. The archive deals with the past but is in a continuous negotiation with defining and creating the future. As such the archive is a powerful and often hidden instrument that structures knowledge about the past as well as the future. The archivist decides what is inside or outside of the collection of objects that makes up the foundation for our cultural memory. As the archival institutions control what is saved for posterity, we must be wary of these institutions’ hold on our shared past and how it is archived. The ways objects are archived define the archive and thus the ways we remember. Through the repeated movements of remembering and consigning objects to the archive, repetition and citation ensure that individual memories are not forgotten. Archives are created with the future in mind, and this is how cultural memory can dig through the archives to create a common past in order to determine the shape of the future.

Dust

The Actual Fever of the Archive

In her 2001 book, *Dust*, historian Carolyn Steedman dedicates the beginning of her writings to Derrida’s *Archive Fever*. After a short introduction,

Steedman asks the reasonable if impish question of why Derrida would talk about the institution of archives in a text largely about Freud, Judaism and psychoanalysis. As Derrida reads Yerushalmi's *Freud's Moses* in deconstructive terms, so too does Steedman vow to read *Archive Fever* in terms of what is not being said by Derrida.

Seemingly disappointed or disillusioned by the contents of Derrida's lecture, she emphasises the banal ordinariness of archives, which in *Archive Fever* are treated with an air of mystique and meaningful significance. The archive fever that Steedman reflects on is not the feverish instinct to discover some definite truth at the archive's origin, but the actual, physical discomforts experienced through long exposure to the dust of the archive. She describes the experience of desperately sifting through an archive trying to extract meaning from its documents: "Typically, the fever – more accurately, the precursor fever – starts in the early hours of the morning, in the bed of a cheap hotel, where the historian cannot get to sleep. [...] The dust of others, and of other times, fills the room, settles on the carpet, marks out the sticky passage from bed to bathroom." (Steedman 2001, 17) According to Steedman, the poor work environment and academic deadlines are the real fever of the archive.

Although Steedman feels a great ambition to finish and get out of the cold, dusty space of the archive, she confesses that the primary passion is to *find it* – to find the one missing document that finally allows her write the article or book. The desire to find the origin and fulfil the purpose of entering the archive is seemingly much stronger than any discomfort caused by the fear of dust. In essence, Steedman may agree more with Derrida than her initial claims suggest.

Remembering History

Just as books, computers and other technologies enhance and externalise our memory, Steedman argues that history itself might be a memory technology. She draws on Michel Foucault's *The Order of Things: An Archaeology of the Human Sciences* from 1960, in which the latter turns the chronology of memory and history on its head. Unlike the usual order of things in which memory transforms into written history, Foucault writes how history already clutters our memory. The writing of modern history influences how we think about memory. This feedback loop between history and memory tells Steedman

that: “[...] we have to be less concerned with History as *stuff* [...] than as *process*...” (Steedman 2001, 67) History is in the remembering, rather than in the objective facts. That is to say that in order to understand history, we must engage with it actively. Objects in the archive cannot be expected to unveil history for us – that is up to our own engagement with the objects and the process of history. Concurrently, this awareness of documented history shapes our memory, which results in historical accounts that are in turn aware of their own historicity – their own quality of being a part of history.

If history is analogous with the process of remembering, then where does the archive find itself as a metaphor for memory or history? Steedman’s critique of *Archive Fever* is that the archive is not at all like human memory or the unconscious mind. Although an archive may collect, classify and catalogue documents in order to later retrieve them – like human memory – from its depths, Steedman argues that the archive’s collections cannot compare with the size of human memory. Archives may seem vast and intimidating, but in actuality there isn’t very much there. According to Steedman, human memory is made up of everything (that has been experienced), whereas the archive is only created through conscious, careful selection of documents and objects. Human memory incorporates the unconscious – this timeless and inconceivable place where nothing ever goes away. Unlike the constituent parts of our memory, nothing happens to the stuff in the archive. Objects are catalogued and placed on a shelf, where they sit unused until someone – a user – actively takes it down and engages with the object. It could be argued that the vastness of our unconscious is of little use, since it is not accessible except in dubious fragments assembled by dreams and psychoanalysts.

However, it is worth noting that Steedman’s quite astute claim that nothing happens until the objects are activated and engaged with. An archive of unused objects is worth very little to the creation of cultural memory. If no one engages with the objects, then no one knows they exist. Like the obscured memories of our unconscious, the objects in the archive are only useful so long as they are uncovered and examined.

The Magistrate as Storyteller

Steedman suggests that Derrida’s account of the archon or magistrate – as the interpreter and upholder of the laws in the documents of the archive – imbues the magistrate with powers that he or she did not really have. According

to Steedman, the magistrate's real powers were as a storyteller for the future. The magistrate's documents in the archive – his or her notebooks – were not only used to keep tabs on official documents, but also for personal notes on rules and regulations imposed by past cases and higher authorities. (Steedman 2001, 44) From her research into justices of 18th century France and England, Steedman explains that the reason we have so many stories of the poor of that time was that the justices were *not* just official interpreters of the law, but also judicators in residential disputes, such as those between the head of a house and his servants.

These notes and documents show that the archive was never solely for official documents. These notes on disputes also indicate that nothing ever starts in the archive but simply ends up there as a half told, discontinued story. It is important to keep in mind whom the narrator is, since these are some of the few recorded narratives about the underprivileged citizens of 18th century Britain. At a period for which documented autobiographical information is scarce, the few sources in existence are from the necessary and involuntary storytellers – the magistrates. The question of why the archive contains what it does is integral to the authoring of history.

The Historian as Creator of Meaning

Steedman gives the power back to the user (who is by association with the archive, an historian) as the creator and purveyor of meaning. In her idea, the archive is little more than a repository that historians alone can bring to life. The experiences of the past, which Derrida seems to discover in the objects of the archive, are in Steedman's view the work of the historian. The past experiences are created by the user of the archive by “[...] bringing to life those who do not for the main part exist [...]” (Steedman 2001, 70) On several occasions, Steedman mentions the power of the historian who can “[...] make ink on parchment speak [...]” (Steedman 2001, 70) when she enters the place where the past lives.

One might argue that Steedman's approach of directly transferring the experiential account of history from the archive to the user is a dangerous one. In constructing an historical experience – in making parchment speak – there is a whole lot of creativity going on. The historian not only presents the past as historical truth (constructed and influenced by her contemporaries), but also artistically by her own whim and impulse. Steedman goes so far as to say that it

“[...] still remains the social historian’s dream, of bringing to life those who do not for the main part exist, not even between the lines of state papers and legal documents [...]” (Steedman 2001, 70) Creating experiences that “do not exist” arguably takes the concept of historical truth too far. If the historian sifting through the archival objects cannot even be trusted to attempt a search for truth, then how does written history differ from works of fiction?

Objectivity in History

It may well be argued that the distinction between the fictional and factual is often unclear, but the expectation is surely still there – an expectation that historians strive for truth in the face of lacklustre sources, personal expectations and hopes of academic prestige. Derrida acknowledges that documented history and archives are constructs of historians and archivists. But he does so in order to draw attention to the structures and pitfalls of thinking that historical truth can be uncovered – to better our understanding and future documentation of history. Steedman on the other hand seems merely excited by the historian’s ability to fashion stories from nothing – with no suggestion to look critically at the dangers of a wholly constructed history.

This is perhaps the definitive archive fever: where the futile search for an origin in the archive results in the construction of an imaginary origin. As mentioned earlier, there is no access to experiences of origins in Derrida’s understanding of the archive, since all objects consigned to the archive lose the status of an actual lived experience the moment they are consigned to the archive. (Derrida 1996, 18) Making the parchment speak is little more than an attempt to conjure non-existent origins. If historians, as Steedman claims, construct history, why is she so adamant about finding an original account that – according to Derrida – is not even present in the archives?

Steedman’s Archive

While Derrida positions the archive’s legitimising and historical power in the archive itself, Steedman sees archives as mere placeholders for powerless objects. These objects gain meaning once the historian pulls them out of the archive and into the annals of history. The objects of the past must be actively remembered and used to become part of our cultural memory. History is not the archive, but a process that we need to remember to keep it alive. If no one uses the objects in the archive then no one will know they exist. Thus, for

Steedman the power of the archive is in the historians and the act of creating history by engaging with the archive's collection.

Suspicious Archives

Media theorist and philosopher Boris Groys has curated numerous exhibitions and written about archives, new media, and power structures in art and propaganda. In *Under Suspicion* from 2000, Groys presents his phenomenology of media and tackles the divide between media and users – how media's outward appearance can mislead users from institutional power structures and what goes on 'behind the scenes.'

Beneath the Surface of Digital Archives

Within the cultural economy is a foundation that underpins the media and archives – the inner workings of cultural innovation. In his attempt to reveal what lies beneath the surfaces of archives and media, Groys finds that these structures can never quite be grasped. As with the Derrida's 'concept' of the archive's continually indeterminable nature, the foundations of archives are always concealed and out of sight. Where Derrida speaks of the archive's concept – an attempted description of the archive's 'theme' or constitution – Groys is concerned with the media-theoretical question of archives' apparent surfaces and what structures they hide. Groys likens the attempt to discover the foundations of media surfaces with looking at the back of the canvas of a painting. While it is possible to see the physical structure of the frame and canvas, the painting is now no longer in sight. Hanging the painting back on the wall, it again takes on the properties of a cultural object, but its foundation has now passed from view. Following the same logic, the archive's structure or foundation cannot be inspected as such. The structural constituents of the archive can only be inspected in isolation outside of the usual use of the archive.

The Suspicious Workings of Media

According to Groys, the hidden structures of archives and other media give rise to a 'media-ontological suspicion.' The occluded inner workings of the archive create a suspicion in the user that the visible signs may be deceptive – that deceitful forces – hidden in what Groys calls sub media space – control the archive. (Groys 2000, 20) This suspicion of what lies beyond the visible surface

raises questions of, who or what reveals the signs that we see. The presence of an unknown other in turn causes fear and ‘ressentiment,’⁷ and a desire to hold someone or something responsible. In short, the medial suspicion gives rise to political engagement.

Deciding What to Remember

The archive is typically seen as a site of reverence and knowledge, but as shown by Derrida archives are also complex collections of curated memory and politicised objects. Historically, a consensus or ruling class has determined these memories and archives for the general population. Groys takes his outset in the ‘Bildungsbürgertum’ – an 18th century German social class defined as the educated bourgeoisie – who used to be the authorities on a universal cultural memory. Instead of ruling by imposing financial or religious statutes, the Bildungsbürgertum ruled through a judgment of what was to be seen as “correct” and “venerable” knowledge and taste.

With the disappearance of the Bildungsbürgertum and other ruling classes of taste and canon, Groys argues, “[...] one can say that in this sense cultural memory has also disappeared. This means that nobody remembers anything. And society as a whole doesn’t remember anything any more either.” (Abdullah and Benzer 2011, 74) It is unclear why the loss of an educational canon is also a loss of cultural memory. It seems that Groys’ definition of cultural memory is rather narrow. His definition only encompasses officially sanctioned memories⁸ and not the types of cultural memory created through consensus or participation. This certainly weakens Groys’ further argument that *nobody remembers anything*.

It seems that what Groys is hinting at, is the fact that the globalised world no longer has an authorised archive to draw from, when trying to decide what to remember. After the internet and globalisation as a whole, there is no longer any reason for which it should be more valuable to remember the past of France, Chile or Japan over the other. Groys argues that since it is structurally impossible to remember everything – to consign everything to the archive – the entire concept of a memory or past based on the archive has failed, as there is

⁷ “Ressentiment; from Old French ‘ressentement,’ from ‘resentir,’ to feel strongly: a feeling of bitter anger or resentment together with a sense of frustration at being powerless to express this hostility overtly,” (“ressentiment” in: *Webster’s New World College Dictionary* 2010)

⁸ Boris Groys touches briefly upon his rather sweeping use of the term; “When I said ‘cultural memory’ [...] I meant museums, libraries, the whole system of institutionalised memory [...]” (Groys, Boris in: Abdullah and Benzer 2011, 74)

no way of determining which memories deserve preservation. (Abdullah and Benzer 2011, 74)

Groys' Archive

Groys' presents a general suspicion of (digital) archives, where structures that the general populace cannot decode are constantly at work beneath the surfaces of media. Globalisation and the move from canonised state archives to globalised digital archives creates a new space of uncertainty about what to archive and the fate of the objects as they become digital media. The nature of the power structures in Groys' conception of the archive is less clear than in Derrida and Steedman exactly because it is only possible to peek into the structures beneath the surface of media at the instance of a glitch or tear in the seamless algorithms of digital archives.

Cultural Memory

In order to understand how changes in archives and their objects construct our memory and conceptions of art, it is essential to look at cultural memory. Through experiences of art and media, cultural memory is formed in an interplay between individuals and institutions. To comprehend how our archives are formed out of memory and – vice versa – the effect of archives on our memory, it is essential to investigate the notions that make up our cultural memory.

Cultural memory has been through many formations since its original conception in 1925.⁹ The French philosopher and sociologist Maurice Halbwachs' descriptions of a collective memory – 'mémoire collective' – in "Les cadres sociaux de la mémoire" and Aby Warburg's social memory of images – 'bildgedächtnis' – were the first attempts at a rigorous mapping of cultural memory. (Confino 2008, 77)

⁹ 'Cultural memory' is widely used and understood, but the popularity of the term has changed over the years. Various terms have taken precedence (collective memory, social memory, ars memoriae, myth, postmemory, etc.) through fields as diverse as history, psychology, philosophy, art, literature and media studies, neuroscience and theology. In this thesis cultural memory will be the used insofar as it is not anachronistic (as would be the case of Maurice Halbwachs' 'collective memory' and Aby Warburg's 'social memory').

Mémoire Collective

Halbwachs wanted to establish memory as dependent on social structures, instead of the individual memory advocated by Sigmund Freud. Halbwachs did not study memory to reflect on the properties of a subjective mind, but instead looked to society and culture, where minds work together. (Halbwachs 1992, 38) For Freud, this suggested a collectivisation of psychological phenomena, which contradicted his work on psychoanalysis.

As Astrid Erll writes, it is possible to distinguish two concepts of collective memory (what is now generally considered cultural memory) in Halbwachs' writing. The first concept presents "collective memory as the organic memory of the individual, which operates within the framework of a sociocultural environment." (Erll 2011, 15) Generally, experiences happen in social contexts. Memories about these experiences are formed through interactions with other people. Furthermore, knowledge about concepts like time, space and ways of thinking take form through communication with others as we participate in a collective symbolic order. Halbwachs describes how collective and individual memories depend on one another: "[...] the individual remembers by placing himself in the perspective of the group [and] the memory of the group realises and manifests itself in individual memories." (Halbwachs 1992, 40) Collective memory-making is more than creating personal visions of the past – it is the creation of interpersonal knowledge about the world, according to Halbwachs' first concept of collective memory.

Halbwachs' second concept sees: "collective memory as the creation of shared versions of the past, which results through interaction, communication, media, and institutions [...]" (Erll 2011, 14) This creation of a shared past differs from any account of history. As Erll explains, for Halbwachs history is orientated towards the past, whereas collective memory is orientated towards the interests of the group in the present. (Erll 2011, 17) In this version, participating in the creation of collective memory shows that the person remembering belongs to the group. The remembering is a result of collective memory constituted through social interaction, where those who did not experience something first hand can also take part in the memory. This suggests that collective memory can be a central aspect in the formation of personal and group identities.

Social Memory

In the 1920s, German art and cultural historian Aby Warburg was developing what he dubbed social memory, which would become another key part of developing the term cultural memory. Warburg's idea of a social memory was illuminated in the setup of the Warburg Library (*Kulturwissenschaftliche Bibliothek Warburg*). Instead of following the norm of ordering the library according to the various disciplines in its collection, Warburg organised the books according to cultural-historical themes. This allowed for objects of different eras, media and genres to be placed side by side, transcending the boundaries of other libraries at the time. In "Memory, Metaphor, and Aby Warburg's Atlas of Images" professor of Comparative Literature, Christopher D. Johnson explains that "[...] Warburg believed [libraries] ideally work to disrupt conventional classifications of ideas or things in order to produce novel thoughts." (Johnson 2012, 68) By rearranging his library, Warburg was able to imbue it with a subversive structure that promoted new ways of thinking about the past it represented.

Warburg's interest was in the memory of art. Social memory is stored in symbols, which led Warburg to develop a cultural memory of images. He discovered that the ephemeral concept of social memory is codified materially in artworks. Thus, Warburg could study "[...] the specific interplay between continuity and re-interpretation of cultural symbols in artworks." (Erl1 2011, 20) According to Warburg, by investigating the symbols in artworks it should be possible to explore social memory across time and national borders. Examining social groups' creation of the past – through artworks – opens up the present's construction of identity.

Two Notions of Memory

Maurice Halbwachs' classification of collective memory distinguishes between two distinctly different versions of collective memory; individual memories in a social setting and collectively produced representations of a shared memory. While useful tools for understanding collective memory, Jeffrey K. Olick protests that Halbwachs' two distinctions effectively divide memory into either collective or individual levels. This simplified dichotomy of how memory works makes it difficult to create a cohesive concept of collective memory. When applying these concepts of collective memory to extract insights from an issue, it is not clear which definition to apply. As Olick states,

“[t]hese two sorts of phenomena to which the term collective memory can refer (in Halbwachs and in general) seem to be of radically distinct ontological orders and to require different epistemological and methodological strategies.” (Olick 1999, 336) In order to apply and understand collective memory, it is important to understand the multifarious uses and applications that the term encompasses.

Two Notions of Culture

Jeffrey K. Olick explains that cultural memory contains two different notions of culture. The first treats symbols and their meanings as subjectively contained in the mind of the individual (the cognitive), whereas the second notion of culture sees treats symbols as publicly accessible in society (the social). (Olick 1999, 336)

These two notions of culture in turn create two notions of cultural memory. The first, cognitive level of cultural memory addresses biological memory and claims that although memory takes its outset in personal experience, it is never purely individual, but always shaped in collective frameworks. These frameworks are shaped by friends and the media, and can be triggered by things like a conversation, books, places, etc. This level focuses on the socio-cultural circumstances in which we remember. (Olick 1999, 338)

The second, social level of cultural memory addresses the symbolic order, in the tradition of cultural studies, where groups recreate a shared past through media, cultural practices, museums, and other institutions. Here, memory processes are collective in nature – as with individual memories, the past is reconstructed through selection and imagination according to current knowledge and desires. (Olick 1999, 341) However, it is worth noting – as Erll does (Erll 2008, 5) – that this distinction between the cognitive and social cultural memory is purely analytical. In practice, the two levels continuously interact. It is not possible to conceive of an individual memory existing prior to culture, nor is a collective or institutional memory without individuals feasible. Groups and individuals in a complex network of interactions shape the past and present. The structure of the network of cultural memory is hidden from plain sight but is at the same time shaped by the individual. Although the individual affects and takes part in cultural memory, it cannot be understood in its complex entirety.

Forgetting the Old to Remember Anew

Aleida Assmann has further developed and proliferated cultural memory from the 1990s up until now, featuring as author or editor of many articles and anthologies on the subject in the past two decades. Assmann states that through culture it is possible to surpass our temporal existence and create something that spans across the past, present and future. Culture creates a framework through our interaction with the past that ties together previous, current and future generations in an act of meaning-making. Aleida Assmann puts it eloquently; “They do not have to start anew in every generation because they are standing on the shoulders of giants whose knowledge they can reuse and reinterpret.” In a quote she herself borrowed and reused from Isaac Newton¹⁰ (who in a poetically Derridean sense of citation and exergue has borrowed this quote from the 12th century philosopher Bernard of Chartres¹¹), Assmann illustrates how cultural memory creates a framework for communication across time – as the internet has created a similar framework for communication across space.

A central aspect of remembering is forgetting. According to Assmann, this feature of individual memories lies at the outset of every memory – in the act of remembering, something else must be forgotten. Individual memory is selective because of the limited memory capacity afforded us by neural constraints, focus and bias. On top of that come psychological disturbances, which modify, dislodge, or obfuscate traumatic or discordant memories. This is what Derrida calls the ‘death drive’, where consigning individual experiences to our memory (in Assmann’s terms this is simply referred to as ‘remembering’) forces the forgetting of other memories. Assmann relates these acts of individual forgetting to the larger scale dynamic between the remembering and forgetting of cultural memory. Just as an individual must forget, societies must forget in order to create space for new information, ideas and encounters. In an ongoing negotiation with the present and future, societies forget by replacing old information with new.

¹⁰ “If I have seen further it is by standing on the shoulders of giants.” (Newton 1959, 416)

¹¹ “Bernard of Chartres used to compare us to [puny] dwarfs perched on the shoulders of giants. He pointed out that we see more and farther than our predecessors, not because we have keener vision or greater height, but because we are lifted up and borne aloft on their gigantic stature.” (McGarry 1159, 167)

Active and Passive Forgetting

To better understand cultural forgetting, Assmann distinguishes between two different forms of forgetting: active and passive. (Assmann 2008, 97) The active form of cultural forgetting is intentional. This can be destructive when directed at a foreign or minority culture, or necessary and constructive when directed at problems of internal social transformations. Censorship and bans on various products have been one way in which active forgetting has been enforced.

The passive form of cultural forgetting is related to non-intentional acts like losing, misplacing and abandoning. The objects are not destroyed as such, but have simply fallen out of attention and use. Since these objects are not destroyed – but simply forgotten – it is possible that they may be recovered at a flea market, on a floppy disk or even uncovered from an archaeological dig site.

This intimate relation between remembering and forgetting shows that if we – as Assmann – acknowledge that forgetting is the default condition of individual and cultural life, then that must make remembering the exception. Thus, collective remembering needs to be actively pursued in order to preserve cultural memory. Remembering therefore necessitates special and expensive precautions, which manifest themselves as cultural institutions in the world. Assmann also shows that the archivist's role is to actively seek out that which makes up our contemporary and past society. Archiving must be an active endeavour to circumvent the threat of forgetting.

The Past-as-past and the Past-as-present

Like forgetting, Assmann claims that remembering constitutes itself in a passive and active form of memory. The institutions of active memory preserve the 'past-as-present', where the institutions of passive memory preserve the 'past-as-past.' (Assmann 2008, 98)

According to Assmann, the museum incorporates both of these forms of cultural memory within its four walls in the form of the actively selected 'canon' and the passively formed 'archive'. The tension between the object's past-ness and presence is imperative to comprehending the dynamics of cultural memory. Museums hold ornate rooms of richly decorated and framed objects, to draw visitors and stimulate debates and wonderment that remain with them after they have left the building. The museum's other rooms are attics and basements that store the objects that are not in the exhibition, but crammed out of sight

and out of mind. The active cultural memory that treats and preserves the past-as-present is what Assmann dubs canon, whereas the passive cultural memory preservation of past-as-past is signified by the archive.

The active remembering of the canon contains objects that when exhibited are framed and mediated for the future and thus planned for repetition and reuse in other exhibitions. Through this institutional framing as an important part of our cultural memory, these canonised objects are saved with the explicit objective to be shown again. Only a small proportion of artworks attain this status of being addressed for posterity. Other objects end up in the storage rooms, where they are still mediated, but have lost their immediate addressee. Without a frame, these past-as-past objects no longer hold the same authority and meaning they once did. However, as part of the archive these objects are open to novel contexts and prepared for new interpretations. (Assmann 2008, 99) The canonised, active cultural memory is based on a small number of objects (texts, artefacts, persons, places, myths) that have been carefully selected and endowed with a sacred status of past-as-present and holding a superior meaning above other objects. The hierarchical traditional museums favour certain objects, which will attain a heightened position in our cultural memory. This selection process is not done in the communal manner of Halbwachs' collective memory, but by a small group of curators and archivists working at the museum.

Recycling the Canon

The collective identity created by these objects is defined by a shortage of space, which means that the cultural capital of society has to be continuously recycled in new iterations – which again reaffirms the art object's sacred status. By Assmann's definition, the canon is not a hit list and it is not re-invented with every generation. Instead it outlives each generation and only affords the following generations the ability to reinterpret the canon according to the current zeitgeist. (Assmann 2008, 104)

The canon's holdings can be repositioned and thereby reinterpreted by relating it to the objects from the archive. The objects of the canon may fall back into the archive, and in an equal manner, objects of the archive may be rediscovered and introduced into the everyday memory of the canon. According to Assmann, the interplay between passive and active memory is what makes possible the dialogues of cultural memory. (Assmann 2008, 106) The selection

process, whereby objects enter or leave the cultural memory exists in a dialogical relationship between the archive and the canon. However, it is not clear from Assmann's article *how* the selection process takes place. Who distinguishes between what is included in the active cultural memory of the canon and what is stored in the archive? The obvious answer seems to fall on the curator, as she creates exhibitions for the museum on the basis of what she finds in the archive. However, the objects in the archive are only there because they have been preserved and picked out by the archivist, effectively preparing and curating the archive for the curator. It could thus be argued that the true curator of cultural memory is the archivist. To have our museums "curated" by a single person or small group of people creates a disparity between those who can and cannot select what to include in the archive. The political power the archive and museum hold over cultural memory shows how the archive is still a space of state and institutional authority.

Profane Space

As Aleida Assmann's idea of the continuous revision of canon through a re-evaluation of archived and canonised objects, Boris Groys examines the search for cultural innovation in his article "One the New". He argues that the initial shock over the loss of history – after globalisation and the loss of a cultural ruling class – has now been replaced by acceptance or even joy. Instead, the focus is now on the creation of 'the new' in an age of reproductions.

Drawing on Marcel Duchamp's introduction of the readymade into the art world as a historical turn for the definition of art, Groys creates a distinction between the archive and what he calls 'profane space'. For Groys, every cultural innovation after Duchamp's *Fountain* follows the same logic as when the urinal was first introduced into an exhibition space. Groys defines profane space as everything that is not yet included in the archive – a space outside the canon and archive that Assmann doesn't even consider. A 'value border' exists between the hierarchical nature of the archive and the profane space of objects considered unworthy of preservation. This border between the two spaces is the determining factor in whether or not an object holds any cultural value.

In spite of the strict separation between what has cultural value and what does not, there is a constant renegotiation of value in the cultural realm. This re-valuation is what creates the culturally new – the continuous process of cultural innovation. When an object from profane space is included into the

archive the value border is redrawn, by comparing the profane object with an object in the cultural archive. Duchamp does this by turning the urinal upside down, which likens it to a fountain or a sitting Buddha. He thereby associates the profane urinal with existing values and objects within the archive. This valorising comparison creates a link between the profane object and current cultural values, so the object is introduced into the hierarchy of the archive.

The established hierarchies (or Derridean 'concept') of the archive are thus reconfigured by every new addition, assuring innovation of cultural memory. (Abdullah and Benzer 2011, 72) Unlike Assmann, Groys' archive is not a cultural dead-space where objects are forgotten and fade out of cultural memory. The selection process that Assmann could not define is described by Groys as the comparison between what is in the archive, and that, which is not (yet). Groys also moves the responsibility of selection and negotiation between what is and is not remembered from the archivist or curator to the artist. This makes sense in the current artistic landscape, where the distance between the curator and the artists is constantly shrinking. However, it does not solve the problem for the artists of the past who can no longer speak on their own behalf. As is the case for Derrida, the archive is a space of political power structures that ensures continued cultural innovation.

Memory and Media

Memory has been inextricably tied to media ever since the flint axe when humans first became able to externalise memories into a medium, accessible by others. The development of new media and societal structures has changed the relations between memory and media, when mass-produced technologies impose specific modes of interaction and use. These mass-produced media impose control measures on our externalised memories and therefore our memory.

The Industrial Model of Memory

French philosopher and student of Derrida, Bernard Stiegler traces the evolution of human memory through technological development. Stiegler works with the assumption that since humans have always been technical beings, human memory from the outset is exteriorised in hypomnēmata (technical

memory aids). From the flint axe to the internet, hypomnēmata are something essentially human.

With the proliferation of mass media such as radio, television and the phonograph more and more of our memory have been consigned to this ‘industrial model’ of memory. These industrial memory aids of technical recording (photography, phonography and cinematography) separate producers from receivers, who are no longer typically able to alter or produce own recordings. According to Stiegler, we are currently experiencing a process of change, in which we are undergoing a move from industrial to digital hypomnēmata. (Stiegler 2010, 81) This process is a move away from passively consumed broadcast media to smartphones, GPS’ and the internet at large, where the consumer becomes the producer. For Stiegler, the question about hypomnēmata is a question of the relationship between anamnēsis and new technologies – how new media interacts with remembering.

Amnesia through Technology

There is an intimate relationship between hypomnēmata and knowledge. As we assign more and more of our memory to various technologies, we also lose great parts of our knowledge. Stiegler compares it to losing a cell phone, with the sudden realisation that the contacts stored within it are all but gone due to the convenience of the device as a memory bearer. As our memory is assigned to cell phones and laptops the fear is that we are also increasingly signing off knowledge to these apparatuses, and not least the industries that make them.

As we delegate our knowledge to the service industries, which network and formalise our apparatuses, we are also accepting the hegemony these industries enforce. Stiegler remarks; “The more we delegate the small tasks that make up the warp and woof of our lives [...] the more superfluous *we* will become: we will lose not only our *know-how* but also our *knowing-how-to-live-well*.” (Stiegler 2010, 68, my emphasis) This new capitalism puts the power in the hand of the producers, leaving the rest as near-blind consumers.

The everyday realisation of displaced knowledge and memory through external memory aids causes feelings of incompetence. As in the example of the lost cell phone, we are suddenly made aware of our lacking knowledge. Internal remembering seems safer to rely on than the external technologies, which we do

not fully comprehend. Hence we trust our internalised memories over the memory stored in the archive.

Grammatisation

Stiegler uses the concept of ‘grammatisation,’ to describe how hypomnēmata shape our lives by becoming discrete elements in them. One example is the way that elements of writing find their way into the realm of speech. To this day, new terms and acronyms (especially with the popularisation of the internet) enter the spoken language all the time. The same could be said of how photography has fundamentally changed our relationship with time, painting and history. These processes change and surpass our immediate awareness in the sphere of language and invade the sphere of our body. Stiegler points out how this process of grammatisation is in fact creating a biopolitics of memory.

Through the use of technologies we do not understand, Stiegler says that we are at the mercy of those who created them: “[...] the proletariat is an economic actor without memory and, so, without knowledge. Having relinquished that knowledge to the gesture-reproducing machine, but without any knowledge of its workings, the proletariat becomes a slave once again.” (Stiegler 2010, 71) Stiegler describes this as a ‘cognitive capitalism’ brought on by the service industry. Grammatisation is characterised as the history of exteriorisation of memory – introducing discrete elements from technologies determined by hyper industrial service economies, which through their design makes externalised memory the object of biopolitical structures of control. (Stiegler 2010, 71)

Biopolitics and Technologies of Power

As we delegate more knowledge and memories to technologies, we in turn become progressively more dependent on them and the capitalist hegemony brought into existence by the service economy. The political power wielded by service economy is close to Michel Foucault's concept of ‘biopolitics.’ This term is largely derived from his notion of ‘biopower’ presented in his lecture series at the Collège de France in 1976-78

Biopower is the extension of state power over both the physical and political bodies of a population. As Foucault writes it in his speech on the 17th of March 1976: “Biopolitics deals with the population, with the population as political problem, as a problem that is at once scientific and political, as a

biological problem and as power's problem." (Foucault 2003, 245) Biopolitics is described as being split between society's 'disciplinary' and 'regulatory' effects on its citizens as the result of medical and economic advances in the late 18th century: "We have two technologies of power [...] One technology is disciplinary; it centers on the body [...] and manipulates the body as a source of forces that have to be rendered both useful and docile. And we also have a second technology which is centered [...] upon life: a technology which brings together the mass effects characteristic of a population." (Foucault 2003, 249) Foucault thus defines the two technologies as the disciplinary technology of the individual body, and the regulatory technology of the population.

Where these two technologies intersect in the end of the 19th century is the 'norm'. Foucault says, "[t]he norm is something that can be applied to both a body one wishes to discipline and a population one wishes to regularize [...]" We are, then, in a power that has taken control of both the body and life [...]" (Foucault 2003, 253) The resulting normative society is thus ruled by both social regulation and individual self-governance. Archives are a central biopolitical technology that regulates the past and present for the normative society's power over its population.

Innovation and Societies of Consumption

Foucault looked primarily at the disciplinary effects of modelled grid-patterned towns and the surveillance of sexuality. (Foucault 2003, 251) But instead, Stiegler turns his gaze on the disciplinary effects of broadcast media – and particularly the effects on individual memory. The analogue techniques extend the influence of biopolitics into a new stage of grammatisation, where the disciplinary society exists even within our external memories. Put simply, the culture industry's control over broadcast media means that – vis-à-vis Derrida's procedural relation between anamnēsis and hypomnēsis – our internal memories are inhabited by the disciplinary measures of biopolitics. Technologies such as phones and laptops are disciplining our external memories at the whims of the creators of these devices. Because our internal and external memories are so inextricably linked, every change to external memories affect changes to our internal memory. Where we used to be in control of our externalised memories, we are now at the mercy of the one-way-communication of broadcast media.

Stiegler shows how the ‘society of consumption’ grew out of the large apparatuses of production from the 19th century and the industry’s attempt to outweigh their expenses. (Stiegler 2010, 77) Since our relationship to hypomnēmata is undergoing constant innovation, this regime of a society of consumption is the industry’s answer – to create more innovation (technologies) in order to keep up with the permanent innovation of our memory. By presupposing the continuous changes to human behaviour, the industrial society makes mere consumers out of its citizens. Technological communication (initially by telephone and electrical telegraph) between individuals is now a primary means of socialisation and the backbone of industrial democracies. Mass media outlets are thus capable of steering societies towards a necessity for novel commodities, which in turn sustains capitalism.

Digital Technologies and Participatory Societies

Stiegler goes on to argue that the emergence of digital technologies has re-introduced the dialogical nature of language into mass media. As in language, the sender (speaker) is also the receiver (listener), which individuates her in relations to the other receivers. This individual participation in a collective act of dialogue brings about a communal transformation of language itself. This act of individuation through dialogue is exactly what the industrial society of consumption wants to abolish. (Stiegler 2010, 82) When the receiver and sender are conflated, there is no space for the service economy to introduce new systems of control.

Digital technologies – but in particular the internet – has changed the power balance of the service economy. Audio-visual memory can now be produced with participatory technologies. Stiegler calls this new stage of grammatisation, the ‘associated’ (as opposed to the ‘disassociated’) technical milieu. In the disassociated milieu, hypomnēmata advances the interests of the service economy. In the associated milieu – when individual remembering and external memory aids are connected – meaningful participatory symbolic practices are constituted by the distribution of memory through hypomnēmata. Put differently, the disassociated milieu exists when our collective remembering is controlled by external technologies of the service industry. The associated milieu exists when we remember collectively through externalised technologies. The internet has brought about an associated technical milieu that, according to Stiegler, consequently marks the end of disassociated milieus. Users no

longer have to be deprived of knowledge and can participate in a global social structures and their transformation. (Stiegler 2010, 83) This claim is perhaps slightly too optimistic in a time where the internet and social networks are some of the most surveillance-ridden and controlled spaces of our lives. The potential for participation in and transformation of global social structures definitely exists on the internet, but they must be actively sought out away from the service economy's grasp on the network.

The Shortcomings of New Media Technologies

Stiegler briefly touches upon how the conversion from analogue to digital technologies did not by default generate a new relationship between the consumer and producer. "Digital technologies arose out of information industries that themselves developed through the strategic commodification of information as stability [...]" (Stiegler 2010, 78) However, Stiegler is largely uncritical towards the continued connection between the service industry and the different hypomnēmata facing internet users. Not only are the hardware components that make up computer or smartphone technologies from the same industry – as shown in Stiegler's own quote above – but operating systems, browsers and many of the most visited websites are all run by the same principles of consumption and disindividualisation that govern industrial society. As Stiegler mentions free software and user-run websites that create space for dialogue and social interaction do exist and have ushered in a new age of cooperation and user participation. But the majority of users spend most of their time and money on services provided by some of today's largest companies in the service economy such as Apple, Microsoft, Facebook, Google and Amazon. Companies that all live up to the industrial maxim of permanent innovation, promoting mass consumption and thereby limiting autonomy and participation.

Political Action through Networks and Archives

From Derrida's description of the archives in ancient Greece, to Stiegler's explanation of how memories are determined by the technologies we use, over Groys' political action based on the suspicions of media, to Assmann's call for active remembering in order to save what might be forgotten. It is evident that archives and new media are steeped in social and political

structures, which shape our society and our memory of it. Aware of the structures that shape our archives, media and memory, the question becomes how we change these structures and reclaim influence over our past and cultural memory.

Marxist sociologist Antonio Hardt and literary theorist Michael Negri have written several books together on what they see as a new golden age – in recent decades after the cold war – for global citizenship and breaking free from state and industrial power structures. Hardt and Negri are evidently influenced by Foucault’s idea of biopolitics with a larger focus on resisting the regulatory measures of the normative society.

Empire

The organisation of archives has historically been driven by state – and later private – institutions, which have their own political interests in what does and does not become part of cultural memory. In *Empire*, Hardt and Negri expand on this idea and describe through major economic advances in history, how a new capitalism has risen in the wake of the fall of the Berlin wall. The upholders of this new capitalism are described under the common name, ‘Empire’. The term is not to be understood as a description of the singular institutions but as the global society’s actual immanent logic and modes of operation; much like Foucault’s biopolitics and disciplinary society. In digital terms, Empire cannot be understood as the software giant Microsoft but as Windows, the fundamental operating system with its underlying automatic updates.

With globalisation and the free movement across borders after the fall of the Berlin wall, citizens have become nomadic: “New figures of struggle and new subjectivities are produced in the conjecture of events, in the universal nomadism [...] They are not posed merely against the imperial system—they are not simply negative forces. They also express, nourish, and develop positively their own constituent projects.” (Hardt and Negri 2001, 61) Empire is not originally a construct forced on us from above, but a result of the global citizen’s own actions in the wake of the capitalist economy.

Multitude

Opposite Empire stands ‘the multitude’, which is a singularity of new political subjects – a rebellious multitude opposed the intrusive powers of

Empire. The multitude exercises its powers through autonomous work, where it produces and reproduces a new ontological reality – it creates a new place outside of Empire’s non-place. Although the multitude creates itself as autonomous political subjects, it is also the creator of Empire itself; “The deterritorializing power of the multitude is the productive force that sustains Empire and at the same time the force that calls for and makes necessary its destruction.” (Hardt and Negri 2001, 61) The improved quality of life attained through capitalist society is at the same time what created Empire and the global disparity in wealth. The creation of the multitude is brought on by precisely this disparity and dissatisfaction with Empire; what Foucault would call the normative society.

Through collaborative work the multitude constructs a new reality opposed to the everyday work done to advance the power of the Empire. As Hardt and Negri writes, “The multitude affirms its singularity by inverting the ideological illusion that all humans on the global surfaces of the world market are interchangeable.” (Hardt and Negri 2001, 395) Through working on the multitude’s own terms within the Imperial economy, the multitude establishes their autonomy and creates themselves as irreplaceable parts in the system. Rather than letting themselves be driven by state and private institutions, the multitude shifts the power balance and seizes political agency. New media artists exhibit many of the same characteristics as the multitude; by working outside of the institutions and removing themselves from the commoditised art market.

Immaterial Labour

The collaborative work of the multitude came as a result of the move to an informational economy, where labour practices have changed. Information and communication has become integral parts of production processes in the western world. Furthermore, since the production of the informational economy is largely services rather than material, durable goods the work of the multitude is described as ‘immaterial labour’. Sociologist and philosopher, Maurizio Lazzarato is one of the first to use the term immaterial labour and defines it as, “labour that produces the informational and cultural content of the commodity.” (Maurizio Lazzarato in: Wright 2005) This service industry produces immaterial goods such as cultural products, knowledge or communication. The type of immaterial labour involved in many of the tasks of

archiving are what Hardt and Negri call analytical and symbolic tasks that consist of either creative, intelligent manipulation or routine symbolic tasks. Both types of labour are present in digital archives; the repetitive work of writing metadata, and the more creative tasks of developing elegant solutions to the restoration of artworks based on obsolete technologies.

Computers play a major part in redefining labour practices and relations, as more and more communication technology is seeping into the way we think and interact. Hardt and Negri call upon media philosopher Pierre Lévy's quest for an 'anthropology of cyberspace' to describe the changes digital technologies have made to notions of what it is to be human in an informational economy. With labour's inherent cooperation, immaterial labour becomes a space for social relations between workers. Hardt and Negri explains how, "[i]n the expression of its own creative energies, immaterial labour thus seems to provide the potential for a kind of spontaneous and elementary communism." (Hardt and Negri 2001, 294) The spontaneous communism mentioned by Hardt and Negri is seen as a possibility for the multitude to break free from Empire. When creating an artwork the artist can produce something that is not a commodity for the informational society. This radical potential is thus inherent in the labour practices themselves. Whether or not the artwork was created with the tools of the art market, these creative processes allow the creation of an autonomous space outside of the art market. In using the labour practices taught by schools and workplaces in new ways, people create a subversive space within the informational economy.

Network Control

Many technological and societal advances of capitalist economies have been presented as opportunities for its citizens. Improving quality of life has been a major ambition for capitalism. But the improvements bring with them new measures of control, which impede the autonomy and freedom of the population.

To guarantee profits and order, the institutions of immaterial economy must actively construct and police the global network – which is definitely the case of the China and US government's attempts to establish control over copyright and access on the internet. Hardt and Negri draw the analogy between global information infrastructures to the construction of railways by imperial economies in the 19th and 20th century. (Hardt and Negri 2001, 298)

The interconnected network of towns and cities is a great gift to the population, but also a primary means of exercising government control and opening up new frontiers for capitalist enterprises. The difference between the railways and the backbone of the internet is that the railways were always external to the industrial production – performing as communication and transportation to other raw materials. With present-day production; information and communication are the raw materials produced. “The network itself is the site of both production and circulation.” (Hardt and Negri 2001, 298) With this method of production, the workers internalise the production and are able to take radical actions against it.

The Mediatised

In *Declaration* from 2012, Hardt and Negri explain how government and industry control over information and communication networks has created what they dub ‘the mediatised’. Through constant confrontation with control mechanisms on the internet, users have taught themselves techniques to avoid these restrictive measures and create a space for their own on the network. When the singular user creates spaces against the Empire, she asserts herself in the network as an opposing force. As Hardt and Negri say, “[...] becoming singular, in contrast to becoming individual, means finding once again the subjective force in being together.” (Hardt and Negri 2012, 24) Through their singularity, users discover that there are no actions against the Empire without other singularities.

When users constitute themselves in relationships to others, they open the possibility to create new truths. These truths – different to those of the Empire – are created when media become tools for the users’ collective self-production – through the users’ collective communication. Through the linguistic interaction between users, new knowledge and political affects take root. Political initiatives cannot be created in a vacuum, as stated by Hardt and Negri; “It requires a leap from the individual to the collective in order to become an autonomous and participating political subject.” (Hardt and Negri 2012, 46) Users need to collaborate in a multitude, in order to change the institutional control over new media art preservation and their archives. This change is a political one, where the autonomous collective create archives outside the control structures of the conventional archive.

The Rhizomatic

These autonomous collectives are powerful in their flattened hierarchies. Hardt and Negri state; “These [collectives] are powerful not despite their lack of leaders, but because of it. They are organised horizontally as multitudes, and their insistence on democracy on all levels is more than a virtue but a key to their power.” (Hardt and Negri 2012, 70) The networks of the internet create new leaderless hierarchies that though their communal relations create political affects.

Stiegler’s idea of the consumer as producer in the digital age implies the collective and egalitarian structure of new media art archives. Philosophers Gilles Deleuze and Félix Guattari mirror the idea of an egalitarian network in *Capitalism and Schizophrenia*; “A rhizome is characterized by ceaselessly established connections between semiotic chains, organizations of power, and circumstances relative to the arts, sciences, and social struggles.” (Deleuze and Guattari 1987, 7) They write about rhizomatic media structures, where all singular nodes are inter-connected in a vast network. The idea of the rhizome derives from the botanical term that describes the subterranean structure of a root network of various plants, which sends off new roots and shoots from every node. The rhizome is often referred to as an example of how the internet works – or should work – with access to everything, as nodes interconnect in a network of a free and open internet.

The Right to Global Citizenship

In the efforts of producing digital archives on the internet, users work to create cultural memories on the terms of the multitude instead of the Empire. Workers create a new geography through autonomous movements, which lead to the multitude’s first political claim – their right to global citizenship. Creating a networked archive is to create a space for the multitude across national borders. Or as Hardt and Negri puts it rather poetically; “A new geography is established by the multitude as the productive flow of bodies define new rivers and ports. The cities of earth will become at once great deposits of cooperating humanity and locomotives for circulation, temporary residences and networks of the mass distribution of living humanity.” (Hardt and Negri 2001, 397) From a geographical point of view, the internet is already a borderless space, except for national attempts to limit the access of their

citizens. However, even these limitations of the Empire are challenged, as users interact and collaborate in the liminal space of the internet.

The Right to Reappropriation

Another political claim set forth by Hardt and Negri is the multitude's right to reappropriation, which describes the free access to and control of knowledge, information and communication – a right to self-control and self-production within language. (Hardt and Negri 2001, 407) As mentioned above, the machines and methods of imperial production are not only tools, but become an immanent part of the multitude. The worker's thinking becomes increasingly mechanical, which entails personal alienation. Therefore, the multitude must regain its self-control by using these machines in novel ways, where the multitude becomes an autonomous part of the production process. By reclaiming control of their language through subversive acts, the multitude can create a collective history that reclaims their body and past. In the realm of archival work, collaborative efforts to create online archives produces new modes of communication between users across borders, which constructs a new space in which to regain control over the production of cultural memories.

The political potential of new media art archives is clear when seen through the study of Hardt and Negri. Archives are historically a city's prime method of control over its citizens – a place of authority and legitimisation of state ideologies, as shown by Derrida. But with the emergence of the internet even archives can become sites of political action and subversive tactics.

With the internet increasingly ingrained in working and everyday life it is necessary that this technology be used subversively against the Empire. Large parts of the internet are organised after Imperial control measures; art museums and archives are largely plain mirrors of the physical state and private institutions. By assimilating the movements of our digital bodies through cyberspace in the creation of digital archives it is possible to create new radical spaces for the multitude – a space defined by user's movements rather than the service industry's tradition and prescriptions on how to form archives.

Rhizome's ArtBase

In the wake of new media technologies and the subsequent proliferation of global communities, artistic practices of new media art have begun to take

form. Created outside of any institutional setting and shared on an interconnected network, these artworks are inherently subversive and reject national and economical institutions. However, born-digital new media artworks¹² also lack the physicality of traditional media, and are therefore far more susceptible to obsolescence in the current fast-paced innovation of media technologies. While new media art can be interpreted as products of the multitude in Empire's non-place, the artists and their artworks are still susceptible to the control mechanisms of the service economy. New media artwork's rejection – politically and physically – of institutional archives is consequently linked to its demise in art history. To retain a place in cultural memory and critical discourse new media art needs an archive of its past, present.

Ensuring a common cultural memory entails that documented objects and interactions exist to be archived and remembered. However, archives must let users access and engage with the objects lest they be forgotten. New media art challenges the archivist by entering art into the digital realm where autonomy, preservation and ownership challenge traditional archives and thus our cultural memory.

An Archive of New Media Art

So far the majority of digital art archives have been the product of established art museums and archives¹³ trying to reach out to a novel art form. These institutions bring with them decades of experience with archiving and preserving analogue art, but little understanding of how to conserve new media art or the cultural codes of the digital realm. While most museums have archival techniques to safeguard the cultural memory of traditional artworks, the lack of maintained new media art archives leaves these artworks vulnerable to atrophy and their cultural memory to an uncertain fate.

While new media art is an active and growing art form, a comprehensive and useful archive of its activities is still nowhere to be found. Attempts to

¹² New media art is a contested and broad category that is generally defined as art engaging with emerging media technologies and concerned with the cultural, political and aesthetic possibilities provided by these tools. The term new media art was broadly adopted in 1994 with the popularisation of the internet. Therefore, new media art is often displayed online and digital in nature. For the purpose of this thesis, new media art is defined by born-digital artworks, since these artworks propose vast novel challenges and changes to preservation, archiving and cultural memory.

¹³ These include institutions such as the Whitney Museum of American Art, the Guggenheim, the Walker Art Center, ZKM's Media Museum collections and the Library of Congress NDSA (National Digital Stewardship Alliance).

better the cultural memory of new media art exist. With ArtBase, Rhizome has created a user-influenced archive of new media art to assemble the stepping-stones for cultural memory to develop a nuanced history of new media art. Rhizome is a fascinating case, since it tries to straddle the divide between an autonomous artist-run project and an authoritative institution. This is reflected in ArtBase, where Rhizome tries to be at once an open, participatory, and collaborative archive and simultaneously institutionalising, selective, curatorial and conservational tastemakers. Coupled with progressive stances on preservation and a proactive attitude to preserving artworks now rather than later. Rhizome's ArtBase is a melting pot of remarkable issues and ideas that raise valuable concerns about archiving and cultural memorialisation of new media art that beg further investigation.

The History of Rhizome and ArtBase

In 1996, Mark Tribe founded Rhizome as a mailing list to promote new media art and in August that year the website opened to the public. In 1999 Rhizome established the “[...] artist-driven, web-based archive of new media and digital art” (Rhizome ArtBase) – ArtBase – as a way to promote and “[...] share [new media artworks] within a relevant context”. (Rhizome ArtBase) Since then, ArtBase has taken on the responsibility to collect, archive and preserve new media artworks.

In its current form, the ArtBase is an online archive of new media art, updated by its users and the Rhizome staff. The Rhizome staff is comprised by 15 people in all, who take care of all site maintenance, preservation and archiving of the artworks, which are all available to view online. The core staff includes Artistic Director Michael Connor, Executive Director Heather Corcoran, Digital Conservator Dragan Espenschied amongst others. The goal of the artist-run ArtBase is to be a public access point to a comprehensive collection of new media art where artists can present and discuss their work. To oversee the institution, Rhizome also has a board of 16 trustees with Greg Pass as chairman, and original founder of Rhizome, Mark Tribe, amongst its members. (Rhizome)

Rhizome.org is a not-for-profit organisation with offices situated in the New Museum of Contemporary Art in New York City. The New Museum was founded in 1977 establishing “[...] an exhibition, information, and documentation center for contemporary art made [by] living artists who do not

yet have wide public exposure or critical acceptance.” (The New Museum) In 2003, Rhizome announced that it was provided office space, accounting, clerical and other administrative services in the New Museum. Rhizome was reportedly able to reduce its spending from \$323,000 to \$100,000 in the following fiscal year. (Mirapaul 2003) However, when asked about the relationship between Rhizome and the New Museum in October 2014, digital conservator Dragan Espenschied claimed that Rhizome was otherwise unaffiliated with the museum and its activities. (Ewé 2014) Currently, Rhizome – and by extension ArtBase – is funded by the New York State Council on the Arts (NYSCA), receiving various financial grants annually for the past 15 years. (New York State Council on the Arts)

Linked and Cloned Objects

The ArtBase archive is overlooked by the staff at Rhizome, and consists of digital art objects such as software art, computer games, and documentation of new media performance and installation art, many – but not all – of which are ‘born digital’ (created in and for a digital environment). (Williams 2003, 39) For their own purposes, the Rhizome staff sort the artworks into two categories: ‘linked’ and ‘cloned’ objects. Linked objects contain an artist statement and biography, a description, keywords and other indexical information, screenshot or photograph of the art work, and a URL linking to the artwork’s location on another website. The cloned objects include all of the same information as the linked objects as well as an archived copy of the artwork on Rhizome’s servers. (Williams 2003, 39) Although the cloned artworks are hosted on Rhizome’s servers, the artworks are not embedded into the ArtBase’s artwork page. The cloned artworks are still represented in the ArtBase as nothing more than a hyperlink that takes you to another website containing the preserved copy of the artwork.

The Selection Process

The archival process has changed slightly over the years as new challenges of preservation and opportunities for increased storage capacity arise. Any user may submit their artwork to be included in the ArtBase as a linked object. This is done by filling out the “Artist Questionnaire” with information about the artwork. In the case that Rhizome’s staff wants to change the status of the linked artwork to a cloned object, the artist is asked to

also fill out requests for specific preservation practises, and the artist's definition of artwork authenticity.

When the artist has entered the artwork to the ArtBase, the Rhizome's curatorial staff initiates the selection process to decide whether the artwork will be stored on Rhizome's servers and ensured preservation by the Rhizome staff, or if it will simply stay untouched as a linked object. The selection process is carried out when the "Rhizome staff reviews the artwork and accepts or rejects the artwork based on the predetermined Rhizome ArtBase Selection Criteria." (Rhizome ArtBase) The selection is based on a judgement of the artwork's historical importance within new media art, whether it challenges the boundaries of the art form amongst other criteria decided on a case-to-case basis. If accepted as a cloned artwork, it is then up to Rhizome's conservator to decide what the work requires and which actions should be taken to ensure the continued representation of the work as close to the original as possible. Selected artworks gain the special distinction of being part of the "ArtBase Selection," which sets them apart from the rest of the artworks with a small banner on the artwork's page and increased visibility on the front page. However, selected artworks are displayed in the same archive as the linked artworks, where ArtBase users will easily overlook the differences between the two categories.

About ArtBase

As just one website amongst several resources on new media art on the internet, Rhizome has to define in succinct and resolute words what ArtBase's 'raison d'être' is. The ArtBase "About" page is split up into three headings, "Our Mission", "The Archival Process" and "Philosophy." (Rhizome ArtBase) "Our Mission" maps out the central goals and a short history of the ArtBase for artists and users browsing the ArtBase website; "The Archival Process" explains in brief, the steps an archived object goes through when submitted, with three informative graphics; and lastly, the "Philosophy"-section deals with preservation, restoration and intellectual property.

From the "About" page, users can also access a page with the two ArtBase policies; the "Collection Management Policy" that goes into further detail about the mission, scope, artwork submission and preservation, plus the "Artist Agreement Policy" that elaborates on the terms and conditions for artwork consigned to the ArtBase. Compared to the "About" page, both of

these policies take on a far more official and authoritative form with numbered sections, legal details and a distinctively different typography from the rest of the website, reminiscent of a legal document or contract.

Analysing ArtBase

Derrida, Steedman, Foucault, Halbwachs and Assmann each view memory in their own right, but what unites them all is the fact that memory and history are constructs assembled by institutions and individuals. To analyse ArtBase the different constructs that make up the cultural memory must be identified and deconstructed to reveal the underlying framework. By disseminating the language, selection of artworks, and Rhizome's engagement with it (as curators, conservators and archivists) the intentions, underlying structures and authority of ArtBase will come into view. If the archive is – as Derrida says – always positioned towards the future, a look at ArtBase's collection and goals as an archival institution will shed light on what Rhizome consider worth remembering for posterity.

With reference to Assmann's active memories of the past-as-present and Steedman's idea that objects need to be engaged with to obtain meaning, ArtBase should be able to adhere to these same principles of active cultural memory in order to be more than just a repository of potential forgetfulness. In his inaugural editorial for Rhizome, Espenschied addresses ArtBase as a passive archive of the past; "As correctly stated in the 2011 report by Ben Fino-Radin, the ArtBase has become an 'archive of historic media art.' [...] The ArtBase is now a heavily curated place—with introductions, categories—as if all of it happened in the past, which it did." (Espenschied 2014) It is worth looking into what aspects of the ArtBase work against the element of engagement and user-interaction. "I wonder how this happened, how the 'base' became an 'archive,' grew stale and became something 'historic.' I don't want to say this is bad, I'm just wondering; after all, it shares this trajectory with many others." (Espenschied 2014) As Espenschied points out, this is not an isolated problem, but a problem facing new media art archives across the board. With these aspects in mind, suggestions can be made on how to improve and advance ArtBase to be an evolving archive from which to build an active cultural memory of new media art.

Crowd-sourcing

ArtBase makes it possible for users to add and edit metadata information about the artworks and curate user-collections under a theme, with personalised descriptions. These features are available for any users with a free account, but Rhizome does very little to encourage their users to do so or source these menial tasks to the crowd. Andrew Lih describes crowd-sourced labour in his article about Wikipedia and what he calls ‘sustainable volunteerism’ – the problem of keeping users interested in building a database beyond the formative, initial entries: “[...] crowds can do remarkably expert work if given the right collaborative incentives and emergent coordination systems.” (Lih 2013, 189) As long as the structures and systems are in place users can and will do specialist work voluntarily to promote their niche interests.

Crowd-sourced creativity and collective problem solving is an integral part of many internet communities, where efficiency and gradual improvement is key. Within crowd-sourced communities exists an expectation for community support in the form of troubleshooting, discussions, creative input, etc. Users often honour this communal assistance and come to expect it of one another. Lih goes on to explain the complex results that have come out of Wikipedia’s very simple set of rules: “[...] Wikipedia is a positive example of an emergent phenomenon for constructing knowledge – in which a few simple rules understood and acted upon by independent individual editors can create larger, complex results [...]” (Lih 2013, 186) Although Rhizome has attempted to implement a degree of crowd-sourcing in the editing of the artwork’s metadata, these initiatives feel more like simple user feedback than an actual engagement with the archive. The limited amount of responsibility and scarcely promoted user-editing aspects makes ArtBase difficult for users to interact with on a structural level. If the right incentives – such as collaborative responsibility and co-influence – were implemented, ArtBase could draw from the pool of expert knowledge in their anonymous user base.

The Language of ArtBase

On the surface ArtBase is an infrastructure that gives access to a resource (new media art), which plays out on an interface. In his seminal text “Database as Symbolic Form,” new media theorist Lev Manovich explains how all-new media objects are databases under the surface of their structural logic, the interface. “[C]reating a work in new media can be understood as the

construction of an interface to a database.” (Manovich 1999, 86) As a new media object, ArtBase is – at its core – just a database of text, document images of artworks and hyperlinks. The interface of ArtBase is strung together to create the structural logic of an archive. Although German media archaeologist Wolfgang Ernst claims that, “The archive does not tell stories,” (Ernst 2004, 48) it would be remiss to assume that archives do not impose narratives about their position in society and in relation to its collection – as is Manovich’s claim. The database resembles the archive in the sense of being a collection of objects, but the major difference between the two lies in the metadata and hierarchies that the archive bestows upon its collection. The archive is a database of objects, but it also contains numerous narratives as written by the Rhizome staff.

In analysing the ArtBase (and websites at large), one should look at the ways in which the institution communicates with its users. In this case the primary method of communication is the written language. The relationship between the user and ArtBase is built up around written content consisting of news updates, artwork metadata and mission statements.

The artworks in the archive are presented through individual artwork pages (not unlike the entries in Wikipedia or profile pages on Facebook), which put a larger emphasis on written information than images of the artwork. This information includes a description of the artwork and the artist, indexical tags, user comments and metadata such as year, credits and URLs for the artwork. When examining the written language of the ArtBase it is worth keeping in mind what Derrida said about the inherent power structures of archives. That the archive’s political influence is always created through the authority and mechanisms of the institutions surrounding the archive. For Steedman, the political power lies within the user, who creates stories from what she finds in the archive. The relationship between the user and the institution is a space for display and constant negotiations of political power.

The Textual Relation

Discourse analyst Alan Sekula says; “[...] archives are not neutral; they embody the power inherent in accumulation, collection and hoarding as well as that power inherent in the command of the lexicon and rules of language [...] any archive, no matter how small, appeals indirectly to these institutions for its authority.” (Sekula, Alan in: Rose 2007, 173) To investigate how ArtBase

presents itself to its audience, it is therefore imperative to look closer at the 'textual orientation' of the ArtBase.

The textual orientation is the ways in which people and institutions accomplish social actions within social and cultural frameworks, as described by Chris Barker and Dariusz Galasinski in *Cultural Studies and Discourse Analysis*: “[We shall be aware of] functions within the utterance as well as the utterance's functions within its context.” (Garter and Galasinski 2001, 63) In the present case, the social actions might not be clear to the user or even deliberately intended by Rhizome itself. Social actions are the result of the relationship between the user and institution within the cultural framework. Which reveals itself by analysing the texts presented by the institution. To further understand how ArtBase wants to present itself, an analysis of the “Mission Statement” and “Collection Management Policy” will serve as a rich resource, since these documents – by their very name – purport to contain the foundational pillars supporting ArtBase.

Selective Truths

According to Foucault there is always a duality of meanings taking place within a text; “[...] this primary and ultimate meaning springs up through the manifest formulations, it hides beneath what appears, and secretly duplicates it, because each discourse contains the power to say something other than what it actually says, and thus to embrace a plurality of meanings: a plethora of the 'signified' in relation to a single 'signifier.’” (Foucault 1972, 118) That is to say, the language constructed in texts like the “Mission Statement” is by design a representation of a truth that is selective, where choices have been made as to which truth to include and in what order. This arrangement of truths helps the text impose a preferred understanding upon the reader. Through analysis, it is possible to come closer to some of the text's hidden truths. As Garter and Galasinski states, this practice of representation created by texts, “[...] resting on more or less contested cultural classifications of people and circumstances, are always part of a communicative situation marked by, and indicative of, the power relations between communicators and the subjects of representation.” (Garter and Galasinski 2001, 65) In the case of the “Mission Statement,” the subjects of communication are the users and particularly the artists present in the ArtBase. The communicators are the institutions of Rhizome, ArtBase and their staff.

The Free Archive

Several themes permeate the text of the “Collection Management Policy”: the ideal of a free and open internet, canonisation, comparisons to conventional archives and issues of permanence. Descriptors such as ‘public access,’ ‘interaction,’ ‘sharing’ and the need to describe the ArtBase as ‘free to browse’ all points to the wish for an open internet, where access to content is not restricted by financial ends. ArtBase’s call for sharing and interactivity again speaks to the sharing of information and collaboration that has gone hand in hand with the internet since its early days as an academic information-sharing network. I would argue that remixability and liberal intellectual property rights also fall into an understanding of what constitutes internet culture. From the lawsuits about Napster, to the copy-pasting of code and humorous images, the internet has always been a space for experimentation with intellectual property rights. However, the artworks in ArtBase are almost exclusively presented in the form of documentation. With linked objects constituting by far the largest amount of artworks in the archive, ArtBase in most cases just displays an image and/or descriptive text, essentially making it an archive of metadata rather than actual art objects.

Instead of breaking with the century old discipline of the museum display, ArtBase still employs the universal rule that users cannot touch the exhibits. In this digital space, there is not touching the artworks due to the lack of any open source structure of the artworks in the ArtBase. The result of this restrictive method of display is the production of an archive-user who merely observes artworks. To fulfil Steedman and Assmann’s requirements for interaction with the objects in the archive, the users need to be able to “touch” and take apart the artworks.

The Legitimised Archive

The ArtBase “Mission Statement” also contains a reoccurrence of terms with relation to the canon and the attempt to historicise new media art in the sense noted by Fino-Radin and Espenschied earlier. Reminiscent of traditional archives, ArtBase describes its own importance in terms of ‘preservation,’ ‘historically significant works,’ ‘publishing’ (as opposed to more colloquial digital terms such as uploading or posting), ‘cultural significance,’ ‘innovation,’¹⁴

¹⁴As mentioned by Boris Groys in (Groys 2008), innovation is repetition, only possible by comparison to the already canonised cultural archive.

‘provenance,’ ‘documentation’ and the emphasis on Rhizome’s own curatorial importance as an authority on selection. It is interesting that Rhizome is trying to both pave the way for new ways to think about archives as participatory spaces, yet at the same time feels the need to place new media art in a traditional art historian context of publishing, preservation and cultural significance. This attempt to encompass both approaches might be one of the largest problems facing ArtBase.

In regard to the user, museum studies professor Eilean Hooper-Greenhill states that “[...] a division is drawn [...] between knowing subjects, between the producers and consumers of knowledge, between expert and layman [...] In the public museum, the producing subject ‘works’ in the hidden spaces of the museum, while the consuming subject ‘works’ in the public spaces. Relations within the institution are skewed to privilege the hidden [...]” (Hooper-Greenhill, Eilean in: Rose 2007, 190) ArtBase stands in a unique relationship between an archive and a museum because of its dedication to “[...] provide public access to a wide-ranging collection of significant works and serve as a platform for artists to share their work [...]” (Rhizome ArtBase)

Although promoted as an archive, its open nature and free access to the artworks resembles that of an exhibition space. Each artwork is on public display with images for the user to “shop around” in the virtual space. The collection is also curated by the Rhizome staff, who function as ‘super users’ in much the same way as a curator or gallery manager in an exhibition space. By building the “ArtBase Selection” of cloned artworks Rhizome highlights certain artworks over others. Just like the museum’s layout of an exhibition valorises some artworks over others in their placement.

ArtBase retains some institutional power of the traditional museum by placing its offices within the hidden spaces of the otherwise public New Museum. There exists a blurred dichotomy between Rhizome’s hidden physical offices and behind-the-scenes curatorial processes, and their online freely displayed artworks and metadata. This dichotomy shows Rhizome’s anxieties about letting go of conventional forms of archiving and curatorial authority. Rhizome still has not fully embraced an archive model that mirrors the collaborative nature of the open internet.

Preserving New Media Art

Rhizome describes the inherent impermanence of much new media art in the second paragraph on the “About” page; “As any artist who has worked with technology for more than a few years can verify – things break. Browser support disappears, software compatibility changes, links expire.” (Rhizome ArtBase)

One of the biggest challenges facing the Rhizome staff is securing the maintenance of the artwork’s functionality for future computer systems. The hardware, software and operating systems we use today are constantly being rendered obsolete. Ben Fino-Radin is the former digital conservator at Rhizome from 2011 to 2013. In 2011 he wrote a report on the “Digital Preservation Practices and the Rhizome ArtBase,” where he writes about what he identifies as new media art’s two primary threats to preservation and access: ‘physical degradation’ and ‘data obsolescence.’ (Fino-Radin 2011)

Physical Degradation

Physical degradation refers to the inevitable deterioration of an artwork’s physical components. With traditional artworks the physical aspects of the work often outlived the artist. But the unique physicality of new media art presents new challenges. Both the storage units containing digital information of the artworks themselves, and the servers hosting the ArtBase website and all of its metadata need continuous updating and replacements.

But there are also objects in ArtBase that contain physical components. Finding room for the physical storage of these components is usually not the biggest concern for traditional archives with their physicality allowing for sizeable basements and attics. However, physical objects fall outside of the ArtBase “Collection Management Policy.” (Rhizome ArtBase) Being an online archive it is not possible for ArtBase to store physical objects in its limited physical capacity in the offices at the top floor of The New Museum. The challenge is to represent the physical object such that it is an accurate example and so the artwork can be recreated for research or future exhibition. Fino-Radin uses as an example “[...] that is representative of these challenges [...] Paul Slocum’s Dot Matrix Synth. Here the artist re-wrote the firmware of a dot matrix printer transforming it into a musical instrument. Slocum’s code reconsiders the physical potential of the printer, and allows for the harnessing of the printer’s naturally occurring mechanical sounds.” (Fino-Radin 2011, 12)

These artworks with physical attributes exist only as documentation in the Rhizome ArtBase (image, video and description). Consequently, there is no immediate possibility to access these artworks, as is otherwise the case with the digital artworks making up the majority of ArtBase's collection.

Data Obsolescence

Every object in the Rhizome ArtBase is threatened by data obsolescence. Some digital art objects are built up around interdependent software applications and technologies. As an example of data obsolescence, Fino-Radin selects the artist-collective JODI's Globalmove.us, which is a glitch website that implements HTML, JavaScript, and the Google Maps API to create its artwork. "[T]he artists have created a website that [...] creates frenetic, drawings using Google Maps interface elements. [...] Google's Map's API undergoes constant development just as any other software, and as such features, functions, and methods go through cycles of deprecation and eventual obsolescence." (Fino-Radin 2011, 10) Nothing is autonomous and thus it takes just a few software or firmware updates to render an artwork inoperative. Every time an internet browser is updated or a video codec is altered, many artworks will stop functioning. Other artworks do not exist in just one location, but function as an algorithm affecting changes to an existing platform (such as Google Maps, an image on an external website, search results, etc.). This creates a dependency between the artwork and the external platform, which makes the task of preserving the artwork almost impossible for conservators.

Fino-Radin offers a solution to this problem of interdependency between the artwork and its infrastructure. His suggestion is to stabilise the external infrastructure to make sure that artworks dependant on external databases or applications can be preserved. One solution Fino-Radin suggests in the case of artworks running on out-of-date software is emulation: "[...] if an art object will no longer run on contemporary operating systems, a piece of software may be written that emulates the environment of the work's original operating system. This strategy is quite efficient in the sense that one emulation effort can restore functionality to multiple works." (Fino-Radin 2011, 18) One issue with emulation as a method of preservation is that it essentially introduces yet another piece of dated software.

Assuming that the external database or application is not too large (as in Google Maps or Facebook), another option is to store a "snapshot" of the

infrastructure, thus ensuring that a functioning microcosm of the artwork still exists. (Fino-Radin 2011, 15) As mentioned, the problem about this approach to preservation is that some databases are simply too large to be stored as snapshots on the Rhizome servers.

Restoration in ArtBase

To restore inoperative cloned artworks within ArtBase, it is first of all crucial to identify *when* the artworks are in need of restoration. With more than 2,500 entries, manually monitoring the works in the ArtBase collection is unrealistic. This led the Rhizome staff to develop two strategies for monitoring and identifying problems requiring preservation – ‘automated scripts’ and ‘crowd sourcing.’

ArtBase has no control over the continued existence of the linked artworks in the collection. If the artist stops paying for website hosting, changes the URL or takes down the artwork, the link on the artwork’s page will break and the work will cease to functionally exist in the ArtBase. As of 2011, the conservator at Rhizome was attempting to transition all linked artworks to full archival entries hosted on ArtBase’s servers. (Fino-Radin 2011, 16) All the same, three years later the vast majority of the artworks still have the status of linked objects.

Through metadata every artwork is described with a “format” tag, which includes specification of file formats, programming language, and technologies used in the artwork. Through a controlled vocabulary based on the National Digital Information Infrastructure & Preservation Program’s format descriptions, (National Digital Information Infrastructure & Preservation Program) it is possible for scripts to quickly scan the collection for formats that are deemed obsolete. One problem identified by Fino-Radin is that issues of obsolescence (such as poor browser support) are not identifiable through an automated script. There is no way, of creating a script to search for artworks that ‘do not work, as they should.’

This is where Fino-Radin brings crowd sourcing into the picture. By making sure users have an easy and intuitive way of reporting problems with the artworks to the conservator, ArtBase creates an effective method of identifying inoperative works in the collection. As soon as a user flags a work as dysfunctional the conservator receives a notice, and can manually investigate the root of the issue. (Fino-Radin 2011, 17) If the work is affected by

obsolescence that may affect other works in the ArtBase, then it is merely a matter of identifying works through the “format” metadata and applying similar solutions.

However, as it stands ArtBase is based less on crowd sourcing and more simply on a reliance on feedback by a meagre number of users. Fino-Radin’s suggestion is not the ‘sustainable volunteerism’ with users carrying out expert work, as suggested earlier by Andrew Lih. Crowd sourced assistance requires an active community and a structure that invites users to participate in the preservation of artworks they feel a sense of responsibility for. As it is, this community does not exist and ArtBase increasingly resembles a dusty archive. It is therefore necessary that users be engaged in a way that is more than a simple viewing platform for artworks hosted on different sites.

Fino-Radin touches upon this need for a more open archive of new media art: “The belief is that obsolescence is steered by use, and re-use breathes new life into creative works.” (Fino-Radin 2011, 20) This is the same claim made by Steedman, Assmann and Erll – that for objects in the archive to enter our cultural memory, we must keep the artworks alive by using and interacting with them. Instead of relying solely on the conservator preservation should be carried out by users of ArtBase.

Rights and Legalties in Preserving Source Codes

Legal issues arise when artists wish to retain their artwork’s source code and the rights to it. Fino-Radin writes that it is in the best interest of “Rhizome to integrate into the ArtBase’s Collection Management Policy the stance that if a work is to be included in the ArtBase, source code, masters, any materials necessary for preservation must be supplied.” (Fino-Radin 2011, 20) For the artists, this requirement necessitates the giving up of rights in order to be included in the archive. There are many reasons why artists may wish to keep the source code of an art object secret – copyright concerns and the mystique of not knowing how an artwork functions plays into this.

Fino-Radin suggests a public archive of source code and including the source code for anyone to see in the metadata itself. “The ArtBase is to a great extent an educational tool. Many institutions subscribe to the ArtBase in order to offer their students full access to its contained history. Source code is inarguably a component that is significant to historic research and education.” (Fino-Radin 2011, 20) As he states, this is all in the name of education and

historic research. But there are many concerns to be taken, as source code can include information that an artist may like to keep private, and compromising information about what the source code is built upon. With some artworks artists may themselves breach the copyright of other source codes – unknowingly or otherwise. That being said, I would argue that there is far more to be gained than lost from a society based on openness, with diminished focus on ownership and authorship.

Art's Intended Form

Even though the preserved objects in the 'ArtBase Selection' are digital, museologically that are still treated as their analogue counterparts. This is apparent from the ArtBase "About" page, where the Rhizome staff writes; "At Rhizome, we aim to ensure the longevity of these works, not only to ensure that years from now an accurate record of this period of creativity and culture exists, but also to enable researchers to interact with and observe these materials in their intended forms." (Rhizome ArtBase) With ArtBase, considerable effort is put into the preservation of the few selected originals, in the hopes that the user can always experience the artwork as it was originally intended.

The idea of originality within new media art, and an artwork's 'intended form' is changing. The form in which an artwork is experienced depends on many aspects such as the browser, computer or phone used to access it. New media artworks may not be optimised for smartphones, different screens have different colour profiles, and a browser update may affect the overall "look" and formatting of a website. These issues are different than the preservation challenges mentioned above because they lie at the very nature of the multi-media realm we inhabit. An artwork will look different on each computer, smartphone or tablet, which breaks down the idea of an intended form when it comes to viewing new media art.

Evidently, this is not to say that any less attention should be given to the preservation of new media art. On the contrary, the increase in different devices for viewing new media art objects only brings with it an even greater need for preservation and proper archival practices. However, the monumental task of preservation might not have to be the work of one or two digital conservators at Rhizome. Institutions like ArtBase, devoted to preserving digital artworks may benefit from opening up their archive and looking elsewhere for archivists, programmers and conservators.

New Media Art

As stated previously, one of the biggest complications facing new media art archives is preservation. The complexity of preserving a rapidly increasing number of media types and formats is something, which many museums have yet to properly address. Older art forms all have prescriptive preservation methods, many of which can easily be applied to a considerable volume of different styles with their medium. The preservation of an oil painting from one artist does not differ much from the next – the painting style may differ, but the conservator’s methods are much the same. With new media art, preservation methods differ wildly, and the field still lacks a concise and universal system of care in the archive. As software and hardware becomes obsolete, artworks are lost in time, leaving holes in our cultural memory.

To make matters worse, the diversity of the structures and technologies used to create new media art continue to flourish at a frightening pace. In order to battle the burgeoning problems in preservation of new media art, we must rethink archival and curatorial approaches, while weeding out traditional practices that have proven to be insufficient.

Art Historical Amnesia

To map out the various ideals presented by a largely de-institutionalised art form, it is necessary to draw up the conceptual paths and timelines, which new media has taken through the years. If new media art is to have any subversive or critical potential, then it is paramount that we write an art history and discourse around these new art forms. Critics, artists and historians all need a historical framework in order to understand and talk about contemporary art and compare it to what came before. If there is no canon from which to talk about new media art, how can we expect to engage with the artworks on a critical level? It is possible to break free of the institutions of cultural memory without losing sight of history and canon? The state institutions of cultural memory may control official accounts of art history, but the internet has made possible the collective canon created through de-centralised collaboration between users.

New media theorist Lev Manovich writes about the troubles facing new media art; “In contrast to other art fields, the memory of the digital art field is

very short, while its long-term memory is practically absent. As a result, many artists working with computers [...] keep reinventing the wheel over and over again.” (Manovich 2002a, 567) The lack of a proper theoretical framework of new media art, the artists are in an amnesic relationship with the past they’re trying to interact with. New media artists do not have the art historical legacy that other art forms do. This is not only a problem for the artists, but for curators, archivists and critics too.

Manovich goes on to write; “While other fields usually have certain critical and theoretical texts which are widely known and which usually act as starting points for new arguments and debates, the digital art field cannot compare. No critical text on digital art has achieved a familiarity status that can be compared with the status of classic articles by Clement Greenberg and Rosalind Krauss (on modern art), or Andre Bazin and Laura Mulvey (on film).” (Manovich 2002a, 567) The potential for critique and canonisation is limited without theoretical and critical texts. Manovich’s 2002 article “Ten Key Texts in Digital Art” is a plea for a canonised framework of critical historical texts about an art form that draws lines back to the late 1960s.

Where Boris Groys considers canonisation as giving in to institutional power structures, it is in fact only through canonisation that new media art can find a way to critique and break free from traditional conceptions of new media art. As Julian Stallabrass writes in his 2003 book *Internet Art: The Online Clash of Culture and Commerce*, “The ethos of much online art is opposed to the established hierarchies and niceties of the mainstream art world, particularly its courting of corporations and very wealthy individuals [...]” (Stallabrass 2003, 117) The importance here is the emphasis on the traditional art market and commercial powers, and not (archival) institutions as such. Traditional approaches to archiving can be redefined to suit new media art with a coherent theoretical framework that will allow artists and archivists to distance themselves from the exclusive institutions of the art world.

Critiquing a Ubiquitous Art Form

In his 2005 review of various publications on new media art, digital art historian Charlie Gere writes, “if new media art wishes to be taken seriously then it is necessary to start to develop appropriately robust and convincing means by which it can be examined critically.” (Gere 2005, 6) Much has changed in the last decade, but new media art is still haunted by museums’ non-

inclusive approach and lack of critical scholarship. “[N]ew technologies is rarely discussed or taught in art history departments [...] Nor has it been well represented in the larger galleries and museums,” (Gere 2005, 6) Gere states. And gives the example of how Tate (Britain’s largest and most prestigious gallery of contemporary art) at the time had not had a single new media art exhibition. New media art programmes and discussion in art historical contexts everywhere have widely increased in the almost ten years since Gere’s article. However, new media art being an already established art form at the time of Gere’s writing, art history still has a lot of catching up to do.

With academic writing from the likes of Lev Manovich, Bernard Stiegler, Steve Dietz, Julian Stallabraas, Beryl Graham and Sarah Cook (to mention a few), one should think that a critical framework is already in place. Although a considerable amount of writing about new media art exists, it is simultaneously an ever-changing art form engaging in increasingly complex technologies. Gere remarks that the “[academic publications] are surveys of contemporary practice, which are excellent as reference material, but do not perhaps offer a critical approach. [I]t seems at times simply to be presenting one project after another, with little sense of progress or development [...]” (Gere 2005, 7) Attempts at critical scholarship seem to fall short in many of the same ways that new media art archives have done.

Many issues surrounding the exhibition and archiving of new media art, arise because curators and archivists still work within a centralised material understanding of art. I would argue that new media art needs more than exhibitions at Tate (or similar legitimising institutions) to gain a critical history. New media art needs its own digital archive and museum. Art and technology historian Christiane Paul calls this new novel institution the ‘ubiquitous museum’ in her article for *New Media in the White Cube and Beyond: Curatorial Models for Digital Art*. “New media art seems to call for a ‘ubiquitous museum’ or ‘museum without walls,’ a parallel, distributed, living information space that is open to artistic interference—a space for exchange, collaborative creation, and presentation that is transparent and flexible.” (Paul 2008a, 53) In many ways, this is what Rhizome is approaching to with ArtBase. But ArtBase still lacks the organisational framework and courage to take the risk of treading the new and unknown territory of the truly open archive.

Breaking Away from the Past

One of the reasons that new media art has been so overlooked from an art historical perspective is the fallible assumption that new media artworks function as their traditional predecessors. Museums and archives have come a long way since the opening up of museums from privately owned spaces for the nobility and the bourgeoisie to the public institutions of the 19th century. However, this openness only applied to the museum's exhibitions and educational programs. Not to the archive, which to this day remains a space closed off from most individuals. Only when approved under the guise of an institution is it possible to access the archival space. Thus, it is only institutions that have access to institutional archives. As Richard Rinehart says in his chapter on "The Open Museum," "[...] when museums 'go online' [...] they are fulfilling this vision of openness [...] but museum websites do little to mitigate the legal and cultural barriers [...]" (Ippolito and Rinehart 2014, 106) Even with the digitisation of art archives the same measures of closed archival spaces apply when individuals attempt to access institutional archives of traditional *and* new media art.

Thinking of new media art in material and centralised terms is misunderstood and does more harm than good. In *Rethinking Curating: Art After New Media*, Sarah Cook and Beryl Graham argue that critics and art institutions still treat new media art as if it had the same material, object-specific properties of more traditional art forms. Instead, they argue that new media art exists in a novel space of the distributed global network where artworks have become dematerialised. (Graham and Cook 2010, 51)

The traditional space of the salons, museums and white cubes carry their own distinctive properties, yet they are all spaces where artworks are legitimised as historically authorised and commoditised objects. According to Cook and Graham, these institutions have conditioned our thinking about the networked space of new media. This attitude is still visible in the discourse surrounding new media art. At the turn of the century, several art institutions were trying to embrace new media art by changing it to fit their purposes. In an interview from 1999, the director of the San Francisco Museum of Modern Art said, "Since we know what older art looks like, we can start to develop standards and a critical evaluation framework for looking at net art based on our idea of what art should act like or look like." (Ross, David in: Jana 1999, 34) Thinking new

media art in terms of traditional art forms only works against the creation of novel archival spaces.

Connected Archiving

The future of new media art archives could be formed by a technologically enabled population – a mediated multitude – of open source volunteers and hackers, willing to create an alternative to the traditional conservation and archive methods undertaken by conventional museums and archives. Traditional preservation methods cannot be applied to new media art, which demands a new structure and approach to archives, preservation and the creation of art.

For the last 50 years, many artists have been moving out of the art institution's white cube and into more pedestrian spaces available to the public. With the connectivity of the internet, this move towards a more public engagement with the artworks is not only about curating but about conservation and archiving as well. Artists, hackers, bloggers and a plethora of other users now occupy roles of curators and archivists. Archiving is no longer an isolated activity in the exclusive milieus of the art institution. This new structure, allows technologically savvy individuals to fix broken code in artworks or dead links. Connected users carry a potential for preservation and archiving, which is based in enthusiasm for and interest in a wide variety of subjects. Communities of this size, specialised knowledge and potential commitment are possibly a first in the history of art. Therefore, it is vital that these amateur archivists be considered as potential solutions to the challenges of archiving new media art.

The 'Material' in a De-materialised Art

Although new media art is characterised by its dematerialised qualities, this is not to say that new media art is completely 'immaterial'. Although artworks built on code and presented as software are not directly related to a specific medium, the materiality of the network and the users engaging with the artwork should not be negated. The materiality of new media art does not lie within the medium itself – mobile phones, laptops, screens – but in the "[...] technical and social relations of network culture," (Graham and Cook 2010, 65) according to Graham and Cook. These connections are real and form frameworks, which are no less tangible than those happening between attendants at a vernissage or between paintings on a gallery wall.

In spite of new media art's place in an ephemeral distributed space, it is still possible for an artwork to be site-specific. The physical connection between computers and the browser window itself are two examples of site-specific spaces, which are where most artworks of the ArtBase take place. Site-specificity means a whole different thing when talking about new media art. Where geo-location artworks based on physical spaces may or may not be site-specific, and the vast simulated spaces of Virtual Reality artworks are only as movable as the mobility of the technology allows it to be. Therefore, the new media archive must be able to include a wide variety of objects, which terms have little theoretical overlap with traditional artworks.

The Content of the Message

McLuhan's adage "The Medium is the Message" has held true for the major parts of the 20th century as an explanation of how any medium influences and embeds itself in the message and alters the way the message is received. (McLuhan 1994, 8) Yet McLuhan's phrase doesn't seem to convey the current experience of new media artworks. The medium could be a computer but the access point to the message of the artwork might as well be mobile phones, desktops, laptops or different operating systems. When considering new media art, we seem less concerned with the specific medium we're viewing than with the message of the content.

As such, it seems productive to investigate the content-focused nature, in order to categorise this novel aspect of new media art. However, a clear-cut definition of new media and new media art is difficult to pin down without considering the consequences. As Christiane Paul argues, "[i]t is always dangerous to categorize an artistic practice, since to do so sets boundaries, smoothes out rough areas, and includes a certain amount of generalization. At the same time, taxonomies provide an orientation." (Paul 2008b, 3) Although as Paul says categorisation and boundaries can stifle creative thought, it is also necessary to have a history and structure to work against. I would argue that such an orientation might be exactly what new media art needs to extend its critical potential into the world of art institutions and archives – whether collaborative or state-run.

Domenico Quaranta addresses the concern of numbing new media art's revolutionary potential and argues that to think technological issues are what makes new media art revolutionary only confuses the issue by misunderstanding

new media art as being about the medium itself. “If we cop out when it comes to taking technology into the exhibition venue [or archive], when will we get the chance to change the rules of the game? [...] The weak point of these objections lies, once more, in the fact that they consider the medium and its specific characteristics to be the strong point – the most revolutionary thing – about New Media Art.” (Quaranta 2013, 183) The revolutionary aspects of new media art lie within its content, rather than the specific medium an artwork is presented in.

Art critic and essayist Jonathan Crary touches upon the importance of a proper definition and understanding of new media art in *24/7: Late Capitalism and the Ends of Sleep*. Like Quaranta, Crary calls for a new definition, “[...] many ambitious attempts have been made since the 1990s to articulate the defining or intrinsic manifestations of ‘new media.’ Even the most intelligent of these efforts are often limited by their implicit assumption [...] that the key task is to outline and analyse a new technological/discursive paradigm [...]” (Crary 2013, 38) The historical changes affected by the novel media technologies themselves are miniscule in their short lifespans – the content and art created for these technologies is what really matters. As Crary states, “[...] books and essays written on “new media” only five years ago are already outdated [...]” (Crary 2013, 39) Instead of focussing on the effects of singular new media technologies, the focus should be on how rhythms of accelerated consumption is transforming experience and perception. As affirmed by Derrida, the way we archive shapes the way we remember. And specified by Stiegler who says that our memories are determined by the technologies we use.

Post Media

In order to form a more concise understanding of new media, the following is a look at different modes of categorisation, in order to set a platform from which to approach the concept of ‘post media.’ According to Lev Manovich, contemporary new media artists are also engineers “[...] pointed toward the model of industrial mass production rather than the traditional artist’s studio [...] In the world of new media, the boundary between [science, technology, art and philosophy] is fuzzy at best.” (Manovich 2002b, 40) From this rather broad description of the new media artist as engineer, new media art is defined simply as being artworks supported and created by technology.

Christiane Paul has a different and more exclusive definition based on common non-visual aesthetics of new media artworks; “The digital medium’s distinguishing features certainly constitute a distinct form of aesthetics: it is interactive, participatory, dynamic, and customizable [...] However, the art itself has multiple manifestations and is extremely hybrid.” (Paul 2003, 67) These multiple manifestations are exactly what challenges today’s new media art archives. Paul’s definition relies on the multifarious nature of new media, which defines new media art by its interactive, participatory, dynamic and customisable qualities.

The Medium as Container

When talking of the ‘post medium’ Domenico Quaranta first of all refers back to art historian Rosalind Krauss and her idea of living in a post medium condition. Krauss describes a movement in the wake of minimalist art in the 1970s where artists left the idea of media-specificity behind and began to experiment with various media, instead of building their career on just one medium. (Krauss 1999, 297)

Quaranta starts from a contemporary view of new media art, which he says has become post media; “[...] postmedia art is the art that comes after the affirmation of the media [...]” (Quaranta 2013, 201) Once the medium of the artwork has been determined, it is of no interest to the artwork itself. It’s simply a container for the content. As an example, an animation does not rely on a particular medium for its viewing – made as an AVI-file on the artist’s computer, it can be displayed there, be copied to a DVD or VHS, distributed via mailing lists or uploaded to the internet to be seen through the countless mobile phones, desktops, laptops and all manner of media. Whatever the medium, the focus is on the animation and its message as an artwork.

Although post media reflects a process that is happening to most of contemporary art, Quaranta does not wish to use the term to describe all art of the present. As such, post media is not meant to define the future of the art world but help us in the sense that, “[r]ecognizing that we are living in a postmedia age is not a point of arrival, but a point of departure. It means recognizing that the digital revolution completely changed the conditions for the production and circulation of art, and that it is slowly but inevitably changing the ways in which art is experienced, discussed and owned.” (Quaranta 2013, 202) The change to the art world brought on by the ‘post media condition’

has been so grand that critics, art historians and archivists have barely been able to keep up with this still ongoing change to distribution, production and experience of art.

Manovich delineates three phases that lead to the post media in his article “Post-Media Aesthetics.” (Manovich 2001, 3) The first challenge to the conventional understanding of ‘medium’ happened with the development of new artistic languages (artist-created archives, Fluxus happenings, installations, etc.). The second challenge was the invention of different media such as photography, television and film, which all prompted a clash with established definitions of artistic media. According to Manovich, the third and last attack on conventional artistic media was the arrival of the digital revolution in the 1980s and 90s; “The shift of most means of production, storage and distribution of mass media to digital technology (or various combinations of electronic and digital technologies), and adoption of the same tools by individual artists.” (Manovich 2001, 4) The computer encompassed all previous media forms and enforced its own operative database structures. Suddenly, the distinctions between painting, writing, animating, sculpting and photography had been washed away by the capacities of the personal computer. The database logic of *one* medium (copy, cut, paste, morphing and algorithmic calculations) is now applied to all other media as well. After the digital age, post media has gone from being a conscious choice to a universal condition of art production.

Discussion

In the wake of the digital revolution – in which we are still engaged – the fact that these distinctions between conventional media exist within the concept of new media art emphasises the sizeable challenge of preserving and archiving new media art. Since new media art is so varied and going through constant technological development, it seems necessary that a new archival methodology must be developed – one that is placed outside the art historical and media-specific method of archiving.

As Christiane Paul remarks, new media art calls for a ‘ubiquitous museum’ (Paul 2008a, 53) – in the current context, a ubiquitous archive – which accounts for the flexible nature of new media art, by creating an adaptable space for collaborative creation, artistic interference and custom culture. These are

the aspects that shape new media art, and therefore, these aspects must also play an integral role in shaping what might be called the ‘Open Archive.’¹⁵ If positioned in a cultural context, the Open Archive would not draw from traditional museological preservation practices, but instead take its archival techniques from the collective digital culture it inhabits. This means mobilising the social media, forums, open source communities, and other constituents of the collective digital culture in order to archive the vast output of new media art.

If we want to preserve the contents of a rhizomatic art form in terms of digital networked archives like ArtBase, then it is adamant that the Open Archive emulates the egalitarian structure of contemporary art. Contemporary art requires a contemporary archive. New media art archives have the potential of opening up century old traditions of archiving, by bringing them out of the exclusive institutions and into the public realm of collective preservation.

The Open Museum

For the ArtBase to move away from its current position as an archive of historical content to an active archive capable of interaction, user-participation and preserving the vast amounts of new media art, it has to be able to tackle the issues related to new media art. With that in mind, what follows is a range of possible solutions suggested to implement alternative ways to think about and preserve new media art.

In *Re-collection: Art, New Media, and Social Memory*, Jon Ippolito and Richard Rinehart design a model that they call the ‘Open Museum.’ “The Open Museum is a framework or self-imposed certification that anyone and any institution could adopt for their new media art collection.” (Ippolito and Rinehart 2014, 107) As such, the Open Museum is not a singular resource for new media art, but rather a standard or franchise that can be applied by a number of institutions in order to create their own instance of an Open Museum. Rinehart and Ippolito lists the properties of the Open Museum as, “A preservation repository for born-digital new media artworks, [...] an online resource that allows unprecedented access, [...] an innovative legal, economic, and cultural framework, [and an exploration of] the values and practises of

¹⁵ With the ‘Open Archive’ I reference Jon Ippolito and Richard Rinehart’s concept of the ‘Open Museum.’ As explained later, the Open Archive is not a carbon copy of the concept behind the Open Museum but a continuation of Ippolito and Rinehart’s ideas into archival territory.

participatory culture applied in the context of fine arts institutions [...]” (Ippolito and Rinehart 2014, 107) The unprecedented access can allow students to download, study, remix and use the source code and other files connected to the artwork.

Rinehart is a member of the Forging the Future project that is described as “[...] a consortium of museums and cultural heritage organizations dedicated to exploring, developing, and sharing new vocabularies and tools for cultural preservation.” (Forging the Future) The Open Museum is compatible with systems such as Forging the Future’s Metaserver, which is a dynamic networked registry that creates links between related records created and hosted across different websites. As described on their website, in place of a centralised archive their metaserver “[...] points to instances of particular works as they transition from one version, medium, or context to the next.” (Forging the Future)

Instead of undertaking the colossal task of gathering all the different versions and updates of an artwork from around the web, this tool allows museum staff to find related records for multiple instances of an artwork and catalogue them all in the Open Museum. By creating a map of all the copies of an artwork, the Open Museum can begin to grasp the proliferation and preservation needs depending on the amount of copies an artwork has across the web. Cultural memory would benefit from spreading memories (artworks) around in order to protect them. The more copies of an artwork, the stronger the mesh of links between them becomes as duplicate artworks help preservation efforts.

The Open Museum’s participatory aspect is essential to its success and with user-contributed metadata based on standard museum terminologies and a parallel terminology system, based on a ‘folksonomy’ Folksonomy is a portmanteau of ‘folk’ and ‘taxonomy’ relating to the “[...] personal, free tagging of information and objects [...] done in a social environment (usually shared and open to others),” (Wal 2007) of terms contributed by artists, archivists, and the public. Rhizome implemented this in the early days of ArtBase under the name VocabWiki – a collection of tags determined by the Rhizome staff and another collection of user-submitted terms. As a terms’ popularity rises, it will rise to the top of the list.

Creative Commons

In order to ensure the artist's rights, the Open Museum will contribute each artwork with a Creative Commons licence. (Creative Commons) This allows artworks to be shareable and malleable, while still retaining some rights at the artist's discretion. Another key feature of Rinehart and Ippolito's Open Museum is that artists are paid up front after which their artworks are released into the museum under the creative commons licence. The idea is to break with current American intellectual copyright law, which states that an author or artist retain the rights to their work for up to 90 years after their death. As artists advance their career and build up an oeuvre, they are expected to find ways to sell their work, which rarely brings in a decent wage until later in their career. In the Open Museum, institutions could commission work from artists, and pay them up front for each artwork upon creation. Rinehart and Ippolito remark; "The museum would earn their renown not for the quality of art they commission and obtain in exclusivity, but for the art they commission and then 'give away.'" (Ippolito and Rinehart 2014, 110) The artists are paid sooner for their work, and users are allowed to view and use the artworks after a few months, rather than decades.

Just as museums are open to the public, Rinehart and Ippolito describe how the Open Museums would also be open to one another. The network of museums would form a continuous global actualisation of Rosalind Krauss' 'ubiquitous museum,' where new media art could flow between institutions in a type of meta-institution.

The Open Archive

Rinehart and Ippolito's Open Museum is a grand vision of what a successful museum of new media art might look like. It is more than a wishful suggestion, but a model with many of its constituent parts already in place – the metasever, Rhizome VocabWiki and more. Several aspects of the Open Museum are exactly what the ArtBase needs to become a comprehensive and active archive. With the outset in Rinehart and Ippolito's Open Museum, the following is a proposal for an 'Open Archive' of new media art.

Looking at the challenges facing new media art archives, it is evident that archiving is not the job of a single expert archivist or conservator. The wide variety of technical competencies vital to archiving new media art must be found in a network of experts, ready to tackle the manifold archival difficulties.

The archival and artist communities do not lack talented individuals, but so far traditional approaches to archiving have lacked the scope and innovation required.

The Open Archive would be built on the principle of a networked intelligence, where nodes in a network manage a distributed and efficient workload. Such an archive should have an architecture built by a few qualified individuals (not unlike Rhizome.org), with the consignment of objects handled by a vast network of users. Charles Leadbeater suggests that art institutions become collaborative and conversational forums, rather than the authoritative archives that treat users like passive consumers of culture. The Open Archive should promote and engage its users as an active community “[...] on a scale so large that it cannot be planned out in advance.” (Leadbeater, Charles in: Ippolito and Rinehart 2014, 106) As suggested by Derrida, archives cannot be grasped in advance, but create themselves and their concepts as they grow.

Like Wikipedia (for general knowledge) or The Internet Archive (for recordings and documents) that both delegate documentation, conservation and contribution to volunteers, it seems feasible to create an Open Archive for new media art on the basis of the existing structures of Rhizome’s ArtBase.

User Archives

If managed by an inter-connected network of users, the scope of the archive would have to be well defined from the start, in order to not become bloated or spiral out of control. The Open Archive needs a well-defined structure and not a Derridean ‘concept’ that is always out of reach, placed somewhere in the future – created gradually with each addition to the archive. Successful examples of network-based communities already exist in the form of Wikipedia (https://en.wikipedia.org/wiki/Main_Page), GitHub (<https://github.com/>) and Genius (<http://genius.com/>). Wikipedia relies exclusively on user-generated and user-maintained content, but also reference material and best-practice initiatives made for other users to expand the encyclopaedia.

GitHub is an online environment for programmers and coders to create, distribute, share and work together on source codes. There is a social media element to GitHub where users assist one another in problem solving and error checking, in a collective move towards completion and augmentation of – often open source – projects.

Genius (née Rap Genius) started as an archive of specifically rap lyrics that users could annotate to explain references and meanings within the texts. With time the creators and users of Genius realised the larger potential of an online annotation service and expanded to all music genres, literature, historical documents and news stories. Users continually add, edit and refine textual content on the website, which even has the ability to embed its annotations on other websites. This distribution of labour to a network community has proven successful and could be a step in the right direction for a networked community of user-archivists such as the Open Archive.

Personal Archives and Social Media

If we look at archiving in the same way that we observe our actions on social media, we might come closer to a solution. When users interact with Facebook, Twitter, Instagram or their blogs, they constantly consign information about themselves in an effort to create a public identity. It seems that although more and more of our digitally stored data is being hosted in the cloud via all manner of mobile devices there is still a move towards linking our virtual social life to the physical world we inhabit. Whether it is ‘checking in’ at an art gallery (via GPS), affixing a date to a blog post, or sharing an image from a concert, these are all ways of crossing the divide between the physical and the digital. What users actually do is archive their lives through images, text, video and audio. If these almost unconscious actions of digital archiving can be harnessed, archival efforts like these can be used to map our new media art history. The enjoyment that users draw from creating an online identity from the otherwise ubiquitous digital cloud is closely related to the act of consigning an object to the archive – an act that creates structure and meaning through information management.

Quaranta describes this joy of digital archiving – without realising that you are archiving – in the catalogue to his exhibition, *Collecting the WWWorld*. “When, at a later date, I would rummage through that jumble of folders and subfolders, I unfailingly felt like the owner of a medium-sized museum. [M]uch of this material has disappeared from the Web without a trace [...] – all of it assembled without the slightest pretence of collecting.” (Quaranta 2011, 8) This archival impulse – not unlike Derrida’s archive fever, already present in users – is a complex desire to consign objects to an archive. As shown above, users expect both a specific structure of the archive while working in an increasingly

physical digital environment of variable media. An environment that is both mobile and social, as to mimic people's day-to-day networks. The Open Archive must be able to grasp this disparate archival impulse in order to mobilise a crowd of archive-savvy enthusiasts.

Ownership

One major challenge for new media art archives and new media artists is the concept of ownership in the digital sphere. With the ruling idea of the internet as a free and open space, digital culture rejects traditional notions of ownership and relies instead on an affinity towards free distribution and sharing.

Charles Leadbeater writes in his essay "The Art Within" about a radical openness afforded to artists with the rise of the internet: "The web might open up who can contribute to the process of artistic creation, widen the definition of who is an artist." (Leadbeater, Charles in: Ippolito and Rinehart 2014, 106) This expanded notion of the artist is still only in its infancy, although creative possibilities for the individual users are greater than ever. The distinction between who is an artist and who isn't becomes unclear on the internet where every user is the creator of something – whether that is code, writing, images, community events or website design. With this, the Open Archive should be planned to accommodate art designed for adaptation and re-use.

In Quaranta's exhibition catalogue for *Collect the Wwworld* he describes it as follows; "There is no way around it: whatever is digital is copyable and can be manipulated by whomever gets possession of it. [...] And while they lose the rights to their own creations, they acquire an unprecedented power over the creations of others." (Quaranta 2011, 12) This premise is readily accepted for code writing and information management on websites like GitHub, but when it comes to artworks many artists feel a different sense of personal ownership over the things they create.

As Rinehart explains, it is "[...] the unique property of new media that allows one to share the original [artwork] without diminishing it." (Ippolito and Rinehart 2014, 107) The art market is so geared towards the economic gains, that although artists have been moving away from object-based art forms since the 1960s, many still expect to sell artworks as if they were unique and unshareable objects. According to Quaranta, "[artists] live in a culture of abundance and information overload, one in which creative practices have

expanded to include things well beyond the conventional limits of a hypertrophied ‘creative class’; a culture in which whoever creates anything can immediately access the level of distribution. In this context, the act of assembling, categorizing, manipulating and redistributing material takes on a prominent social role, since it guarantees the survival of certain messages over time, while consigning the others to the depths of the global database we live in.” (Quaranta 2011, 12) In a culture where sharing is one of the biggest saviours from amnesia and obsolescence, it is vital that new media art archiving efforts can rely on the shareable nature of internet communities.

Digital artworks that are locked down and not open to editing write themselves into oblivion, as archives can then only function as placeholders until the work is inevitably rendered obsolete. The basic institutional structure for a successful new media art archive exists within the ArtBase, but institutions like Rhizome need to open up to the collaborative and sharing mentality of the rest of the internet in order to succeed.

Remembering the Original Experience

In a talk given by Rhizome’s current digital conservator, Dragan Espenschied touches on the situation that new media artists have to deal with when they upload their artworks to the internet. “If I put something online, if it is really about internet art, what say do I have about what users are doing with that? Maybe you remember these small graphics saying ‘watch this with Internet Explorer 5,’ then, OK, I can’t. Shall I leave now? Should I buy a Windows computer with Internet Explorer 5? Of course I won’t, I will just continue [on to something else].” (Espenschied 2014) This illustrates a central problem for many archivists, when they attempt to decide how to best preserve new media artworks. In this sense it is of interest to both the archivist and the artist that something is done to avoid the fall into obsolescence.

Some times, what must be done to best preserve the artwork might not be the preservation of the object itself, but rather a simple representation (screenshot or video file) of its functionality. In an interview for the Library of Congress’ “Insights Interviews” Jon Ippolito gracefully sums up this approach to preservation; “We need a more balanced approach. You want to fix a butterfly? Pin it to a wall. If you want to preserve a butterfly, support an ecosystem where it can live and evolve.” (Owens 2014)

As the current conservator for Rhizome, Espenschied's rather provocative statement underlines an elephant in the room for many thinking about digital conservation. To what extent can the original experience of a digital artwork be preserved over time? In some cases the artwork may be better represented in other ways than through emulators and constructed digital environments. Espenschied expands on this by saying; "[...] this approach to conservation could be put into action as an institutional process, and trying to tap into resources that are more akin to oral history. [T]his instability and variability is not a problem, it is just a thing that we have to deal with. We do not need to pin down artefacts into one single form, instead we need to conserve exactly these variable qualities." (Espenschied 2014) If an artwork is not being actively engaged with because of the requirements to install emulators and different browser plug-ins, it might be worth entertaining the possibility that other methods of preservation and access serve the variability of new media artworks better.

Preserving the Memory of the Internet

Before being hired as the digital conservator for Rhizome, Espenschied and internet artist/theorist Olia Lialina worked on salvaging a one-terabyte torrent of personal websites from the free hosting platform Geocities. After the multinational internet corporation Yahoo! bought Geocities and closed it down in 2009, these websites were a look into the internet's recent but suddenly inaccessible past. On their project blog, Lialina mentions this sudden move away from personalised websites to the more template-driven web; "In 2004, ten years ago, when Blogger, Livejournal, and MySpace became popular, I saw that not just the aesthetics but the culture of making home pages – welcoming users to 'my corner of cyberspace' – was disappearing." (Lialina 2014)

With the enormous amount of (often incomplete) data these websites would be difficult for almost any cultural institution to host, let alone re-create. Furthermore, they would probably receive little attention, were they simply re-hosted and left on domains far away from the public eye – once again proving how the internet has changed with the proliferation of Facebook, Tumblr, Google services, Flickr and other centralised template-driven websites. Instead, Espenschied and Lialina chose to rebuild the almost 400,000 websites in order to post an image of each Geocities 'home' page every 20 minutes on their blog: "One Terabyte of Kilobyte Age Tumblr." (Lialina and Espenschied)

For many conservators this does not seem like a viable method of preservation, since it does not capture the original experience of actually navigating the websites. Perhaps this idea of an original experience is too entrenched in traditional archives where the original artworks still carry an 'aura,' Aura is a term borrowed from Walter Benjamin who argues that the a work's authenticity is inseparable from the original artwork; "Even the most perfect reproduction of a work of art is lacking in one element: its presence in time and space, its unique existence at the place where it happens to be," (Benjamin 1968, 218) which cannot be duplicated by replications. However, in the digital sphere I would argue that awareness of this recent past through mere images is worth more than being able to navigate the sites themselves. A platform like Tumblr with more than 210 million blogs, (Tumblr) can reach an enormous audience compared to an institution like Rhizome. In the name of cultural memory, it seems clear that some times there are advantages in alternative methods of preservation and archiving, which do not pay heed to traditional conventions of ownership and the original.

Second Guessing

Traditional archivists would most likely protest the diminished focus on artist ownership and user-responsibility for archival efforts, calling for more prescriptive control with the care of the archive's objects. How can it be ensured that a crowd of amateurs will preserve the artworks and their cultural memory? Is it safe to leave such an important task in the hands of an unknown crowd?

Looking to Wikipedia we see an enormous resource for a vast amount of people from all over the world – academics, archivist and historians alike. As described earlier amateurs who are specialists in a vast variety of fields built up this resource for all manner of knowledge. There are many attacks to Wikipedia from internet troublemakers, government officials with political agendas, and users with a religious or scientific bias who in one way or another actively work against the goal of a free and neutral encyclopaedia. (Wikipedia) Due to the solid framework set in place by the founders of Wikipedia and the tireless efforts of a substantial amount of active users, attacks like these are often corrected before any other user even notices. The sense of community built up around a noble task convinces users to keep building and improving the content.

The New Media Art Niche

A community surrounding something as vast as Wikipedia's online 'encyclopaedia of everything' will always outnumber that of an archive with a specific focus like new media art. Nevertheless, users interested in building an archive of new media art do not consist solely of archivists and art historians. Just as Wikipedia doesn't consist solely of university professors and GitHub doesn't consist solely of program developers, an open archive would not consist solely of archivists. A vast skillset is required to build the Open Archive, ready to tackle the wide variety of issues related to digital preservation and cultural memory making. A multitude of artists, engineers, programmers, curators, historians, conservators, students, journalists and writers are all potential users of an open archive of new media art – professionals as well as amateurs. By building a strong framework that encourages participation and development, it should be possible to create an active and living archive of new media art.

Conclusion

The characteristics of archives – as suggested by the preceding deconstructive investigations – present archives as repositories of the past orientated towards the future and creation of cultural memory. With a background in Derrida's writings on the archive as a space of ongoing negotiation between origins, truths, users and institutions with political interests, an image of the archive's social and political structures emerges. In *Archive Fever* Jacques Derrida traces the origins of the archive back to ancient Greece to reveal the archive's root in juridical state institutions. Boris Groys acknowledges a similar tendency of the archive, where the underlying structures are always out of plain sight beneath the institutional and technological surface.

According to Carolyn Steedman the objects of the archive need to be activated and engaged with in order to create memories. In her description of the past-as-present Aleida Assmann shows how publicly accessible objects enter cultural memory.

Memory and archives are dependent on social interaction, which according to Michael Hardt and Antonio Negri create possibilities for political action. The technological developments in the past decades have changed the formation of archives and cultural memory to the point where new media

technologies have enabled new subversive spaces. Bernard Stiegler warns against the tools afforded by the service economy, which threatens individual and cultural memory through institutional control over external memory technologies. The normative society created through technology and the service economy's hold on cultural memory can be subverted only through a globally connected, open, rhizomatic, and technologically enabled multitude.

Archives help create stepping-stones for cultural memory to develop and take hold in the collective memory. In order to create digital archives that can accommodate the novel framework and culture surrounding new media art objects, it is necessary to rethink core structures of the archive. By investigating what constitutes an archive, notions of political power and institutional control surface as the main issues facing archives and cultural memory.

Rhizome's ArtBase could have the radical potential to change established preservation and archival structures in the art world and the landscape of new media art. Connectivity, collaboration, sharing and representation are central to new media art and the digital culture of the internet, which often works outside the boundaries of the conventional art market. New media art explores its own subversive potential, and in order to preserve this potential it is paramount that the artworks are consigned to an archive.

The longer we wait, the more of our cultural memory of new media art is forever lost to oblivion. This is why an already functioning institution like Rhizome without direct ties to any governmental or economic concerns is a prime candidate. ArtBase is already well underway with one of the largest online collections of new media art. By opening up the ArtBase and allowing users to continually update and re-work its structure (technically and conceptually), ArtBase could become the open archive new media art requires. All it needs is a push in the right direction.

There are still many unresolved challenges to creating a truly open archive. Garnering interest and trust from users, while creating a sizeable community – and ensuring that artists are convinced that their artworks will be treated appropriately – are key issues that as yet are unsolved. However, many of these concerns cannot be addressed before an open archive has actually been implemented.

In order to create a comprehensive and representative archive of New Media art, institutions like the Rhizome ArtBase should adhere to these

participatory principles if they wish to promote and place new media art in the cultural memory of art history, while preserving its unique criticality and subversive potential. Transforming Rhizome's ArtBase into an open source, collaborative network between artists, archivists, engineers and programmers enables an archive fit for the wide variety of preservation challenges in an ever-changing technological landscape. Evidently, there is still much work to be done before the creation of a truly open and functioning new media art archive.

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