

*Digital Debris of Internet Art:
An Allegorical and Entropic Resistance
to the Epistemology of Search*

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Abstract

This Ph.D., by thesis, proposes a speculative lens to read Internet Art via the concept of digital debris. In order to do so, the research explores the idea of digital debris in Internet Art from 1993 to 2011 in a series of nine case studies. Here, digital debris are understood as words typed in search engines and which then disappear; bits of obsolete codes which are lingering on the Internet, abandoned website, broken links or pieces of ephemeral information circulating on the Internet and which are used as a material by practitioners. In this context, the thesis asks what are digital debris? The thesis argues that the digital debris of Internet Art represent an allegorical and entropic resistance to the what Art Historian David Joselit calls the Epistemology of Search. The ambition of the research is to develop a language in-between the agency of the artist and the autonomy of the algorithm, as a way of introducing Internet Art to a pluridisciplinary audience, hence the presence of the comparative studies unfolding throughout the thesis, between Internet Art and pionners in the recycling of waste in art, the use of instructions as a medium and the programming of poetry.

While many anthropological and ethnographical studies are concerned with the material object of the computer as debris once it becomes obsolete, very few studies have analysed waste as discarded data. The research shifts the focus from an industrial production of digital debris (such as pieces of hardware) to obsolete pieces of information in art practice. The research demonstrates that illustrations of such considerations can be found, for instance, in Cory Arcangel's work *Data Diaries* (2001) where QuickTime files are stolen, disassembled, and then re-used in new displays. The thesis also looks at Jodi's approach in *Jodi.org* (1993) and *Asdfg* (1998), where websites and hyperlinks are detoured, deconstructed, and presented in abstract collages that reveals the architecture of the Internet.

The research starts in a typological manner and classifies the pieces of Internet Art according to the structure at play in the work. Indeed if some online works dealing with discarded documents offer a self-contained and closed system, others nurture the idea of openness and unpredictability. The thesis foregrounds the ideas generated through the artworks and interprets how those latter are visually constructed and displayed. Not only does the research questions the status of digital debris once they are incorporated into art practice but it also examine the method according to which they are retrieved, manipulated and displayed to submit that digital debris of Internet Art are the result of both semantic and automated processes, rendering them both an object of discourse and a technical reality. Finally, in order to frame the serendipity and process-based nature of the digital debris, the Ph.D. concludes that digital debris are entropic . In other words that they are items of language to-be, paradoxically locked in a constant state of realisation.

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Author's declaration

During the period of registered study in which this thesis was prepared the author has not been registered for any other academic award or qualification. The material included in this thesis has not been submitted wholly or in part for any academic award or qualification other than that for which it is now submitted.

Signature  _____

Date 29/07/2015 _____

Introduction

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1. What is the research about?

1.1 Thesis statement

The project is an investigation of digital debris in Internet Art practice. In this thesis I am arguing that the digital debris of Internet Art represent an allegorical and entropic resistance to the knowledge embodied by the Epistemology of Search. Thus, the thesis reverses the Renaissance notion that ruins are a repository of knowledge (Dillon: 2006)¹, and defends instead the assertion that digital debris are critical agents that intervene in the network paradigm created by and for the Internet. I am defending the position that digital debris are the projection of a cultural concept onto a

¹ See Dillon, B., (2006) 'Fragments from a History of Ruin', *Cabinet Magazine*, Issue 20 'Ruins', Winter 2005-2006, available at, <http://www.cabinetmagazine.org/issues/20/dillon.php> (last accessed 16/02/15).

technical reality which allows them to instill a back and forth dialogue between the computational and the cultural. Digital debris are understood as words typed in search engines and which then disappear; bits of obsolete code which are lingering on the Internet, abandoned websites or pieces of ephemeral information circulating on the Web 2.0 and which are used as materials by practitioners. As a result of this understanding of digital debris, I will use the term debris, throughout the thesis, in its plural form. By Epistemology of Search I am referring to the work of Art Historian David Joselit in *After Art* (2012) where he describes and theorises the ways in which, in contemporary culture, images hold value not in what they convey but in the patterns of dissemination they create once they enter into circulation. In other words, the Epistemology of Search represents an instance where meaning is derived not from the content of what's communicated online, but in its capacity to connect with images at various velocities. Consequently, according to Joselit, the circulation of images takes primacy over their content. Thus the ambition of the thesis is to continue the discussion started by Joselit in his sharp and original analysis of the production of contemporary images and to point at a few ways in which one can respond to this state of contemporary knowledge.

1.2 Of the importance of the research question

Whether we used the term waste, rubbish, trash, junk or detritus it seems that we take for granted the meaning of these terms as objects which have ceased to function for us and which therefore become useless. Yet since information is nowadays predominantly written in numerical code, the question on the nature of waste has to be addressed again, and in new ways. Moreover, this continuum of information is locked in the physical object of the computer.

The thesis asks: what does the idea of waste in the context of an online art practice imply? In other words, it attempts to exhaust and unpack the incongruous idea that online information bears some sort of materiality. The thesis asks what lies beyond the waste metaphor and to what end is it used?

The research narrows down the question by only focusing on Internet Art practices. The thesis approaches the problematic of digital debris by looking at the strategies and processes through which discarded data is retrieved, recycled, manipulated and turned into debris. I will argue that the knowledge of the Epistemology of Search is resisted by digital debris in a discursive and allegorical manner, which is nonetheless anchored in technical support. Thus, the duality of digital debris, as both an object of discourse and a technical reality, is one of their key characteristics and I'll clarify in the thesis that digital debris are locked in an oscillation between those two facets. I hereby submit that digital debris represent a step of online waste-to-come, they are the result of the retrieving and incorporation of discarded data into artworks. As such, with this gradual shift of definition I maintain that digital debris are the on-going result of extracted and manipulated data once it is implemented into art practice. By on-going, I am referring to the fact that digital debris are in a constant state of generation and as such they represent a set of processes, a continuum, rather than a collection of objects.

1.3 Genesis

During my M.A. in Visual Culture at the University of Westminster I encountered Internet Art for the first time and started to write about definitions of New Media Art in most of the essays I submitted for my degree. In the middle of the course, I had the opportunity to meet one of the curators of the Wellcome Trust who was at the time preparing an exhibition titled *Dirt*. From that conversation and my existing interest in New Media Art arose the idea to associate the two elements.

2. Methodologies

2.1 Speculative methodology and scope of research

The project adopts a speculative approach in as much as it brings in the same analysis various art practices from different periods within the object of study that digital debris represent. The precept of my speculative approach is to set a dialogue between, for instance, Internet Art, radical modernist poetry and 70s experimental film, as a way of proposing an alternative lens in the study of Internet Art. Indeed, the process-based nature, the aesthetic and conceptual radicality of the works studied in the thesis evade the traditional framework provided by Art History, placing the study of Internet Art in a methodological crisis. Here, the thesis proposes the beginning of an alternative approach. The speculative dimension of the project also lies in its take on case studies. Indeed, here the methodology, which consists in analysing case studies, differs from a social sciences based one to propose a methodology based on writing as practice. Rather than, for instance, carrying a series of interviews about the curators and artists of Internet Art, I have chosen in my project to start my investigations by a method of generative description of each artworks studied. Throughout a meticulous and thorough textual description of the online works observed, patterns and parallels between different works appeared. The speculative methodology developed throughout my thesis, by its inter-disciplinarity and its fictional anachronism, represents a methodological theoretical advancement, in as much as it offers a scenario, a form of transaltion, of the issues at play in Internet Art, to a broader audience in the interstices of New Media and Art History. The speculative methodology is also a contribution inasmuch as it represents an exercise whereby, I can experiment and test a language suitable for the study of Internet Art. The speculative methodology allows the research to look at the boundaries between two contrasted methodologies in the study of Internet Art: Media Archaeology and Media Aesthetics. The thesis proposes that through the specificity of a manifestation called digital debris, those two methodologies enter into a dialogue. I am submitting that digital debris embody the conflation of not only the cultural and the technical but by extension, the terrain where Media Archaeology and Media Aesthetics collide. Here, the speculative approach is also required for Media Archaeology represents a speculative analysis too,

from a theoretical perspective it allows me to frame the layering of temporalities that are at play in both Media Archaeology and the artworks studied in my project.

The methodology applied in the thesis, with each chapter dedicated to one artwork has also taken part in the selection process of the works studied. As such, the thesis acknowledges that other artworks could have fitted in the study of digital debris, such as: Cornelia Sollfrank, *Net Art Generator* (1999), Amy Alexander *Multi-Cultural Recycler* (1996/97), Vuk Cosic *File Extinguisher* (1998), or Alexei Shulgin *Desktop Is* (1998), but has decided to keep works that were very distinct from one another in their processes and form as a way of reflecting the variety of propositions available. It has also been decided to respect the structure of the thesis with nine works studied, one per chapter.

I am also acknowledging that with its speculative approach, the thesis proposes a hypothesis which remains experimental and theoretical without providing a direct application.

2.2 A historicising and comparative project

Since the processes of retrieving, recycling and treating forgotten data are often real-time and thus in a perpetual state of realisation, and considering also the invisibility of the online waste, the thesis anchors the phenomenon of digital debris in a historical perspective. In the midst of the acceleration of technological development, and the profound shift in its capacity for storage and subsequently memorising (and conversely forgetting), this Ph.D. represents an effort to halt for a moment and look back at Internet Art and try to historicise it. Yet, the way the thesis is constructed is not linear, but as a series of case studies or pointers in the realm of Media Studies and Art History dedicated to digital art practices. As such, throughout the nine chapters of the thesis I weave two sets of references. Thus, the thesis is an exercise in comparative study by bringing together the case studies of digital debris in Internet Art and historical precedents in the history of detritus in art, or in the codification of language. The first one is the corpus

of Internet Art works, which deals with digital debris, in other words, artworks that have been conceived, constructed and disseminated online. The second set of visual references, such as Mallarmé, Raymond Roussel, David Larcher, Hollis Frampton, has been shaped according to the multi-media nature of the Internet Art pieces studied and provides a lens through which contemporary instances of Internet Art dealing with obsolete information can be read. As such there is a form of internationalism at play in the set of references and the online works studied. More importantly, the decision to refer mainly to experimental film and poetry reflects on the focus of the research to examine digital debris as both visual entities and objects of discourse. The common denominator in all the historical references used in the thesis is that they are all concerned with the idea of lists and listing. The notion of listing, at the core of programming commands, was the first step in processing the research by enumerating all the online works dealing with discarded information. The thesis then rewires the case studies with their historical counterparts in an original set of connections. Accordingly, the aim is to re-assess some of the traditional references of Internet Art (Sol LeWitt or Nam June Paik for instance) in order to stress their points of connection and departure. Canonical examples of *détournement* of an object into art practices, such as some of the *Rendez-vous* readymades by Duchamp, will also be examined in order to ask what's the difference between re-appropriating a physical object then turning it into an artwork and re-appropriating information to turn it into an artwork. With the help of Joselit's rich and current interpretation of the readymade, I pose in Part Two of the thesis that the recycling of information in Internet Art practice pursues and radicalises the unstable nature of the readymade object as both a sign and a commodity. In the present context of cognitive capitalism, where the Internet is the main actor, I argue that this instability is multiplied. As such, the complexity and institutionalisation of the readymade is perforated when juxtaposed with Thomson & Craighead's work, in order to both re-envision what the readymade signification is about in contemporary art practices and to illuminate Internet Art practices with a critical sharpness.

The thesis is also speculative in so far as it confronts, for instance, Raymond Roussel with Jodi, performing an intended form of anachronism, which aims at questioning by which means a history of Internet Art can be written. This thesis offers a few starting points of an answer by tapping into Carlo Ginzburg's interpretation of Kracauer's account of micro and macro history in *Thread and Traces* (2012). The optical metaphor used by Kracauer in defining macro and micro temporalities opens up a fragmented and kaleidoscopic conception of time which translates the ways in which history and the archive is rendered in online art pieces such as *Once Upon* by Olia Lialina and Dragan Espenschied. Even if the research inscribes the online works studied into a historical perspective, yet it doesn't mean that the inscription is linear, but rather shapes a net of connections. By insisting on the digital debris as a phenomenological item, and as a nexus where the material and the semantic meet, the thesis entertains a dialogue between forms of idealism and materialism and intends to gather conversations about the Internet as a medium, about online curating, or cognitive capitalism, related to the phenomenon of digital debris.

2.2 Interdisciplinarity and originality

The thesis is diagrammatic inasmuch as it creates simultaneous connections with not only an array of artworks but also a variety of other fields of enquiry such as Art Criticism, Art History, Art Theory, Media Theory, Visual Culture and Philosophy. This Ph.D. thesis intends to look at Internet Art and to confer upon it the attention it deserves by developing an adequate critical tool kit. The thesis intentionally brings the debate of the Internet as a medium and New Media Art to a broader audience. By a knight's move in which the research moves attention from industrially produced debris, to the use of digital debris in an art practice context, the research aims to close this gap and herein lies its originality. Through the examination of digital debris, the thesis also unpacks the specificities of Internet Art as a group of practices producing and displaying their work online. Hence in this thesis, the case studies of digital debris are all embodied in digital art works displayed online.

2.3 Visuality and Research Process

The research process stems out of my responses to the materials examined, i.e. all the pieces of online art. The thesis holds that visual artefacts generate new ideas. The thesis maps out the path between debris that are excavated to debris that are generated and stops in between to explain how debris are produced. What is striking in the retrieving/production of debris is the relationship they entertain with their visuality. Indeed, one thing to bear in mind is that contrary to Mary Douglas' famous definition of dirt as being matter out of place in *Purity and Danger* in 1966, digital debris are hidden in plain sight. At first the elusive nature of discarded information can lead one to think that digital debris do not exist. The visibility of online waste is thus contingent and conditioned through the production of art practices, which itself produces a specific scopic regime of knowledge. As such, visuality, as understood in the Ph.D., is first tinged with a Foucauldian perspective and space is left in the thesis to point out the ways in which the perception of digital debris is constructed and how this setup is an integral part of the definition of digital debris. The emphasis of the thesis is on the ways in which the alternative to the Epistemology of Search is visually constructed. Indebted to the work of Jonathan Crary in *Techniques of the Observer* (1992) and his argument that each medium produces a specific mode of seeing and ultimately a specific form of visual knowledge, the thesis aims at uncovering some of the specific visual modalities of online interfaces. The specificities unveiled are synthesised throughout the thesis via a series of motifs, which also serve as visual buoys in the arc of the argument. For instance, the pixel, in Part One, illustrates not only the compilation and sampling of data but also the layering of points of view that can be integrated in one spot on the interface. The grid is another recurrent theme in the thesis, at times vertical (as in Sol LeWitt and Thomsom & Craighead's case) and at times horizontal, it is turned into an HTML triptych (in Olia Lialina and Dragan Espenschied's work) and eventually becomes morphed, absorbed and swallowed in David Larcher's video work. Part Three gives room to the blank and flash motifs,

which symbolises the resistance and electrifying invasion of the network paradigm by digital debris.

The research started in a rather typological manner by sounding the field of Internet Art and listing all the works that deal with re-appropriating forgotten, discarded, dismissed data and then classifying them according to their internal structure; whether they are for instance open, real-time systems or if they follow archival, and self-contained logic. Works, which are participatory, were also separated from pieces, which were the result of the artist's work. The precept of that methodological position is to open up the phenomena at play online, to isolate their structural, visual and conceptual components first and then to find historical precedents for those components. Once the different online components have been analysed and compared to historical ones, the argument bridges the gulf between the different works studied at the end of each part of the thesis. In other words, each chapter starts by a dismantling of the visual phenomena at play online, which is then reconfigured in order to observe the way they resonate with one another.

3. Terminologies

3.1 Digital Debris

The precept of the research is to underline not only that digital debris are symptomatic of Internet Art in that they manifest the endless copy/paste, and remixing qualities that digital technology allows, but they also represent hidden, discursive and allegorical critical agents that cast an alternative light on the production of contemporary knowledge. These digital debris are proposed as symptomatic of Internet Art practice. They represent instances that highlight the need of a specific toolkit to interpret Internet art works. The digital debris are phenomena that helps to seize the medium specificities of using data as a material. Digital debris materialise on the screen, and the thesis asks what constitutes them? I answer the question by stating that both the technical and linguistic processes at play in digital debris converge to manifest themselves on what Cultural theorist Alexander

Galloway names the *intraface*, an autonomous zone of activity within the interface, a threshold between the edge and the centre of the image (2012: 40). According to Galloway, the interface is not merely a final point of encounter between data materialised in pixels and the viewer but it becomes a ground for digital debris to play out, unfold and generate, just as it is rendered in Jodi's *Asdf* where the digital debris is a real-time bespoke creation on behalf of the viewer.

3.2 Internet and Web

The Internet is a network of networks connecting computers to computers whereas the Web is a way of accessing information on the Internet. In other words, the Web is software built on top of the Internet that allows the users to access the Internet's content. The Web is one sees and clicks on the 'mostly invisible Internet'². The Internet's origins can be dated back to the 1960s whereas the Web was invented 20 years later.³

3.3 net.art, Internet Art, New Media Art

The recent history of using digital technology as a creative medium can be divided into different periods that I refer to, in turn, in the thesis. The first incarnation of using the Internet as a medium was net.art. Here, I refer to the timeline provided by Cultural theorist Alexander Galloway on the three successive stages of Internet Art. According to Galloway, it started with net.art, first coined by artist Vuk Cosic accidentally in an email. The era of net.art, spanning 1995 to 1999, is concerned with the network and advocates that net.art happens on the network, not in the computer but in between, thus making net.art extremely difficult to commoditise and curate in a traditional gallery system. From 1999, Galloway asserts that net.art has given way to Internet Art, a group of practices revolving around the

² See 'What's the difference between Internet and Web?' on the Computer History Museum at <http://www.computerhistory.org/revolution/networking/19/314> (last accessed 28/07/2015)

³ Ibid.

commodity of software. The idea of Internet Art somehow represents a step where art was beginning to be incorporated in gallery displays but still relying on the idea of exchange and real-time, as Galloway describes it:

Internet art, more specifically, refers to any type of artistic practice within the global Internet, be it the World Wide Web, email, telnet, or any other such protological technology.
(2004: 211)

Then Internet Art was followed by the term New Media Art. New Media Art is the broadest definition of the three and it includes 'any contemporary art that uses New Media technology' covering the field of 'Internet Art, CD-ROM, certain kinds of installation art, digital video, electronic games, Net radio, and so on' (Galloway, 2004: 211). Curator Christiane Paul defines New Media Art as being:

process-oriented, time-based, dynamic and real-time; participatory, collaborative, and performative; modular, variable, generative, and customizable. These features need not all surface in a particular artwork but can appear in varying combinations.
(Paul, 2009: 3)

In some respects, New Media Art illustrates the complete absorption of Internet Art practices into the traditional system of gallery distribution that net.art was rejecting and avoiding. For net.art, medium specificity as it was understood in modern art, was irrelevant and the main characteristic of its practice was the fact that it was happening on the Internet, between the nodes of the network. With the term Internet Art, I'd like to not only focus on works that are designed to be displayed online, but also works that don't solely rely on the undermining of the network, or its revealing. I am choosing the term Internet Art as a more inclusive term than net.art to incorporate works that acknowledge the permeability and ubiquity of the internet in contemporary culture and the dismissal of any boundaries between the online and offline. As such, throughout the thesis I'm moving towards works that also have some presence in the physical space of a gallery, such as *Biennale.py* and *The London Wall*. Yet if the early years of net.art, especially as revealed through the works of Jodi, have been labelled as utopian by curator Omar Kholeif in *Art After the Internet* (2014), the thesis intends not to dismiss the radicality present in those works and argues that the position held by artists such as Jodi in the early 90s holds a

striking resonance for today's cognitive capitalism. The thesis thus proposes to look at works such *Jodi.org*, as a way to engage in the conversations that Art started in *After Art* (2012).

3.4 Data, Information and Knowledge

Considering that I'm studying the re-appropriation of pieces of information in art practices, I'm going to spell out the difference between, data, information and knowledge. In an essay for Mathew Fuller's book *Software Studies* (2008), writer Ted Byfield charts the different stages in the evolution of the term information by referring first to the work of British statistician R. A. Fisher in *Proceedings of the Cambridge Philosophical Society* (1925). Byfield explains that Fisher examines the amount of information contained in one single observation within the context of a statistical analysis (Byfield, 2008: 126). For Byfield, Fisher points at the two principle qualities of information as being 'abstract yet measurable, and that it is an aspect or a byproduct of an event or process' (Byfield, 2008: 126). Then, he describes the work of American mathematician Claude Shannon in his 1948 *A Mathematical Theory of Communication*. Shannon offers a model of 'how to quantitatively measure the reduction of uncertainty in receiving a communication, and he referred to that measure as 'information' (Byfield, 2008: 127). From the different definition of information that Byfield draws from, he stipulates that the common idea is mediation (2008: 128). It reads:

the common experience of what is often called information is indirect, distinguished from some notional immediate or immanent experience by mediation- say, through a commodity (hardware, software, distribution, or subscription) and/or an organisation (a manufacturer, a developer, or a 'resource').
(Byfield, 2008: 128).

The author then synthesises his position by declaring that information 'is abstract yet measurable, it is significant without necessarily being meaningful, and, last but not least, it is everywhere and nowhere' (2008: 128). In an article entitled *Data, Information, Knowledge and Wisdom*⁴ (2004) by Gene Bellinger, Durval Castro and Anthony Mills, data is defined

⁴ Available at <http://www.systems-thinking.org/dikw/dikw.htm> (last accessed, 23/07/2015).

as something raw, which simply exists and has no significance beyond its existence (2004: 1). It is also explained that data can exist in any form usable or not whereas information is data that has been given meaning by 'way of relational connection' (Bellinger, 2004: 1). In other words it is the patterns, associations and relationships among data that can provide information. In Bellinger's article it is mentioned that this meaning can be useful but does not have to be (2004: 1). However, knowledge, Bellinger explains is the 'appropriate collection of information such that it's intent is to be useful' (2004: 1), thus, knowledge is rendered a deterministic process (2004: 1). Similarly, in a lecture titled *Data, Information and Knowledge*⁵, Scholar in Computer Science Roman V. Belavkin clarifies that data, information and knowledge can be classified by levels of abstraction and quantity with data at the base of the pyramid and knowledge at the top of the pyramid in which data represents measurements or records about events, information represents data that has been analysed and organised in such a way that one knows its characteristics (average, range, variance) and knowledge being information being 'put in a specific context'⁶. I am arguing in this thesis that that what I see as digital debris in Internet Art do represent data which has been organized and structured in an allegorical and entropic fashion, which render them information. Given that this information is precisely located in the context of art practice and that I've placed this information in relation to the Epistemology of Search, this information is turned into an alternative form of knowledge.

3.5 Post-Medium specificities and technical support

Even if the notion of medium specificity was rejected by the first generation of net-artists and has been substituted by a form of relativism, my choice of selecting the term Internet Art at the core of my argument is an attempt to set a few pointers to the realm of online practices and to challenge relativist

⁵ Available at <http://www.eis.mdx.ac.uk/staffpages/rvb/teaching/BIS4410/hand01.pdf> (last accessed 23/07/2015).

⁶ Ibid.

paradigms of the post-modern and post-medium. If the current context of media theory revolves around concepts of the post-digital or post-human, the thesis acknowledges the permeability of digital technology in the everyday; yet I'd like to hold on to some reservations on the all-encompassing use of the term which, stemming out of a particular western and urban *milieu*, takes for granted the conditions and uses of the Internet worldwide. As a result, my argument retreats from debates around the post-digital and post-human, for my intention in the thesis, conversely to current debates on the digital, is to defend a new form of medium specificity or as Rosalind Krauss called it, *technical support* (2010: 37). The thesis is indebted to the work of Krauss on what renders an artwork conceptually and theoretically rich. Even if Krauss's definition of technical support wasn't intended for Internet Art, it was nonetheless devised for an array of commodities that are included in art practice, such as cars or televisions. The commodification of online information invites a displacement of her concept of technical support into another field. Here I am engaging with the conversation she has started by applying it and extending it to another field of enquiry.

4. Structure of the thesis

4.1 Part One: How and Where do Digital Debris Appear?

The first part of the thesis looks at the ways in which digital debris are generated in Internet art. This part operates in a rather typological way by sounding the field of Internet art practices, which collect obsolete pieces of information and display them online. If certain works such as *Data Diaries* or *Once Upon* work as closed systems or as collections of data gathered at moment in time, others like *The Digital Landfill* are participatory and include an element of serendipity.

In Chapter One, I will examine the methods and the processes used to retrieve data in order to generate debris through the example of *Data Diaries* (2003) by Cory Arcangel. Indeed, I will show that if data is recycled the digital debris of Internet art are just as generated as when they are found or excavated. In other words the debris are generated insofar as they

are wrapped in another layer of encoding, once displayed in a different context. It will be explained that the debris become debris once they are materialised in pixelated form on the screen, rendering the generating of digital debris a visual phenomenon. The chapter will anchor the argument in a historical perspective by drawing a comparison with the work of Sol LeWitt and will discuss the often-claimed heritage of the conceptual artist in relation to art. I'll conclude that with the merging of gesture and intention that *Data Diaries* represents, Arcangel departs from a Sol LeWitt approach, which dissociates the execution of the work from its conceptualisation. The chapter will end with the *double-entendre* that *Data Diaries* fosters on the terms database and memory, and how this buoyancy of meaning allows Arcangel to introduce some criticality in his work to question the status of the interface and to disrupt design aesthetics.

Chapter Two explores a piece titled *Once Upon* (2011) by Olia Lialina and Dragan Espenschied. I will unpack the archival and fictional strands that the piece advances and will assess the pertinence of Media Archaeology as a theoretical tool to frame digital debris, by considering the Internet as an archaeological ground. The aim of this part of the thesis is thus to survey and examine the theoretical tools available for a study of digital debris in Internet Art. I will then argue that Media Archaeology, with its rejection of the visual, is limited as a lens to decipher the use and manipulation of debris in an art practice context. Chapter Two details the ways in which the process of generating data is visually translated through an HTML motif in the context of *Once Upon*. I will interpret *Once Upon* as a fictional archive that invites the viewer to reflect on the temporality that building an archive through frames implies. The chapter will ask, what type of history is thus written? Referring to Kracauer's micro and macro temporalities, I will point out that the HTML motif, at the core of *Once Upon*, fractures Internet history in a kaleidoscopic triptych of planes in which the artist becomes both the historical subject studied and the narrator.

Chapter Three focuses on Mark Napier's *Digital Landfill* (1998) and discusses the contingent visibility of online waste. As such, if non-recycled discarded information is often elusive, the visibility of digital debris is

necessary, for it is once debris are materialised on the interface that digital debris are visible. As such I am asking what and where is the image of the digital debris? Here, I am paying attention to the transition due to which digital debris are visualised. As a consequence, the chapter looks into the display and exhibition of digital debris as a way to inspect the notion of online curating.

4.2 Part Two: The Metaphorical Constitution of Digital Debris

After studying in Part One how digital debris are generated, Part Two argues that debris are as much a technical entity, or reality, as an object of discourse. It also examines how and what constitutes digital debris. Chapter Four, by analysing Thomson & Craighead's piece *Weightless* (1999), asserts that digital debris are partly metaphorical, yet unlike a purely Foucauldian approach which would examine the ways in which digital debris are an object of discourse, I submit that in the case of Internet art practices, digital debris represent an interplay of the semantic and the visual, hence the importance of semiotics in this part of the thesis. More precisely, in Chapter four, I will demonstrate how through not only their metaphorical nature, but also through the exhaustion of the metaphors they are undertaking, digital debris have the capacity to be used as critical tools that ridicule the potential dangers of automated Internet art. The three chapters acknowledge the aestheticisation of information at play in the manipulation of digital debris and aim at unveiling the ways in which the agency of debris is visually constructed.

In Chapter Five, I will submit that digital debris in the context of Thomson & Craighead's work *Beacon* (2005), are a nexus where the semiotic and the commodity meet. As such, it'll be argued that digital debris perform as a form of linguistic readymade in the age of cognitive capitalism, where the physical artefact of a wheel has, for instance, been supplanted by the commodification of online information. The internal logical particularities of digital debris will be observed through the lens of a new reading of the heritage of Charles Sanders Peirce's theories of signs, which I argue gains another resonance in the age of cognitive capitalism. Through a historical

detour via William Burroughs' *Electronic Revolution*, I will show that what is conveyed by online debris is inherently unstable and always in a state of being refreshed, or realised.

Chapter Six does not study an Internet Art piece but proposes to look at David Larcher's *Video/void* (1994) as a televisual example of the ways in which visual and semantic instability occurs through a simultaneous process of materialisation and dematerialisation. Chapter Six will conclude that digital debris appear through a phenomenon that I call semantic ratios. Chapter Six ends by defending the idea that the pieces of Internet Art, studied conceptually, succeed for they all, to various degrees, explore the technical specificities offered by the Internet and as such participate in redefining a form of medium specificity.

4.3 Part Three: The Allegorical and Entropic Resistance to the Epistemology of Search

The last part of the thesis unfolds the ways in which digital debris are instrumentalised in a critical manner. The aim of Part Three is to firstly introduce the notion of the Epistemology of Search and secondly, to examine the ways it is subverted by digital debris. Chapter Seven presents and contextualises the Epistemology of Search through the case study of an online and installation-based piece titled *Biennale.py* (2001) by Eva and Franco Mattes, also known as 0100101110101101.org. The chapter refers to the theoretical work of Joselit, who coined the term Epistemology of Search, and details what the concept implies. Through *Biennale.py*, the dissemination of information and the viral aesthetics digital debris can take on is clarified. The chapter focuses on the way in which the concept of the virus is employed in Internet Art. This word, which has navigated back and forth between the fields of biology and computer science, has acquired a layered understanding. Once applied to a broader cultural context, computer viruses form a sort of hybrid concept, which encompasses simultaneously and without differentiating them, media ecology, digital technology and physiological disease. Like a word or expression that is reused in different contexts as an image, it will be shown that digital viruses

are not a mere metaphor but can provide a critical abstract tool which can help to grasp the way in which information is disseminated in networks. Yet I also argue that the digital debris of Internet Art aren't simply viral as a computer virus is understood but that their viral nature has more to do with the performativity of the viral aesthetics described by Antonin Artaud in his theoretical writing. More precisely, I am arguing, by referring to Artaud's *The Theatre and Its Double*, that the introduction of the idea of a virus in a work of art, rather than facilitating an Epistemology of Search, has the ability to bring out struggles and blockages within the logic of networks. A detour via William Burroughs' *Electronic Revolution* helps us to grasp the stable symbiotic state in which digital debris in art practice is. I argue that it is in the stable symbiosis the debris create that a strategy of resistance is deployed, inserting a halt, a pause or a slowing down of the logic of networks.

Chapter Eight revolves around www.jodi.org by Jodi (1993) and compares the website with the poetry of Raymond Roussel in order to reveal the allegorical nature of digital debris and how the latter participates in implementing the idea of artifice and illusionism as a means to subvert the functioning of the Epistemology of Search. I will explain that with artificiality being one facet of digital debris, the latter can't be thought of as a form of knowledge in themselves, for their relation to truth is contingent. The artificiality and fiction incorporated into Jodi's work tinges their website with a form of indecision as to whether the debris presented are genuine, discarded codes or recreations. I will map out the shift from metaphor to allegory that occurs in Jodi's work. I will show that allegory with its doubling of meaning, its re-appropriation of images, its strategy of accumulation and its site specificities, holds a criticality which suits the digital debris in their resistance to the Epistemology of Search.

From a conceptual point of view, drawing from the noted oscillation of the debris between the computational and the cultural, I will address in Chapter Nine the on-going nature of the debris to define it as entropic. Entropic here is understood as referring to the second law of thermo-dynamics in which it represents a measure of unpredictability. Following up the definition of

entropy I will advocate that the digital debris of Internet Art, with the binary yes/no structure according to which an algorithm functions, could encompass a third element, that of serendipity. Serendipity is the focus of the chapter where the openness of real-time generated online pieces is studied, as in Jodi's piece *Asdfg* (1998). The chapter also investigates the notion of encoding in both its computational and cultural sense and queries what the implications are in using encoding as a creative process. In order to solve that problem of encoding chance, the chapter refers to Mallarmé's poem *Un Coup de Dés* as a theoretical source.

Part One: How and Where do Digital Debris Appear?

Chapter One: *Data Diaries* Revisiting the Heritage of Sol LeWitt

- 1.1 Data Diaries: automation in question
- 1.2 LeWitt: instructions as a new medium
- 1.3 The grid and the pixel
- 1.4 Transcoding rather than recycling
- 1.5 Labour: digital gesture VS conceptual art matrix
- 1.6 Digital Unconscious
- 1.7 Database *double-entendre*

This chapter will attempt to investigate the notion of digital debris through an instance of Internet Art and more specifically through the work of New York-based artist Cory Arcangel in his work entitled *Data Diaries*. The aim of this hermeneutical essay is to evaluate the ways digital debris are retrieved in the context of an art practice. *Data Diaries* is an example of a work that explicitly deals with digital garbage, i.e. documents that are necessary to run a computer but which are hidden under the sleek interface of the software and which are hidden away in the RAM of the computer.⁷ The chapter will demonstrate that in the context of an art practice, digital debris are as much generated as they are retrieved. Firstly, the essay will explore the processes that generate debris and propose that its automated nature is relative. In order to unpack the low level of automation that the piece performs and the set of instructions it implies I will draw a parallel with the method used by Sol LeWitt. Through the lens of LeWitt's drawings I will revisit the heritage of the American conceptual artist in relation to Internet Art and will argue that even if Arcangel uses a set of instructions to produce his work, the method differs from LeWitt's for there is in *Data Diaries* a clear association of gesture and authorship that LeWitt has dissociated himself from. I will assert that the act of retrieving data in order to create debris is here a case of transcoding rather than recycling. Transcoding being an act of translation, I will be led to stress the importance of digital labour in Arcangel's work by making a historical detour via a piece

⁷ The piece *Data Diaries* was commissioned by Turbulence in January 2003 available at <http://www.turbulence.org/Works/arcangel/>. (last accessed 16/02/15).

of work by British experimental film and video artist, David Larcher. Reference to Larcher 's *Granny's Is* will help to assess not only the production of *Data Diaries* but will also open the way to tackle the psychological reading of the website that Arcangel has triggered. Thus, the conflation between the RAM of the computer and the artist's memories will be observed as a form of digital unconsciousness. Here the chapter focuses on the individual memory of the artists and the anthropomorphisation of the computer. I will also assert that the blurring of the terminology used both to describe, for instance, a database in its technical dimensions, as much as to narrate an online diary, represents a critical tool which sheds light on the very language used in New Media and critiques the interface as a transparent medium.

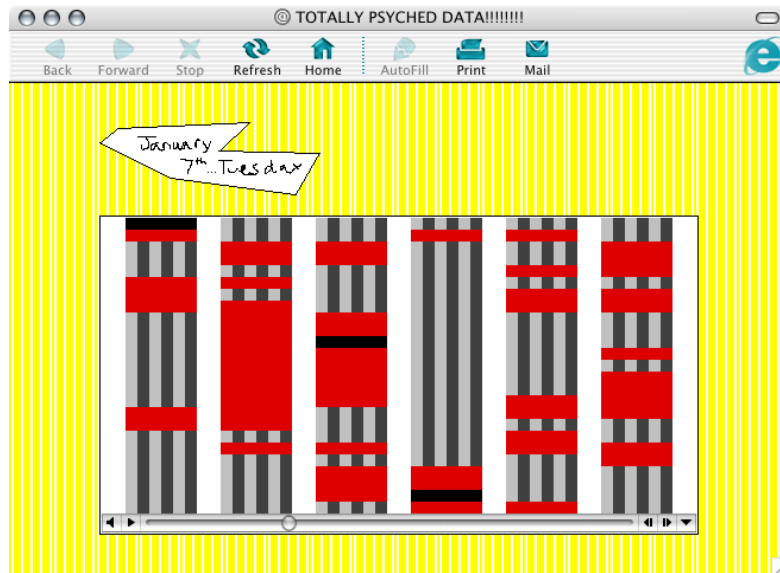


Fig.12) Screenshot from *Data Diaries* (2003) by Cory Arcangel accessed on 13/12/11 at <http://www.turbulence.org/Works/arcangel/intro.php>

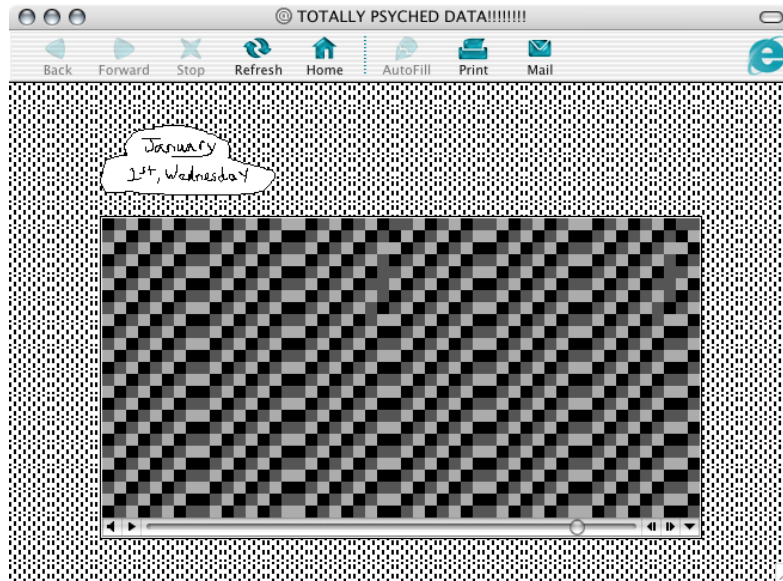


Fig. 13) Screenshot from *Data Diaries* (2003) by Cory Arcangel accessed on 13/12/11 at <http://www.turbulence.org/Works/arcangel/intro.php>

1.1 *Data Diaries*: automation in question

The piece *Data Diaries* was commissioned by Turbulence in January 2003 and is still accessible online.⁸ *Data Diaries* offers a recent account of a work that explicitly deals with wasted data, i.e. documents that are necessary to run a computer but which are hidden under the sleek interface of the software and which are hidden away in the RAM of the computer, which may be why Stallabrass argues that there is no trash in digital information (2009: 180). *Data Diaries* is an exercise of *RAM fishing* which consists in looking for pieces of information stored in the RAM of a computer. Data in the RAM never gets erased but is over-written until the computer shuts down and restarts. As a result, data, which has been generated and accumulated during the use of the computer, is accessible. At the time when the work was produced, a QuickTime file was made of two components, a header and the data. In *Data Diaries*, Arcangel disassembled the header from the data and then erased the data each header corresponded to. Since a QuickTime file has no error system, by activating only the header, Arcangel tricked the computer and forced the machine to play any kind of data stored

⁸Available at <http://www.turbulence.org/Works/arcangel/>. (last accessed 18/02/15).

in the ram. The artist repeated the action every day over a month and thus revealed the hidden data that had been generated. The result is eleven hours of video material fragmented into 31 short videos, one for every day of the month. The work is a collection of short videos with sounds that are data-generated and time based. Despite the fact that the initial process started by Arcangel is called RAM fishing, and as such presupposes that the operation only necessitates picking up pieces of information that are dissimulated, the number of procedures involved to display the 'trash' Arcangel is manipulating requires first a dissociation of a QuickTime file and then another layer of encoding to force the computer to wire the empty header with whatever information is located in the RAM. As a consequence, the actual pixelated debris visible on the screen is a recreation from ephemeral data in the RAM, it represents an idea of waste which is just as much generated as it is found. What *Data Diaries* offers us is the visualisation of data that is normally not designed to be seen, and so it is worth pausing and unpacking the procedures that have rendered those lingering pieces of information visible and generated debris. For instance, the action of splitting a QuickTime file in two is a consequence of the variability of New Media. The variability of New Media is one of the five fundamental principles of New Media (the others being numerical representation, modularity, automation, transcoding) mapped out by Lev Manovich in his typological *Language of New Media*. According to Manovich,

It becomes possible to separate the levels of 'content' (data) and interface. A number of different interfaces can be created from the same data. A new media object can be defined as one or more interfaces to a multimedia database.

(2002: 37)

Here, Arcangel's videos can be thought of as interfaces that reveal the multimedia nature of the documents stored in the RAM. Indeed, the different types of patterns that can be distinguished in the videos illustrate the various kinds of document stored in the RAM (HTML documents, Flash movies, GIF or JPEG images, text characters). For instance, during a lecture

given at Columbia University⁹, the artist was able to decipher the pure shapes of colour the videos were converting and tell the audience the documents they referred to. One of the other characteristics of New Media that *Data Diaries* illustrates is its modularity. In the case of *Data Diaries*, the QuickTime files that are deconstructed are small files, which are then shown on a larger scale when they are displayed online. This is an example of the modularity of New Media according to which the size of a New Media object can be modified without losing its inherent structure. Thus, the large size of the pixels visible in the videos can be seen as a consequence of the modularity of the work and proves that the debris presented on the website have been modified, blown up and transformed into a construction that would fit Arcangel's vision of what virtual waste could be.

Conceptually, one of the assets of Internet Art depicted in *Data Diaries* is its replacement of execution by automation. Arcangel wrote a program that executed the work, and as such it operates what Manovich calls a low-level of automation 'in which the computer user modifies or creates from scratch a media object using templates or simple algorithms' (2002:32). Although, in *Data Diaries* the computer doesn't start from scratch it nonetheless modifies, through automation, the 'media object', by retrieving and rendering data visible in order to create debris. In order to clarify the idea of automation in New Media, let's examine another definition of media objects. American scholar D.N. Rodowick in his book *The Virtual Life of Film* astutely discusses the idea of media objects and departs from Manovich's definition by radicalising it, it reads:

Computers do produce objects or things, but processes – automatisms – transforming inputs and outputs. Understanding the automatisms of computing involves thinking beyond or beneath their outputs to consider more deeply their processes.
(Rodowick, 2007:127)

⁹ See Cory Arcangel, *Digital Media Artist*, School of the Arts, Columbia University, New York, December 16 2004 available at http://www.columbia.edu/itc/soa/dmc/cory_arcangel/ (last accessed 16/02/15).

Rodowick argues that a digital recording is by nature *metamorph* and not *isomorph* and accordingly does not so much record its source as it converts them into a symbolic logic suitable for algorithmic manipulation (2007:126). Following this argument it seems that for Rodowick, unlike Manovich, the possibility of a New Media object is not so certain and that one should understand them as automatic processes rather than objects. In a context such as *Data Diaries* where the artist is visually translating information to generate debris, I would point out that the sheer automated and process oriented nature of New Media as defined by Rodowick, fits the on-going generative nature of the debris displayed by Arcangel. In other words, by drawing information from the RAM and modifying it to then present it as debris, Arcangel's approach resonates with Rodowick's call for media 'objects' to be understood as processes.

1.2 LeWitt: instructions as a new medium

The idea of automatism stems naturally from the technical specificities of digital technology but in an art practice context, draws from, among other sources, the work of Conceptual artist Sol LeWitt. The parallels drawn between LeWitt's work and Internet Art can be summarised in the original difficulty to curate the work and the idea of setting up a set of rules or instructions that perform the work (Hodin, 2009: 16). cited as one of the major sources of inspiration for New Media artists. As such it seems that his particular use of the word method over the word process in works like his *Wall Drawing*, executed in 1968 at the Paula Cooper Gallery in New York, would be useful in analysing Cory Arcangel's approach. *Wall Drawing* is LeWitt's first wall drawing. The work stemmed out of the artist's three-dimensional work which systematically investigates cube structures.¹⁰ For the exhibition at the Paula Cooper Gallery, LeWitt created a system of twenty-four permutations the line. LeWitt then developed a vocabulary of the four basic directions in which lines can be drawn: horizontal, vertical,

¹⁰ See Massachusetts Museum of Contemporary Art
<http://www.massmoca.org/lewitt/walldrawing.php?id=11>

45° diagonal right and 45° diagonal left. The artist set up a system of twenty-four permutations made by rotating the lines (drawn inside squares) in four sections of four. Later he would also superimpose the lines on top of one another, as seen in *Wall Drawing 11*. The Massachusetts Museum of Contemporary Art describes LeWitt process as follows:

LeWitt's earliest wall drawings, including *Wall Drawing 11*, all are done in hard, black pencil, a material that rendered the work as two-dimensional as possible and maintained the integrity of the wall as a plane. By drawing directly on the wall, Lewitt limited the work's duration; ultimately the wall drawings are painted over. Yet, despite this temporary aspect of the drawings, the idea is permanent, and the drawings can be redrawn on another wall by another person.

(2008: Massachusetts Museum of Contemporary Art
<http://www.massmoca.org/lewitt/walldrawing.php?id=11>)

To make his practice explicit Lewitt suggests the term method, which according to him is more suitable to define his approach than the word process, for it includes both the mental process and the physical process of two-dimensional drawing. Similarly, if the technical act of retrieving and generating debris could be read as a process, the piece also revolves around the idea of illustrating in pixelated form a digital unconscious, or in other words, the conflation of the artist's use of a computer and the RAM. As such, the overall approach undertaken by Arcangel here could be seen as a method, for it involves both the physical process of encoding the piece and the mental processes involved with its conceptual aspect. In an interview with Patricia Norvell in 1969, Lewitt declared that his art is about 'not making choices. It's in making an initial choice of, say a system, and letting the system do the work' (2001:114). In quite a similar manner, Arcangel builds a program, which by its automatic structure is making the work. The alternative use of the QuickTime file set up by Arcangel is, in Lewitt's term, the 'system that does the work'. Later in the interview, Lewitt mentions that the content of his work is the system. Yet, Lewitt refutes any formalism and states that he starts from a very simple 'silly' idea, which is part of an irrational method, an exercise that is not meant to represent the world (Norvell, 2001: 121). Arcangel's attitude seems to resonate with Lewitt's

insofar as, being a hacker, he defends a playful approach, which consists in deconstructing codes without necessarily planning the outcome of his work.¹¹

1.3 The grid and the pixel

As they appear on the screen, the data treated by Arcangel becomes debris in a pixelated form. Interestingly, from a visual perspective, the video frame of the QuickTime format populated with pixels recalls LeWitt's use of grids and cubes to translate an exploration of systems. In 1996, a piece of Internet Art called *Every Icon* by the American artist John F. Simon Jr. also explored LeWitt's heritage in a digital form. The piece plays on duration and presents the viewer with a Java Applet grid of up to 1 024 smaller squares that are programmed to appear in black and white. As the piece unfolds, *Every Icon* displays all the possible colour configurations until the grid becomes eventually completely black. The piece seems endless¹² and tries to exhaust all the possibilities offered by an algorithm, in squared structures that recall LeWitt's drawings. The smaller scale of the grid in John F. Simon Jr.'s work also resonates with the grid of pixels that Arcangel displays in *Data Diaries*. Yet, whereas the grid employed in *Every Icon* is a construction closer to LeWitt's drawings, Arcangel's grid, or smaller squares, stems from the form of the pixel, which in a digital video – as it is in *Data Diaries* – already represents a zone of where video signal is sampled. In an essay entitled *Materiality and Medium-Specificity: Digital Aesthetics in the Context of Experimental Film and Video*, British video artist and writer Simon Payne, explains:

unlike film frames, which are discrete objects - you can hold a strip of film up to the light and see its frames - pixels are ultimately abstract entities. They are small regions within which the video signal is sampled.[...]The pixels of a digital video image always remain at one remove from direct experience, but they

¹¹ See *Cory Arcangel, Digital Media Artist*, School of the Arts, Columbia University, New York, December 16 2004 available at http://www.columbia.edu/itc/soa/dmc/cory_arcangel/ (last accessed 16/02/15)

¹² See Matt Mirapaul's article in the New York Times (1997) about the duration of the piece <http://numeral.com/articles/041797mirapaul/041797mirapaul.html>.

represent the means by which digital images function
(Payne, 2007: 31)

In other words, whereas the grid is for LeWitt a way of marking and watching a cerebral process unfold, Arcangel's pixels are already the sum of an average of the information processed. LeWitt is unfolding a form of 'abstractisation' whereas the pixels by nature represent a state of abstractisation already in place. The formal cubic structure that constitutes LeWitt's system is in both *Every Icon* and *Data Diaries*, applied *a posteriori*. The pixelated manifestation of debris in Cory Arcangel's piece is the result of transcoded sampling of information. Furthermore the quality of the pixel as being already an average sampled compilation of data participates in the generative nature of the digital debris.

Moreover, according to British artist and writer Graham Harwood, 'clusters of pixels enable us to dive through our screens and stand in the position occupied by the lens' (Harwood, 2008: 215) and as such allows a multiplicity of points of view that the singular and linear set up deployed by LeWitt prevents.

1.4 Transcoding rather than recycling

In the introduction, which supports *Data Diaries*, Cultural theorist Alexander Galloway underlines the fact that the viewer is watching a conversion of information. It appears indeed now that *Data Diaries* confronts the history of the medium as a tool of communication, and its ability to mediate content neutrally. A *mise-en-abîme* is occurring here, about discourses on the nature of the Internet as medium, which has the potential to mediate content and the recycling of debris. As a consequence, if fabricated, debris are never old but always new, from the new to the obsolete without time to become worn out, or damaged. The processed-based nature of digital media then seems to elude the straightforward notion of recycling, where objects are transformed from one fixed state of being to another. In the case of *Data Diaries*, it seems rather that what Arcangel is reaching at is a translation of format, which is what Lev Manovich calls transcoding. In *Language of New*

Media, the author proposes to inscribe the term transcoding in a critical and cultural perspective. As such, to transcode is:

to translate it into another format. The computerisation of culture gradually accomplishes similar transcoding in relation to all cultural categories and concepts. That is cultural categories and concepts are substituted, on the level of meaning and/or language, by new ones that derive from the computer's ontology, epistemology, and pragmatics. New media thus acts as a forerunner of this more general process of cultural reconceptualisation.

(Manovich, 2002: 47)

By converting information and generating debris, Arcangel is applying to a technical process a cultural narrative of personal memory that illustrates the phenomenon of transcoding that Manovich is outlining. Yet Rodowick refutes the fusion of the cultural and the computational that describes Manovich:

For Manovich, new media are nothing less or more than the synthesis of these two histories in the translation of all existing media into numerical data manipulable by computers and accessed via electronic screens. Manovich calls this 'transcoding', a process wherein all previous cultural forms become subject to the computer's ontology, epistemology, and pragmatics.

(2007:95)

Rodowick criticizes Manovich on two points; firstly he mentions that the author of *The Language of New Media* ties the histories of cinema and computational processes too closely together, which therefore tends to flatten out the specificities of the film medium. Moreover, the author of *The Virtual Life of Film* regrets the 'retrospective teleology' (2007:95) that Manovich sets up and according to which all time-based images are studied from a film point of view. Despite his focus on film, Manovich, according to Rodowick, does not stipulate the becoming of film and photography after their computational conversion. Yet on a close reading of Manovich's text, one could argue that if Manovich centres his typology of New Media on the history of cinema, he also stresses the importance of anchoring New Media to the idea of programmability. Indeed, at the end of the section where he outlines the principles of New Media, Manovich concludes that even though it has no historical precedent, the most fundamental quality of New Media,

which is its programmability, has to be addressed in relation to computer science (2002: 47).

1.5 Labour: digital gesture VS conceptual art matrix

If the parallels drawn between Cory Arcangel and Sol LeWitt help to grasp computational processes as an automated continuation of LeWitt's instructions, both works convey opposite ideas on authorship and the actual labour involved in the realisation of their pieces. According to Art Critic Rosalind Krauss, LeWitt's practice represents a departure from gesture and a move towards 'matrix'. As she put it:

While gesture registers the artist's bodily and psychosexual energy, matrix is far less emotive; its intellect-conceptual approach is to the object rather than the subject of the linear field. [...] The original grid is such a matrix.
(Krauss, 2007: 29)

In that regard, Arcangel's *Data Diaries* with its psychological metaphor, its hacking solitary execution seems to pursue the tradition of gesture rather than the object-centered matrix system developed by LeWitt. Krauss then explains automatism as a principle that doesn't express the isolation of the artist but which suggests that the rule of the system stems from the support (2007: 50). LeWitt could be seen more as a composer who dissociates himself from the object produced, whose essential quality is to be performed. As a result, the actual long work of meticulously drawing lines on a wall is put aside by the way in which LeWitt conceptually framed his work. The intention that turned the work of art into an object, which needs to be executed or performed by someone who is not the artist, hides the craftsmanship needed and involved in the actual realisation of the work. Krauss even goes further by stating that for philosopher Stanley Cavell automatism is a set of rules that becomes the medium (2007: 50). The Art Critic points out that the redefinition of automatism is an effort to draw attention to the 'self-regulating character of traditional aesthetics medium'

(2007:50). In 1971, in an interview for French Television¹³, Duchamp, who could be seen as having pioneered the 'self-regulating character' of a medium, declared that the readymade was the consequence and response to 'too many people making pictures with their hands' (Joselit, 2001: 157). Yet Duchamp's approach departs from Krauss' point inasmuch as in the case of the readymade, he wasn't working with traditional media but was very much inventing new ones. Following the heritage of Duchamp, Lewitt's work could be seen as a conscious decision to use the hand and to locate the work in the cerebral process that decides on the work to be realised. As such, LeWitt's drawings attempt to point to something that lies outside the work, between the concept and its realisation. Whereas *Data Diaries*, in its final form, displays a piece of work which has been conceptualized and executed by Arcangel and as such doesn't point to something outside the work, but within. Thus, *Data Diaries*, even if it drew data from an external source, illustrates an instance of practice that combines a form of automatism wrapped in a visible sense of craftsmanship of the piece. It is in this context that I argue that *Data Diaries*, even if indebted to the heritage of LeWitt, nonetheless positions itself in opposition to 60's conceptual art and in an online context accentuates the unison of the making of the piece with its original intention. As such, it could be said that Arcangel reverses the blurring of authorship that digital technology allows with its copy/paste/ endless de-multiplication capacity.

Arcangel is proposing a platform which generates debris, and as it evokes the re-appearance of memories in dreams, the work can also be read as a questioning of the status of the interface. Somehow, in generating debris sourced from residues located in the RAM, Arcangel confronts the viewer with the garbage of the computer and as such refutes the pretended invisibility and transparency of the interface. In displaying these quirks of digital technology, the artist is breaking down the illusion of the interface as a sleek transparent mediator. As such, *Data Diaries* could be read as what British Media theorist Fuller conceptualizes as 'speculative software', which

¹³ Marcel Duchamp interview for a retrospective exhibition of his work (1971), available at <http://www.ina.fr/video/CPD07011070> (last accessed 30/01/15)

is 'a space for the reinvention of software by its own means' (2003:30). In other words, the strength of *Data Dairies* is to critically engage with the medium of both the computer and the interface from within.

Indeed in revealing the hidden debris of the RAM, the New York artist is attacking the idea of the immaterial interface and drawing the attention of the viewer to the particularities of the presence of not only the computer but also the interface as a medium. Ultimately one starts to realise that Arcangel's work is not solely about an aestheticisation of obsolete data but about an instrumentalisation of dismissed data. Arcangel, by offering the viewer a psychological reading of his computer memory, is turning digital debris into an autonomous system, one which turns the status of the interface upside down. Since digital debris are themselves the projection of a cultural concept onto a technical reality, they allow dialogue that takes place through the interface between the computational and the cultural. Thus, Arcangel created a piece which oscillates between its medium being the computer or the interface, or in other words between hardware and software, between the material and immaterial. The piece opens up the medium's possibilities and asks what actually constitutes a medium in 2003, when the art is happening online. It could also be pointed out that the aesthetics of *Data Diaries* possess some criticality too. Indeed with its cloud-shaped bubble speech that contains the date of each video in a mimicked hand writing, the piece plays with the garish aesthetics of '90s Nintendo video games. Furthermore, the blurring of the pixels – a result of the blowing up of Quick time files – contrasts with the crisp look of Arcangel's website, as if the intention of the artist was to spray a layer of irony on the commercial nature of the '90s video games targeted at the younger demographic. The gulf between the aesthetic of the website and the video highlights the ways in which the visualisation of data can be misleading. Consequently, I'd like to argue that one of the underlying principles that runs through *Data Diaries* is an attack on software design aesthetics. This position justifies, in part, Cory Arcangel's choice to work with codes and not through software, which might impact heavily on the aesthetic of the work he wants to present. Hence the deliberately peculiar aesthetic of his work

that he heralds as 'dirt style' and which, with its lurid patterns of colours evokes 1990s video games visuals. Such references to video games is not surprising, given modifications to the games that Cory Arcangel undertook during the late 1990s, in works such as *Super Mario Clouds*.

The act of constructing a personal narrative out of the archaeology of one's media debris finds one of its historic illustrations here in the work of British filmmaker David Larcher. Media Theorist Jussi Parikka sees David Larcher's work as emblematic of a Media Archaeological approach. British experimental film-maker David Larcher¹⁴ produced in 1989 a video piece entitled *Granny's Is*. The artist, who studied Archaeology and Anthropology at Cambridge, (and Film at the R.C.A.) describes the piece as follows:

I filmed the images during the Christmas of 1982, 1983 and 1984. They were taken in the room in which my grandmother lived since 1943. After her death, I took her journal and photo albums. I reconstituted the room as it was shown in a tiny watercolour that she had done in 1945, and which I remembered while I was young. I filmed alone in this room, creating images of her. I felt like a gardener who cultivates his souvenirs by trimming or transplanting them. Thanks to this work, *Granny is...* (Larcher, Vitheque, Independent Video Online)

<http://www.vitheque.com/Fichetitre/tabid/190/language/en-US/Default.aspx?id=282>

Using footage shot over more than ten years, the video is a complex work of fleeting images, memories, disappearance and loss. The piece, 46min long, explores the technical possibilities offered by editing, overlays and inserts and jumps between the linguistic, the typographical, the literary and video aesthetics. The structure of the piece isn't apparent at first, apart from three titles which successively seem to divide the video into three chapters, such as 'End of Day Glass', 'What Is Spoken Remains in the Room Waiting for the Future to Hear it' (the second verse from T.S. Eliot's *The Family Reunion*) and ' Tap! Tap! The Blind Night's White Stick'. The piece revolves around a few principles and patterns, which are recurrent in the video. First there is the self-generated *mise-en-abîme* strategy, which by layering images of the room setting, a portrait or Larcher at work, complicates the images

¹⁴ Interestingly, Larcher's website borrows from the aesthetic of the early net.art websites such as *Jodi.org* or *The Most Beautiful Webpage*, which is partly recreated in *Once Upon*.

produced with the depiction of their own dissolution, as in Larcher's effort to recollect and reconstruct the portrait of his grandmother from memory. The strategy is also manifest when he turns the objects and pieces of furniture of his grandmother's flat into screens. Secondly, there is also the astronomical rotation of the images, resulting from an occasion when Larcher and his grandmother discussed an astronomy book that she described as terrifying. The revolving movement of planets is most visible when Larcher is using the motif of the glass ball. The rotation of the solar system seems also to encompass the structure of the whole piece, with memory, and the image of his grandmother at the centre. As such, the viewer witnesses the reappearance of images he or she has already seen previously in the film, but in new forms, on a different and smaller screen. Indeed, the piece shares with *Data Diaries* a formal interest in the frame motif even though Larcher's frames are analogue and not Quicktime format videos; *Granny's Is* translates the discontinuities of reality through a myriad of smaller frames disseminated into the space of his grandmother's apartment.

Interestingly, the piece also intertwines different types of technology (film and video) but also debris of shots taped throughout the years, which then syncopate with the images of Larcher's grandmother. 'End of day Glass' refers to the items that glassworkers made in their own time at the end of the day, using the remaining molten glass in the pots. The various items produced were consequently made of different colours. The term indicates that Larcher was working with leftovers and gives the viewer a clue as to why the images are composite. Additionally, a constant back and forth between Larcher's studio and the apartment she was living in occurs in the work. Larcher orchestrates the collage of the pieces of video he's using and at times watches it unfold, as if the film maker was conferring a certain life and autonomy to the images he has created, hence perhaps the gardening analogy he uses to describe his work. Thus, the images populate, float and navigate in the middle of this labyrinth of screens that Larcher has constructed. Accordingly, a materialist reading of the work could confer some sort of agency to the media depicted in *Granny's Is*. Yet, on further

inspection, I'd like to propose that the piece departs from Media Archaeology for two reasons that can also be found in *Data Diaries*. A detailed critique of Media Archaeology will follow in Chapter Two, but here to stress the importance of the depiction of labour in David Larcher's piece, suffice to say that Media Archaeology represents a materialist discipline which looks at media as objects in order to understand cultural technology. Firstly, the physical act of digging out images, the labour involved in producing images, is explicitly depicted in the piece and even aestheticized, which contradicts the de-visualisation of media that Media Archaeology aims at. Larcher, by choosing the term 'End of Day Glass' and depicting himself at work, emphasises the mechanical processes at play and chooses a craftsmanship term which emphasises the genesis and production of all the effects developed for *Granny's Is*. In that respect, the archaeological approach visible in *Granny's Is* contrasts with the methods defended by Media Archaeology, which relies on data mining, an automated algorithm-based research and as such alters the position of the archaeologist as someone who undertakes, who carries out the research. If at first sight the data mining seems to translate the approach taken by Cory Arcangel, the procedure by which data is gathered should be unpacked. Cultural theorist Marquard Smith indeed asks in a paper, which investigates the current conditions of research as praxis in art and humanities, what are the implications of using terms such as 'data mining'? He explains that the term refers to a 'semi-autonomous computational process, which discerns in large data sets patterns of activity and extracts that information' (Smith, 2014: 394). This process seems to resonate with what Cory Arcangel is developing in *Data Diaries*, and yet as Smith points out the term data mining is loaded with a connotation of industrial production and with it a certain type of labour. I would submit that the displacement of such a lexicon in the information age is rather misleading in understanding the conditions of computational processes. A confusion of terms, which by being fostered, enables a certain control of the conditions of labour in the age of Big Data. It could be argued then that Larcher's endeavour is partly archaeological, but not in an automated sense. The visibility of the archaeologist's practice,

as for instance when one sees the artist at work in an apartment, enables the inscription of his choices onto the medium he's manipulated, to pierce through. This is the second point, which for me differs from a Media Archaeological perspective, the presence and representation of the artist's intentionality. Indeed, by controlling at length the chain of production of his own work (through RAM fishing, then transcoding into 31 videos, and online curating), Cory Arcangel's piece contains all the different layer of labour involved in the making of his work. Not only do the author of the website is responsible for the labour required to create the work, but by being at the same time archaeologist/hacker and curator he also leads the different types of action and labour that those two activities imply, from the physical programming skills required to RAM fishing, to the conceptual and abstract work needed to conceive the collection of daily videos. Yet Arcangel, in *Data Diaries*, doesn't display or mention the work involved in the dissociation of the Quicktime file he undertakes. It is interesting to notice how the notion of craftsmanship is often at first sight often dissociated from work the production of a new media artwork (Richardson, 2006: 157)¹⁵. Yet, in other contemporary productions of digital images, artists such as Elizabeth Price defend the labour involved in the realization of their work. A multiplicity of roles and decisions are visible in Larcher's images that are never sizable in their entirety but appear rather as metonymy, as parts. Thus it seems as if the grandmother is only represented through her attributes, the traces of a person who's no longer present and a sign of a constellation of images-to-come perpetually in movement. The piece translates the complex relationship Larcher had with his grandmother. Accordingly one only sees the two characters visible on the screen through an operation of collage, never in the same shot; only Larcher's voice is present with the image of his grandmother, as a sign of the impossibility of occupying the same space and to fully recompose his memories of his grandmother. A beam of distorted images from the old lady's eye at the beginning of the video does shed some

¹⁵ See also Richardson, A. G. thesis 'Truth to Material: Moving from Software to Programming Code as a New Material for Digital Design Practice' (2010), available at http://sure.sunderland.ac.uk/3311/1/Truth_to_Material.pdf (last accessed 10/07/15).

enigmatic, symbolic light onto the portrait and warns the viewer, from the start, that the piece is very much conceived from Larcher's consciousness, which in some respects, recalls Proust's *mémoire involontaire*. In *History, The Last Thing before the Last*, Kracauer draws his account of memory from Proust's visit to his grandmother after many years in *Guermantes Way*. For Kracauer the *mémoire involontaire* is an experience of historical subjectivity, which places the subject in the position of an exile:

The exile's true mode of existence is that of a stranger. So he may look at his previous existence with the eyes of one 'who does not belong to the house'...it is only in this state of self-effacement, or homelessness, that the historian can commune with the material of his concern.

(Rodowick, 1987: 123)

Kracauer does assert the interpretative capacity of the historian and places his subjectivity at the centre of any historiographical project. I would like to submit that, although the image making process of *Granny's Is* unfolds before both the viewer's and Larcher's eyes – as he depicts himself standing in the middle of the flat – the work doesn't merely provide a meta-discourse on the conditions of the production of the piece itself but intertwines it with a personal narrative. As such, *Granny's Is* represents more of a dialogue between the symbolic and the optical, it walks the line between the material and the psychological. It is the subject, manifested through his intention and choices, that constructs the semantic layer necessary to navigate between, and interpret the temporal disparities expressed through, the collage for Larcher.

1.6 Digital Unconscious

In that respect, *Data Diaries* differs slightly from previous embodiments of Internet Art which undermine completely the notion of authorship. In *Data Diaries*, Arcangel randomly draws an auto-portrait of himself. Chance as a portraiture tool in *Data Diaries* can remind the viewer of chance as investigated by Fluxus artist Daniel Spoerri. In *Topographie Anécdotée du Hasard (An Anecdoted Topography of Chance 1962)*, Spoerri mapped the 80 objects lying on his table on 17 October 1961 at 3.47 p.m. Each object is

assigned a description and an evocation of the memories attached to it. Spoerri started with this incidental opportunity, this chance of mapping out these objects, to explore the possibilities of a situation. By reflecting on his connection with these objects, *An Anecdoted Topography of Chance* can be read as an autobiographical novel (Spoerri, 1995:10). A parallel could be drawn with Arcangel's approach, which sketches a portrait of the artist through the use of his medium. Through the use of his dismissed data, Arcangel is relying on the random automation he wrote, revealing content on an everyday basis without selecting or editing it. The idea of incorporating chance can be found in both works: the objects lying on the table are the starting point of an introspective journey for Spoerri whilst the videos in *Data Diaries* are the result of an incidental dig into Cory Arcangel's brain through the use of his computer. In adding to the automation aspect of the work this incidental factor, the link Arcangel is making with psychoanalysis becomes more apparent. Indeed, Arcangel plays with the idea of a personal digital unconscious by using his computer RAM as a brain, and the videos displayed allow the viewer to see Arcangel's computer dream.

In *Data Diaries*, Cory Arcangel shifts from the specific technical meaning of memory as understood in relation to the computational medium he uses, to a psychoanalytic meaning of memory. The artist here imagines that computers do have a subconscious and creates a situation in which it is possible to watch them dream. Each video displayed on the *Data Diaries* website is therefore the digital dream of the day it is linked to and brings to the viewer a different set of memories for each day¹⁶. Interestingly, Lev Manovich has also provided an anthropomorphic version of the computer memory:

At the same time, a computer database becomes a new metaphor that we use to conceptualise individual and collective memory, a collection of documents or objects, and other phenomena and experiences.
(2002: 214)

¹⁶ See <http://www.turbulence.org/Works/arcangel/alex.php> (last accessed 16/02/15).

Not only do the videos in *Data Diaries* enable the viewer and the artist to sneak a peek at the memories of the computer but with their rapid pace and sounds, they also, as Arcangel puts it, show the 'computer suffocate and yell at the same time'.¹⁷

To study further this metaphor of the computer RAM as an unconscious, and to unpack its complexities, it might be important to consider Freud's early major work, the *Interpretation of Dreams*. Published for the first time in 1899, *The Interpretation of Dreams* introduces Freud's concept of the unconscious. Freud at the beginning of the *Interpretation of Dreams* investigates the field of the study of dreams and reviews existing scientific writings on the subject. Rephrasing Hildebrandt, he asserts that a dream is something completely separate from the reality experienced in waking life and he adds that the dream is 'an existence hermetically closed within itself' (2008: 11). Yet, according to him, dreams are the gateway to access the unconscious. To demonstrate his point, the author focuses on the relationship between dreams and memory, stating precisely that dreams borrow their content from perceptions recorded during waking life. Freud then advocates that the material of dreams is not so much reproduced in dreams as remembered. He draws the conclusion that something which 'is once mentally our own can never be entirely lost' (2008: 19). Just as the information in the RAM of the computer never gets erased, memories always leave a trace. Bearing in mind these preliminary notes, Freud outlines a notion that he would later accurately name in another book entitled *On Metapsychology*. The notion he only sketches out in *The Interpretation of Dreams* is the notion of mnemic residues (1991: 358). Mnemic residues are a specific kind of memory from our waking lives, which then resurface in dreams. The subject unconsciously records these memories during waking periods through his senses. Then these memories are locked in the unconscious and resurface randomly in dreams. As a result, when these memories manifest themselves in dreams, the subject who experiences them does not know their origins. Freud explains:

¹⁷ Ibid.

The first thing to emerge is that material appears in the dream-content, which, when subsequently awake, we do not recognize as part of our knowledge or experience. We may well remember that we dreamed this or that, but not that we ever experienced it. (2008:13)

In quite a similar fashion, data is generated and accumulated whilst one is using one's computer, without noticing it, and then Cory Arcangel with his disassembling of the QuickTime format allows these pieces of information to resurface in videos. Moreover, the nature of these mnemonic residues seems trivial and not worth remembering. However, Freud stresses that, insignificant as they might appear, they are crucial in understanding the way in which memory behaves in general (2008: 127).

Another issue that is brought to light in *Data Diaries* is the relation of digital residues with time. Interestingly, the piece shows the conversion of residues on a daily basis; however it could be argued that the psychoanalytic approach is slightly more complex. Freud points out that there is debate on the relationship between the mnemonic residues that resurface in dreams and the time they were recorded by the unconscious.

Impressions that occupy the waking thoughts intensely appear in dreams only when they have to some extent been pushed to one side by the thinking actively of the day. (Freud, 2008: 17)

As explained by Freud, dreams are not systematically tapping into the day, which precedes the dream. The repartition of memories in dreams is uncertain. Memories do not resurface in dreams automatically on the night of the day they have been recorded, as if programmed to do so. Not only does the manifestation of mnemonic residues in dreams not follow the chronology of waking periods, but the way in which they reappear in dreams can also be fragmented and partial. Thus Freud stipulates, 'the dream composition is foreign to the ordered series of the psyche' (Freud, 2008: 40).

This claim by Freud seems to resonate with one of the statements that New Media artist Mary Flanagan made in relation to her work, *[Phage]* where she stated that the 'dream-like' shapes visible in the work are battling the

'hierarchical tyranny of the operating system'¹⁸. *[Phage]* provides another illustration of digital dreams through the re-appropriation of forgotten RAM memories. The piece is an online application which scans the user's RAM and randomly selects images, fragments of text, sounds and other content to create a continually shifting visual spatialisation of the user's information. RAM fishing through data, the program creates a visual and sonic memory map. This map reflects on the numerous overlapping memories of the desktop and renders visible thousands of invisible files necessary to run common software. In a similar fashion as *Data Diaries*, *[Phage]* undermines the pure immaterial interface of the computer. Flanagan even advocates that *[Phage]* operates as a bacteriophage virus. Yet, unlike a bacteriophage, the digital *[Phage]* participants must consent before allowing their system to be infected. This biological metaphor helps Flanagan underline her attack on the apparent neutrality of the medium she is working with.

Besides, the level of participation in *[Phage]* differs from *Data Diaries*. Insofar as Arcangel was proposing a series of videos, the position of the participant encountering the work was mainly that of a viewer. Conversely, in *[Phage]*, Flanagan proposes a programme, which needs to be downloaded and used on the RAM of each viewer, thus transforming each participant into an active user who starts an introspective journey as the RAM of his computer reveals hidden memories. The participant incidentally experiences the contents of the computer's memory and by extension, revisits their own activities. In creating continually shifting audio-visual sculptures from the participant's data *[Phage]* distributes authorship between the artist who programmed the work and the user who operates it, using his own RAM memory.

1.7 Database *double-entendre*

The request Manovich expresses for a turn towards computer science so as to understand New Media specificities, is an invitation to observe more specifically the twist operated by some New Media artists on computer

¹⁸ See <http://www.maryflanagan.com/phage> (last accessed 16/02/15).

technology. Just as Arcangel and Flanagan are playing with the idea of a digital unconscious, they also play on a *double-entendre* of the word database in a computational and cultural sense. Manovich develops this argument as well and begins by defining database as understood in its computational form. As he explains, a computer database is:

defined as a structured collection of data. The data sorted in a database is organized for fast search and retrieval by a computer and therefore, it is anything but a simple collection of items.

(Manovich, 2002: 218)

Manovich adds that as such, a computer database has to be distinguished from a traditional collection of documents and that by its own nature it contains various kinds of media. However, with the analogy of the unconscious that he sets, Arcangel contradicts the idea of the database in its computational form. Indeed, if one understands the unconscious as accessed through dreams and as a collection of random, fragmented elements, the comparison with a computer database may no longer be valid. If the way *Data Diaries* is visually and chronologically organised recalls the index of an archive and would invite the viewer to read it first and foremost as a database, the incidental way it has been generated and is played out within each video, challenges the apparent archive that Arcangel is proposing. Thus, the database depicted in *Data Diaries* seems to be closer to the cultural definition of database given by Manovich:

As a cultural form, the database represents the world as a list of items, and it refuses to order this list.

(2002: 218)

The order and alignment of information given on the interface of the website is conversely proportional to the serendipity that each video opens up, as if behind the frame of the QuickTime format, the viewer was given access to a pixelated stream of consciousness, to a digital dementia. Then, regarding the understanding of the database as a cultural construction, Manovich refines and radicalises his thought by defining this cultural facet as first and foremost a narrative element, thus opposing narrative and database. It reads:

database and narrative are natural enemies. Competing for the same territory of human culture, each claims an exclusive right to make meaning out of the world.

(Manovich, 2002: 225)

Manovich provides further support for the specificities of the narrative and states that narrative 'creates a cause-and-effect trajectory of seemingly unordered items (events)' (2002: 225). In that regard, it could be suggested that Arcangel, by proposing a diary of videos, is building a form of narrative, a chronological series of videos in which the viewer can witness the intervention on the RAM carried out by the artist in the past, thus establishing the connection between the origins of the videos and their online display. Moreover, considering Arcangel's fascination with and modifications of obsolete video games, one might start to understand his interest in the idea of narrative. Although perpetually in tension, narrative and database maintain a contradictory relationship. Given that a computer database allows, according to the author of *The Language of New Media*, multiple 'indexing of data, since each record besides the data itself contains a number of fields with user-defined values' (2002: 214), Manovich strengthens the bond of cause and effect between the index and the data it corresponds to, and by doing so is bringing together narrative and computer databases. Arcangel's *Data Diaries* offers, I would argue, an explicit illustration of such a concept. Indeed, the piece not only reveals how digital debris are not just retrieved the way they are or found, but how they are formed, shaped and generated through a perpetual layer of encoding which gives them existence every time the webpage is refreshed. Through the conceptual art method that Arcangel deploys here and the anthropomorphising that he's casting on his machine, it seems here as if the author of *Data Diaries* is joining the enterprise set up by Media Archaeology and the agency it confers to media. Yet, Arcangel, I would argue, is conferring agency not on the computer per se but to the piece of program which runs the work. Unlike Media Archaeology, which is concerned with the physical objects of media to unpack their cultural significance, Arcangel opens up the way data carries significance.

It could be argued then that the manipulation of digital debris seems to reconcile the two antagonistic notions of narrative and database.

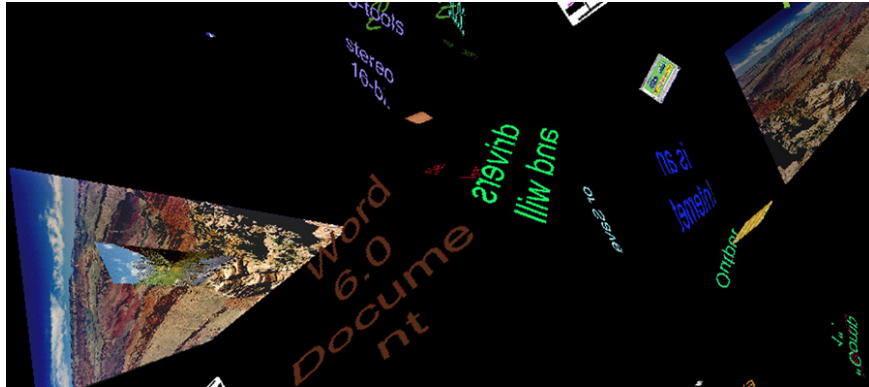


Fig. 14) Screenshot from *[phage]* (2000) by Mary Flanagan, accessed on 13/12/11 at <http://www.maryflanagan.com/phage>

It was intended in this essay to unveil some of the complexities of the concept of digital debris in a contemporary art-practice context. The case study of Cory Arcangel's *Data Diaries* has provided me with the opportunity to do so. Throughout the study of the work, different questions have been raised: questions on the nature of the process undertaken by the artist, on the ways in which his processes are visually conveyed and consequently what type of media object is produced along the way. It has been explained that what is displayed in *Data Diaries* is not so much the retrieving of debris as the production of debris through an act of transcoding, which requires a low level of automation. The notion of automation has been contextualised by looking into the heritage of Sol LeWitt's. I've drawn a parallel between LeWitt and Arcangel to underline the notion of labour involved in *Data Diaries* that LeWitt denies. As such, it has been shown that there's a trace of gesture in Arcangel's work which counterbalances the automatism derived from LeWitt's method. I've also paid attention to the ways in which the production of debris is visually constructed. With its exacerbated, blown up, pixelated nature the representation of the debris is a sampling of information, a realised average compilation of data which participate in the future nature of debris. I have also demonstrated that the media objects created, or the digital debris, are not so much objects as processes. Yet,

because the piece created by Arcangel is a self-contained and closed system, the debris of *Data Diaries* are processes that have been frozen at the time of the production of the piece. Then, the parallel drawn by Arcangel between the computer RAM and the unconscious has been tested through a psychoanalytic reading of the work. In that regard, a comparison has been made with the piece [*Phage*] by Mary Flanagan, which involves a higher level of participation from the user. Finally, I have pointed out how the language used in *Data Diaries* and with it the intention to play on the *double-entendre* of the term memory, both in its digital and psychological sense, participates, along with a take on database in both its computational and cultural forms, in the criticality that Arcangel has placed within his website in order to challenge the assumption of the interface as a transparent vector and of the design culture. Considerations on the *double-entendre* of the terms database and memory have stressed the ways in which criticality was implemented within *Data Diaries*.

Chapter Two: *Once Upon Data Archaeology* rather than Media Archaeology

- 2.1 The Internet as an archaeological site
- 2.2 Media Archaeology revisited
- 2.3 The HTML *motif*: historical discontinuity
- 2.4 Zig-zag navigation

If German Media theorist Wolfgang Ernst has stated that ‘data trash is, positively, the future ground for media-archaeological excavation’ (2013: 140) Internet Art works such as *Data Diaries* by Cory Arcangel (2001), or Thomson & Craighead’s *Browser Archaeology* (2006), have already explicitly dealt with the practice of archaeology by excavating and extracting forgotten data. In other words, such practices dig into the layers of information found online in order to find clues, documents that will enable them to build an archive and subsequently to write a particular history, be it personal (as in Cory Arcangel’s case) or collective (as in Thomson and Craighead’s). This chapter will gravitate around a piece by Olia Lialina and Dragan Espenschied entitled *Once Upon* as an Ekphrasis exercise. The work, created in 2011, walks the line between the archival and the archaeological by bringing together personal and collective historiographies. The chapter is an attempt to study how the technical processes that retrieve data are translated in a visual artefact. I intend to examine the strategy deployed by the artists to render an archive visible. The chapter’s aim is to place pointers in the realm of current discourses around and on behalf of media and will advocate that there is a resistance by the visual arts to fit into the paradigm of knowledge defined by Media Archaeology. Indeed the field of enquiry delimited by Media Archaeology dissociates the object of media and the processes it contains from the images, the content it has been designed to produce, rendering media a mere fossil. On the other hand, what are the implications of separating the data, the content information, from its physical carrier? I intend to rewire the internal mechanisms of a computer with the images it produces. Here, I would like to suggest that; from the specificities that originate from the study of Internet Art – which are themselves inherited from the technical specificities of the Internet –

Internet Art is a space where the semantic, the phenomenological and the material can intermingle. Consequently, I would like to submit that the digital debris retrieved in *Once Upon* represent a technical entity as well as a product of discourse. The work, *Once Upon* by Olia Lialina and Dragen Espenschied, which interlaces data excavation, Media Archaeology, memory and the archive, will serve as a starting point to assess some of the materialist grounds provided by Media Archaeology.

I will ask, what type of history is visually conveyed in the particular space of *Once Upon*? To address this question, I will refer to the writings of Carlo Ginsburg and Siegfried Kracauer on micro and macro history. As such, it will be argued that a comprehensive study of contemporary digital debris in art practice should encompass the micro (the perceptible, the visual representation), the macro (the position of media in the lineage of previous media, discourses of digital technology) and the materialising processes at play in between them.

The chapter represents a reversal of the notion of archaeology as commonly understood, to advocate the idea that digital debris is just as much created as it is found. If this definition of archaeology resonates with Foucault's definition of the archive as an object that has been shaped by discourse, the chapter will argue that in Internet Art debris the importance of the author, the collection of gestures applied onto his work, embodies a form of presence which departs from a Foucauldian post-structuralist position. The essay will argue that in *Once Upon*, Lialina and Espenschied, as authors and characters of their piece, become the narrators of a kaleidoscopic and discontinuous story that navigates between the frames of micro and macro time, between the semiotic and the material, between the symbolic and the optical.

2.1 The Internet as an archaeological site

Once Upon (2011) by Russian and German New Media artists Olia Lialina and Dragan Espenschied, recreates three important contemporary websites (Google+, Facebook, and Youtube) in the technology and spirit of 1997,

according to the artists' memories. The work creates an anachronistic platform by using the tools of 1997 to build websites which did not exist at the time. The piece operates different types of renewals. First it renews the videos found online in 1997. Secondly, it recycles the aesthetic of 1997 and thirdly it reuses the HTML structure employed in 1997. The exploration of the HTML structure recalls Lialina's famous early Internet Art piece *My Boyfriend Came Back From The War*. The novelty of the HTML structure, back in 1997, lay in the importance of frames and how they enabled the viewer to see several documents all at once on one screen¹⁹. Lastly, *Once Upon* also remediates the artists' memories. As such, it could be said that Lialina and Espenschied create a multi-layered *milieu*, a stratified virtual terrain where one can pick up the traces, the residues of not only personal history but also the history of the Internet. Indeed the piece investigates the history of the medium itself, i.e. the Internet, by locating it in 1997. 1997 was a turning point in the development of the Internet insofar as it represents the year when the .com era started and with it the promise to build a more complex online project – a promise which, according to Olia Lialina, actually only came true ten years later²⁰. Here, the artists reverse the logic of archiving by not only archiving content from the late '90s (clips from the geocities archive) but by shedding a light, excavating a communication tool. Interestingly, the work borrows archival strategies in as much as the website is locked in a precise moment in time. In a conference entitled *Understanding Social Media Monopolies and Their Alternatives*, organised by the Institute of Network Cultures in Amsterdam, March 2012, Lialina also stressed that the work was not about contemporary social networks but about the networks that people were building for themselves, before the

¹⁹ See Olia Lialina, 'Imaginary Origins of Social Networks' for *Understanding Social Media Monopolies and Their Alternatives Conference* (Amsterdam, March 2012) <http://vimeo.com/38840992>

²⁰ See Olia Lialina and '97 Web Melancholy, <http://networkcultures.org/wpmu/unlikeus/2012/03/09/olia-lialina-and-97-web-melancholy/>

term social network was coined, before it became capitalised²¹. As such, the website tries to showcase the structures that were built from within rather than imposed on the users. Lialina points out that *Once Upon* originated from a specific formal hypothesis: how would contemporary networks look if they were made with frames? Here, the artist refers to HTML frames, which allow the author to present a document in multiple views. In a sense, the multiplicity of points of view inherent in the technical parameters of HTML language enable Lialina and Espenschied to compile and make visible at the same time personal and collective memories. However, the piece is also a historical reconstitution. Here, Lialina and Espenschied have blurred the boundaries of what constitutes a historical document by using their own memories as a historical source, a testimony of what the Internet was like in 1997. As such, *Once Upon* becomes a fictional archive, which nurtures several narrative strands, hence the reference to the theatre curtains in 1997, when as Lialina puts it ‘anything which was connected to video borrowed the codes of cinema’²². Despite its imaginary dimension, the website is functional and adopts the speed of the 1997 Internet, (intentionally slow 8kbytes), and Lialina and Espenschied use scripts that were available at the time. Here, the artists propose a speculative digital archaeology where they not only position themselves as archivists and archaeologists but also – in the online version – as curators of their own work. The online version of the work cuts through the regular means of dissemination by giving instructions to the viewer on how to encounter the piece. The resistance to traditional gallery-based curating, combined with the compilation of the different renewals described above, also reflect on the overall ethos of the website, which could be described as a renewal of avant-garde modernist strategies in the context of 2011. The HTML frame

²¹ See Olia Lialina, ‘Imaginary Origins of Social Networks’ for *Understanding Social Media Monopolies and Their Alternatives Conference* (Amsterdam, March 2012) <http://vimeo.com/38840992>

²² See Olia Lialina, ‘Imaginary Origins of Social Networks’ for *Understanding Social Media Monopolies and Their Alternatives Conference* (Amsterdam, March 2012) <http://vimeo.com/38840992>

becomes a vehicle for the different strands of meaning deployed in the work (historical, archival, personal). As such, *Once Upon* not only fosters an archaeological metaphor by digging into the forgotten layers of information that the Internet holds, but it also digs and retrieves the modernist strategies deployed for instance by Kurt Schwitters or Duchamp. Consequently it is easy to see how theoretical tools such as Media Archaeology (itself partly derived from Foucault's *Archaeology of Knowledge*) strikes a chord with *Once Upon*, but to what extent can one expand the archaeological metaphor and the conflation it implies between the cultural, the technological, and the ontological in an art practice context? If Media Archaeology does represent an innovative and speculative critical shift of the understanding of media in contemporary culture, I will try here to test the adequacy of such a theoretical lens to examine Internet Art.

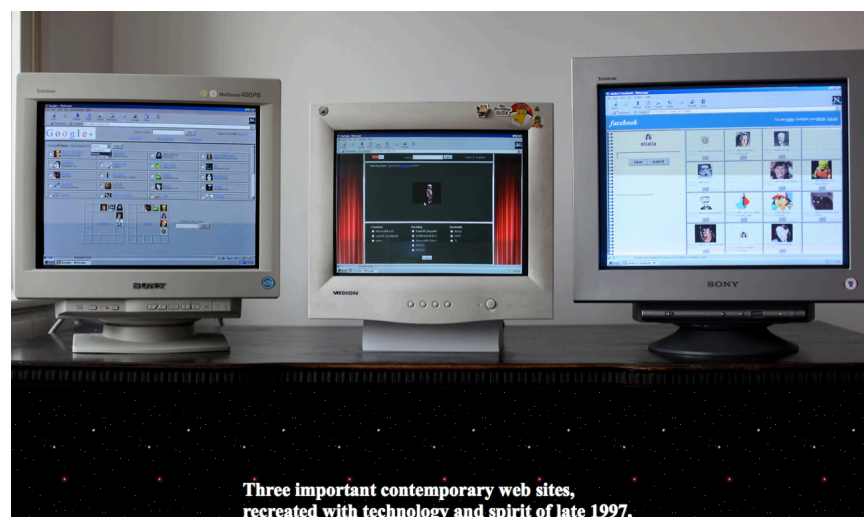


Fig. 15) Screenshot from *Once Upon* (2011) by Olia Lialina and Dragan Espenschied accessed on 30/01/15 at <http://1x-upon.com/>

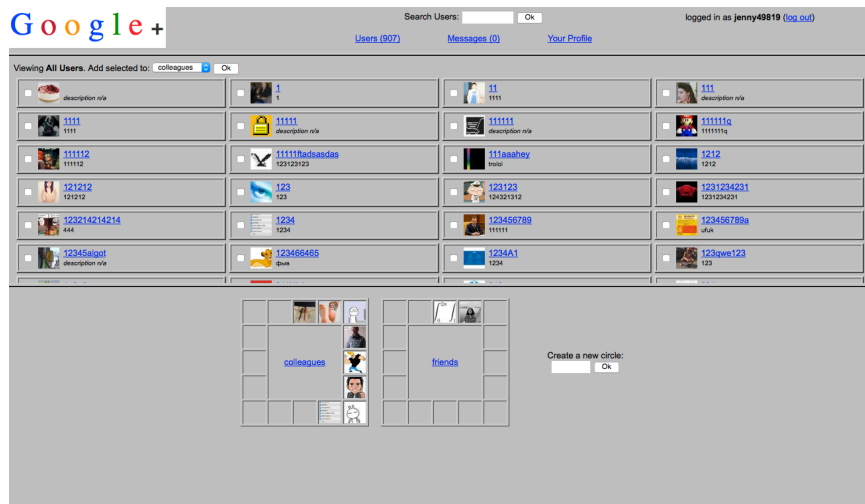


Fig. 16) Screenshot from *Once Upon* (2011) by Olia Lialina and Dragan Espenschied accessed on 30/01/15 at <http://gplus.1x-upon.com/>

2.2 Media Archaeology revisited

In his book *Media Archaeology*, Parikka aims at mapping out the field of Media Archaeology by describing some of the key figures such as Frederic Kittler, Siegfried Zielinski, Erki Huthamo and Wolfgang Ernst. According to Parikka, Media Archaeology represents a materialist ‘travelling discipline’ – he also uses the term nomadic – (2012: 15) based on a mobile set of concepts and which intends to understand contemporary digital culture by excavating obsolete, forgotten or lost media. As such, the discipline outlined by Parikka forms a trans-historical approach which challenges linear historiographies and asks ‘what do we do with media theory?’ (2012: 18). The objective shared by many media archaeologists is to shift the critical focus from the visual production of media to the technical and mathematical procedures that are taking place within media (Parikka, 2012: 15). As such, for instance, Kittler argues for a perspective into the pixel-centred image that is not based on modes of visibility as culturally and politically constructed, but on optics phenomena (Parikka, 2012: 35). Influenced by the work of Foucault in *Archaeology and Knowledge* and *The Order of Things*, Media Archaeology looks at media as objects of discourse that shape our perception of technology:

We are secondary to such systems. Besides agency, this has to do with power. Power is no longer circulated and reproduced solely through spatial places and institutions – such as the clinic or the prison, as Foucault analysed – or practices of language, but takes place in the switches and relays, software and hardware, protocols and circuits of which our technical media systems are made.

(Parikka, 2012: 70)

In other words, for Parikka ‘we do not speak language, but language speaks us’ (2012: 70). What Foucault has done with the archive or the prison, Media Archaeology intends to do with media. Inasmuch as Foucault saw the prison or the archive as a starting point in his study of how discourses are fabricated, Media Archaeology has to start from physical technological devices (be it the zoetrope, the phonograph, the television or the digital camera) to understand how our perceptions are historically structured (Parikka, 2012: 20). There’s a need for media archaeologists to understand the software image mathematically. Media Archaeology is not about hermeneutics, or textual analysis but about internal mechanisms. The discipline described by Parikka is to a certain extent a reversal of the field of enquiry that Visual culture (or Visual studies) represents. It focuses on the technological conditions of media rather than on what it mediates. Parikka writes:

Media-archaeology writing starts with the agency of the machine: technical media are themselves technological constellations that are able to store and process data in ways that are beyond our cultural analytical tools – an old phonograph captures much more than we can decipher semantically [...]. Instead of the phenomenological logic to approach to material – what we can see with our own eyes, and understand with our own ears – we rely on mathematical tools to decipher, analyse and calculate archives.

(2012: 125)

Yet, despite its machinistic and non-phenomenological nature, some Media archaeologists such as Zielinski and Huhtamo advocate that we take as objects of study technology that has not existed and ‘imagine new histories of the suppressed, neglected and forgotten voices of media history, to find the perversions in media history’ (Parikka, 2012: 39). Somehow, Zielinski and Huhtamo, despite using the term ‘imagining,’ seem to want to depart

from a visual account of media towards an underlying understanding of its technical structures.

Following up Parikka's description, a first illustration of Media Archaeology could be seen in Thomson & Craighead's piece *TV Archaeology*. The work, made in 1994, is described by the artists as:

an installation using a burnt television tube and a slide projector. The slide projector is permanently on rewind so that slides perpetually reinstall images onto the burnt out TV tube, while a Fisher Price record player uses the slide projector's carousel as a turntable to play a staggered rendition of a nursery rhyme. (Thomson & Craighead, 1994)²³

The piece, by using a dead medium (the TV) re-enacted by another media (the projector) is producing fictional media. The fictional dimension of the piece is reinforced by the *détournement* of the toy used as a suggestive component of the artwork. In a similar fashion, *Once Upon* (2011) by Olia Lialina & Dragan Espenschied shares the two features of retrieval of information and fictional media with Media Archaeology. Indeed, first the piece excavated data that was created in 1997 and as such performs a literal account of archaeological digging from geocities pages. Secondly, the website recreates some former technologies, the 1997 Internet, and in that regard resonates with the imaginary side of Media Archaeology, the idea being to resuscitate fictional media or media that no longer exist. Indeed, the opening page of *Once Upon* reveals three monitor screens displaying three sites which did not exist in 1997: Google+, Youtube, Facebook). However, it has to be noticed that within the field of Media Archaeology the imaginary part of media culture is not shared by all theorists, thus Ernst rejects such a speculative approach. As for Huhtamo and Zielinski, by tapping into an imaginary account of media, they want to establish Media Archaeology as a field of enquiry, which problematises and opens up the notion of what counts as media (Parikka, 2012: 79). The will for Parikka's discipline to complexify the field of enquiry stems from the writing of Foucault in *Archaeology of Knowledge*. The intention of Foucault's archaeology and consequently of Media Archaeology is to highlight the diversity and to point

²³ See Thomson & Craighead's website at <http://www.thomson-craighead.net/docs/tvarch.html> (last accessed 16/02/15).

out the discontinuity in the development of knowledge/media. Both disciplines assert that the universe of discourse and of knowledge is full of ruptures. According to Foucault, too often historians have tried to flatten down those specificities in creating a homogenous narrative. For Foucault, they have constructed the spirit of a time from a collection of individual thoughts. The author of the *Archaeology of Knowledge* is against the projection of an individual consciousness on the past. In order to do so, one needs to empty history on an analytic level, to de-visualise it. If *Once Upon* seems to illustrate Foucault's view on history in as much as the piece generates a heterogeneous collage of Internet history and historiography (a journey into the artists' memory, the present encounter between the piece with the viewer, the 1997 past the website is referring to, the suspended and fictional time that the piece creates for itself) the discontinuities are nonetheless first and foremost visual.

2.3 The HTML *motif*: historical discontinuity

Indeed, it is the pictorial collage of HTML frames, by fragmenting the surface of the screen, that translates all the historical discontinuities *Once Upon* is reaching towards. The kaleidoscopic history written by the artists may reflect the non-linear and fragmentary vision of history defended by Media Archaeology, yet it doesn't represent an instance of flat ontology either, for its subjectivity and its fictional aspect contradicts the isolation of the author defined by materialism.

Here, more specifically, I would like to propose that Lialina and Espenschied's use of frames allow them to depict two different types of temporalities, i.e., a micro and a macro temporality. I am referring here to micro and macro time as defined by Carlo Ginzburg in *Threads and Traces: True, False, Fictives*. The Italian historian builds his understanding of micro-history by tapping into Kracauer's *History: The Last Things Before the Last*. For Kracauer, micro-history is defined in contrast to macro-history and the two terms refer explicitly to a particular genre of historical writing. Kracauer uses an optical metaphor – and interestingly for me here the term

data – as according to him, those historical writings distribute themselves like film. The scholar in film studies D. N. Rodowick explains that

For Kracauer, this non-homogenous structure distributes itself, like film, along spatial and temporal axes. In a similar analogy with film, Kracauer describes historical space by differentiating what he calls ‘macro’ and ‘micro’ histories.

(1987:125)

The filmic metaphor here echoes *Once Upon*’s use of the codes of cinema theatres. Accordingly, macro-history refers to long shots:

As the distance from the data increases, they become scattered, thin out. The evidence thus loses its binding power, inviting less committed subjectivity to take over.

(Rodowick, 1987: 125)

And micro-history to close-ups:

In the micro dimension, a more or less dense fabric of given data canalizes the historian’s imagination, his interpretive designs.

(Rodowick, 1987: 125)

In the context of *Once Upon*, macro history would equal the history of the Internet as a whole and the turning point of 1997 within it. The micro history would be the memories of Lialina and Espenschied about 1997, the data collected at that time thus channeling the artists/historians’ imagination, inviting an interpretation. In Kracauer’s account macro history is associated with less subjectivity on behalf of the historian, whereas micro history precisely requires a more hermeneutical take on data. Wolfgang Ernst, in his book on *Digital Memory and the Archive* has a divergent view on macro and micro history. For Ernst, micro time corresponds to the time of the technology, the time of the procedural, time as perceived from within the machine. In other words, how long does it take for media to transmit an image, to process it (2013: 58)? Where Kracauer saw micro temporality as the time of the individual, the subjective, here, micro is synonymous with non-human temporality and macro history corresponds to a constructed temporality where the narrative of history is built. Consequently, Ernst describes macro time as being the time of culture, of the broader history of technology and media in which one medium, such as the 1997 Internet in *Once Upon*, is inscribed. I would suggest here that Ernst’s conception of micro and macro time isn’t a simple reversal of Kracauer’s view of time but rather the same issue seen through a different philosophical lens. Ernst opts

for a more realist conception and as such dehumanises micro time from its subjective focus to displace it in the realm of the machine. Following that shift in focus, Ernst defines macro time as being potentially humanly perceived. This is where my reading of Lialina and Espenschied's micro time differs. If on first inspection, *Once Upon* seems crystallised in 1997 and thus locked into the emergence of the HTML structure, and thus being in line with Ernst's micro time, I would pose that the crystallisation in 1997 is actually a human construction. The act of locking the website in 1997, as mentioned earlier, is a fictional gesture which doesn't prevent time from corroding data. The narrative elements of *Once Upon* introduce a self-reflexivity, which in the end reinforces Ginsburg's key self-criticality that reality is fundamentally discontinuous, heterogeneous, and that micro history has its limitations. The self-reflexivity that Ginsburg shows in his own account of history lets him introduce the 'greatest potential benefit' of micro-historical methodology (2012: 213). Ginsburg explains:

Micro-history accepts the limitations while exploring their gnoseological implications and transforming them into a narrative element
(2012: 209)

The narrative element Ginsburg is advocating is what Kracauer saw as an exchange, a back and forth exchange between macro and micro time, a dialogue between the two temporal dimensions (2012: 213). That exchange can 'continually thrust back into discussion the comprehensive vision of the historical process through apparent exceptions and cases of brief duration' (Ginsburg, 2012: 207). The critical theorist embraces not only the point of connections and exchange but also the elusiveness of the ruptures and discontinuities. The emphasis on exceptions of brief duration here is of importance, in as much as Kracauer insists that 'what is attained in one sphere' can't be 'transferred automatically to a more general sphere' (2012: 207). In other words, Kracauer includes a certain amount of serendipity in the system he was building by acknowledging that what is of relevance, or occurs in micro history, cannot be necessarily applied to macro history and vice versa. Accordingly, following up Kracauer's thinking, this is where Media Archaeology seems to contradict itself. How can the media

archaeologist studies the objective temporality of the object of media (as defended by Ernst) when the notion of history is in itself a constructed concept revolving around a subject? It seems then, that one couldn't extrapolate a history of a media object considering that history as a concept is inherently antagonistic to the realism advocated by Media Archaeology. As a result, I understand that the aim of Media Archaeology is to rethink what history can be, hence the speculative nature of the discipline. Yet, one question remains, how does one navigate between the speculation set up by Media Archaeology and an actual historiography, like the one displayed in *Once Upon*?

2.4 Zig-zag navigation

Once Upon could be apprehended as navigating between the frames of micro and macro history. As Lialina and Espenschied walk the line between a testimony of collective consciousness and their personal memories, and the archive materials found online, their revision of modernist and curatorial strategies are the means through which the enunciation of the piece is achieved and materialised into HTML frames. Given its digital and therefore procedural nature, *Once Upon* is perpetually sketching out an on-going set of patterns between the sphere of the technical and the cultural, as the product of processes they mediate. Indeed, on the website the refresh cycle of each page is apparent, emphasizing the procedural nature of the websites. *Once Upon* then would represent an example of dialogue between the different conceptual frames of micro and macro history. Yet if digital debris, or obsolete pieces of information gathered and reused by Lialina and Espenschied are what enable that dialogue, what is the trigger, the driver that allows those excavated pieces of information to mediate? Moreover, what shape does this dialogue, this navigation in this heterogeneous field take? The beginning of an answer could be found in *Difference and Repetition* where Deleuze talks about the dark precursor that appears between two potentials in a heterogeneous environment, which stimulates them before the appearance of a visible phenomenon. The dark precursor is the

exchange of electrically charged particles that occurs before the lightning strikes.

The chapter started with an analysis of *Once Upon* by Olia Lialina and Dragan Espenschied and teased out some of the ideas of excavating data and memory at play in the work. Subsequently, I evaluated how these issues connected to debates on micro historiographies and Media Archaeology. The paper not only draws attention to Lialina and Espenschied's partly structuralist approach in exploring HTML frames but also translates the idea according to which *Once Upon* performs a layered archaeology of different types of frames (i.e., the micro, macro, symbolic, technologic, cultural) rather than a flat ontology. In this particular instance, the information excavated by the artists allows navigation, a dialogue between these different frames. Rather than choosing between a materialistic or a hermeneutic approach, the essay, by focusing on visibility and the perceptible, has advocated the need, from an art practice perspective, to rewire an understanding of the mechanical processes of, for instance, digital technology with the subject. Supported by Kracauer's account of historiography, I've underlined the pertinence and the value of the fiction deployed by Olia Lialina and Dragan Espenschied, which in a rather anti-mimesis fashion enlightens not only an ontology of technology but one's relationship with technology. Here, the fictionality of *Once Upon* distinguishes itself from the speculative character of Media Archaeology since it is constructed from the imagination of the artists who position themselves as the subjects of their piece. It is in that relationship between subjects and technology that Gilbert Simondon has foreseen the real poetics of technology.²⁴

²⁴ See Gilbert Simondon 'Entretien sur la mécanologie' (The technical Object as Such), 1969 available at <https://www.youtube.com/watch?v=eXDtG74hCL4> (with English subtitles) and <https://www.youtube.com/watch?v=VLkjl8U5PoQ> (French) (last accessed 10/07/15).

Chapter Three: *The Digital Landfill*, the Contingent Visibility of discarded information and the Necessary Visibility of Digital Debris

3.1 *The Digital Landfill*: 'A landscape without image'?

3.2 Hiddenness and interface

3.3 'The Art Happens Here': online display, rethinking curating

3.4 A ruin of Internet Art

In the late '90s Art historian Julian Stallabrass remarked in an essay entitled *Trash* that inquiring about waste is asking what a thing has become once it's out of use, but while its form is still partly intact or at least recognisable (2009[1996]: 407). By emphasising recognisability as the main component of trash, Stallabrass brings to our attention the visual aspects of waste and along with it, the assumption that it is always in sight. Yet this account of trash takes on another meaning in contemporary culture, where information is mainly written in a numerical form and the visibility of discarded information on the Internet is not like the visibility of clutter in the streets. Unlike physical trash that can be found at every street corner, always in sight, I'd like now to focus on the critical moment when digital debris become visibly recognisable as debris, and highlight the contingent visibility of online discarded information. I have shown in Chapter One and Two that digital debris were just as much generated as they were retrieved or found and I have underlined the importance of the artist's role in the framing of the debris she or he is manipulating. As such, it has been explained that digital debris are also the product of the artist's intention. Yet, to what extent is the recognisability of debris as debris readable once it is re-appropriated in an online art piece and as such is wrapped in another layer of encoding? For instance, can a piece of Perl script, which is hidden behind the appearance of the interface, be recognised? Does it mean that the debris is always present but concealed? In order to answer these questions, this chapter will examine the problem from two angles by first paying attention to the space where digital debris are resurfacing (i.e. the interface and the Internet), secondly to the codes that are making the debris themselves. I'll argue that those two aspects participate in the necessary visibility of the digital debris and will unpack the correlation between them.

The chapter will revolve around the Internet Art piece *The Digital Landfill* by Mark Napier. The piece is relevant for me here, not only because it explicitly deals with the recycling of online waste and underlines the Internet as a landscape of both production and display, but also because the website itself no longer generates debris but is still present on the Internet as a form of digital ruin.

3.1 *The Digital Landfill*: 'A landscape without image'?

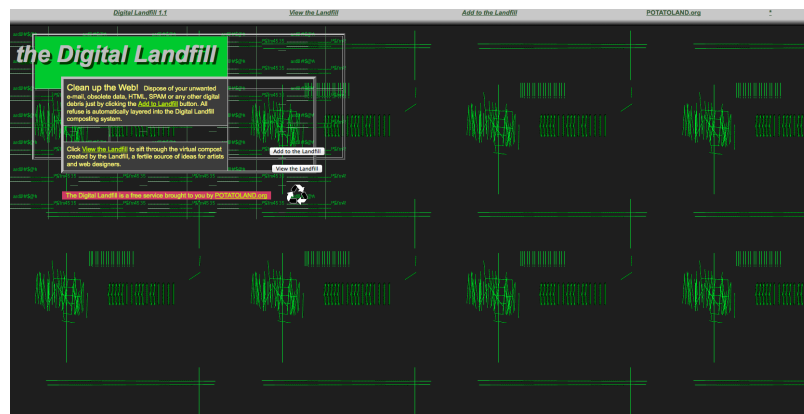


Fig.17) Screenshot from *The Digital Landfill* (1998) by Mark Napier accessed on 30/01/15 at <http://www.potatoland.org/landfill/>

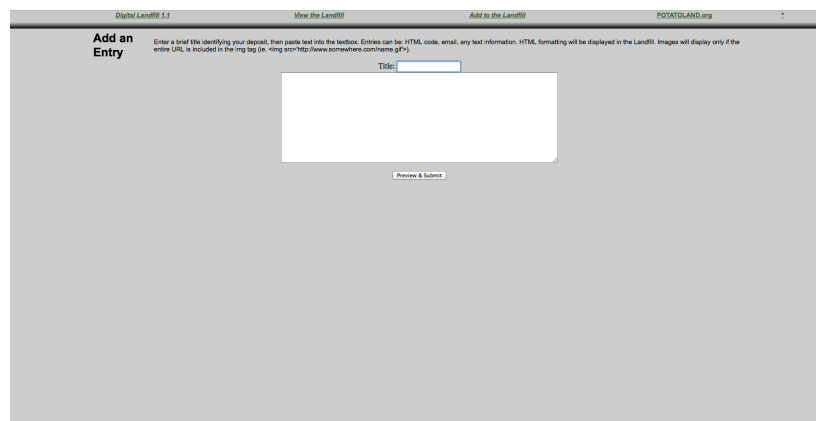


Fig.18) Screenshot from *The Digital Landfill* (1998) by Mark Napier accessed on 30/01/15 at <http://www.potatoland.org/landfill/>

In 1998, American artist Mark Napier created a piece entitled *The Digital Landfill*. The website, written in Perl script, is as its title suggests, a mass of data collected by users. Indeed, the piece invites viewers to submit their

own digital trash (be it text, images or URLs) onto the website and witness the green data 'rot' on a black backdrop. The Netscape 4.0 browser that supports the site allows the viewers to see layers of junk decaying. The piece also provides a timeline on the left of the screen, which allows the viewer to look back at the landfill at different stages of decomposition. When one interacts with the piece, he or she will observe his or her files superimposed onto previous digital debris in such a way that they become quickly absorbed with all the waste accumulated on the website. Through the act of throwing away discarded data on a digital public space, the readability of the original pieces of data submitted is lost, and becomes part of the stream of information that *The Digital Landfill* is nurturing. Mark Napier isn't presenting a collection of still objects but the fusion of different elements melted in a constantly fluctuating flow of data that deteriorates. Trash amalgamates other pieces of trash, melting them eventually in an indistinguishable mass of information. Therefore it appears on first inspection that the recognisability of the digital debris is lost in *The Digital Landfill* and consequently, in light of Stallabrass' account of trash, can I still refer to the information submitted on the website as debris? If not, what type of image is Napier producing on his on-going collective website? Despite the fact that the field of enquiry that Media Archaeology represents is more concerned with physical media than data, Parikka nonetheless points at the quality of data that is of interest for me here. One of the key points advocated by Parikka and his cohorts lies in the procedural nature of data. Referring to Ernst, Parikka describes data as being unstable, and as producing images, which are 'truly time-based' (2012: 117). The time-based dimension of data is particularly apparent in *The Digital Landfill* through the timeline that Napier provides and which enables the viewer to travel in time via the layers of digital detritus accumulated. Furthermore, the time-based nature of data, described by Parikka, can also be thought of as taking part in the historical perspective that Napier is inscribing. Indeed, conscious of the historical precedents in the use of debris, the artist specifies:

Digital Landfill explores the fine line between these first cousins, art and debris. An evolving artwork, the website invites viewers to deposit text and HTML 'debris', scraps of information taken

from their email inboxes, web pages, and newsgroups. All contributions are immediately added to the landfill.

Mark Napier www.potatolan.org/landfill/ (last accessed 16/02/15). Here, *The Digital Landfill* is re-contextualising the strategy pioneered for instance by Kurt Schwitters, when data is, unlike the pages of newspapers, a continuum of information that if frozen, freezes the refresh-cycle of the webpage (2012: 117). In the retrieving of a digital object then, according to Parikka, the digital object, here data, cannot be seen as a still object but as a processing entity which introduces dynamics and change (2012: 129). Here, Parikka's view echoes the American scholar of Visual Studies, D.N. Rodowick's account of New Media objects as being automatism and processes rather than objects. Yet, I would argue that it is precisely in the gulf between the two meanings of the term objects, as automatism (in an online context) and as physical artefacts, that *The Digital Landfill* is playing with. On the one hand, by its title, the work evokes a physical environment populated with objects. On the other hand, the website highlights the particularities of the ways in which online pieces of information can be conglomerated. I would submit that this polarised view is symptomatic of the way the Internet was approached in Internet artworks. Indeed, in 1998 when *The Digital Landfill* was produced, the Internet was perceived as a virtual world in itself, which the user had to switch on and off to experience. In this context, *The Digital Landfill* was introducing a dialogue between the online and offline life, a bridge between the physical world and the online environment. The terminology, borrowed from a physical reality, facilitated a dialogue with an Internet which had yet to invent its own lexicon. Thus, the title *The Digital Landfill* lends itself to a metaphorical reading of the Internet as a landscape. Yet, still in 2007, D.N. Rodowick, in *The Virtual Life of Film*, posited that new media represented a landscape 'without image':

A new territory has unfolded on electronic and digital screens, and this is a landscape "without image" for two reasons. The first reason is historical. [...] we do not possess a historical image of these forms because we do not yet completely understand what concepts condition their possible genealogies.[...]The second reason is ontological. These forms are also without image in the sense that what

appears on electronic and digital screens does not fully conform to the criteria by which in the past we have come to recognize something as created, aesthetic image.

(2007: 94)

Rodowick's analysis can be read on two levels: a macro level of reading which states that a digital image hasn't found the cultural and theoretical lenses it needs to be interpreted. On a micro level, the author of *The Virtual Life of Film* argues that a digital image is without an image for it is made of codes that are instructions, commands to realise a digital image rather than indexes of what a digital image represents. Rodowick's remark widens the gulf between the different views on what constitutes a digital image. Indeed, it could also be debated that, depending on one's philosophical position – either Realist or Idealist – the conception of the digital image, its ontology would vary. For instance, to put it simply, a Realist would consider that the image lies in its written form as a command, a piece of code, independent from it being seen by a subject or not. On the other hand, an Idealist would conceive a digital image as being seen on the screen, perceived by a subject. Interestingly, *The Digital Landfill* gives precisely that visibility to the URLs provided by its users, overlaying Realism and Idealism. The aim of *The Digital Landfill* is to visually show the code that constitutes the image that is normally displayed on the interface. Napier is conferring visibility to the codes, regardless of the images they originally constructed. The unstable collage that Napier is proposing produces a new image which depicts at the same time a 'coupling of degeneration with regeneration' (Parikka, 2012: 119). I'd like to argue that Napier's point in *The Digital Landfill* is not so much to criticise the absence of image in digital technology, as Rodowick seems to be doing, but to shift the perception of the viewer onto what composes a digital image. Accordingly, Napier's landfill isn't 'without an image' but precisely multiplies images. If one thinks of a digital image as being essentially a succession of commands to be executed, then Mark Napier is giving visibility to the image: he's revealing the 'DNA' of the digital image. By showcasing the URLs, *The Digital Landfill* offers an opportunity to re-think what constitutes a digital image and subsequently what the image of digital debris might be. Yet, if Napier's work does unveil the inner

qualities of code and aestheticises them via a set of ecological metaphors, the piece uses the Internet as a platform onto which files are submitted, as landfill, but the inner structure of the landfill itself, what constitutes the interface that contains all the debris, is not given visibility.

3.2 Hiddenness and interface

Indeed, there's a piece of Internet Art that precisely gives visibility to what's behind URLs and to the hidden inner structures of the Internet. *1:1* (1999-2002) by Swedish New Media artist Lisa Jevbratt explores the role of the Internet Protocol (IP) address, a code of four numbers concealed behind the website's domain name (i.e. .com). *1:1* was a project that aimed at building a database of all the IP addresses that the Internet contained in 1999. The IP (Internet Protocol) address is a numerical address used for all computers connected to the Internet. A URL, the name of a site that is usually used, for example rca.ac.uk, is only a cover for the IP address that is the 'real' address of a website. IP addresses range between 0.0.0.0 and 255.255.255.255. In *1:1* the IP addresses were gleaned by sending out programmes called 'crawlers' designed to collect cross-sections of varying samples of IP addresses. The procedure developed for the piece ran as follows: the crawlers were first sent out on the Internet to determine whether there was a website at a specific numerical address. Then if a site existed, whether it was accessible to the public or not, then the address was stored in the database. The crawlers did not start on the first address and proceed to the end; instead they searched selected samples of all the numbers, slowly zooming in on the numerical spectrum. In 1999 2% of the spectrum was searched but the fast growing pace of the Internet around 2000 quickly rendered *1:1* out-dated. A second version of the piece, *1:1(2)*, was then launched as an attempt to catalogue all the IP addresses that could be found. Beyond the strategy of the piece to spot and collect Internet locations, in a way that recalls the retrieving of data by Jodi in *Asdfg*, one of the premises of the piece is to think of the Internet as a landscape that is rarely actually really experienced for itself, for it is made of IP addresses, and those IP

addresses are concealed behind the name of a webpage (such as .com). Jevbratt here sheds a light on the inner qualities that constitute the Internet, the hidden information that runs it. The title *1:1*, which refers to mapping terminology, deploys a tactic not too dissimilar from the one pioneered by Spoerri in his *Anecdotal Topography of Chance*. Jevbratt draws not a personal map of her memories through objects, but a collective map of the Internet through all the different websites that populate it. From an aesthetic point of view, it is interesting to note how the use of pixels in Jevbratt's work differs from Cory Arcangel's. If Arcangel dramatizes his use of pixels by blowing them up through QuickTime on to a window itself contained within the space of the screen, the pixels displayed in *1:1* fill the whole screen and are reduced to their binary form in horizontal stripes of various colours. Where Arcangel was creating a different interface for each day of the month, Lisa Jevratt hierarchized and gathered all the data collected in five interfaces (entitled: *Migration, Hierarchical, Every, Random, Excursion*), which visualised all the IP addresses. The *Migration* interface reveals in one image how the Internet has evolved from 1999 to 2002. The four other interfaces show parallels between the databases. Jevbratt explains that by conferring visibility, in a pixelated form, to the database of IP addresses she has collected, the viewer is invited to experience the Internet in a different manner than the one provided by search engines, which only give the user 'roads maps'. The Internet visualised in *1:1* and *1:1(2)* is not the Internet as everyone experiences it but it is

an abundance of inaccessible information, undeveloped sites and cryptic messages intended for someone else. [...] this Web Search-engines and portals deliver only a thin slice of the Web to us, not the high-resolution image we sometimes think they do. The interfaces/visualizations are not maps of the Web but are, in some sense, the Web.

(Jevbratt,

http://128.111.69.4/~jevbratt/1_to_1/description.html, 2002)

last accessed 16/02/15.

1:1, like *Data Diaries*, gives the viewer a glimpse at the inside of the technology, yet *1:1* goes one step further than *Data Diaries* by exploiting the inner qualities of the Internet itself. If *Data Diaries* is only showcasing itself on the Internet, dealing with the operating system of the computer and as

such performs in a more self-contained manner than *1:1*, then *1:1* and *1:1(2)*, by not being fully completed, lie in a more open system. They represent an attempt to sample and catalogue what the Internet is made of. As such, in Jevbratt's work, the Internet becomes the material of the piece, its site of production and its site of display.

The Internet, from a structural and 'ontological' point of view is therefore hidden in the proper sense, as Scholar of History and Philosophy Malcolm Bull defines hiddenness in his book *Seeing Things Hidden, Apocalypse, Vision and Totality*. Jevbratt reveals the hiddenness of the Internet, for it is through her piece that the viewer understands that there's actually another layer to the Internet that he hasn't experienced before. As Malcolm Bull explains, for something to be hidden, it must be known but not experienced or sensed. Considering that before Jevbratt, one wasn't aware of what constituted the Internet, and it therefore couldn't be hidden.

If something hidden must be both potentially knowable and at least partially experienced by someone, this suggests that hiddenness is not a quality independent of knowledge but rather a function of it.

(2000: 18)

Prior to *1:1* it could be argued that what constituted the Internet from within was known but not experienced. With the visualisation of IP addresses, the Internet becomes visually sensed and consequently not hidden anymore. Yet, the fact that Jevbratt's projects have remained incomplete and have only collected a fraction of what the Internet was around 2000, leaves the Internet inexperienced at its core but still known, and therefore it remains hidden. Here, it is paradoxically when the IP addresses are visualised that their hidden aspect is revealed. Even if Lisa Jevbratt's practice isn't part of the first generation of net.art practices, I would argue that nonetheless, *1:1* and *1:1(2)* share some of net.art's ethos in exposing the network where net.art took place. Jevbratt's pieces reflect back on the hidden spots where net.art was originally taking place, i.e. one of the networks of the Internet.

3.3 'The Art Happens Here': online display, rethinking curating

In 1997, the artist's collective MTAA, produced a gif entitled *Simple Net Art Diagram*. The drawing depicts two computers connected by a wire. In the middle of the wire a speech bubble points at the connection between the two monitors and says 'The art happens here'. The diagram, which could be read as a visual manifesto of net.art, explicitly points to the space of the Internet as being a condition of net.art. Back in the late 90s, Curator Steve Dietz did not use the term medium but referred to the network as the main prerequisite for net.art. His position is aimed at going beyond the idea of experimenting with a medium, to challenge it and to substitute it with the specificities of the Internet as a defining environment for online art. The position is well illustrated in the MTAA gif, which they describe as follows:

if the verb 'happen' describes net.art as an intrinsically performative art form, the adverb 'here' makes clear that net.art is not just something that you can code on a computer and then upload online; net.art only happens 'on the internet', in the ethereal space connecting humans and computers.

(<http://www.manetas.com/outsideoftheinternetthereisnoglory/> last accessed 16/02/15).

Electing the Internet network as the backbone of net.art over the exploration of a medium, is a reflection of the post-medium conditions of the time. Stallabrass says, it is specifically this post-medium claim that made net.art suffer from the same critiques as installation art (2009: 8).

The term post-medium seems rather misleading for net.art in its more radical expressions (Jodi) shares more with the spirit of avant-garde modernism than with '90s YBA's production. However, the pervading growth of the Internet over the last 10 years and the appearance of the 'post-digital'-where the notion of off and online has dissolved- has ushered in a different type of Internet Art which is more concerned with the seamlessness between the Internet and the physical world. This shift in practices is well represented by comparing *Data Diaries* by Cory Arcangel and *The Digital Landfill* by Mark Napier. If Napier's piece, with its use of the Internet as both a site of production and display, its interaction with the viewers, could be appreciated as typically late net.art, paradoxically, although *Data Diaries* is independent of the Internet, the piece could easily be associated with Internet Art, for it uses and investigates the modalities of

the QuickTime software. It seems indeed, that the ethos of net.art, qualified as utopian by Critic and Curator Omar Kholeif (2014: 11), has given way to another set of practices which, as Cultural and Media Theorist Alexander Galloway puts it (2004 :219) has replaced the Internet with the commodity of the software as the main focus. The exploration of a software embodied in a physical artefact is particularly explicit in Cory Arcangel's digital print of Photoshop gradients.

However, if online art practices have evolved in their concerns, the experience of the viewer in pieces such as *The Digital Landfill* hasn't changed much. Even if screens have multiplied and now come in all shapes and sizes, in most cases, the viewing experience remains a one to one relation with the screen. The conditions of online experience, experienced via a monitor screen, have from the start contributed to define the specificities of Internet Art. The one to one encounter that such Internet Art works nurture between a monitor screen and a viewer symbolises the conditions of viewing and displaying of Internet Art. The artist and founder of *Rhizome*, Mark Tribe, explains:

most net.art is meant to be experienced as a solitary encounter. And many net artists saw their practice as oppositional to art world institutions. Putting net.art in the gallery involves a recontextualisation that can radically alter the experience and significance of the work
(Tribe, 2014[2007]: 27)

The encounter with the work is a one to one experience which happens online, and which defines net.art as a primarily network-based manifestation. This is why projects such as the *Widget Art Gallery*, an app that allows viewers to visit an online gallery displaying Digital Art pieces, seems antagonistic to the ethos of net.art. The *Widget Art Gallery* recreates a traditional white gallery space where art pieces are displayed on walls. By this traditional display on virtual walls, the gallery recreates the very conditions of exhibitions in the art market that net.art was avoiding in the first place. Indeed, as Stallabrass explains in an essay entitled 'Can Art History Digest net.art?' there's always been a

fundamental divide between the production of rare or unique, expensively made objects, protected by copyright and curatorial scruple, appearing in exclusive and controlled environments, and

purchased by the mega-rich; and of the dissemination of digital works, of which no one copy is better than any other, which may appear in many places at once, which may run out of the control of artists and curators, and which are given as a gift.

(2009: 7)

The British art historian even goes further by referring to Law scholar Yochai Benkler and stressing that online art was not only dissociated 'from the mainstream market for contemporary art' but was also 'dangerous to it' (2009: 7). Indeed, embedded in a collaborative and cooperative culture, Internet art made drawing the lines between the different roles of the artist, the curator and the public much harder, as Lambert puts it:

The malleability, flexibility and even potential hacking of online works, renders them suspect to the art market or for the museum. A work that has no final version and multiple iterations can make the curator's role problematic to say the very least.

(2014:14)

The collective and participatory aspect of Internet Art, which blurs the roles of the artist, curator and viewer, is particularly illustrated in *The Digital Landfill*.

Indeed, the tactic endorsed by Napier in *The Digital Landfill* intentionally leaves room for the user to participate. The website is interactive in the sense developed by Canadian scholar of philosophy, Dominic McIver Lopes. In his attempt to build a philosophy for computer art, Lopes proposed a basic notion of interactivity according to which:

A user interacts with a work of art just in case he or she acts so as to generate its display in a prescribed manner.

(2009: 37)

By submitting content via URLs, the viewer takes part in the generative dimension of the work and becomes a user. The piece emphasises the importance of connecting viewers to be relevant. Here, it could be argued that Napier's take on digital trash is closer to a metaphorical digital collective geological lab, where the viewer's input is necessary in order to keep the procedural nature of the piece intact. It is the non-hierarchical relations among the participants involved in the endless rearranging of the online works, which subsequently 'undermines the rise of curatorial power that has happened since the 1970s' (Lambert, 2014: 16). *The Digital Landfill* is not only performative in its generative aspect, but as an early piece of

Internet Art, it requires the participation of viewers to function. Unlike *Data Diaries*, where the intention only stems from Arcangel's process, the decisions taken in the making of *The Digital Landfill* are here shared with the viewers who become both users and co-authors. As the artist puts it:

Through the web interface, viewers can explore the history of the landfill layer by layer. Every contribution represents a decision someone made, a response to a previous contribution, an evaluation of what 'belongs' in the work. We see a cross section of web culture written into the layers.

Mark Napier www.potatolan.org/landfill/ (last accessed 16/02/15). Logically, Napier himself becomes part of the audience of his own work, a viewer of the work he has instilled. More precisely, the interaction between Napier and his viewers/users is rendered possible through the space of the interface. Mark Napier's *Shredder* piece highlights the role of the interface in the interaction with the viewers/users. Created in 1998, *Shredder* invites the viewer to submit a URL in the location field at the top of *Shredder's* interface, or to choose from one of two dozen pre-selected URLs, and the *Shredder* literally deconstructs the original site, slicing and cutting into pieces its text, imagery, and source code to form abstract compositions. *Shredder 1.0* works by passing the code in which a webpage is written through a Perl script, that is, a rudimentary program that rearranges the original code before displaying it on a web browser.

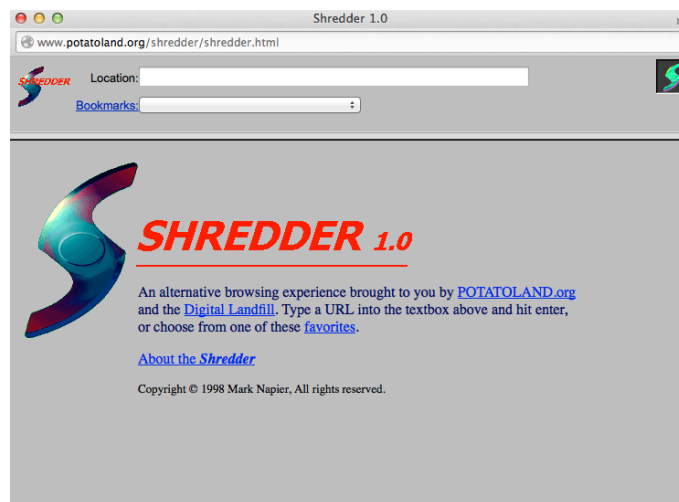


Fig. 19) Screenshot from *Shredder* (1998) by Mark Napier accessed on 30/01/15 at <http://www.potatolan.org/shredder/shredder.html>

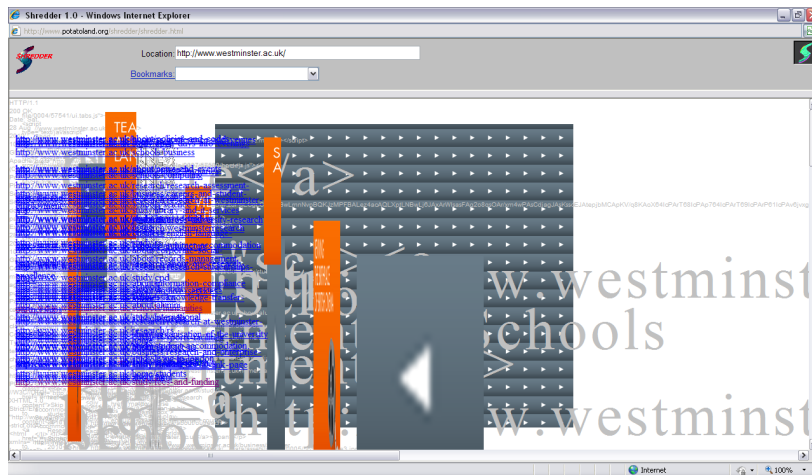


Fig. 20) Screenshot from *Shredder* (1998) by Mark Napier -shredded version of the University of Westminster webpage - accessed on 29/08/10 at <http://www.potatoland.org/shredder/shredder.html>

Here, the Perl script functions in such a fashion that the results are always visually similar (Tribe, 2007²⁵). In contrast to *The Digital Landfill*, *Shredder* is not a collaborative piece, in the sense that it does not create an open space on which the contribution of every user is visible, but establishes a one to one relation between the user and the application. As Mark Napier puts it:

My works are not objects but interfaces. The users become collaborators in the art work, upsetting the conventions of ownership and authority [...]By interacting with the work, the visitors shape the piece, causing it to change and evolve, often in unpredictable ways. The user is an integral part of the design.

(Tribe, 2007,
<https://wiki.brown.edu/confluence/display/MarkTribe/Mark+Napier>)

Shredder is more generative than *The Digital Landfill* in as much as it doesn't strip the codes, but reworks them through a Perl script. Somehow, the interface completes a recycling process that *The Digital Landfill* only starts by letting the data 'rot'. Accordingly, *Shredder* also represents a more aesthetic endeavour, which aims at changing the viewer's perception of interface design and draws the viewer's attention to the conventionality of

²⁵ See Brown University's collection of New Media Art works at <https://wiki.brown.edu/confluence/display/MarkTribe/Mark+Napier> (last accessed 16/02/15).

the forms by which digital spaces are normally organized. On the other hand, *The Digital Landfill* is more concerned with uncovering the structure of the interface. In the aestheticisation of information at play in *Shredder*, the traces of the original site's design can sometimes be identified in the distorted logos and fragments of text that remain, and the shredded versions resemble more the non-representational paintings of Gerhard Richter than the slick interfaces of the websites from which Napier's compositions derive.

3.4 A ruin of Internet Art

The generative aspects of *Shredder* and *The Digital Landfill* have become frozen in the contemporary state of both websites. Indeed, one of the interesting aspects of encountering *The Digital Landfill* today is that it now no longer runs properly and has become a form of digital ruin. Unlike most of Jodi's earlier works (such as *Asdfg* or *Jodi.org*) which are still running and still unfolding themselves as they recycle current digital debris (as in *Asdfg* for instance), *The Digital Landfill* shows signs of error: 404 page not found, or spam, instead of the image that was generated by the interface. As such, the piece has gained another aesthetic layer and also offers a meta-discourse on the state of online art conservation. *The Digital Landfill* provides an instance, which reflects on the level of manipulating obsolete pieces of information, but also now, despite itself, reflects on the status of Internet Art in today's Internet and contemporary art practices. Thus, the website has not only become its own ruin but also a ruin of Internet Art. As a ruin of Internet Art, does the significance of *The Digital Landfill* equal the recycling of the digital debris that the website performed? In other words, how does a digital ruin differ from digital debris?

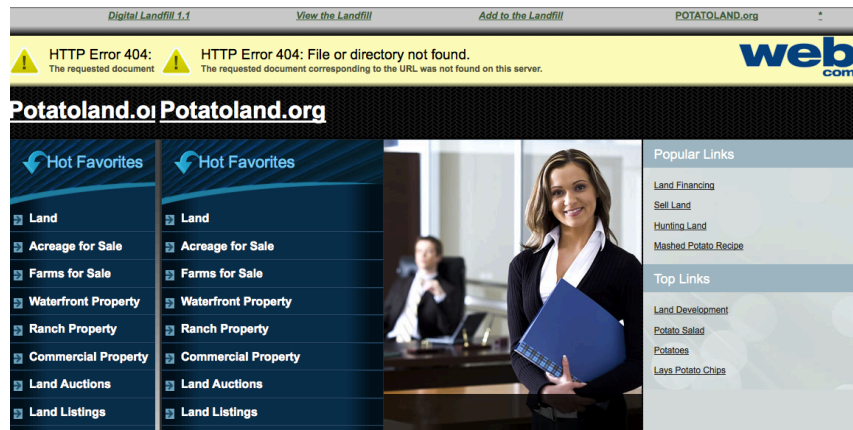


Fig. 10) Screenshot from *The Digital Landfill* (1998) by Mark Napier, accessed on 30/01/15 at <http://www.potatoland.org/landfill/>

The exhibition *Ruin Lust*, which took place in spring 2014 at Tate Britain, curated by Brian Dillon, surveyed the different types of ruins throughout art history. From Turner's watercolors, John Martin's painting *The Deconstruction of Pompeii and Herculaneum* to Jane and Louise Wilson's photographs of Nazi bunkers on the beaches of Azeville, the show chronicles the fascination that ruins have provoked throughout art history and their relationships with both artists and viewers. I would pose that the exhibition sheds a light on how ruins bear the traces of what they used to be when anchored in their original sites. Unlike the dirt that is 'matter out of place' as Mary Douglas famously stated, the ruins depicted in *Ruin Lust* are ruins that have remained visible as ruins for a long time. Often architectural, they haven't moved from the site on which they have been erected and testify to the passing of time, materialised in crumbles, by an effect of contrast with their environment. Since it hasn't moved from its site of creation, the ruin is in a constant dialogue with its present surroundings, a contrasted perception, which participates in the cultural value that ruins have gained through time, especially for the Romantics who valued the decay of classical artifacts (Dillon, 2006²⁶). The location of the ruins in their original site also sets them apart from debris, whose source is often unknown. Ruins eventually belong to a culture, they become a landmark for a nation or a

²⁶ See 'Fragment from a History of Ruin', *Cabinet*, Issue 20 Ruins Winter 2005-2006, <http://www.cabinetmagazine.org/issues/20/dillon.php> (last accessed 16/02/15).

culture. The ruin also has an essential semantic link inasmuch as, when experienced, it triggers in the viewer an imaginative reconstruction of what was there before it became a ruin. The ruin depicts the collapse of something known, (a cathedral, castle, temple) often associated with some historical event, which has then been marked in the public consciousness, whereas trash relates to something ordinary between the consumer, the user and her or his objects. Debris evoke consumption, the everyday, and as such holds, on a first inspection, the least value. Yet it is precisely for this reason, for their status as worthless leftovers, that debris have populated more and more art galleries. Trash has lost its context and hence its purpose. Indeed the reification of debris into artifacts is rendered possible through their ability to convey a large variety of meanings as in Noble and Webster's *Shadow* sculptures²⁷. Indeed, the manipulation of the debris is realized *a posteriori* from the different types of discourse and meaning applied to it. The debris takes on the form of an empty shell, a perfect receptacle, a canvas to work on, onto which the discourse of contemporary art can be applied. Such was *Ruin Lust*, with layers of curatorial choices applied to some of the most recent works, such as for instance the interpretation provided of Tacita Dean's *Kodak*. This piece, made in 2006, consists of footage of the Kodak factory in Chalon-sur-Saône. Shot on 16mm film, a format in the process of being discontinued, the film, according to the curatorial framework of the exhibition, records its own obsolescence. I would argue that there's resistance for *Kodak* to be viewed as a ruin and that this reading of the piece represents a rather speculative leap in the narrative proposed by the exhibition. Indeed, the depiction of the production of 16mm film symbolizes a reversal of the process by which a ruin becomes a ruin. If the generative aspect of the material is visually conveyed, as in *The Digital Landfill*, *Kodak* doesn't couple it with the real-time disintegration of the material, only the disappearance of the image projected using this film format. In Tacita Dean's piece the idea of obsolescence is not visually conveyed within the piece but belongs to a set of external discourses applied

²⁷ See Noble and Webster's website at <http://www.timnobleandsuewebster.com/biography.html> (last accessed 10/07/15)

to the work. Outside *Ruin Lust*, *Kodak* could be seen as a eulogy of celluloid. Moreover, the piece developed by Dean relies on a mirroring system between the film as a material and the representation of its production in the image projected. As such it functions in a self-fulfilling and isolated manner, which departs from the incompleteness and set of connections that ruins materialize through their environment. Thus, I would argue that ruins function as visual metonymies fostering a necessary bond with the larger building, epoch, past, they evoke. To read *Kodak* as a ruin of the 16mm film image, the piece should have been projected into the factory of Chalon-sur-Saône. *The Digital Landfill*, unlike *Kodak*, can be perceived as a ruin because its interface constituents have actually been rendered not only obsolete but non-operational and degraded. The concepts of both ruins and debris provide visual translations that help to grasp the inner mechanisms of both the Internet and information in a digital form. *The Digital Landfill* thus encompasses two different mechanisms, by being the ruin of a website meant for debris. As such Napier's piece reveals the different types of connections that dismissed information maintains with its original site of production and points at the moment when the debris isn't visible anymore, thus revealing the contingent visibility of online waste. The conceptual framing of *Kodak* by the exhibition here intends to refer to the qualities of ruins as a vehicle for an imaginative reconstruction and as such, highlights the semantic link of ruins.

The aim of this was to examine the visibility of digital debris and to study how this visibility was a defining part of the debris. First, I have paid attention to the landscape on which they appear and asked where the image of the debris was? To answer this question I have looked at the role of the interface and highlighted how it not only renders debris visible but also, like a screen, conceals them. Through the work of Lisa Jevbratt, I have pointed out the ways in which a visible rendition of the normally concealed Internet can be achieved. I have then asserted that it is when digital debris are materialised on the screen that the art 'happens'. In other words, I submit

that it is in the transitional process by which they are displayed as part of a work that they trigger the work and gain visibility. Subsequently, I have analysed the online display of digital debris and the ways in which they question traditional curating, to show that if Internet Art traditionally happens in between the nodes of the networks, in the case of digital debris, the art also 'happens' in the encounter occurring on the interface. Considering that *The Digital Landfill* by Mark Napier no longer functions and shows an error page when encountered, I've argued that it can be read as a form of online ruin. From this analogy I have subsequently sketched out what differentiates a ruin from debris in an art practice context. The comparison between ruins and debris allowed me to sharpen my understanding of digital debris as processes which, as a result of their displacement, have lost their original meaning and have become empty shells, on which a variety of discourse can be projected. The study of Tacita Dean's film *Kodak*, helped to grasp the gulf between ruins, or more precisely between the representation of ruins and curatorial discourses. As such, through the lens of *Kodak*, it is the semantic dimension of *The Digital Landfill* that is highlighted. Part Two will examine what constitutes digital debris from a semantic point of view and will describe how their semantic aspects are embodied in technical structures.

Part Two: The Metaphorical Constitution of Digital Debris

Chapter Four: *Weightless*: Metaphors as a Paradigm for Knowledge and its Limitations

- 4.1 *WebWaste.net*: the online illustrative metaphor and its limitations
- 4.2 *Weightless*: television metaphor as a critical tool
- 4.3 A satirical closed circuit
- 4.4 Turning communication into an Ubu archive
- 4.5 Burrough's catalytic manipulation of language
- 4.6 Unrealised *détournement*

In Part One, I have shown the ways in which digital debris are retrieved and concluded that they are just as much generated as lifted from the Internet. Throughout the study of *Data Diaries*, *Once Upon* and *The Digital Landfill*, it becomes particularly striking that those works heavily rely on metaphors (psychological, archival, geological). The aim of this essay is to unpack the consequences of using metaphors as an axis for online art practices and to look how far this paradigm can be extended without losing its critical strength. By looking at Internet pieces that display themselves in a metaphorical manner, I intend to unpack the idea of digital debris, which are themselves metaphorical. The chapter will revolve mainly around a piece entitled *Weightless* by British artists Thomson & Craighead. They have re-appropriated the traces and fragments that online communication leaves behind. Thomson & Craighead set up two different strategies in a piece entitled *Weightless*, created in 1998, which presents the viewer with a collection of found elements taken from the Internet, including animated GIFs and fragments of communication from chat rooms. As its title suggests it is a comment on the use of information as a material and imprisons ephemeral pieces of information in a self-contained and limited piece of Internet Art. First, I will look at a very explicit example of internet art that relies solely on metaphors and will point out why this approach isn't so successful from a critical point of view, or when metaphors are just employed in an illustrative manner. Then I will examine the original way in which *Weightless* nests itself in the history and aesthetic of another medium, television and how this approach enables the artist to turn the

metaphor upside down. Structurally I will explain how the reversal of the television metaphor is rendered possible through the closed circuit they have set up. As such the artists have elaborated a system that directly contrasts with the idea of television broadcasting. Indebted to the work of Nam June Paik, Thomson & Craighead have disrupted the feedback signal of television to turn a tool of communication into an art object.

In the second part, I will demonstrate nonetheless that the manipulation of online communication into a closed object, itself wrapped in the metaphor of another medium, creates an unstable piece, which as such resembles some aspects of William Burroughs' viral aesthetic.

4.1 *WebWaste.net*: the online illustrative metaphor and its limitations

One of the most explicit metaphors of online waste that can be spotted in Internet Art, lies in a piece by Icelandic artist Ragnar Helgi Olafsson called *WebWaste.net* (2002). *WebWaste.net* is an on-line collective yet anonymous rubbish dump of the Internet. Downloading the *Dustman* application allows the Internet user to empty the content of his desktop bin into the website and to see it merge with what other users have left on the website, in a way that recalls *The Digital Landfill* by Mark Napier. The scope of discarded materials ranges from Word documents, to sound files and different sorts of applications.



Fig. 11) Screenshot from *WebWaste.net* (2002) by Olafsson, Ragnar Helgi on 29/08/10 at <http://www.webwaste.net/>

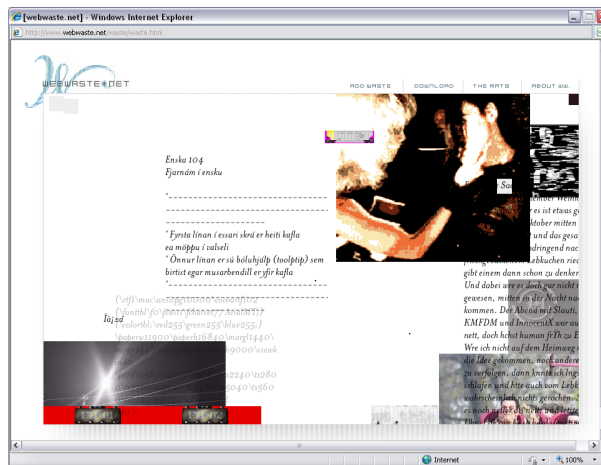


Fig. 12) Screenshot from *WebWaste.net* (2002) by Olafsson, Ragnar Helgi on 29/08/10 at <http://www.webwaste.net/>

The software also enables the Internet user to download some materials that have been thrown away. *WebWaste.net* pushes the metaphor of waste further by hosting 'rats'. This is where *Webwaste.net* differs from *The Digital Landfill* by implementing a form of animism. These rats are algorithmic, more precisely data-parasites which 'eat' pixels from images or words from text-documents and, after digesting them, dump them into other images or files. Hence the users are shown the breakdown and decomposition of the thrown away objects on the *WebWaste.net* over time. The rats breed, multiply and if people cease throwing away objects on the server, the rats

die of starvation. Whilst *WebWaste.net* itself is accessible from any computer, the rats 'live' in a specific location on a specific, constantly running computer connected to the server which houses the website. From this symbolic cage (at the moment stored in Marseille, France) the rats are fed with the files of *WebWaste.net*.²⁸

Yet the *Webwaste.net* piece doesn't seem to critically engage with the layers of metaphors it's using and doesn't touch on what actually lies behind the metaphors used on the Internet, but rather keeps the metaphors on a semantic level. According to Media theorist Matthew Fuller the metaphor of waste and of the recycle bin on our desktop is revealed as a misleading metaphor:

Metaphors also include items such as the familiar "desktop" 'wastebasket'. This is a notorious case of a completely misapplied metaphor. A wastebasket is simply an instruction for the deletion of data. Data does not, for instance, just sit and rot as things do in an actual wastebasket. That's your backup disk. Actual operations of the computer are radically obscured by this vision of it as some cosy information appliance always seen through the rear-view mirror of some imagined universal. The page metaphor in web design might as well be that of a wastebasket.

(Fuller, 2003: 55)

The truth behind the recycle bin of the desktop is that in fact, a discarded file is not moved to the Recycle Bin. Instead, the file remains in the same place but its directory entry (the complete path and filename of the file is removed and placed in a hidden folder called Recycled. The file is then renamed. The original name and location of the file are stored in a hidden index file, called INFO2 located in the Recycled folder. If one opens the Recycle Bin and clicks a file and chooses Restore, the file is renamed and its directory entry restored. Deleted files are renamed and stored in the Recycled folder. Thus files are not really erased when one deletes them, they are just renamed and their location hidden from view. A similar process occurs when one empties one's Recycle Bin, the file data is not deleted. Instead, Windows, for instance,

²⁸ Olafsson, Ragnar Helgi, Notes on *WebWaste.net* (August 2005) at <http://www.webwaste.net/olafsson/images/projects/NotesOnWebWaste.pdf> (last accessed 16/02/15).

changes the file's directory entry to indicate that the space occupied by this file is no longer needed and is available for use. The data remains at the same location, but at any time if the operating system needs space for another file, it may be overwritten. Until it is overwritten, the file still exists on the hard disk and is recoverable (Spector, 2003: 202). The desktop metaphor is just an instance of the borrowing of terminology from a different field in order to render the user experience more familiar. In the case of the *WebWaste.net* the set of metaphors deployed is a mere vector for conveying an illustration of online participation without offering a critical inward look at the technology that supports it. As stated by Media Theorist Mathew Fuller 'software will need to be seen to do what it does, not do what something else does' (2003: 100). I read in Fuller's remark a plea to strip software from the metaphors and images that are applied to it and which lead to a misconception of the technology. The wish to readjust language around software to gain a clearer and sharper understanding of technology is, I argue, shared by some Internet Art pieces.

4.2 Weightless: television metaphor as a critical tool

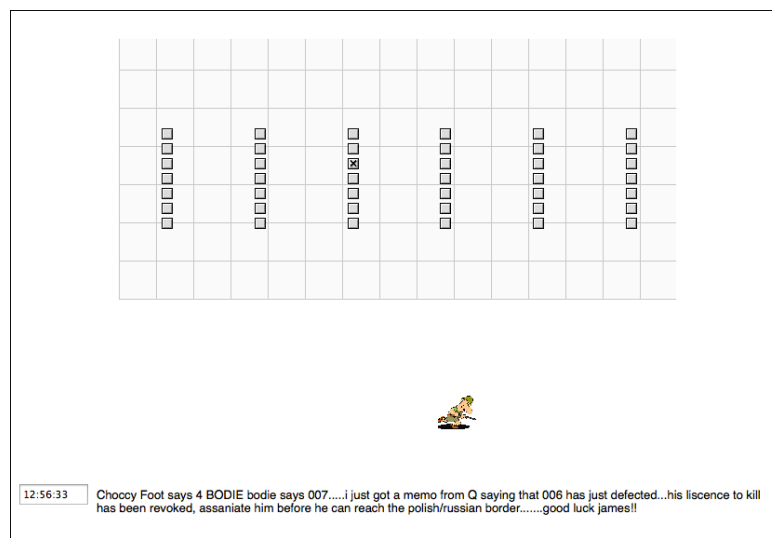


Fig. 21) Screenshot from *Weightless* (1998) by Thomson & Craighead accessed on 30/01/15 at <http://www.thomson-craighead.net/docs/webworkb.html>

Unlike *WebWaste.net* by Olafsson, which takes the metaphors and language of New Media for granted, there's a piece of Internet Art by British artists

Thomson & Craighead²⁹ that critically engages with metaphors by using them not solely on a semantic level but on a visual one. *Weightless* is a website which allows the user to navigate a collection of data collected online in 1998. The data is made of animated GIFs and chat-rooms transcripts organised into 42 boxes. The program, built by Thomson & Craighead, has scanned the web and reconstituted its findings in the form of a grid. By clicking on this grid, the viewer is led to see the sentences extracted from porn chat rooms, spams and the animated graphics collected when *Weightless* was conceived. On the opening page of the website, a midi soundtrack welcomes the viewer. In 1998, a midi soundtrack was playing throughout the website, which unfortunately isn't anymore. The music back then would have had a different effect on the pacing of the piece and ultimately its impact on the viewer. The content of the work is not made visible at first and the viewer has to interact with the programme to access the data, in line with the status of online discarded pieces of information as hidden entities.³⁰ Once the viewer clicks onto one of the dots presented to him on the grid of the website, she or he is led to follow the dots sliding through different webpages until the final document is found. Somehow, the viewer is thus invited to travel within the archive that is *Weightless*. The viewer not only navigates in the obscure collection he or she is browsing, but it appears that the website itself responds to the navigation undertaken by the viewer. There is also the fact that the searches of the viewer are explicitly random, for one doesn't know what one's looking for when searching this archive. As in a video game³¹ where the game momentarily turns itself into a movie sequence, in order to move the action forward at some point, the user becomes a viewer. It is in the moment when one can idly observe an anonymous character travelling in the layers of the archive, that one is led to read *Weightless* as a televised archive. Indeed, with its use

²⁹ Sees Thomson & Craighead *Minigraph 7* (2005), with essays by Stallabrass, J. and Archer, M. available at <http://www.fvu.co.uk/bookshop/detail/thomson-craighead-minigraph-7> (last accessed 23/07/2015).

³⁰ See also *Flat Earth* (2008) by Thomson & Craighead which gives the viewer a 7 min documentary via fragments taken from blogs around the world available at http://www.ucl.ac.uk/slade/slide/flat_earth.html (last accessed 23/07/2015).

³¹ in 1999, Jodi created <http://sod.jodi.org/>, a modification of the game *Wolfenstein 3D*

of a grid, its music and the appearance of chat transcripts at the bottom of the screen-like subtitles – it could be said that the metaphorical side of the work lies in its mimicry of a TV show. For instance, the action of selecting which data to see by clicking on a box, recalls the use of a television remote control. The television metaphor was directly intended by the artists, for when presenting the work, Alison Craighead declared: ‘with *Weightless* we were really interested in making it look like television or something that was televised’ (Quaintance, 2011)³². Here *Weightless* offers a critical take on the idea of remediation, which is also defended by Jay David Bolter and Richard Grusin. In their book *Remediation, Understanding New Media*, the authors suggest that the particularity of digital remediation lies in its claim of an invisible relationship with previous media such as film or photography. According to Bolter and Grusin, digital media absorb previous media without acknowledging them and as such create an interface, which continuously hides and denies the presence of its historical predecessors in order to render the desktop experience immediate. From this perspective, the goal of the interface is to appear as transparent as possible. Thus, since the claim of digital media is that it operates *ex nihilo*, the idea of remediation becomes impossible. The authors denounce this phenomenon by stressing that remediation is ‘unique to digital worlds’ (Bolter & Grusin, 2000:50). With its nesting of the computer interface in an online context with the appearance of a television, *Weightless* unravels the homogenous remediation promised by digital technology in order to shed some light on a certain lineage of the internet.

4.3 A Satirical closed circuit

It is interesting to notice that the metaphorical language of the television medium, initially intended for broadcasting and thus communication, is here locked in a closed, quasi self-contained system. Indeed *a posteriori*, with its

³² Thomson & Craighead interview by Morgan Quaintance, July 28, 2011 <http://morganquaintance.com/2011/07/28/interviews-thomson-and-craighead/> (last accessed 16/02/15).

archiving of ephemeral pieces of information, *Weightless* ironically prefigures the archiving of Tweets launched by the Library of Congress in April 2010.³³ The paradoxical concept of television as a closed-circuit is also described by Joselit in *Feedback, Television Against Democracy*. In his book the American scholar embarks on an investigation of video art in mid 20th century America that combines art history and the political sciences. With the merging of the two disciplines, the author aims to study the instances in which closed-circuit television is subverted. Joselit's objective is to set up an art history devoted to scanning practices and which will therefore be able to stabilize moments of disruption 'in order to mine their significance, as both politics and form' (2007: 17). One of the pre-requisites of the book is the definition of television as a closed circuit. It reads:

Television is the paradigmatic closed circuit. Formally, it arises from two mechanisms: scanning, which characterizes television's reproductive technology, and feedback, which describes its broadcast structure.

(Joselit, 2007: 28)

If *Weightless* can be perceived as a closed-circuit, it nonetheless functions differently. On first inspection, it seems indeed that the piece created in 1998 embodies two of the qualities of a closed-circuit as defined by Joselit i.e., the scanning of the web to collect pieces of ephemeral information and the feeding back of these pieces of information which are then broadcast onto the website.

Yet, on a second inspection, one starts to realise that the feedback at play in *Weightless* is only partial. Indeed, the deliberate limitations of *Weightless* are the most interesting facets of the work. The piece is not an open-ended work but rather a self-contained piece, which always displays the same data if the viewer clicks on a box he has already clicked on. Besides, the dead ends of the website highlight its non all-connecting structure and invites the viewer to think of the type of connections and network structures that the Internet is made of.

³³ The Library of Congress announced that it was about to archive all public Tweets that have been posted since 2006, at <http://www.loc.gov/today/pr/2010/10-081.html> (last accessed 16/02/15).

Thus, the data displayed in *Weightless* is on a loop and the viewer has no other choice but to witness the reappearance of data he or she has already watched³⁴. Thus, the piece could be described as a reiterative piece, which plays with the very paucity of the interaction (Stallabrass, 2003: 64). It seems then that the work is pitching against the absolute interactivity promised by online communication and deliberately displays a parody of interactivity. In 2003 Stallabrass wrote a book on early Internet Art, focusing on its relationships with online commerce and the art market. Stallabrass describes Thomson & Craighead as follows:

Much Internet art, far from providing meaningful interaction, plays on its very paucity. The bittersweet work of Thomson and Craighead subverts the illusion of interactivity.
(2003: 64)

In that regard, Thomson & Craighead seem to share the same critical view of interactivity as the one maintained by Russian net artist Alexei Shulgin. Since Internet interactivity is often described as democratic, Shulgin expressed his reservations with the term. Shulgin stresses the fact that the apparent interactivity is often a manipulative tool, meant to push the viewer into clicking on certain buttons in the name of the artist (Stallabrass, 2003: 27). The undermined interaction of *Weightless* is also manifested in the absurd duplication of the viewer's image. Indeed, not only does the work re-appropriate debris gathered on the Internet, but it also offers a mirror to the viewer who can therefore idly witness the use the programme makes of personal information.

One of the other self-contained aspects of the piece is its ability, by its online nature, to free itself from the regular means of art distribution and to question the role of curatorial intervention in a Internet-based piece. This point is developed in the first monographic survey of Thomson & Craighead's works published in 2005, in which Stallabrass wrote an

³⁴ In today's current cognitive capitalism, the loop dimension of the work takes an interesting reading and reflects on the commodification of information via the user. Today, by visiting and clicking through an ordinary website, the visitor becomes a human feedback system which provides the machine with data for the site to perfect itself and to improve. The aim of the machine being not to improve the visitor's needs but to strengthen the control and exploitation of the viewer's data (Stallabrass, 2003: 64). Yet, *Weightless* was designed at a time where this notion of feedback didn't take place.

introductory essay entitled *Reasons to hate Thomson & Craighead*. He remarks that:

Internet art, being immaterial, can be copied perfectly and distributed for nearly no cost- and this against a world dependent upon shutting up rare or unique objects in museums and bank vaults.

(Stallabrass, 2005: 71)

In *Weightless*, Thomson and Craighead seem to evade not only a traditional curatorial approach that would tend to project a website such as *Weightless* on the wall of a gallery, but it even evades curatorial solutions like those proposed by New Media curator, Sarah Cook. In *New Media in the White Cube and Beyond*, edited by Christiane Paul, Cook attempts to build typologies for curating New Media Art. The author maps out three models of exhibition for New Media: the exhibition as software, the exhibition as a trade show and, more importantly for us here, the exhibition as a broadcast. It reads:

New Media art's occasional need for a time frame, a durational viewing, the notion of a scheduled broadcast – emanating from one and received by many – with as many or as few channels as needed can provide an interesting alternative exhibition model.

(Cook, 2008: 36)

Even if the television metaphor fostered in *Weightless* may lead the viewer to think the account of exhibiting as broadcasting valid, *Weightless* does not require a scheduled broadcast to frame its dissemination. In contrast to the dynamic suggested by Sarah Cook, *Weightless* confines the viewer to 1998 when the piece was conceived; since the machine is running the work, it therefore seems to mock the event dimension of the exhibition as a broadcast format pointed out by the curator. As such, the piece subversively aims at, as Stallabrass puts it, rubbing 'the noses of art-goers in the tawdry material that they have gone to the gallery to escape'(2005: 70). If a sense of parody is laced within the structure of the work and its relation with the viewer, the collection of found materials presented by Thomson & Craighead seems to reinforce the irony of the work. First, the title reflects on the trivial, obscene and useless fragments of speech that are shown to the viewer. The title *Weightless* is also a comment on the immaterial nature of

the data presented. In his essay, Stallabrass describes the nature of the debris presented in *Weightless*:

Their piece *Weightless* 1999, for instance, presents the viewer with a collage of found elements taken from the Web, including animated GIFs (the generally cheesy little animation files that decorate pages), muzak, and lines of often cryptic or obscene communication from chat rooms.

(2003: 64)

As a result, with *Weightless*, Thomson & Craighead managed to free themselves from a curatorial narrative imposed on their work.

4.4 Turning communication into an Ubu archive

Such a critical take on online communication, by wrapping it in the metaphorical layer of another medium, invites us to question not only the evolution of ephemeral pieces of information once they are incorporated into another context, but also the status of the final object produced. As such the conversion of online communication into an object inscribes itself easily into the heritage of Nam June Paik and the famous 1969 exhibition 'TV as a creative medium'. If Paik was distorting television signals in order to draw attention to the potential of television as a medium, as in *Magnet TV* (1965) for instance, Thomson & Craighead's *Weightless* could be said to emulate a similar tactic by rendering the screen interface as a pictorial form (Green, 2004: 9). Yet they're adding another layer to it, which has to do with the specificities of dealing with data. One of the elements that separates *Weightless* from *Magnet TV 1*, for instance, is the data base nature of *Weightless*. In *Internet Art, the Online Clash of Culture and Commerce*, Stallabrass starts by parsing out (2003: 26) a few characteristics of Internet Art which all encompass what he names as 'the form of data'. Indeed, he points out 'the most fundamental characteristic of this art is that it deals with data, and can be thought of as a variety of database forms' (2003: 26). If one starts to consider *Weightless* as a form of database, it seems then that the work echoes some instances of Fluxus.

Here, in order to grasp the approach and method adopted by the artists in *Weightless*, one needs to do another historical detour. Avoiding traditional curatorial tactics, a taste for Dada and the trivial content of the objects collected, may come from an inspiration that *Weightless* seems to draw from the New York Fluxus and most specifically from the *Fluxkit* piece. The *Fluxkit* encapsulates a collection of multiples, printed items by artists revolving around George Maciunas and those who had contributed to the festivals and events organized by the group since 1962, among whom was Alison Knowles. The attaché case, advertised at the time for the price of \$100, was mass-produced and was packed with small objects to be held in the hand, read and manipulated. If the Fluxus influence of the Fluxkit assembled by George Maciunas is explicit in Thomson & Craighead's website *Dot.Store*, it seems that the Fluxus heritage still lingers in *Weightless*. If the interaction that *Weightless* permits is limited, the user can nonetheless click on the items ranked in the website and re-watch them at will in a manner that echoes the touch and manipulation of the items laid out in the Fluxkit attaché-case. The fact that the kit was mass-produced seems to resonate with the online dissemination of *Weightless*, which multiplies the piece. The website seems also to echo one of Alison Knowles's pieces for the Fluxkit. However, interestingly, *Weightless* has retrieved not visual artefacts but fragments of texts, which by the displacement they've been through have become aestheticized. The aestheticisation of information at play in *Weightless* reflects another fluxus work entitled *Bean Rolls* (1965), which features a study of the bean. The work is composed of a metallic box containing small rolls of paper for the viewer to unroll to read Knowles' study of a legume. With its participatory aspect, and the fragmentation of text that needs to be unrolled, *Bean Rolls* seems to echo the unfolding of the text in *Weightless* which resides in small virtual boxes. As Alison Knowles explained, part of the purpose of the Fluxkit is that not only does it represent a collection of items, which can be manipulated, but also the objects present in the kit can be fixed or substituted by another object if one is missing. As such, when the work was produced its performativity and on-going nature contrasted with the status of the artwork in a museum, even if

ironically the work is now displayed on a plinth behind glass at the MoMa. In a way, *Weightless* seems to have inherited the Fluxus anti-curatorial ambition and transposed it into the digital sphere.

Yet the question remains, what type of artefact results from the manipulation carried out by the artists? The ability of a piece to not rely on an external agent for its circulation may place it on the road to ruin. Indeed, inasmuch as *Weightless* is bound to the technology that supports it there may come a time, as for many online pieces of work by other artists (like *The Digital Landfill* by Mark Napier or *WebWaste.net*, *Glitchbrowser* by Dimtre Lima and Iman Morandi, 2002), when the technology won't be able to support the website. Therefore, there seems to be an unresolved tension between a piece of Internet Art, such as *Weightless*, and the closed-circuit it represents with its non-all-connectivity, which acts as a 'brick' in the web and in the ever-evolving, commercially oriented technology which not only supports it but also constitutes it. Accordingly, since *Weightless* may be rendered obsolete by the technology which produces it and since it is only showing debris gathered in 1998, it could be tempting to argue that the work offers the viewer a glimpse of Internet usage in 1998 and deserves a place in a documentary perspective.

The Listening Post is an installation developed at the same time as *Weightless* but which was finalised in 2002. It is an installation by American designer Ben Rubin and statistician Mark Hansen at the Science Museum. It consists of a program that retrieves and extracts data from their context in live chat-rooms and then funnels them to a 231 screen display. These data, which are uncensored pieces of conversation, resonate with voices from speakers installed around the room. The data collected is displayed on 231 LED screens in real time, offering the viewer a spectacle of sentences beginning with 'I am', 'I like'. In that regard, the piece is rather typological. If *Weightless* makes a light play of the material it is recycling, *The Listening Post* underlines the affective content of the data it shows and proposes a giant cinematic collage of identities. The work continuously renews itself

and plays on the openness of its unpredictability. The installation also involves the notion of Real-time and has the capacity to present data at such speed that the user feels the machine's responses are more or less immediate. The communication appears either as a whole or in truncated phrases, which include statements about nationality, age, sexual preference, religion, and everyday life. The work is divided into six sequences that resonate with specific sounds. Each sequence offers different patterns: at one moment, for instance, the text washes rapidly across the screens, evoking the movement of wind, which is emphasized by the sounds from the speakers. If *Weightless* fosters a metaphor with the television format, *The Listening Post* adopts theatrical conventions such as a dark room, rows of benches and a large curved screen. It could be argued that, unlike *Weightless*, the installation places the viewer in a voyeuristic position where he or she can witness the displacement of private pieces of information into the public domain without being watched. Unlike the *Listening Post*, the rawness of the data displayed in *Weightless* allows the piece to shift from the will to translate anonymous individuals' concerns into a collaborative virtual collage, to a question about the mode of communication itself. In contrast to *Weightless*, *The Listening Post* could be seen as a celebration of online communications. However, in *Weightless*, behind the mode of communication, it is the role played by the machine that is also addressed. As Stallabrass explains:

[...] other works touch on the opportunities and dangers of automated art. The elements in *Weightless*, for example, were largely lifted from the Web, and if any one juxtaposition of animation, music and text would be as affecting as any other, why not let the machine make the selection?
(2005: 72)

As such, the role of the program in *Weightless* sheds light on the way the data is set up with the specific goal of undermining the technology it exploits. It seems indeed that the program, as part of Thomson & Craighead's critique of automated Internet Art, randomly retrieves data and no apparent pattern seems to appear in the debris displayed. In that sense *Weightless* shares a fictionalised sense of the document and the archival with *Once Upon* by Olia Lialina and Dragan Espenschied, whereas Cory

Arcangel's Beat the Champ installation at the Barbican in 2011 recreated a sustained history of bowling through its various incarnations on a chronological arrangement of mostly redundant platforms.

As such, the deliberate role assigned to the program in *Weightless* reinforces the idea that the piece could not be read as a documentary. Interestingly, unlike some of Thomson & Craighead's most recent works, such as *A Short Film About Flying* or *A Short Film About War*, which both consist of a succession of pictures extracted from Flickr and where the original IP address of the image's location on the Internet is displayed along with the image, *Weightless* conceals the source of its found materials. As such, it could be said that Thomson & Craighead avoid a documentary reading of the data and prevent the debris from being read as evidence of online communication in the late 90's. Accordingly, in line with Stallabrass, I would argue that the piece could be read as a comment, not only on the amount of detritus that the Internet can produce and on the dangerous ease of de-contextualizing them, but also on the 'banality of much web content and [...] the raw communication of the chat rooms' (2003: 64). Furthermore, the website which runs the work here departs from a Conceptual Art perspective *à la* Sol LeWitt – despite its grid motif – where the artist sets a number of parameters and experiments with the unexpected outcomes of the work, since the pure automatism of the piece is ridiculed in *Weightless*. I would argue that the 'light play of found materials' defended by Stallabrass (2005: 71) possesses nonetheless some criticality. In my opinion, the database gathered in *Weightless*, because it exhausts and ridicules its constituent parts (the television metaphor, the triviality of the materials found), could be read more as a *Ubu-esque* archive rather than a documentary and this is where its strength as an art piece lies.

4.5 Burrough's catalytic manipulation of language

The temporary set up of *Weightless* as an absurd archive of trivial content, laced with irony, introduces a tremor in the engagement Thomson & Craighead perpetuate with the Internet and more generally with New

Media. It is in the disruption of the feedback intended by online communication that the criticality of the piece sits. More specifically, I would submit that the disruption of the feedback, which often occurs as a quiver implemented by the artist, is here inherited from some of William Burrough's theoretical work.

I will examine the communicative set up of data undertaken by Thomson & Craighead through the prism of the viral aesthetics of William Burroughs. Interestingly, in his book *Feedback*, Joselit also refers at length to Burroughs' viral aesthetic and elaborates his concept with Burroughs' account of viruses, developed in his 1971 *Electronic Revolution*. For Burroughs the written word was a virus that literally made the spoken word but which had not yet been recognized as such. Burroughs warned against the danger of the human voice and proposed to disrupt language through a series of tape recording manipulations so that the viral nature of words could be revealed³⁵. Joselit taps into the manipulations of language suggested by Burroughs and interprets viral aesthetics as an attempt to 'interrupt the smooth reproduction of pattern in order to induce shake, quiver, or noise' (2007: 63). Following up the logic of viral aesthetics, *Weightless* could be seen as an instance in which the disruption of television signals and the dislocation of chat-room transcripts bring to light the viral nature of online communication. For Burroughs the aim of these manipulations was to prevent the viral nature of words from spreading. In quite a similar fashion, *Weightless* underlines the potential contamination of language that online communication can produce by distorting it. As Joselit puts it, Burroughs's manipulation of language is: 'powerfully catalytic: the presumed transparency of words to "their" meanings is destroyed' (2007: 55). Thomson and Craighead's approach could equally be qualified as catalytic insofar as the words are not just used as cryptic traces of conversations but are also turned into visual artefacts, which subvert not only the qualities of online communication but also automated art. As such *Weightless* is not about leaving a mark, but about the frailty of the system of rules built for the

³⁵ See the Electronic Revolution at www.ubu.com/historical/burroughs/electronic_revolution.pdf (last accessed 16/02/15).

work and the danger of fully embracing an algorithm that runs the work without any critical distance.

It could even be suggested that attention is focused onto the *uneventful* dimension of New Media communication. American philosopher Stanley Cavell, in relation to what the television screen actually monitors, has theorized the notion of the uneventful. Cavell describes the uneventfulness of television as what the screen monitors, the repetitive, the utterly familiar (Joselit, 2007: 24). The uneventfulness of the information displayed in *Weightless* is twofold. First it can appear familiar insofar as it represents anodyne bits of conversation which many users can relate to, but it is also familiar by the mere fact that the debris are on a loop.

In *Weightless*, the viewer seems to reach a dead end every time he selects some data that ultimately sends him back to the main page of the website. There are no traces here of what will subsequently be called 'breadcrumbs' in online navigation. Here, unlike an online error page, the viewer is faced with an intended failure of technology. In this case, Thomson & Craighead are unveiling the limitations of the piece one after another throughout the user's navigation of the website. The amount of data and the range of possible combinations to look at that seemed at first vast, becomes quickly deceptive as the viewer is faced with a work which resists his voyeuristic attempts and leaves him with a sense of frustration and the feeling that he or she has been tricked by the machine. The structural maze that the viewer faces reflects on the fact that both the source of the debris and the structure according to which they are retrieved are hidden.

A work entitled () by American experimental filmmaker Morgan Fisher addresses a similar issue. The film, which was made in 2003, is made entirely of inserts from feature films collected for that purpose. These inserts include details of weapons, wounds, letters, signs, tombstones, machinery, games of chance, timepieces, money, and even intimate caresses. Fisher places the inserts from a given film in the order in which they appeared in that film, but two inserts from the same film never follow each other directly in his assemblage. Fisher edited the inserts under constraints

he does not fully reveal, even if the historian of American avant-garde cinema, P. Adams Sitney, describes them as Oulipian. In () as in *Weightless*, the rule that structures the work is hidden from the viewer and the shots watched in (), like the data in *Weightless*, seem to appear randomly to the viewer. The insert shot gets its narrative meaning wholly from its adjacent shots (unlike shots in a traditional film), so that in effect ()'s contextualisation is endlessly displaced onto adjacent shots that are themselves dependent on their neighbours. Hence perhaps, the connection that Sitney draws with Oulipo's subversive and playful approach. Here, the mention of () invites us to a culturally broader reading of the issues at stake in *Weightless*. It underlines the need to think of digital ephemeral information by anchoring it to previous instances of artworks using information as a material. The disturbances that *Weightless* generates invite the viewer to see the digital debris as a frame to look at the technology that created them. The piece proposes to take an inward look into a medium to destabilize the immaterial perception of digital data. Collectively, these references point at the multiform dimensions of *Weightless* and the inner criticality contained within the work, which invites an inward look at the technology that supports it.

4.6 Unrealised *détournement*

By collecting and grouping elements of online communication it could be said that Thomson & Craighead are undertaking a form of minor *détournement* as described by Debord in his *Society of the Spectacle*. According to the French Situationist a minor *détournement* is:

the *détournement* of an element which has no importance in itself and which thus draws all its meaning from the new context in which it has been placed. For example, a press clipping, a neutral phrase, a commonplace photograph.
(Debord, *Les lèvres nues* 6, September 1955)³⁶

³⁶ Available at <http://www.cddc.vt.edu/sionline/presitu/geography.html> (last accessed 24/02/15).

The banality of the fragments of texts gathered by the artists in *Weightless*, as demonstrated above, gain their significance once they are placed in a different context. Moreover in *Weightless*, being tinted with irony, the notion of *détournement* could be even more striking insofar as for Debord a *détournement* aims at subverting the original message of the object 'detoured'. In a sense then, the *détournement* differs from a recuperation, which softens a radical idea to incorporate it into mainstream media. Not only could one see the manipulation of digital debris in *Weightless* as an instance of a minor *détournement*, but, by wrapping it into a retro television metaphor, the satirical take on online communication leads to a reading of the work as a form of what Debord calls an extensive *détournement*. This latter is 'composed of one or more series of deceptive and minor *détournements*' (Debord, 1955).³⁷ However, one of the precepts of Debord's theoretical project specifies that if the outcome of the *détournement* is to make art, the overall project is unsuccessful. For Debord *détournement* needs to free itself from the art framework. If the will to depart from art and to refuse the label of artists and artwork was very much part of the ethos of Internet Art, I would argue that *Weightless* very much posits itself as an art piece. This is particularly visible, as the first thing that appears on the opening page of the website is the artists signature and the title and year of the work.

This chapter was intended to look at an instance of online metaphor and to evaluate how this latter plays out in an art piece. After examining the work of Internet Art entitled *Weightless* by Thomson and Craighead, it appears that not only metaphors of found materials and television language are the vectors of the ideas conveyed within the work, but more importantly, through the displacement and aestheticisation of the information, they become critical tools that enable the artists to engage with the technology they are using. Yet I have explained that considering the reappropriation of digital debris as an act of *détournement* wasn't feasible

³⁷ Available at <http://www.cddc.vt.edu/sionline/presitu/geography.html> (last accessed 24/02/15).

for *Weightless*, as right from the start it is thought of as an art piece and as such unravels a Debordian theorisation. Nonetheless, if Thomson & Craighead are not performing a *détournement*, they nonetheless manage to instil some criticality in regard to the commodification of data by exhausting metaphors. In this chapter I have examined the ways in which the knowledge that online metaphors support are visually constructed and argued that in the instance of *Weightless* the metaphors are exhausted and therefore become critical too. I have shown that the knowledge generated by a piece such as *Weightless* is shaped as a database but that this database doesn't necessarily reveal the ways it is internally structured. I have pointed out that in *Weightless* the piece ridicules not only online communication and the value of the information generated online, but it also undermines the notions of interactivity, feedback and archive in an online environment. As a result, the work created in 1998 by Thomson & Craighead, turns the computer interface into a critical artefact that starts a process of debordian *détournement* which has yet to be realised.

Chapter Five: *Beacon* : A Linguistic Readymade in the age of Cognitive Capitalism

- 5.1 Deletion: information as commodity
- 5.2 A linguistic readymade
- 5.3 Materialising processes: oscillation between object and sign
- 5.4 Peirce's semiotics in the digital age
- 5.5 The *intraface*: real time and site specificities

Here, I will examine the notion of deletion which, on first inspection, seems to mark the first step towards the production of debris. To generate debris one needs discarded, deleted data. The chapter will examine a work by Thomson & Craighead, titled *Beacon*, which relays words typed into search engines and which thus symbolises the first step towards an epistemology dedicated to online knowledge. The chapter will contextualise the notion of deletion by inscribing and defining it within the present state of cognitive capitalism. I will stress how the act of deletion is a crucial agent in the information economy. As such, I hope to highlight the increasing commodification of information found online. The shift of understanding as to what holds value will impact on the meaning of detoured objects in art practice and more precisely, will refresh the notion of readymade. Indeed, throughout the theoretical writing of Joselit, I will argue that *Beacon* provides a new type of readymade where the commodity of the physical object has been supplanted by the commodification of information. Through the aestheticisation of information at play in *Beacon* I will submit that Thomson & Craighead's piece is a receptacle for processes of materialisation and de-materialisation. In other words, I will demonstrate that *Beacon* is a piece in perpetual oscillation between its status as a sign and its status as a commodity. Following up this remark and Joselit's emphasis on semiotics, I will apply a semiotic reading to *Beacon* via the writing of C.S. Peirce. Embarking on a semiotic reading of an instance of Internet Art will lead me to revisit the heritage of Peirce in today's cognitive capitalism. The chapter will end by looking at the concept of the interface and argue that in the context of *Beacon*, the viewer is presented with not a traditional interface but with one of its derivatives that Alexander Galloway calls *intraface*.

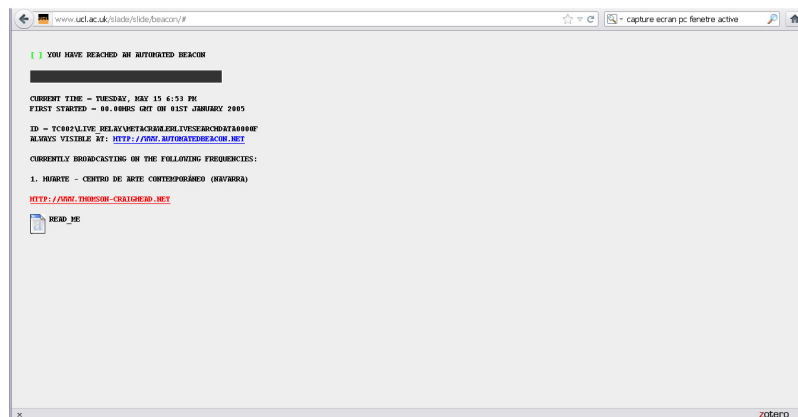


Fig. 14) Screenshot from *Beacon* (2005) by Thomson & Craighead accessed on 30/01/15 at <http://www.thomson-craighead.net/docs/beacon.html>

5.1 Deletion: information as commodity

In 2005 Thomson & Craighead created an entirely automated piece entitled *Beacon*. *Beacon*³⁸ is a web-based artwork, which continuously relays live web searches as they are being sent around the world. The program acts as a ‘silent witness’ according to the artists, presenting words that have been typed in a search engine in series and at fast regular intervals. The piece, which is real-time, displays words at such a fast pace that they seem to flash. Even though *Beacon* and *Weightless* were produced by the same practitioners and are both self-generated, the implications of these two works are quite different. If Thomson & Craighead carefully calculated the outcomes of *Weightless* in a closed and quasi archive-like system, *Beacon* is an open system, which by visually relaying a continuous stream of words, points at an unpredictable and live navigation of the online space. Given that *Beacon* is in real-time, the viewer is witnessing a continuous recycling of debris. By incorporating and deleting words at a fast pace, the work renders the process of accumulation perceivable. The piece, by constant superimposition, seems to merge words with one another. Yet, unlike *The*

³⁸ *Beacon* was first launched online in January 2005 and then subsequently displayed in 2 installations, one which projected it in a gallery and another one as a railway flap sign at the Royal College of Art see <http://thomson-craighead.net/beacon.html> (last accessed 23/07/2015).

Digital Landfill, which displays unintelligible sequences of URLs, here the words typed in the web browser and détourned by the artists, remain in their original form. However, unlike *The Digital Landfill*, as soon as an obsolete word is re-appropriated in the *Beacon* machine, it appears for a second on the screen, and disappears, discarded by the same program, which has lifted it from a remote search engine.

As such, *Beacon* associates the deletion of words inherent to the way browsers operate and showcases not only the retrievable aspect of data but also its disappearance or more precisely its deletion. Unlike *Data Diaries*, *Once Upon*, the *Digital Landfill* and *Weightless*, which all in different ways give the viewer access to online waste that is not normally visible, *Beacon* acknowledges the disappearance of words and thus brings the attention of the viewer to the fleeting nature of online data. The use of the term beacon in itself intensifies the criticality contained within the work, which not only warns against a pure automated piece but also highlights one of the Internet's main principles, which is its facility to constantly delete itself. In *Internet Art*, Stallabrass comments:

data on the Net is in principle eternal and in practice usually ephemeral. Deletion is the Net's métier, its content and its processes being tied to the moment, both technically, since many pages are designed for particular browsers and plug-ins, but more importantly culturally, as the gale of fashion drives web pages before it, and fickle viewers skate only over the new.
(2003: 44)

Stallabrass is right when he spells out the 'culture of the now and the new' that web browsers, with their constant deletion of the old, foster. Yet, if in 2003 one could argue that the Net is 'in principle eternal' but in 'practice ephemeral', I would argue that now, 10 years later in the 'post-digital' age, the statement could be reversed. Indeed, the so-called 'ephemeral' data that *Beacon* relays isn't ephemeral inasmuch as it feeds the Google page algorithm that then gives value to the webpages that have been searched the most. This is precisely the ranking of webpages and subsequently their commodification, which now qualifies cognitive capitalism. Cognitive capitalism refers here to the knowledge- economy created by Google's exploitation of Internet nodes and links, according to the level of attention

they generate. As explained by writer Matteo Pasquinelli, the heart of cognitive capitalism lies in the PageRank algorithm, developed by Brin and Page in the '90s, which 'traces a semantic value across a dynamic and chaotic hypertext' (Pasquinelli, 2009: 3). Google 'establishes its own proprietary hierarchy of value for each node of the Internet and becomes then the first systematic global rentier of the common intellect' (Pasquinelli, 2009: 3). As such, the digital debris displayed in *Beacon* are not so much deleted as retrieved and recycled by Google for profit. Although created in 2005, *Beacon* appears more relevant than ever by not only infiltrating the search engines, which were aimed at rendering the Internet more homogenous and regulated (Stallabrass, 2003: 20) but also shedding light on the mechanisms of contemporary cognitive capitalism.

Importantly the novelty of cognitive capitalism or common intellect is that it represents an extensive commodification of information, of language. In this particular context I would submit that semantic takes on a different significance. The significance is all the more complex since, as *Beacon* reveals it, the information exchanged online is displayed through various types of visualisation. Consequently, I'd be inclined to read *Beacon* as an instance of work that pairs the commodification of data with a semantic sign. I submit that the conflation of the semiotic and the commodity are intrinsically specific to the internet's economy and that *Beacon's* interplay of those two elements strikingly resonate with the reading that Joselit develops of the readymade. I have shown in Part One that digital debris are just as much generated as they are found, and I'd like to explain now that if *Beacon* successfully questions the role of search engines in cognitive capitalism, it is because of the specific oscillation, inherited from some of Duchamp's readymades, between data as a commodity and as a sign.

5.2 A Linguistic Readymade

Behind the apparent 'self-conscious shallowness' (Stallabrass, 2003: 64) and light play of their work, Thomson & Craighead's *Beacon* nonetheless

resembles Duchamp's readymades where 'the correspondence between objects and their function is disarticulated completely' (Joselit, 2007: 55). Stallabrass also identifies the tactic of re-appropriating data in *Internet Art*, as a Duchampian gesture in which 'there is no movement or signing and dating of the objects, just the throwing out of a pointer to what exists' (2003: 27). Here, I would pose that the interesting part of Stallabrass' definition lies in the ability he confers on data, despite its disconnection from its original context, to *point at* something. Joselit radicalises the *pointing at* power of a readymade object by explicitly underlining its semiotic dimension. In *Feedback*, he touches on the issue of Duchamp and the readymade. Joselit explains:

the significance of the readymade has nothing to do with the pictorialism of the objet trouvé – with 'making collage using ready-made objects,'[...]the radicality of Duchamp's invention lay not in incorporating mass-produced things in art, but rather in producing a paradoxical object locked in a perpetual oscillation between its status as a thing and its status as a sign – or, stated differently, in heightening the epistemic crisis between commodities and networks.
(2007: 51)

For the author, the readymade approach, which consists in both a refusal of any pictorialism and a destabilization of the *détente* between an object as a commodity and an object as a sign, is part of an essential double and unresolved movement within the readymade. Here the originality of Joselit's argument, which strikes a chord with the cognitive capitalism *Beacon* sits in, is to reaffirm the importance of the semiotics in the act of the readymade, which subsequently becomes not simply the displacement of a commodity in order to criticise the capitalist field of exchange and the art market, but a dynamic of linguistic specification where language is subjected to desublimation (Joselit, 2001:73).

To demonstrate his point Joselit refers to some less known textual readymades such as *The* (1915) and *Rendez-vous of Sunday, February 6, 1916*. In one of his previous books, entitled *Infinite Regress*, Joselit not only emphasises the linguistic nature of the readymade but argues that the desublimation of language consists of a double movement within the readymade, where on the one hand words are stripped of any significance

and are turned into objects, into pure materiality and on the other hand, objects themselves are reified into a language, into a set of semiotic relations. Thus the author of *Infinite Regress* approaches Duchamp's work as not only a 'critique of capitalist fields of exchange' (Joselit, 2001: 72) but also as a 'dynamic of linguistic specification' which 'doubles back in order to inscribe itself, calling into question the neutrality or transparency of words' (Joselit, 2001: 72). The linguistic account of readymade that Joselit builds, and with it the double movement of turning into an object/turning into language, resonates at the same time with the commodified and aestheticised continuum of information that *Beacon* is playing with. Indeed, *Beacon*, by detouring words typed in search engines, precisely plays on the duality of information as a commodified sequence of semiotics. Moreover, the words typed into *Beacon's* search engine are turned into an absurd real-time montage of words, which echoes some of Ed Ruscha's aestheticisation of text. Thus, if the readymade object oscillates between its status as a sign and as a commodity, in a cognitive economy it could be said that *Beacon* performs a form of readymade in a new context. In the light of Joselit's specific considerations on the readymade, the parallel with Duchamp brings attention to the fact that *Beacon* doesn't merely represent the re-appropriation or *détournement* of an object nor just a symbolic act of inscription of what is art, but an oscillation between the two. In line with the linguistic readymade defended by Joselit, Thomson & Craighead's practice eludes a solely material re-appropriation of media but sets in motion a back and forth process between object and discourse, as in Duchamp's *Monte Carlo Bond* where the piece is in a constant undecided relationship with the material that carries it. As such, Joselit's reading of Duchamp's work and Thomson & Craighead's practice could, at first sight be interpreted as departing from Foucault's genealogy and its necessary, fixed, unilateral anchoring of statements into materiality, yet on a close reading of the *Archaeology of Knowledge*, one realises how conditions of the statement are particularly close to the way in which information is disseminated and manipulated, as it is depicted in *Beacon*.

This may be why Thomson & Craighead are reluctant to describe their approach as a re-appropriation. As they explain:

It's not about re-appropriating media; it's more about catching datastreams and then allowing the viewer to see them for a moment in a new configuration. It's not about appropriating objects, it's more about taking two or three data-feeds, and tying them into a knot.

(Thomson & Craighead, 2011)³⁹

As a result, if there's something of the readymade in Thomson & Craighead it does not lie in the simple appropriation of an object but rather in a discursive approach which detours a continuum of information as a structuring agent in the elaboration of a piece. The approach defended by Thomson & Craighead, reinforces the understanding of New Media 'objects' developed in Part One as processes rather than objects.

5.3 Materialising processes: oscillation between object and sign

The seeming difference with Duchamp and Foucault's theorisation of the inscription of language into matter is that Duchamp incorporates a double movement, a sort of meta criticality, a double dialogue that reinserts the position of the subject, a configuration that includes readymade, object and subject whereas Foucault reaches to a completely material account of language.

Foucault differentiates archaeology from genealogy, as the former for him describes the inscription of history into bodies, into materiality. As a result, genealogy is given a materialising potential. In his *Archaeology of Knowledge* Foucault explains how genealogy functions by affirming that a sequence of 'linguistic elements must have a material existence to be regarded as a statement' (1972 [1969]: 101). It reads:

The statement is always given through some material medium, even if that medium is concealed, even if it is doomed to vanish as soon as it appears. And the statement not only needs this materiality; its materiality is not given to it, in addition, once all its determinations have been fixed: it is partly made up of this

³⁹ In conversation with Thomson & Craighead, 2 March 2011 available at <https://www.imperica.com/en/in-conversation-with/in-conversation-with-jon-thomson-and-alison-craighead> (last accessed 25/02/15).

materiality. Even if a sentence is composed of the same words, bears exactly the same meaning, and preserves the same syntactical and semantic identity, it does not constitute the same statement if it is spoken by someone in the course of a conversation, or printed in a novel; if it was written one day centuries ago, and if it now reappears in an oral formulation. (1972 [1969]: 101)

For Foucault, the inscription into materiality is constitutive of the statement itself and is not just the applicability of a principle of statements. The statement is then bound to a place, time and substance in such a way that if any of these constituents is altered, the identity of the statement is changed too. Consequently, with Foucault, the notion of a statement as a whole is conferred with some paradoxical instability. It is unstable in as much as the identity of a statement is bound to be modified if one of its parts is modified. Yet a statement is inscribed into some materiality and as such could lead one to believe in the perennial quality of a statement. Here Foucault sheds light on the capacity of statements to be manipulated, used, transformed, exchanged, combined, decomposed and recomposed. As such, statements, according to the several velocities they go through, enter 'various networks'. It is striking how Foucault's terminology here seems adequate to describe the way in which information circulates on the Internet:

the statement, as it emerges in its materiality, appears with a status, enters various networks and various fields of use, is subjected to transferences or modifications, is integrated into operations and strategies in which its identity is maintained or effaced. Thus the statement circulates, is used, disappears [...]. (1972 [1969]: 105)

Under this light, Joselit's reading of the readymade and subsequently, Thomson & Craighead's work in *Beacon* appear rather Foucauldian in its archaeological sense, and bearing in mind Foucault's account of what constitutes a statement, one can witness a certain flexibility in the way in which this latter can be constructed and articulated. Yet, I'd like to extend the argument further by stating that the particular unstable inscription of the statement in the materialising and dematerialising qualities of the net play a large part in redefining an alternative medium specificity, or as Rosalind Krauss calls it 'technical support'. For Krauss, the technical support in which a work of art of the 'post-medium' condition resides, necessarily

stems not out of 'the physical substance (and practiced by a specialised guild)' but of 'contemporary commercial vehicles, such as cars or television, which contemporary artists now exploit' (Krauss, 2007:38). In *Beacon's* case the 'contemporary commercial vehicle' could be seen as the web browser. Thus where Joselit saw the oscillation between language and commodity as a condition of the readymade, Krauss sees a condition that constitutes serious art. In my opinion *Beacon* represents an instance of work that advocates the piece as not being merely a statement, such as 'this is art', but a more unstable ensemble of the reification and destruction of language inscribed into the cyclical electric networks of the internet.

5.4 Peirce's semiotics in the digital age

The electric signals generated by binary codes, and specific to the ways in which digital information is materialised and dematerialised, represent a crucial turning point in the significance and more precisely in the indexicality of the words used in *Beacon*. The *détournement* of a web browser in *Beacon* leads to an aestheticisation of information, which subsequently turns the words used into animated images. As demonstrated by media theorist Braxton Soderman, a digital image does not hold the same indexicality as a photograph, where indexicality has to do with resemblance. For Soderman the digital image is indexical of the algorithm which has produced the digital image. There is a shift from a perceivable indexicality to a computational and processed one:

when a program is executed, the symbolic instructions of the program are compiled or interpreted into machine code, into ones and zeros, then into on/off voltage flow, and eventually through a digital-to-analogue converter that reads combinations of on/off switches (measured as on/off voltage flow) and produces the analog voltage level that will be sent to the display; the symbolic is converted into physical electricity that will eventually determine the composition of the image on a monitor.' (Soderman, 2007: 164)

The oscillation that *Beacon* identifies between the realm of information and materiality, associated with the different indexicality attached to a digital image, opens my argument to the symbolic. The symbol (and often as seen

in Part One the metaphor) is an intrinsic dimension of computer language. According to Media Theorist Florian Cramer, the symbolic necessarily pierces through for it is mediated by the interface, which is according to him inherently symbolic:

Since the user interface to a computer is always symbolic, and involves syntactic and symbolic mapping for operation it always boils down to being a formal language. To the extent that they are understood symbolically, everything that can be said about software interfaces falls under the entry on language.

(Cramer, 2008: 150)

Given the different levels of indexicality it intertwines, *Beacon* is a particularly arresting case of *détournement* with its re-appropriation of streams of information and historical art practices in an online environment.

To understand this virtual semiotic conundrum, and unpack the mixed semiotic aspects of digital debris, one should look at the writings of the founder of Semiotics, Charles Sanders Peirce. Peirce is of particular relevance for me here inasmuch as in contrast to structural and post-structural linguistics, which evacuated the 'idea of an autonomous subject, immediately present to itself through its independent consciousness' (Krauss, 2007: 205), Peirce has placed the subject at the centre of his semiotic system. The originality of Peirce's thought on signs is twofold: firstly, the American logician emphasised interpretation as part of the significance of a sign and secondly, as a result, his philosophy placed the subject at the centre of his semiotic system. The role of the subject, both as author of the work and viewer, echoes the importance of moving away from a purely materialistic or realist vision of Internet Art. Moreover, in the age of cognitive capitalism, which exhausts the capacity of information to be capitalised, data is turned into an object that partly eludes a mere statistical reading. As such, online semiotics become redefined and gain new meaning. Moreover, if you pair this commodification of the semantic with the growing discursive nature of contemporary art practices, the need to focus on the study of signs becomes paramount.

If the three types of signs such as the Icon, the Index and the Symbol are widely documented and commented upon, the core components of a sign

and its mutability are often overlooked. For Peirce, the development of his theory of signs evolved throughout his life and scholars in Semiotics (Shin and Hammer, 2011) agreed that his thinking on signs could be divided into three major periods. Here, I will focus on the second period, around 1903, which corresponds to the most coherent and refined version of his theory of signs. It was around this time that Peirce clearly stated that a sign was composed of three elements: a Representamen, an Object, and an Interpretant. The Representamen is what we experience first.

A Representamen, is a First which stands in such a genuine triadic relation to a Second, called its Object, as to be capable of determining a Third, called its Interpretant.
(Peirce, 1955[1897]: 100)

According to Peirce's phenomenology we cannot experience the real world as it is. The world is in constant flux, in a constant state of becoming and our knowledge of it is an approximation. In other words, our minds are too limited and the world is too subtle and complex for us to grasp, therefore we only glimpse a representation of it, the Representamen. Then, the Representamen enters into a relationship with an Object (the real that we cannot access right away), which is the second component of the sign. The third component of the sign is the Interpretant. It is the sign's meaning, what mediates the relation between a Representamen and an Object. It is worth noticing that, according to Peirce, in order for a sign to be complete the three components need to be interrelated and present, for a sign cannot function as a sign if one of its three components is missing. This is what Peirce implies by using the term *genuine*, which means that the three elements are bound together. Accordingly, a Representamen, an Object and an Interpretant are complementary. Depending on the way that these three elements intermingle with each other, a different type of sign is produced. Indeed, what differentiates an Icon from a Symbol or an Icon from an Index lies in the specifics of the relationship that the Object has with its Representamen.

An Icon is a sign in which an Object interrelates with its Representamen by virtue of some resemblance or similarity. For example a map resembles the territory it represents or a photograph resembles the landscape it depicts.

In light of the Peircean account of signs, I would propose that the fragments of text featured in the website created by Thomson & Craighead could be seen as instances of a semiotic Symbol for two reasons. Firstly, they represent Peirce's Symbol, for they are comprised of texts and in consequence the connection to what text refers to is conventional. Secondly, they could be seen as instances of a semiotic Symbol, for they are parts of online conversation and as such they refer to a specific type of social interaction, which has its own set of conventions. However, it is worth noticing that the debris are the result of a displacement from the original context of an online chat room and thus one can wonder if their status as a symbol is still intact. Indeed, Peirce specifies that a sign signification is entirely dependent on the situation in which the subject encounters them. As such, signs are situation-dependent and their significance varies according to the situation in which they are experienced. For instance, an Object in one situation can become a Representamen in another situation and creates another sign in which it is turned into a Representamen. Accordingly, Peirce concludes that signs can potentially multiply and produce more signs indefinitely. Indeed, Icon, Index and Symbol are not only expressions of a certain type of interrelation between a Representamen and an Object but they also translate a certain type of interaction between the subject and his or her overall experience of the Sign. It has been explained that Peirce places the subject's interpretation of the Sign at the centre of his system, therefore Icon, Index and Symbol arise when the subject bases his or her interpretation of the Sign by looking at its Object. If he or she places his or her attention on the Representamen, he or she no longer experiences Icon, Index and Symbol but Qualisign, Sinsign and Legisign. If he or she places his or her attention on the Interpretant, he or she no longer experiences Qualisign, Sinsign and Legisign but Rheme, Dicent and Argument. It follows that, for Peirce, depending on where the subject places his focus, there are nine ways of describing the relation between Representamen, Object and Interpretant. Yet if Peirce uses nine different terms to identify those interrelations, each triadic set of relations follows

the same logic as Icon, Index and Symbol do. For instance, all Icons, Quasaligns and Rhemes interrelate with their respective Representamen by virtue of some resemblance or similarity. All Indexes, Sinsigns and Dicents interrelate with their Representamen by virtue of some causal connection. All Symbols, Legisigns and Arguments interrelate with their Representamen by virtue of some convention. In the context of *Beacon*, it would follow that the debris had one signification in their original context, as words typed in a search browser that helped to navigate through the web, and that once displaced into an online work they are transformed and gain another signification. Before attempting to understand what they have become in *Beacon*, it might be well to describe a historical precedent of words displaced into a visual artefact, more specifically American filmmaker Hollis Frampton's *Zorn's Lemma* (1971). The film, part of a seven part series entitled *Hapax Legomena*, investigates the possible applications of a mathematical principle (Lemma) formulated by the German-American mathematician Max Zorn, onto a visual medium. *Zorn's Lemma* starts with a reading by a female voice from a late 18th century grammar textbook entitled *Bay State Primer*. During this part the viewer only sees a black screen. The second part of the film, largely silent, shows the viewer an evolving 24-part Roman alphabet – where I/J and U/V each have one letter – composed of street signs photographed in New York City. The alphabet is cycled through, and words are in turn replaced by scenes, such as for instance a hand turning the pages of a book or a man painting a wall. The film's last part shows a man, woman and dog walking through snow as several voices read passages from *On Light, or the Ingression of Forms*, by Robert Grosseteste. In an interview about his film in 1985 with Peter Gidal, Frampton declared:

When we can read and when a word is put before us, we cannot not read it. We are drawn to read it, and when we do, we are not looking at what color it is, or looking at its typeface, unless it's so grotesque or deformed as to make the word illegible. We are reading marks in a fixed order on a surface. On the other hand, in looking at a photograph, one is looking at the representation of an illusionist space within which the shape of things – their boundaries, their colors, and so forth – are paramount.
(2008 [1985]: 192)

Both works strip words from their semantic value and invite the viewer to look at them as a linear succession of visual artefacts.

Even if the cyclical method employed in *Zorns Lemma* differs from *Beacon's* randomness, the two works seem to overlay the semiotic logic of the written word as a Symbol to turn it into a form of Index. Through their aestheticisation, the fragments of words filmed by Frampton and retrieved by Thomson and Craighead are indexes. As Frampton points out himself, the words become marks. Despite Thomson & Craighead's taste for systems, they do not correspond to the marks left by LeWitt which testify to the frailty of the systems he set up for his work, but they are manifestations of the artist's will. They could be apprehended as indexes insofar as, in the context of *Zorn's Lemma* they no longer refer to the signage of a shop or a theatre, or to a web browser in the case of *Beacon*, but to the displacement that they've been through. Those words become the traces of the manipulation carried out by Frampton and Thomson & Craighead. On the one hand then, the debris displayed are the indexes of the technical processes, be they filmic or computational, developed in the making of both *Beacon* and *Zorn's Lemma*; Frampton's film seems to prefigure the shift that Soderman is advocating in understanding digital indexicality as being procedural and algorithmic rather than purely representational. On the other hand the debris are also indexes of the artistic gesture, or semantic processes of practice developed by Thomson & Craighead and Frampton. Yet, through the example of *Zorn's Lemma* it becomes apparent that the symbolic power of words is layered with the indexicality of the artistic endeavour they have been through. The *pointing at* power of data in *Internet Art* attributed by Stallabrass could thus be interpreted here as a *pointing at* quality of the Peircean Index. The act of displacement is even more present in that since Frampton filmed words in close ups, the viewer ignores the context from which they were extracted and can only speculate about the processes through which they've become objects enmeshed in a piece of art. This overlay of Symbol and Index appears to illustrate the Peircean principle according to which a sign from one situation (words indicating a shop or a theatre) is mixed with another sign in a different context. In other words,

through this layering of significance, the overall indexicality of debris is accruing.

Besides, both *Zorns Lemma* and *Beacon* deal with ephemeral pieces of information, from which original contexts no longer exist. The addition of one symbolic sign to an indexical, observed in *Beacon*, seems to complexify the sign, as Peirce understood it. Indeed, the potential of a sign to multiply, which is one of its inherent qualities, seems to be exhausted in the piece. In the treatment of digital debris that *Beacon* undertakes, meaning is conversely multiple to how structurally simple the piece is. The semantic demultiplication then clashes with the formal logic of the piece. In contrast to *Zorn's Lemma*, which by following its own logic creates its own lexicon and can sustain itself, *Beacon* becomes intentionally trapped in its own system. Therefore it could be said that the tension Thomson & Craighead instill allows them to ironically introduce a touch of criticality on the nature of automated Internet Art.

5.5 The *Intraface*: Real time and site specificities

The irony Thomson & Craighead deploy in *Beacon* has also another justification, to exacerbate the confrontation of the virtual space, the interface and the physical space. Stallabrass underlines the clash of content and context that *Weightless* brings to light and states that the personal and obscene are thrown 'against the banal milieu of the airport lounge and the online shop' (2005: 70). This banal milieu is even more prominent in the piece, as *Beacon* also plays on the boundless characteristics of the Internet since the location where the debris was lifted from is hidden. Interestingly, this clash of milieu is also something Frampton had in mind as he developed *Zorns Lemma*. He explained:

I was amused by that, and I began to make a collection of the rather brutal confrontations, within the urban environment, between these two mutually exclusive kinds of space which have been violently thrust together by the culture.

(Frampton, 2008 [1985]: 192)

It is worth noticing that this clash of space is happening through what Frampton named 'culture' but which in *Beacon* is the product of the interface.

Interestingly, *Beacon*, which was originally available online, was then installed at the B.F.I.⁴⁰ in London and as such conflated the experience of the online space with the physical space. The words depicted in the piece could then be thought of as instances of concrete poetry. However, the online version of *Beacon* entertains a different relationship with space and rather than tackling the gap between the physical and online space, *Beacon* now plays on the boundlessness of virtual space and the false transparency of the interface. In both cases, either at the B.F.I or online, *Beacon* conflates those different types of space to situate the viewer in a paradoxical position. The strategy was already successfully employed in Frampton's *Zorns Lemma*. The filmmaker explained:

So looking at a photograph of a word situated in an illusionistic space, be it deep or shallow, involves the perceiver, paradoxically, in two simultaneous activities, which seem at odds with each other.

(2008 [1985]: 192)

Here, Frampton stresses the paradoxical situation for the viewer that his film creates. The impossible ubiquity of the viewer can be seen as resonating with Peirce's need for a subject to focus his attention on a singular set of relations to interpret a sign. As shown previously, Peirce stresses the need for a sign to be interpreted from a singular point of view, yet the conflation of spaces that *Beacon* depicts render that single perspective impossible. In this instance *Zorns Lemma* and *Beacon* seem to destabilise the single perspective advocated by Peirce in his definition of the sign.

The difficulty of anchoring *Beacon* in one spatial plane has to do with the way in which an interface theoretically functions. According to Media theorist Alexander Galloway, interfaces are spaces in themselves. As a result, the computer screen is no longer a conduit like a window or a door for communication to get through. In *The Interface Effect*, Galloway specifies that an interface is not a point of mediation or a connection between

⁴⁰ See <http://www.fact.co.uk/projects/re-video-positive/thomson-craighead-beacon.aspx> (last accessed 23/07/2015).

physical space and virtual space. He then embarks on a hermeneutical investigation of the interface to demonstrate that there is another layer to the interface: the *intraface*. Galloway defines the intraface as a zone of indecision between two opposite directions, the edge and the centre. The intraface is a threshold, which belongs to the aesthetic and within which the edge and the centre are 'subsumed and contained within the image' (Galloway, 2012: 41). The intraface is an autonomous zone of activity that impacts, on the interaction with the viewer. Following up Galloway's definition of the intraface and the dynamics it deploys between its centre and its edges, what are the implications for *Beacon*?

One of the factors, which strengthen the visibility of the interface, is the clash of the different types of spaces – physical, virtual and interface – depicted in *Beacon*. The confrontation of these spaces occupies the interface and turns it into an intraface. Accordingly, the interface becomes intraface and delivers an imperfect communication. As Galloway states (2012: 26), communication is absolutely successful when completely transparent, when the means of communication become unnoticeable. As for the relation between edge and centre in *Beacon*, given its boundlessness, the edges are peculiar and could be identified as the place from where the debris are retrieved in real time. The source where the debris are extracted has a direct connection with the search engine created by Thomson & Craighead at the centre of the *Beacon* website. As such, the edges of the piece lie in a location outside the frame of *Beacon*, which the centre of *Beacon* (its search engine) points at. Accordingly, *Beacon* could be thought of as a form of intraface as defined by Galloway, a layered autonomous zone that entertains an indecisive relationship with the online space which originated it – here the place from where the debris are lifted. In *Beacon* the dynamics between centre and edge and the frictions between the physical, the virtual and the interface are the result of the undermining of the web browser device carried out by Thomson & Craighead. Moreover, I'd be inclined to add that the intraface of *Beacon* could be read as indexical in as much as both centre and edges mutually point at each other in a causal connection. It could even be said that the intraface is indexical by the very quality of being made of

codes. Indeed, let's refer back to the television language displayed in *Weightless*. As Galloway explains, a digital image is intrinsically different from a televisual one, for computers are not originally conceived to produce images, but text and codes. He states:

Television departs from the image entirely and instead goes for the symbolic space of language in which things are arranged in pixels and grids; and the computer annihilates the imaginary entirely, reverting back to that oldest of age-old media, writing.
(Galloway, 2012: 14)

Despite the fact that drawing preceded writing by several thousand years, I would here develop further Galloway's point by proposing that in the case of *Beacon* the intraface is indexical, for it refers to a sequencing of codes, a hidden architecture of writings which renders the image possible without being visibly part of it. As for *Weightless*, even if the piece borrows from a television show format and as such could lead one to think that the work shares the symbolic language of television, as Galloway puts it, the piece remains indexical by the mere fact of being digital. In this nexus of indexical relationships between edge/centre, physical space/intraface/virtual space and intraface/digital data, it could be argued that in both *Beacon* and *Weightless*, the debris manipulated by Thomson & Craighead are not only a result of the intraface but they also define it.

The aim of this chapter was to uncover the ways in which the debris displayed in *Beacon* represent ambiguous entities oscillating between their status as semiotics elements and materialising and dematerialising processes. The chapter first examined the way in which the debris illustrated the commodification of information in cognitive capitalism and how *Beacon* paired this commodification with an on-going aestheticisation through the live relay of online data. This pairing of commodity and aesthetics has led me to revisit some accounts of the readymade. Following the work of Joselit on Duchamp's practice, I've have demonstrated that *Beacon* does share some of the tactics deployed by Duchamp in his *Rendez-vous* by producing an object which is locked in oscillation between its status

as a sign and its status as a commodity. The linguistic interpretation provided by Joselit, helped me to shed some light on the primal linguistic qualities of *Beacon*. I've also concluded that the difference between Duchamp's readymade and *Beacon's* aestheticisation of data lies in the fact that Thomson & Craighead use a continuum of information and that as such the artefact produced couldn't be 'locked' in oscillation as Joselit argues, but rather engaged in processes of materialisation and dematerialisation. In light of Joselit's semantic take on Duchamp's tactics, the chapter attempted to assess the explanatory role of semiotics in an online environment. Thanks to some of the theories of C. S. Peirce, it was demonstrated that his triadic definition of the sign helped to foreground the role of the artist and her/his intentions in the re-cycling of debris I discuss here. Nonetheless, it has also been explained that the digital debris displayed in *Beacon* cannot only function as symbolic signs but also as indexes. The overlaying of the significance of the sign paired with the spatial demultiplication at play in what Alexander Galloway calls intraface, defeat the Peircean notion of a single point of view and space in the interpretation of semiotics. The importance of this chapter was to reintroduce an alternative way to start thinking about medium specificity and to demonstrate that Internet Art isn't just a pure discursive practice in which digital debris are a metaphorical manifestation but that they are entangled into processes of materialisation inherent to the medium.

Chapter Six: *Video/void* : Semantic Ratios and the Necessity of Technical Support

- 6.1 Reflective niche
- 6.2 Middle inflation
- 6.3 Semantic-ratios
- 6.4 Deconstruction
- 6.5 Technical support

After studying the metaphor of TV broadcasting in *Weightless* by Thomson & Craighead, this chapter makes a historical detour via a work called *Video/void* by British video artist David Larcher, which actually deals with exploring TV broadcasting by reappropriating video debris. The shift of focus in a non-internet based work represents a move to reveal how much his work of the mid-90s prefigures and coincides with the emergence of Internet Art. Through Larcher's *Video/void* I'd like to stress the importance of medium specificities, even though the term has been dismissed in recent considerations on Internet Art. I'd like to suggest that the strength of the most interesting works of Internet Art lies in the critical engagement they entertain with their 'technical support'. The term 'technical support' is intended here as a reference to the work of Rosalind Krauss and her plea for medium specificity. In Chapter Five, I have unveiled the oscillation that takes place between commodity and sign. Here I'd like to defend the view that the interplay between the symbolic and the specificities of technical support occur through semantic ratios. Semantic ratios refer to the intention to pin down alternative medium specificities by unveiling the interplay of the technical and the symbolic in the relationships that the work nurtures with the external elements (discourses, references) that construct it. More precisely, in this chapter I will unpack the ways in which David Larcher creates a discursivity embedded in the technical realities of the TV medium. The detour via Larcher, in my exploration of digital debris in Internet Art, helps us to grasp how discursivity is approached in a work that plays with the language of television. The interesting aspect of *Video/void* is that it prefigures some of the characteristics of some pieces of Internet Art, such as *Weightless* by Thomson and Craighead, i.e. the use of a mass

communication tool as a medium, and the idea of broadcasting and its signal based nature. What type of discursivity is Larcher elaborating in *Video/void*? *Video/void* uncovers the ways in which a work, which employs leftovers, is discursive without rejecting the technical specificities of its medium. Here, I understand discursive in a rather Foucauldian way as relating to discourses or mode of discourse. I'd like to demonstrate in this essay that *Video/void* provides an instance of a discursivity constructed through what I call a semantic ratio. First I will focus on the ways in which *Video/void* revolves around the figure of the niche and to what extent this nesting generates a self-reflexive *mise-en-abime*. Then I will explain how this engulfing of the piece from within sets up semantic ratios. Derived from W.J.T. Mitchell's concept of semiotic ratios, the semantic ratios at play in *Video/void* represent the unstable interplay of the semiotic and the technical. More importantly, the semantic ratio is a visual translation, or manifestation of the discursivity of the piece. The semantic ratios synthesise the visual, conceptual and technical interplay of the debris that David Larcher is manipulating. *Video/void* stands out in the production of debris, for it deals with video dropouts, which exist where information was, in a form of analogue *intraface*. I will examine the role of these voids in the deconstruction ethos that the piece carries out.

6.1 Reflective Niche

Video/void, happened to be, as Foxy Gifford underlines in an issue of *EyeBall* (1998: 42) featuring her sharp review of the work, a nightmare for the Channel 4 technicians. By exceeding brightness, contrast and colour standards of the time, the piece, by reusing video dropouts, deliberately challenges the rules of TV broadcasting. *Video/Void*, produced and aired for the first time in 1994, revolves around the idea of manipulating video but also TV broadcasting. Larcher's imagery developed in *Video/void* often borders on incoherence. Indeed, at times depicting what could be associated with a sea and at other times a desert – where a giant fake dollar sign rises from the dust – *Video/void* evolves and oscillates between surreal and alien

environments. Often interlacing them, Larcher taps into the intrinsic qualities of emptiness that these environments evoke to set up a space that is, as the artist puts it in the video (4min 57sec), 'lingering in the anywhere, underneath the void'. On the one hand, Larcher shows a landfill of derelict images, where a light, in the distance of the depth of the screen, flashes at intervals on the horizon like thunder.

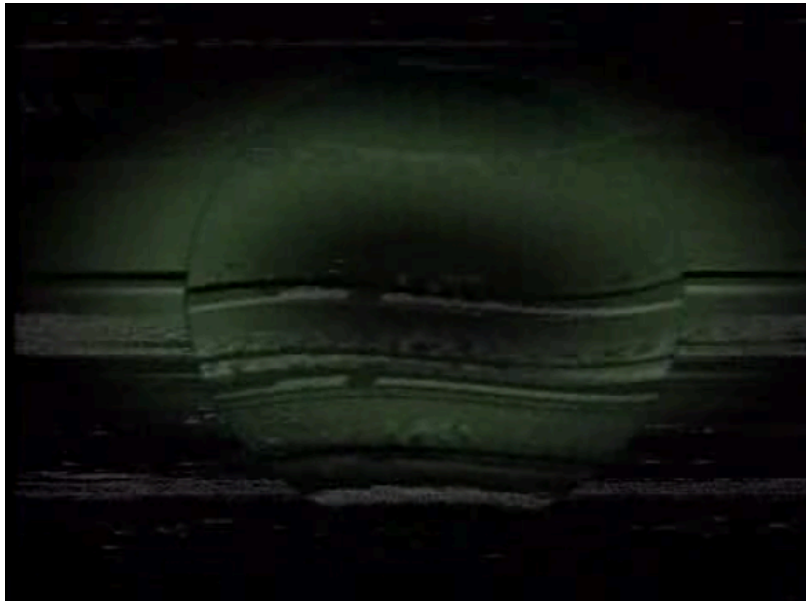


Fig. 23) Screenshot from *Video/void* (1994) by David Larcher accessed on 30/01/15 at <http://laurentine.arscenic.tv/medias/films/article/videovoid-text-david-larcher?lang=fr>

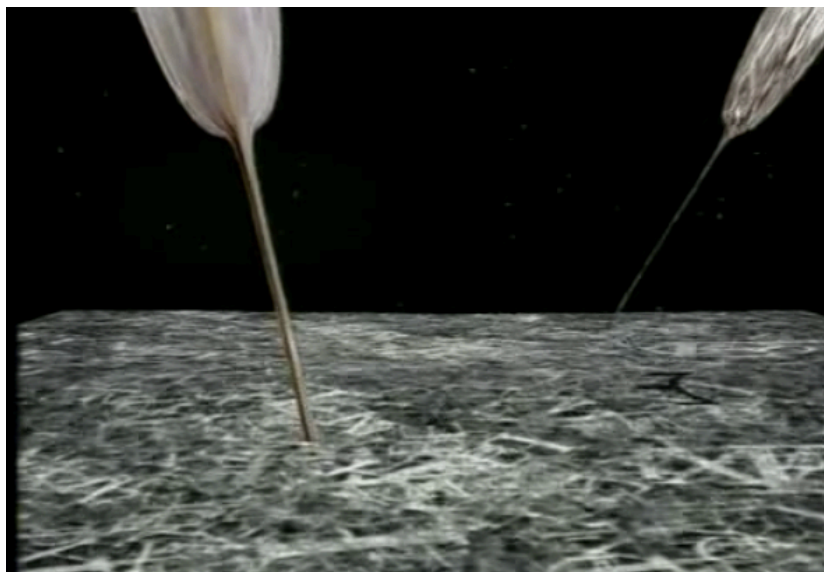


Fig. 17) Screenshot from *Video/void* (1994) by David Larcher accessed on 30/01/15 at <http://laurentine.arscenic.tv/medias/films/article/videovoid-text-david-larcher?lang=fr>

On the other hand, the video also pans over dying images, lying discarded to one side. The story of those dying images can be imagined through the flashbacks depicting the video dropouts, animated and populating the TV screen like imaginary and typographical creatures. At times resembling skate swimming across the screen, at other times like marble narwhals drifting on what could be described as an electrified desert, the artist is not afraid to blur the boundaries between abstract and figurative. A snake in the shape of an E, and worms, which recall Miro's *Harlequin Carnival* (1924-25), crawling in a sea of signals that the viewer is given access to. Oneiric objects such as unidentifiable seagulls hover on the screen and morph into letters. The video also depicts signs, not too dissimilar to the Aztec alphabet, which cast shadows on one of the seas where *Video/Void* takes place. This is the point where the piece fully explores the colour palette that video can offer. Indeed, *Video/void* starts with a black and green sequence, which is quickly substituted by a silver and black one, then allowing other colors to appear one by one. It is the addition and subtraction of images that seem to 'choreograph' the work seamlessly, as Video artist Simon Payne describes:

The stream of imagery in *Video/void* and *Ich Tank* warps, waves, folds, rotates and expands in every dimension. There are hardly any straight cuts. The primary means of structuring in these videos is through the transformation of imagery that appears in various multifaceted and contorted composites. The videos progress via the addition or subtraction of elements and layers that continually unfold, as if the screen was an infinitely malleable matrix.
(2008: 33)

Payne also stresses that all the effects visible in *Video/void* result from post-production high-end editing systems. In other words, Larcher is proposing a highly controlled and crafted collage of the lack or absence of information on tape. By affirming in the video 'Ces images imprevisibles ont ete piratées', Larcher emphasises the manipulation carried out on the images produced and reflects on his own process. Using the term *piratées* (hacked), Larcher positions himself in a terrain close to Internet practices. The mention of hacking rather than remixing, which is often associated with New Media practices, is relevant for it seems to emphasise the role played by the one

who has manipulated the images, unlike remixing which seems to attribute more agency to the images produced. Parikka defines remixing as follow:

Also outside media-archaeological discussions, remix and remediation have gained a strong foothold as key aesthetic processes and artistic practices of digital culture (Campanelli 2010; Bolter and Grusin 1999). These can be seen as emblematic of aesthetic practices that focus on the use of archives and existing material for creative purposes, and, as such, also rethink the notion of creativity outside myths of romanticized originality. (Parikka, 2012: 145)

Yet in *Video/void*, Larcher does not draw his materials from an archive but from degraded tapes, corroded material, in other words, stuff that would never have made it into an archive. The fact that the manipulation of images takes place in post-production enables Larcher to fully explore ‘the language of video’ with ‘complex effects and compositing procedures integral to the technology’ (Payne, 2008: 34). Thus, the idea of TV broadcasting, which I would argue cannot be dissociated from the piece, runs consistently through the video. As such, the verses rolling on the screen like credits, and the centre screen (towards 19 min 20 secs) switching through TV channels of various found footage, all participate in making the language of TV broadcasting explicit. Moreover, the numerous announcements in French such as ‘*son et lumière pour la visite du ministre*’, reinforce the theatrical nature of the piece. I would argue that *Video/void*, by stripping bare the medium of television, sheds light on TV broadcasting without implanting it into the codes of another medium but within itself.

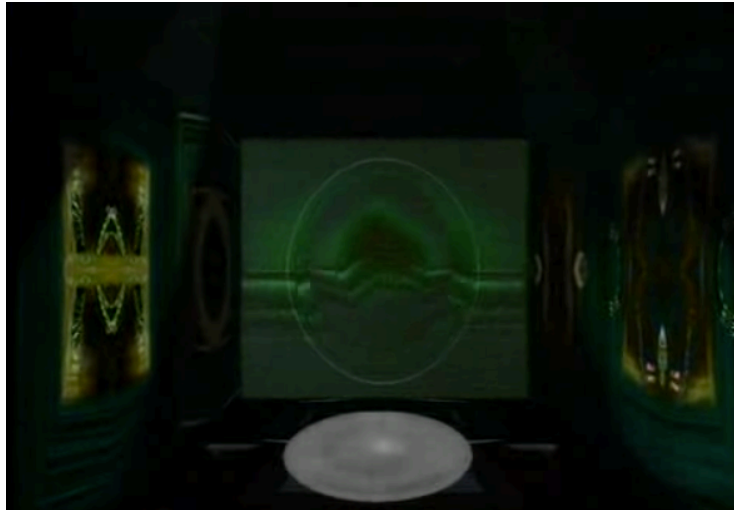


Fig. 18) Screenshot from *Video/void* (1994) by David Larcher accessed on 30/01/15 at <http://laurentine.arscenic.tv/medias/films/article/videovoid-text-david-larcher?lang=fr>

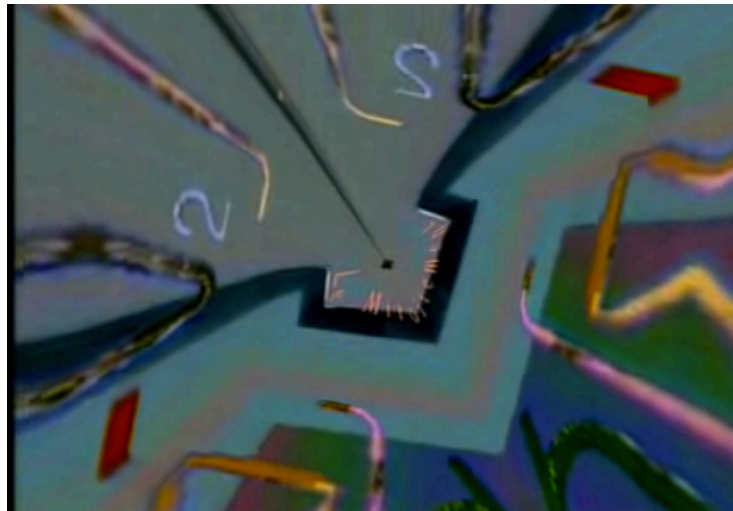


Fig. 19) Screenshot from *Video/void* (1994) by David Larcher accessed on 30/01/15 at <http://laurentine.arscenic.tv/medias/films/article/videovoid-text-david-larcher?lang=fr>

As a result, *Video/void* creates a niche for itself. Partly theatrical and partly reflecting the inner structure of the cathode ray tube, the viewer is given a view of the inside of the TV monitor with shapes that resemble electronic components, like wires and chips (Payne, 2008: 34); hence the 'miroitement du déjà vu' that Larcher mentions in the piece'. Following the idea of the niche, *Video/void* provides images that stem from the point of focus in the center of the screen, as if the psychedelic images are generated from the middle depth of the screen, creating a kaleidoscopic room where living

images are turned into neo baroque⁴¹ wallpaper. If Larcher explores the medium specificities of video through a recycling of fragments of tape where information has dissolved, and thus doesn't transplant his investigation into the history of another medium, Thomson and Craighead in *Weightless* are taking a contrary position. Their web-based piece, created only four years later than *Video/void*, examines the qualities of Internet communication by inscribing it, almost displacing it, in an anachronistic fashion, into the codes and language of TV. If *Video/void* doesn't root itself in a media historical perspective, it nonetheless creates a form of *mise-en-abîme* where form and content are in perpetual dialogue and reflect one another. Towards the 18th minute, *Video/void* becomes quite theatrical in its display and revolves around a superimposition of geometrical shapes and screen planes realigned and choreographed around the center of the screen, like the niche of the 1645 ebony cabinet displayed at the Louvre. Visually the sequence evokes an electronic version of this. The cabinet's two large doors open to reveal elaborate decoration with coloured elements hiding inside 23 drawers. Constructed as both an architectural model and a miniature stage, the pink columns stand out against a series of black drawers and small central doors. The two small doors in the middle, also with locks, open to reveal the most ornate and colourful part of the cabinet: a niche, also called a caisson or theatre, whose vivid colours and varied materials contrast starkly with the rest of the cabinet. Framed at the bottom by a drawer and at the top by a balustrade in front of a mirror, the niche has a marquetry checkerboard perspective-effect floor and a painted ceiling.

⁴¹ In *The Cinema Effect*, Media Theorist Sean Cubitt, describes contemporary Hollywood productions as neo-baroque where: 'film is no longer a time-based medium (a function now occupied by television) but the medium of movement. Spatialization takes over from narrative the job of managing the film's dynamics. Movement here is sculptural, architectural, or geographical rather than temporal, and space itself is malleable.' (Cubitt, 2004: 224) The same malleability and non-temporal nature of space could be read in *Video/void*.



Fig. 24) Ebony cabinet (1645) Musée du Louvre accessed on 30/01/15 at http://musee.louvre.fr/oal/cabinet/cabinet_acc_en.html



Fig. 25) Screenshot from *Video/void* (1994) by David Larcher accessed on 30/01/15 at <http://laurentine.arscenic.tv/medias/films/article/videovoid-text-david-larcher?lang=fr>

On the sides, two mirrors set at an angle between tinted ivory columns accentuate the perspective effect. At the back there is an original feature consisting of galenite rocks inset with seashells and vegetation, not too dissimilar from the oceanic bestiary that can be seen in *Video/void*. These rocks also frame a painting representing the view of a ruin. The side mirrors reflect these rocks, the checkerboard floor or the mirror opposite, depending on one's viewpoint. The ebony cabinet exhibited at the Louvre

and *Video/void* have in common the abundance and complexity of effects they display. The profusion of detail on show drowns both the cabinet and the video in a *mise-en-abîme* where Larcher himself seems lost. Indeed, not only the piece conveys this self-engulfing sense, but the artist uses a reflexive rhetoric too. The series of squares, motifs and planes he is distorting echo the format of a monitor screen, in a similar way to the modern strategy *à la* Mondrian where the painted squares reflect the format of the canvas they're brushed on.

Thus Larcher airs some of his interrogations by asking: 'why keeping all that junk?' The artist also meditates on the duration of the piece and his own sense of boredom and certainty about his work, when he remarks 'how long have I been speaking? How long do I have to talk to?' At other times he ponders on his process and states 'before explaining my book, I'm waiting for others to explain it to me. Wanting to explain it for yourself would restrict its sense.' As a result, the post-production sophisticated effects applied to the video dropouts are an opportunity for Larcher to reflect not only on his own process, but also on the medium he's working with.

As Simon Payne clarifies it:

the graphic text in Larcher's videos offers a reflection on the technology. In *Video/void*, the words 'the vacuum with a rich structure' trail across the screen. (A cathode ray tube is a vacuum). (2008: 36)

The text employed by Larcher, derived from the specificities of TV technology, opens up a realm of symbolic and poetic meanings. The result is a work that develops its own lexicon. The accumulation of the reappropriations turns the piece into a foreign language. Proust, whose presence lingers in the piece and whom the artist quotes, for instance in *Granny's Is*, has declared in his posthumous corpus of literary critiques *Contre Sainte-Beuve*, that beautiful books are written in a sort of foreign language (1971:299); a language that may be foreign to the linguistic rules of English or of French but which is not foreign to the system of the artist and where even the contradictions are coherently absorbed in a stylised whole, in their aestheticising function.

The language that Larcher invents here for his own purposes engulfs the meaning of the piece. The inflation from the middle, instead of bringing clarity by expanding on the meaning of *Video/void*, de-multiplies the possible significations without explaining any, thus leaving them undeveloped and dense, resulting in the 'contraction of meaning' that the artist mentions. Consequently, the deployment from within participates in the investigation of the medium by ways of contractions. I would argue that the contraction of meaning is rendered visually. The dropouts that open *Video/void* undulate in the middle of the screen, the spheres of images which rotate, the graphic text wrapped in circles, the voice over that talks about repetition, recycling, deriving from the middle, all these contribute to the stylistic endeavour that Larcher is developing in *Video/void* and which consists of growing and inflating elements from within.

6.2 Middle inflation

More specifically, Larcher grows the artefact he's constructed by insertion in the middle. The technique, which aims at inflating elements in their middles, is noticeable on singular sequences when the camera zooms in and radiates out towards the viewer, rendering the piece centrifugal, precipitating itself. Larcher himself uses the term compression to translate some of the accelerations that his piece performs. The inflation is also present in the voice over and in the display of texts, which are repeated and slightly modified by incorporating new elements one by one. French poet and essayist Charles Peguy pioneered this stylistic endeavour in both his poetic and prose works. Peguy's enthusiasm for Bergson has shaped his writing, and perhaps the metaphor of the elastic band for time that Bergson uses, may be of help here to define the ways in which Peguy grows his sentences from the middle. Peguy, in one of his poems entitled *Presentation de la Beauce a Notre-Dame de Chartres*, exposed the technique of growing his text and sentences from the middle. The poem, written in 1912, illustrates the author's pilgrimage to Chartres cathedral. Following the rhythm of the poet's walk, the text starts slowly, then little by little expands and

accelerates until he can spot on the horizon the tip of the cathedral spire. As in many occasions in Peguy's poetry, the verses in *Presentation de la Beauce* start laboriously, through repetitions. Painfully, the author's language tramples and stamps like his own walk across the wheat fields that lead to the cathedral. It has to be noticed that the method of *insertion* set out by Peguy was meant to serve his mysticism by attempting to insert the eternal into the temporal. Nonetheless, what is of interest for me here, is the way in which Peguy textually expresses that stamping and then that inflation of the language from the middle. The poet applies his stylistic device by rewriting part of a verse from one line to the next, by repeating parts of a verse throughout a strophe and adding new words to them. For instance, in *Histoire et Memoire*, a corpus of critiques published after his death, Peguy begins every paragraph with the same sentence which he extends each time a little bit more. As a result, most of his verses are then turned into nominal sentences, like a list, a file or an image, which then gets corrupted and written over. Compiled with other adjectives attached to them, the sentences are not sentences in linguistic terms but a conglomerate of information. It is in this regard that Larcher's recycling of dropouts and patterns echoes Peguy's style.

6.3 Semantic ratios

I'd like to submit that this stylistic by-the-middle endeavour is a mean to set up what I'd like to call a semantic ratio. The semantic ratio stems firstly from what is visually at play in *Video/void* and the morphing nature of screen ratios. The screen appears to be constituted of different planes, all collapsing one after another. The surface of the screen is disembodied from the screen it belongs to, falling into the depth of the monitor, becoming flatter, gaining texture. The objects Larcher manipulates, those bits of missing information on tape, are used as cut-outs which first appear in their seeming entirety, filling up the whole screen, then slowly retreat from the viewer with their ratio distorted so that horizontal planes or surfaces are stretched to vertical ones. Indeed, one of the challenges that Larcher confronts his viewer with is

the distortion of TV ratio screens as screen planes are flattened, wrapped, morphed, and width is substituted for height and vice versa. I would like to pause for a minute on the term ratio and argue that the term not only translates the technical specificities of video but also the conceptual and symbolic framework of the piece. As such, I'd like to argue that in *Video/Void* the technical specificities of the medium – and more specifically its ratio – generates a critical lexicon that helps us to aesthetically engage with the piece. Here, I derive the notion of a semantic ratio from what Art Historian W.J.T. Mitchell names semiotic ratios. In an essay entitled 'There is no Visual Media', Mitchell starts by referring to McLuhan's idea of sense ratio and posits that there is no such thing as visual media, that all media are mixed media in as much as they all involve, in different degrees, other senses such as hearing or touch. Therefore, Mitchell asks, why do we still talk about visual media, is it just a matter of preponderance? Mitchell poses that art is not always mixed media-based in as much as it always involves, to varying degrees, other senses, but that it is mixed media because it always refers to something outside the work. He then explains that even modernist 'pure painting' was completely shaped by words and a language outside painting. For instance, Mitchell specifies that today's discourse of art theory and philosophy is as present in contemporary works of art as the Bible was in a Claude Lorrain painting. Art has become discursive and external discourses on the purpose of art and what constitute a medium have supplanted religious texts, which used to inform 17th century paintings (2010: 396). Thus, photography is being riddled with language and so is analogue video. Yet, if all media are mixed media as Mitchell puts it, does this mean that the idea of medium specificity is lost and if so, are all media equivalent? All media are mixed media but that doesn't mean that medium specificity is impossible. It is the link between the visual artefact and the external discourse or set of discourses that matters now and that defines the specificities of the medium. To these considerations, Mitchell argues for a semiotic ratio. In other words, he calls for a medium specificity defined by a set, a combination of not only senses, as in McLuhan's definition, but of significances and meanings (2010: 400). According to Mitchell, medium

specificity is not derived from a singular particularity but rather from a combination, a set of ratios between discourses. The ratio that normally sets the proportion of an image between its height and width, gains here an aesthetic and a symbolic value. Mitchell's ratio is about extracting a concept of analysis from a perceived reality (sense ratio) to create a discursive ratio. In *Video/void*, Larcher completely distorts ratios, as not only the sensed ratios or rather the visually perceptible are mixed and shuffled, but the piece also relied on a set of changing symbols and meanings. The medium specificity lies in the configuration of connections that *Video/void* nurtures with external discourses. Yet I have demonstrated that *Video/void* operates by engulfing itself. But as Mitchell points out, the specificities of a work of art stem from the constellation of elements that gravitate around a central signifier. Here, I would argue that the void of *Video/void* represents the central signifier of the connections that the work builds for itself. Still, by its ability to draw connections from within itself, the piece differs from the notion of anchorage that Barthes develops in *Rhetoric of the Image*. An image, which for Barthes is polysemous, anchors its meaning thanks to the presence of text (1977: 56). Yet, in *Video/void*, the graphic text provided by Larcher rather than anchoring meaning, de-multiplies it. In this context, Mitchell refers to Peirce's triad in which there is no pure sign but a mixture of signs, depending on where the subject who experiences the sign stands (Mitchell, 2007: 400). The Peircean sign is thus not layered but rather mixed. It becomes an evolving sign, which even located at the centre of a piece of work is in constant construction and re-actualisation. Like the beam of electrons that constantly update the video on the phosphorescent screen, a central sign is also in an on-going realisation. Throughout his reading of Peirce, Mitchell advocates the need of a semiotic ratio. Yet, in order to encompass the constant re-adjustment that *Video/void* exhibits with both its symbolic and technical status, I would suggest the term Semantic ratio. The on-going nature of semantic ratios resonates with the communication-based aspects of the piece. *Video/void* reveals something also present in *Weightless* – the implanting of the discursive back into the specificities of either the Internet or TV. On first inspection, the common territory shared by

Weightless and *Video/void* is their immateriality, for neither showcase the material object of the TV monitor or the computer monitor, and hence avoid bringing the sculptural into the conversation. Furthermore, they also both rely on the idea of transmission, of the eventfulness of being encountered through either the TV or the Internet. As such, it's not so much the object of the TV that occupies the heart of the piece, but rather the set of processes, and the signals that it produces, both on a technical and symbolic level. Even if *Video/void* is derived from actual material, its realisation is signal-based. It could even be argued that here, in a rather McLuhanesque fashion, that communication itself becomes the medium and that the actual object, of either the TV or the computer, dissolves into the processes of translation of signals. The piece is more concerned with semantic ratios that encompass both the perceptible and the symbolic that run through the conceptual framework of the video. Like the video signal that continuously scans the screen from top left corner to bottom right corner, the semantic ratio is always on-going and realising itself. Moreover, the artist also uses the term *imprévisibles* to describe his images and thereby stresses the unexpected outcome of his work, which also contributes to the on-going realisation of the semantic ratio.

The mixed signifier, here the void as Mitchell describes it, resides in Larcher's found object. As Mitchell explains in his book *What Do Pictures Want?*, a characteristic of a found object is its capacity to be hidden in plain sight. The found object is the object that finds you and not the other way around. As such the notion of the found object presupposes openness from the artist, a willingness to accept chance partly dictating the unfolding of the work. In other words it is about a change of perspective. The change of perspective is prescient in *Video/void*, where the viewer witnesses, as if through an animated flying camera perspective, the shift of angle and position that Larcher is developing, especially when the camera is flying above the sea of words. The translation or shift of perspective, into modular planes, participates in the evolving semantic ratio that *Video/void* creates.

6.4 Deconstruction

The on-going realisation of the semantic ratio contributes to the deconstructive philosophy that underlies the work. As Payne points out, the stream of images that Larcher creates bears the trace of theories of deconstruction of art. It reads:

Larcher's work is founded on a philosophy of deconstruction, offering a meta-discourse on the limitations of language in general. (What makes Larcher's videos compelling, despite their cynicism, is his handling of complex effects and the juxtaposition of imagery, which is deft and often very witty). [...] Larcher's work tests the function of the language of video after it's been completely codified; in this regard his videos challenge the audience as much as the technology.

(Payne, 2007: 37)

Video/void, nested within itself, not only creates what Mitchell calls a meta-picture (2010: 401), but also a meta-discourse on the deconstruction of language, or to put it differently, of the possibility of a language without referent (apart from itself). This deconstruction and destabilisation, Larcher uses as a driver, manifesting itself in the anti-linguistic attitude that the piece adopts. In Larcher's work *Video/void*, the language he's using is not in a state of equilibrium, as demonstrated earlier through the technique of inflation from the middle, but in a perpetual nonequilibrium. The text that Larcher utters is unstable, playing on the idea of dissonance and as such departs from linguistics as a discipline. The anti-linguistic posture is also clearly pronounced when Larcher mentions the arrival of 'the Ministre de Linguisterie' and turns into ridicule the name of the discipline. Stylistically, Larcher is far from a linguistic approach and translates visually his approach by displaying groups of items, configurations of objects that are never in a contained or stable system, but in an ever growing dynamic. Larcher appears as an Ubu, a master of the absurd. Alfred Jarry, the founder of Pataphysique, a deliberate system of total disintegration and reconstitution in the *insolite*, seems to have shaped the tone Larcher uses in *Video/void* with expressions such as 'Le Quator des Peripeties 4'. Video and void being almost identical words in sound and spelling, as if related, add to the absurd spirit of the piece. The deconstruction of video in the piece is also highlighted when he explains 'I will make a poem of pure nothing', and

challenges the concept of a language without referent by creating clouds of 'non' floating above a sea of letters. The non-existent here corresponds to the dropout, or a lack of information, and Larcher mentions it several times through a series of puns such as 'text to a void'. Yet, importantly, Larcher also affirms that the lack of images or void gives birth to television pixels. As such, Larcher confers a revelatory power on the void, the central signifier, which echoes Proust's comment on Baudelaire's verse ' O charme d'un néant follement attifé' (charm of a non-existent thing, madly arrayed!)⁴², to which the author of *In Search of Lost Time* replied 'mais si c'est le néant senti, recrée, ce n' est plus le néant, c'est toute la vie, tout l'art'. Therefore, *Video/void* can't be perceived simply as a sole enterprise of deconstruction.

Consequently, one question arises: are the video dropouts and the central position they occupy as central signifiers, constitutive or regulative of the deconstruction that Larcher is performing? Derrida asks this question in regard to Kant's parergon. The parergon figure, drawn from Kant's *Critique of Judgement*, might be of interest, for it represents a middle discursive articulation, which at the same time includes and excludes in a dialectic manner. Kant calls this position of the parergon, the intermediary, the *Mittelglied*. As Derrida puts it, what are the principles of this middle articulation? Are they constitutive or regulative? In a similar fashion, the question could be asked in the case of Larcher's *Video/Void*. Does Larcher's gesture to recycle video dropouts constitute or regulate the deconstruction in *Video/void*? Derrida explains that the *Mittelglied* is not only a discursive articulation but constitutes an articulation between the theoretical and the practical. It is a space, which is both theory and practice, where theory and practice are dialectically included and excluded. According to Derrida, art, or the beautiful, takes place in this precise articulation between theory and practice. Derrida reads Kant's third critique as a work of art and tries to prove that Kant is sitting in that articulation, attempting to build a bridge, a gap. For Derrida the gulf, the abyss, becomes a symbol in Kant's work. The

⁴² Extract from the poem 'Dance Macabre' (The Dance of Death), published in the *Tableaux Parisiens* section of *Les Fleurs du Mal* (1857).

aesthetic judgement occurs in that middle articulation. The middle ground should be considered as a detachable and non-detachable part inasmuch as it represents an articulation, a bridge between two parts. This view on the *Mittelglied* as an articulation that excludes/includes, attaches/detaches seems contradictory but as Derrida stresses, at the moment of judgement, a critical suspension occurs. As such, for Kant the aesthetic judgement is not cognitive. The question then to ask, whether judgment is theoretical or practical, or constitutive or regulative, is the role and the nature of the procedure of the critique. Derrida states that a proper level of critique is similar to the work of an architect, whose role it is to excavate and then to erect. Larcher's piece visually translates what Derrida is pointing out here, for the video represents the gesture towards constituting a video, towards attaching and including video elements (here dropouts). Yet on the other hand, the video dropouts attached to the overall piece are voids; in other words they deconstruct the inner substance of the medium. They are detaching, excluding the medium from itself, from within. The voids are the contradictory kernels that figure at the micro level of the work's macro structure as both constitutive and regulative. The video voids are therefore constitutive and regulative of the piece, hence Larcher's statement: 'the dropout, lack of information becomes the pixel'. The parergon of video dropouts is like the parergon in the drapery of statues that Derrida mentions. The drapery is an ornament that is detachable and yet non-detachable for once removed it leaves traces of a lack. It is parergon for it is precisely very difficult to detach.

it is not only their exteriority that constitutes them as parerga, but the internal structural link by which they are inseparable from a lack within the ergon. And this lack makes for the very unity of the ergon. Without it, the ergon would have no need of a parergon.'

(Derrida, 1979: 24)

Video/void maintains the presence of the ergon and parergon visible without dissolving them into one another. Like the slash that constitutes the middle ground of the title, exclusion inclusion, both *Video/void* as a piece of work and the object of the video dropout remain conceptually and technically in sight and identifiable, even though they've both been brought

together in the singular stream of the video once it was edited and broadcast in 1994. Following Derrida's view on Kant's *Mittleglied*, it becomes apparent that the strength of *Video/void* lies in its parergon status between the discursive and the technicalities of the medium it explores. The piece fosters a rich, dialectical and unresolved relation – via semantic ratios – with its medium by simultaneously deconstructing and developing it. *Video/void* manages to embed itself in the technical reality of video as a medium. The dropouts Larcher is using reveal the bare medium, they become the medium minus what it supports or carries. This bare medium is then structured into a semantic process. In order to unpack what Rosalind Krauss has coined 'technical support' I am going to make a detour via the example of a contemporary video piece which adopts a strategy in opposition to the one contained in *Video/void*.

6.5 Technical support

Recently, in an essay entitled 'Digital Debris: Spam and Scam' for *October* (Fall 2011, No. 138), and in a digital video piece called *How Not to be Seen: A Fucking Didactic Educational .MOV File* (2013), filmmaker and writer Hito Steyerl has worked on the idea of representing non-existing debris. Yet, I would like to defend that her practice seems to be concerned more with the rhetoric, the language of waste rather than actual leftovers or discarded materials like Larcher's video dropouts. In a recent survey of her work at the Institute of Contemporary Art, Steyerl displayed two pieces that dealt with online waste. Yet, her approach resembles a more discursive attempt to represent the non-existent and doesn't necessarily contain or embody the deconstruction of the technology, but rather highlights the modes of visuality attached to it. The first piece was titled *Liquidity.inc*. *Liquidity.inc* begins with the voice of Bruce Lee declaring, 'be formless, shapeless, be like water'. The video revolves around a speculative and anthropomorphic narration of water. The first sequence gives voice to the protagonist by merging a CGI reconstruction of seawater with a video of the sea. Then follows a bubble type font derivative of Internet Art aesthetics, which states

'I am water, I am not from earth'. Right from the start the viewer is thrown into the speculative realism that Hito Steyerl often depicts in her videos and essays. *Liquidity.com* follows the life of Jacob Wood, a financial adviser who, after losing his job during the financial crisis of 2007, embarks on a new career in martial arts. The piece interlaces the history of Jacob, his current training and fights, with collage where the metaphor of liquidity pans out. In its visual structuring the piece relies heavily on the repetition of water *motifs* and the *mise-en-abîme* of video frames (Iphone screen, TV monitor, Quick Time video) incorporated within the screen of the piece. The depiction of John Wood's life (such is the distortion of lines between documentary and fiction that one could ask if he really exists or if he's a creation aimed at reflecting on the online de-multiplication of identity and pseudonyms) prevents the metaphors and puns deployed around water to fully exhaust themselves and as such to operate as critical tools. A map of all the water metaphors subsequently used in the video is displayed at the beginning of *Liquidity.inc* recalling the outcome of a Google search. The connections and GIF collages I read in *Liquidity.inc* are an attempt to visualise a phenomenon that Joselit has so sharply observed in his book *After Art*; i.e. the Epistemology of Search or how the dissemination of online content and its capacity to be connected to other content takes primacy over the nature or quality of what is circulated. Where one would think that the work somehow manages not to focus on Steyerl's process, a documentation of the budget issues the artist faced during the development of *Liquidity.inc* reminds the viewer that the subject, which Steyerl's practice purports to move away from, is never really far away. Accordingly, it is rather difficult to pin down where the work conceptually stands, for its philosophical premise is polarised between a desire towards speculative realism and an actual emphasis on the demultiplication of the artist's own image, tinged with expressionism. In other words, one is left to ask how to reconcile the materialism the work aspires to and the notion of political activism it seems to emulate? Because of the ways in which Steyerl represents herself in one way or another in each video, one would expect her to sketch out a clearer position for herself as a critic of the politics of digital image production and

dissemination. Yet as I watched *Liquidity.inc* and *How Not to be Seen: A Fucking Didactic Educational*, it becomes unclear if the work condones or embraces the Google culture it relies on. It has to be remarked that the actual recording of the budget conversations Steyerl had as she was making the work happened via Facebook chat, as one of the few *accoutrements* of digital culture and tools of cognitive capitalism (Facebook, Twitter, iPhones, QuickTime files among others) that the work seems to take for granted without questioning the ways in which they instrumentalise the representation of the political consequences of the financial crisis of 2007-2008. The work walks the line between celebrating and denouncing digital technology, yet this instability, instead of distilling some fruitful buoyancy renders the piece confusing. As a result, it seems that *Liquidity.inc* and *How Not to be Seen: A Fucking Didactic Educational* (which aims at mocking the video instructions rhetoric by describing how to become invisible in a digital world) exhibited at the ICA were somehow flippant both structurally and theoretically. It almost seems as if the flippancy is a cynical strategy aimed at warding off any potential criticisms towards the work. In a remarkable fictional interview of Guillaume Apollinaire by Mathew Collings for *Art Review*, the French poet discusses Hito Steyerl's *Liquidity.inc* and points out that if the Berlin-based artist is right in heralding that we are used, there is nothing new in that declaration and it shouldn't allow her to use us too (2014:52). Here the appearance of Apollinaire sheds some light on the problematic relationship that the work intends to have with its audience. The set of paradoxes at play in the five pieces displayed at the ICA, rather than opening up a debate, engulfs the viewer in the mist of commentaries that the videos nurture. *How Not to Be Seen* seems to perform an infinite regression that finds its immediate expression in the design of the black box exhibition space. Displayed at the ICA, they resemble a discursive endeavour and as such do not reveal the politics of the digital image in any of its rich technical specificities. Moreover, the work seems to represent a strong departure from any engagement with any type of medium specificity or as Rosalind Krauss has called, 'technical support' (2013:37). In an essay titled 'Spam' written for *October*, Steyerl rightly states that digital wreckage is

both material and immaterial: 'it is data-based debris with a tangible physical component' (2011: 72). Unfortunately, unlike Larcher whose concept is generated from a technological malfunction which is then positioned back within the medium, she doesn't translate that hybridity within *Liquidity.inc* and it appears as if her intentions halted half way in the immaterial realm of discourses. Steyerl's approach focuses more on the discursive whereas Larcher's brings back the discursive into an exploration of the medium. His work is anchored and generated by the specificities of the medium he is exploring or, to paraphrase Rosalind Krauss, in the specificities of his technical support. In a collection of some of her essays entitled *Perpetual Inventory* (2013), the debate around medium specificity appears, which she has updated by referring to 'technical support'; it reads:

I am using the term 'technical support' here as a way of warding off unwonted positivism of the term 'medium' which, in most readers' minds refers to the specific material support for a traditional aesthetic genre.

(Krauss, 2013: 37)

Thus after clarifying her position, the American critic explains how technical support broadens the idea of medium by 'acknowledging the recent obsolescence of most traditional aesthetic mediums' while incorporating the 'layered mechanisms of new technology that make a simple, unitary identification of the work's physical support impossible' (Krauss, 2013: 73). As a result she also stresses that if a traditional medium is distinguished by a physical substance, the term technical support refers to 'contemporary commercial vehicles, such as cars or television' that contemporary artists use (Krauss, 2013: 38). With its use of TV broadcasting, *Video/void* does indeed define itself as an illustration of an artist basing his work on the exploration of his technical support. Steyerl's approach focuses more on the discursive and one could speculate that her medium is eventually discourse itself. The dynamics of exchange are indeed at the core of *Liquidity.inc* and only happen to be 'embalmed' in the form of digital video. Yet if *Liquidity.inc* toys with the idea of monetary flows, waves and the circulation of images online, the work doesn't tackle the convergence of those two fluxes, in what is known as cognitive capitalism. Indeed, no comments are made on the value of data, which is retrieved and searched, online.

One of the interesting aspects of Larcher's work is that by nesting the discursive, through semantic ratios, it allows a dialogue between the technical and the symbolic. It creates a work that interestingly wavers between what it's creating and what it deconstructs. Conversely, Steyerl's work *Not to be Seen: A Fucking Didactic Educational .MOV File* represents not only a process of the dematerialisation of art, but a dematerialisation already accomplished. Somehow, Steyerl's work displayed at the ICA translates what Joselit was already stressing when referring to the exhibition *Information* (MoMA 1970) curated by Kynaston Mc Shine. Joselit extends and sums up Mc Shine's thoughts on the obsolescence of the object over the dynamics of exchange of information (Joselit, 2003:129). In a way the work is a perfect example of a complete dematerialisation, even dematerialisation already accomplished, whereas *Video/void* shows unresolved processes and translations. Given that *Video/void* rests on theories of deconstruction, one could assume that the work displays postmodern simulacra, images that according to Baudrillard can't be pinned down as real or fake. Yet Larcher's images are not simulacra insofar as they are well anchored in technical processes. I would submit that Larcher's process stems from technical phenomena and as such is not just about the rhetoric of the non-existent but about a conversion process, a journey from materiality to the semantic, from VHS to the digital.

It was intended in this chapter to examine David Larcher's *Video/void* in order to shed some light on the discursive nature of Internet Art pieces. Interestingly, it seems that *Video/void* prefigures what Thomson & Craighead deal with in an online context. Yet it represents a step that has yet to be depicted with data, a stage in which the information is physically inscribed in a material and where the action of time and the decay of the material is perceivable. Indeed, where Larcher is playing with ideas in their technical realities, Internet Art in the case of *Weightless* plays with those ideas but in a metaphorical sense, thus creating a piece much more discursive than *Video/void*. One of the strengths and particularities of

Video/void is that the discursivity is brought back into the technicalities of the medium, in other words the conceptual idea of void, which frames the work, is inherent in the video dropouts that Larcher manipulates.

I've described the ways in which *Video/void* revolves around the figure of the niche and to what extent this nesting generates a *mise-en-abîme* and self-reflexivity, which differs from the 'nesting' that Mitchell describes and which implies the nesting of a medium in another medium (2005: 401). I have also outlined how the nesting and self-reflexivity set up semantic ratios. Derived from W.J.T. Mitchell's concept of semiotic ratios – itself derived from McLuhan senses ratio – the semantic ratios at play in *Video/void* represent the unstable interplay of the semiotic and the technical. More importantly, the semantic ratio is a visual translation, or manifestation of the discursivity of the piece. The semantic ratio synthesises the visual, conceptual and technical interplay of the debris that David Larcher is manipulating. The semantic ratio provides at the same time a meta-picture and a meta-discourse on the relationship that a work of art, such as *Video/void*, fosters with its own language and the languages it uses. The on-going, process based nature of the semantic ratio leaves the viewer with a sense of a work without a referent. Larcher, by re-appropriating video dropouts deconstructs as he recreates something ongoing and distinct, something which can't be pinned down for it is in a process of realisation, something in between, something like a slash in the void between languages. Yet the work proves to be a valuable illustration of one that deals with information, and that the debris it manipulates convey a form of knowledge which isn't purely metaphorical and symbolic but anchored into technical support. To emphasise this point I have drawn a parallel between Internet Art and the work of Hito Steyerl. I have asserted that although Steyerl's work comments on online culture, it nonetheless relies on traditional means of dissemination, i.e. galleries, to be seen and as such seems to undermine some of its claims. In that regard, Steyerl's work departs from Thomson & Craighead's.

Part Three: Allegorical and Entropic Resistance to the Epistemology of Search

Chapter Seven: *Biennale.py*: Exposing the Epistemology of Search

- 7.1 *Biennale.py*: contamination as a curatorial strategy
- 7.2 The Epistemology of Search: patterns of dissemination
- 7.3 Burrough's viral language and its stable symbiosis
- 7.4 Artaud's theatre: renewing viral aesthetics

The chapter attempts to focus on the way the concept of the virus is employed in New Media artworks. The word, which has navigated back and forth between the fields of biology and computer science, has acquired a layered understanding. Once applied to a broader cultural context, computer viruses form a sort of hybrid concept, which encompasses simultaneously and without differentiation media ecology, digital technology and physiological disease. Like a word or expression that is reused in different contexts as an image, it will be shown that digital viruses are not a mere metaphor but can provide a critical abstract tool that helps to seize the way information is disseminated in networks. Indeed, through some examples of digital viruses in art practice, I would like to argue that computer viruses could represent a valuable critical tool, destabilising the Epistemology of Search inherent to Internet networks. As such, I'd like to argue that the appropriation of either an actual computer virus or its representation deploys a strategy that can create a halt, a pause or a slowing down of the logic of networks. The examples studied will demonstrate how this halt is realized through, among other factors, a de-multiplication of contexts for the virus to propagate and the implementation of artifice. I will also try to disentangle the different types of networks at play by differentiating a metaphorical network from an abstract one. As such, if the medium of the Internet is definitely a network of one kind, the conceptual network of ideas that an artwork builds for itself might be of a different kind. It is within that gap between different network paradigms that the Epistemology of Search can be challenged and slowed down.

7.1 *Biennale.py*: contamination as a curatorial strategy

In 2001, the duet of Brooklyn based, Italian born artists, Eva and Franco Mattes, proposed a computer virus as a piece of art. The duo, who started out their careers by working anonymously under the pseudonym of 0100101110101101.org, represent the second generation of artists working with the Internet, after net.art. In the late 90s, they gained a reputation for cloning, remixing and recycling Internet Art pieces such as *Jodi.org*. It was in following up that ethos that in 2001, the two artists, in collaboration with epidemiC, another group known for its programming skills, released *Biennale.py* for the 49th Venice Biennale. The work, displayed in the Slovenian pavilion, opened on June 6th and remained on display throughout the whole Biennale. *Biennale.py* was an installation comprised of three elements. Firstly, it was shown on a computer that couldn't be operated by the viewer, but through which viewers were able to observe the computer being infected and files being corrupted, in real time. Secondly, 10 CD-ROMs, each containing a copy of the computer virus at play on the monitor, were hung on a wall. Thirdly, the virus code was printed in large letters on a banner of 3 by 4 meters. At the Biennale, the virus was also distributed on T-shirts and sold on CD-ROMS, \$1,500 each (Parikka, 2007: 286). The piece was then intended as a critique on the system of the Biennale as a whole, here, I'm going to unpack how this critique was reticularly structured. More specifically, on a technical level, *Biennale.py* represents the first instance of a virus ever written in Python language. In other words the virus only affects programs also written in the Python computer language and is spread if someone downloads infected software or utilizes a corrupted floppy disk. The 47 lines of code comprise the program, which attaches itself to all files and software written in Python language (so ending with .py or .pyw). This means it is only able to survive in Python environments.



Fig. 26) Eva and Franco Mattes *Biennale.py* installation for 49th Venice Biennale (2001) available at <http://0100101110101101.org/biennale-py>

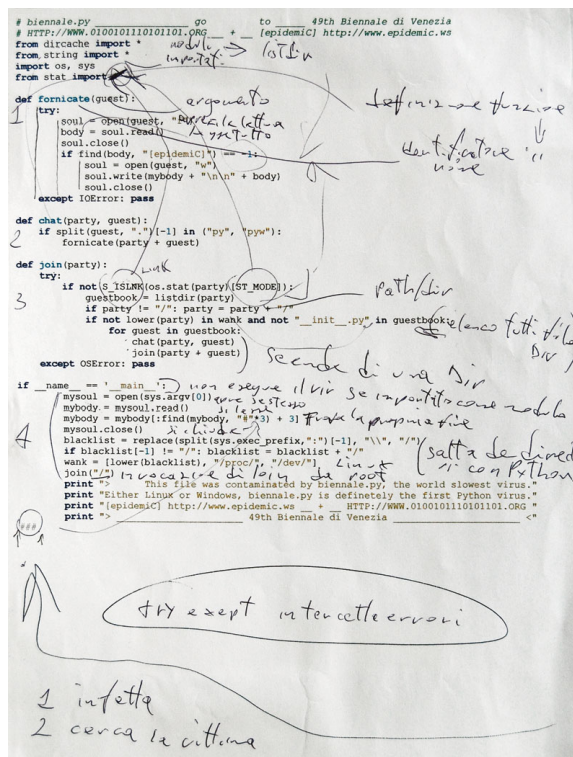


Fig. 27) *Biennale.py* virus (2001) by Eva and Franco Mattes available at <http://0100101110101101.org/biennale-py/>

One of the networks at play in *Biennale.py* appears to be the demultiplication of the virus that the Mattes have created. The demultiplication of the virus on a variety of surfaces may have been a way for

the artists to materialise the computer virus and the network it weaves as it contaminates and as such to achieve a greater visibility, but more importantly I would like to propose that the installation sheds light not on a set of metaphorical networks but on an on-going abstract one. Such an abstract take on networks is described by New York cultural theorist Alexander Galloway in his book *Protocol, How control Exists after Decentralisation*. The aim of Galloway's book, as Eugene Thacker points out in the foreword, is to consider networks not as mere metaphors but as abstractions. Here the cultural theorist refers to Bergson to define abstract as full of potential, as a network that is at the same time always enacted and about to be enacted. According to Thacker, the metaphor of network is too limited and only allows discourses of interconnectivity, but does not address the status of networks as materialized and materialising the media of control (Thacker, 2006). The virus sheds some light on the passing of time, on duration. It points mechanically, inevitably, to the moment when the contamination will be total and when the system infected will no longer be able to function. As such, its emphasis is on the executable rather than on the displacement. The materializing mode by which networks operate is what Galloway names protological. Protocol here is the key concept that Galloway submits in his book and refers to a specific type of management and organisation 'native to computers in distributed networks' (Galloway, 2006: 3). The concept of protocol is derived from the technical definition, which refers to standards governing the implementation of specific technologies (Galloway, 2006). The network that *Biennale.py* constructs as it contaminates and spreads represents an abstract materialising manifestation of the power of control that the Internet holds. Galloway insists that this on-going attribute of a network is what enables it to operate in a distributed hegemonic way, rather than in a centralised one.

The distributed nature of the virus in different formats (wall, computer, CD-ROMS, T-shirts) also translates the intrinsic quality of the computer virus to duplicate itself in order to contaminate. In *Digital Contagion*, Parikka borrows from Foucauldian methodology and starts his 'archaeological'

exploration of computer viruses by submitting that computer viruses only represent an accident symptomatic of a broader cultural phenomenon, a 'diagram' as he puts it, tapping into Deleuzian terminology. As such, from the incident that causes a computer virus, the media theorist is interested in the set of external relationships that partly condition the work rather than in any medium specificity. If the author of *Digital Contagion* stresses the importance of the virus to duplicate it, it is to underline not the essence of computer viruses but the circumstances by which they become manifest. Following up how computer viruses have come about, Parikka starts by describing how a computer virus operates and how its duplication is one of the fundamental characteristics. It reads:

On a technical layer, a digital virus is designed to attach a copy of itself to a host program. These have often been executable files (.exe, .com) but can also be boot sectors and manuscripts. Often computer viruses also include a 'trigger' and a 'payload'. This means, for example, that a virus will trigger after, say, 50 boots, releasing its payload.

(Parikka, 2012: 19)

The executable files echo the materialising nature of the abstract network.

Like the digital virus, which attaches a copy of itself to a program in order to invade a computer, the virus created by the Mattes attached copies of itself to different surfaces in order to contaminate the installation space. The contamination of the exhibition space is where it could be argued that most of the piece operates. Every surface (be it the monitor version, CD-ROM or a banner or T-shirts) produces a copy of the virus, which therefore nurtures the contamination of the exhibition space, which in turn enlivens the whole work. The contamination has the effect of not only materialising a computer virus but also of depicting the repetitions of the virus between the different formats that support it. Even if *Biennale.py* was very much performative and as such remained ephemeral in some ways, an online documentation is available at http://0100101110101101.org/home/biennale_py/index.html. The online record of *Biennale.py* allows the contemporary viewer to seize the critique of commercialisation of art at play in *Biennale.py*. It is, as if the documentation of the piece helps the contemporary viewer imagine what the experience of the piece must have been like. It gives a glimpse at the

dissemination of a computer virus on a variety of surfaces that takes place in 2001, and see the abstract network that this dissemination creates. With its emphasis on how the idea of a computer virus navigates within an abstract network, between different formats and the exchange it creates between the artists and the viewer, or to put it differently, between a sender and a receiver, especially in the online version, it is easy to see how *Biennale.py* resonates with Mail Art. The practice of Mail Art, as one of the manifestations of Fluxus, relied essentially on a system of exchange and encounter between a sender and a receiver (Gere, 2009: 89). Mail Art was highlighting the idea that the value of a piece of work doesn't rely in the objects but in the exchange of ideas and the repetition they create as they circulate and get re-appropriated. These repetitions, by conferring new relevance, not only keep the work alive but also frame the work itself. By displaying the press' opinions on the original installation of 2001 on their website through a form of random collage, the Mattes are contaminating a contemporary reading of their own work. The online documentation entertains a dialogue with the origins of the piece. The multiple formats the virus appeared on and its online paves the way for the heterogeneous environment necessary for the protological nature of *Biennale.py* to manifest itself as a critique of the Biennale institution and commercialisation.

By paying attention not only to the time when the piece was conceived (2001), but also to its display and composition, one will observe that *Biennale.py* is indicative of a key turning point in the development of digital art, of a post net.art generation. Galloway distinguishes net.art in opposition to Internet Art by stating, in line with the artist Vuk Cosic, that net.art was primarily concerned with networks and spread approximately from 1995 to 1999.⁴³ Early works by Jodi such as, for instance, *Jodi.org* or *Asdfg* are typical of that era where using the Internet as a material was the main focus. Indeed, net.art was playing with the constraints of the time, such as bandwidth and computer speed. Galloway argues that net.art intended to disengage itself as much as possible from previous cultural productions and

⁴³ It is worth noting that the expression net.art itself appeared accidentally and was picked from a corrupted, unreadable email message (Galloway, 2006).

in order to do so, relied heavily on the tactics of computer crashes, technological glitches and corrupted codes. Considering the development of digital technology, the technical limitations, which in part defined net.art, are no longer relevant and, according to Galloway, Internet Art seems now to be playing with another set of limitations, i.e. commercial limitations. Thus, Galloway explains how Internet Art represents a movement in which works are less concerned with the networks that support them than with the commodification of software. Consequently, Internet Art refers now to 'any type of artistic practice within the global Internet, be it the World Wide Web, email, telnet, or any other such protological technology' (Galloway, 2006: 211). It could be argued indeed that firstly, *Biennale.py*, with the sale of CD-ROM copies of the virus, seems to endorse the commodification of software that Galloway describes, and secondly that it embraces a variety of media and practices as Internet Art does.

7.2 The Epistemology of Search: patterns of dissemination

The work by the Mattes seems to prefigure what Joselit calls an Epistemology of Search. In his book *After Art*, the art historian asserts that contemporary images hold power in their capacity to replicate, remediate and disseminate at 'variable velocities' (Joselit, 2012: XIV). The art historian hopes 'to link the vast image population explosion that occurred in the twentieth century to an epistemology of search' (Joselit, 2012: 89). For Joselit the Epistemology of Search symbolises the 'breakdown of the era of art' where 'art', 'defined as a private creative pursuit leading to significant and profitable discoveries of how images may carry new content, has given way to the formatting and reformatting of existing content.' (Joselit, 2012: 89). Thus the author shifts the critical focus from art production to what images do once they enter circulation in heterogeneous networks. The book is an attempt to identify the circulation of images and the configuration of links and connections they create in heterogeneous environments. The pattern of dissemination and connections of these images are what Joselit names as formats. It reads:

formats are nodal connections and differential fields; they channel an unpredictable array of ephemeral currents and charges. They are configurations of forces rather than discrete objects. In short, formats establish a pattern of links or connections. I use the term link and connection advisedly because it is through such modes of association, native to the World Wide Web, that composition occurs under conditions of image population.
(2012: 55-56)

Thus, the way the virus created by the Mattes is duplicated on several surfaces and the way it allows connections between them becomes the format of *Biennale.py*. The format defined by Joselit doesn't take into account the content of what is connected but stresses that 'in economies of image overproduction' the key is 'connectivity'. This is the 'Epistemology of Search' (Joselit, 2012: 55-56). Following this idea of connectivity regardless of what is connected, Joselit also explains that what matters now 'is not the production of new content but its retrieval in intelligible patterns through acts of reframing, capturing, reiterating, and documenting. What counts in other words, is how widely and easily images connect' (Joselit, 2012: 55-56). *Biennale.py* seems to illustrate this point in as much as every medium present within the work (print, digital...) reframes and reiterates, in its own way, what another medium has done. As such, the banner, for instance, reiterates the virus depicted on the computer screen. As for the online version, not only does it reframe the virus contained on the CD-ROMs but it also 'documents', as Joselit puts it, the first installation in Venice and the reactions to it. Thus, the fact that the viewer can find, in the online version, the retrieved press comments, seems to illustrate Joselit's definition of contemporary art as being mainly an act of retrieving and reframing. With its online and gallery display, *Biennale.py* exhibits an institutionalised critique of the gallery system.

One could think that the creation of a computer virus by the Mattes, which is then implemented in the installation, would disturb the concept of the Epistemology of Search insofar as it would ultimately threaten the functioning of the computer system, yet the virus of *Biennale.py*, like a computer virus (such as a Trojan one), acts as an agent, which facilitates the

Epistemology of Search. As Joselit puts it 'images are not aimed at creating utopias; they have a diplomatic portfolio (and sometimes, as in embassies, they operate as infiltrators, as spies, as Trojan horses)' (Joselit, 2012: 84). As Parikka notices, every new technology creates a new set of potential accidents or dangers and consequently every technology brings out a new form of disruption of its own technology. The specificity of *Biennale.py* is not only to emphatically expose the danger of computer viruses but also to entertain a paradoxical relationship with the network which supports it. It is a relationship where, on the one hand, the virus needs the network to sustain itself and contaminate, and on the other, the network, usually imperceptible, gains visibility thanks to the virus.

Biennale.py is a work that entertains a paradoxically stable relationship with its lethal virus. Unlike a traditional computer virus that aims to destroy the system that supports it, *Biennale.py* intends to survive its own virus in order to exist. The piece needs to keep the computer running so that it can sustain the relationship with the CD-ROMs and banner throughout the exhibition period. The best way for it to survive is not by destroying the computer which hosts it, but rather to cohabit with it. By killing the computer host, the virus would eventually 'die' too. Interestingly, the Mattes' piece appears to rely on the potential of its own destruction rather than in its actual destruction. It seems that *Biennale.py* runs towards its own extinction as it develops the virus it contains, without ever realising it. Like Sisyphus, who eludes his own mortality by tricking and unchaining Thanatos the god of death, *Biennale.py* is in a relationship of stable symbiosis with its virus.

7.3 Burrough's viral language and its stable symbiosis

This stable symbiosis echoes in part the theoretical work of William Burroughs. In *The Adding Machine*, published in 1985, American poet and novelist Burroughs warned against the potential danger of the written word. In his theory the author explains that the written word is a virus that literally made the spoken word but which has not been recognized as such

yet. Burroughs warned against the danger of the human voice and proposed to disrupt language through a series of tape recording manipulations so that the viral nature of words could be revealed. Later in 1985, Burroughs reaffirmed his theory:

My general theory since 1971 has been that the Word is literally a virus, and that it has not been recognized as such because it has achieved a state of relatively stable symbiosis with its human host; that is to say, the Word Virus (the Other Half) has established itself so firmly as an accepted part of the human organism that it can now sneer at gangster viruses like smallpox and turn them in to the Pasteur Institute. But the Word clearly bears the single identifying feature of virus: it is an organism with no internal function than to replicate itself.
(Burroughs, 1985: 48)

What is of interest for me is the notion of a potential or 'stable symbiosis' with humans. Like a computer virus, which can remain inactive for a while in the hard drive, the written word can lay dormant too. As a result, the virus at play in the Mattes piece reaches the stable symbiosis with its environment that Burroughs is pointing at. Besides, it seems here that Burroughs also anticipates the way in which computer viruses operate, by being under cover and by duplicating themselves. Here, Burroughs' account of viruses resembles Joselit's definition of computer viruses as diplomatic agents in the reign of the Epistemology of Search. It is not only the duplication of the virus but more importantly its duplicity as an entity which maintains its *status quo* with its environment before contaminating it, which enables both the Mattes and Burroughs to scramble the message without scrambling the code. The act of partially disrupting the readability of the virus is what confers a certain recognisability to the Mattes' piece. Recognisability is for Joselit another feature of the Epistemology of Search, for:

in informational economies of overproduction, value is derived not merely from intrinsic qualities of a commodity (or other object), but from its searchability- its susceptibility to being found, or recognised (or profiled).
(Joselit, 2012: 58)

If both Burroughs and the Mattes seem to keep the idea of the virus visible, the two practices are quite different in as much as if the Mattes are playing around with an actual virus, the strength of Burroughs' work lies in it being

partly speculative in his revealing of the viral nature of language. Hence, despite the fact that *The Electronic Revolution* was published in 1971, he reiterated his theories in 1985 in the *Adding Machine* and stressed how the viral nature of language hadn't been realised. Accordingly, it could be said that Burroughs was dealing more with a form of viral aesthetic than with viruses as such.

Density of connection and economies of overproduction of images lead to a saturation, which is symptomatic of the Epistemology of Search; it is the 'status of being everywhere at once rather than belonging to a single place – that now produces value for and through images' (Joselit, 2012: 16). From that perspective, the Mattes' work *Biennale.py* seems to fit the saturation that Joselit is analysing. With the de-multiplication of the images of the virus, both at the Venice Biennale and online, the artists embrace an aesthetic of excess which helps the virus to proliferate. This digital excess is borrowed from another type of digital malware, which according to cultural theorist Alexander Galloway is pure excess, i.e. spam. He says:

Spam is an excess of signification, a signification without sense, precisely the noise that signifies nothing – except its own-networked generativity.
(Galloway, 2006: 147)

If spam differs from virus because it functions differently, it seems to provide a relevant point of reference to study the virus created by the Mattes. Indeed, the virus of *Biennale.py* seems to operate with an excess typical of spam. As such, the piece doesn't mean anything apart from the fact that it can contaminate. Subsequently, in the Mattes' *Biennale.py* the language of code is an instance where 'the nature of what is exchanged receded in favour of the significance of distribution and dissemination' and where meaning relies mainly in the work's ability to connect (Galloway, 2006: 147). Thus the virus of *Biennale.py* is locked in a paradoxical status like spam, which 'signifies nothing but excess' (Galloway, 2006: 147). Curator and critic Lars Bang Larsen advocates that the notion of semiotic excess, manifest notably in spam, can become a critical weapon that 'if encouraged' can 'offer an opportunity to circumnavigate capitalism' (Larsen, 2011). Critical theorist Esther Leslie, personifies spams as 'an imaginary

population who were sending in the same period emails of randomly generated verbiage or cut-ups stolen from zombie computer hard drives or online texts' (Leslie, 2010: 248). The digital spam would represent a form of Burroughsian cut-out in the latent database of the hard drive. Not only does Leslie qualify the obsolete hard-drives as zombie but I would also argue that the imaginary population of names created by the algorithm, which drives the production of spam, represents in itself a population of digital zombies. In this instance, the zombies would be an instance of the excess of signification that Galloway describes, virtual entities, which, because they are deprived of any subjectivity, have the sole function of reproducing themselves and engulfing mailboxes.⁴⁴

In his book *After Art*, Joselit stresses the importance of the point of access where an audience encounters a piece of work/audience. The emphasis on the viewer's subjective experience of a work is what Larsen calls the experience economy. Despite the problematic related to the experience economy where viewers' experiences are commoditised, sold and consumed again by themselves, it emphasises the critical point where information is accessed and becomes valuable. Joselit states that just as with a 'Minimalist sculpture, the appreciation of art under the Epistemology of Search requires a spatialised form of reception where the viewer's shifting position from place to place causes modulations in significance' (Joselit, 2013:14). Joselit refutes Benjamin's idea according to which the work of art belongs to a 'time and space' that possess the authority of witnessing. For the author of *After Art*, 'reproduction jeopardises the "historical testimony" and 'the authority of the object' (Joselit, 2013:14). It eliminates distance in time and space by making the image nomadic (Joselit, 2013:14). Thus here, the emphasis is brought, via a Deleuzian terminology, onto the space where art is encountered.

⁴⁴ Interestingly, the notion of online zombies has recently taken on a new dimension with the creation of *Weavrs* by David Bausola. *Weavrs* is a 'system that manufactures artificially intelligent beings that exist on the social part of the Internet', see <https://www.prote.in/en/profiles/david-bausola-philter-phactory> (last accessed 16/02/15).

7.4 Artaud's theatre: renewing viral aesthetics

Antonin Artaud's writings on viruses and more precisely, the plague, might shed another light on the point of access between an audience and an artwork. *Le Theatre et son double (The Theatre and Its Double)* is the testimony of an intense creative period for its author. In the early 30s, after the dissolution of *The Theatre of Alfred Jarry*, which Antonin Artaud had founded with Roger Vitrac and Robert Aron, Artaud started the Theatre of Cruelty, a group of artists setting up readings, conferences and manifestos. The principles described and heralded in *The Theatre and Its Double* were fully applied for the first time in 1935, as part of a play entitled *Les Cenci*. The play, a drama written and directed by Antonin Artaud himself, was a financial disaster. Yet Artaud described it as 'a success in Absolute'. Antonin Artaud opens his *Theatre and its Double* manifesto by recounting an episode of plague, which occurred in Marseille in 1720, as an allegory of theatre. The playwright then develops the allegory throughout the book. According to Artaud, if theatre is like a plague it's not because of its contagious nature, but because it reveals a 'latent disorder' of images, which for him are dormant in all of us. The author even qualifies these images as 'the exteriorisation of a latent undercurrent of cruelty' (2010: 20), a revelation that is both at the same time vengeful and victorious (2010:18). Artaud keeps comparing the plague to the theatre and the theatre to the plague, thus creating a dialectic dynamic between the two ideas in which not only plague reveals but also foregrounds and pushes those latent images, those subconscious debris, to extreme gestures. For Artaud, theatre becomes 'a powerful appeal through illustration to those powers which return to the mind' (2010: 20). Artaud seems here to posit that theatre can act as a psychological catalyst, which, a little bit like mnemonic residues, brings to the mind its 'inner struggles' (2010: 20). What is of interest for the argument here is the fundamentally conflictual nature of the revelation of the latent mess and how Artaud structures and defines the modulations of significance that Joselit outlines in the Epistemology of Search. Where Burroughs

advocates a stable symbiosis between viruses and humans, Artaud calls for a battle of forces. The author of *The Theatre and Its Double* successfully destabilizes the point of access between work and audience by setting up an unstable system, in which the virus of the plague is a tool for confrontation. He seems to introduce a theatre of resistance where fluidity and connections do not necessarily reign over the content of what is revealed and where blockages are fruitful. In other words, an art manifesto which heralds the potential of switching on and off the point where information is accessed in the logic of networks. Artaud even embraces the unclear and messy nature of the exchange between mind and theatre, by stating that if the possibilities and powers revealed by the theatre are dark, the ultimate goal is to urge man to take a 'nobler, more heroic stand in the face of destiny' which justifies the presence of the plague (2010: 21). I would submit that the theatre of Artaud is not afraid of the dark and unclear means it uses to accomplish its task as a work of art. Artaud's theatre doesn't cover up the network where his ideas propagate with a veil of transparency, but turns it into an obscure fabric. Unlike Burroughs, who stresses the importance of keeping a form of recognisability in what his tape manipulations convey, Artaud doesn't seem to be concerned with maintaining the recognisability of the virus form, and rather than promoting a smooth circulation of ideas or facilitating the transmission of ideas, the theatre of Artaud is like the plague in the 'image of this slaughter', of 'this essential division' with its own medium (2010:21). Hence Artaud's description of his theatre as being, like the plague, both victorious and vengeful (Artaud, 2010: 18).

One can start to perceive the influence that Artaud had on Deleuze in his construction of the rhizome concept where all is about powers, potentials, lines of forces crossing milieux and territories. This is precisely the aspect of Deleuze which has shaped Parikka's writings; however, if one looks at Artaud's work closely, the poet and playwright seems to be building an allegorical system formed of dual plans and binary relationships: the spectator/the actor, the stage/the audience, life/art, are more arborescent than rhizomic. A binary mode, which recalls the way a computer virus works. Indeed, computer viruses function in an IF/THEN mode:

The infection mechanism looks for infectable objects and IF it finds them, THEN it infects them. The trigger can be set for a specific date, and IF it is reached, THEN the trigger is pulled.
(Parikka, 2012:19)

Duality seems of importance for Artaud insofar as it is within that duality that he can locate the notion of the gap. It is within that gap that the encounter happens. *0100101110101101.org* seems closer to Artaud's interests on viruses, *The Theatre and its Double*, in as much as the emphasis on the duality of theatre/art and its impact on the viewer, departs from an horizontal non-hierarchical paradigm which defines a thing only by external connections. Here, there is a hierarchy, an encounter, an ensemble of binary relations governed by an overarching principle of unveiling. Indeed, Artaud points out that if theatre is like plague, this is not related to its ability to contaminate but in its ability to be a 'revelation, urging forwards the exteriorisation of a latent undercurrent of cruelty through which all the perversity of which the mind is capable' (2010: 20). Here Artaud, by focusing on the revelation of truth in contrast to the contamination that the virus creates, helps to effect a significant shift in my understanding of viruses in art practice. In Artaud's case, it becomes apparent that it is a viral aesthetic, the allegorical counterpart of the actual virus and what it is meant to achieve, i.e. a positive transformative experience, rather than an actual virus or an abstraction of a virus, which is of importance. Thus I have started my argument by rejecting the metaphor of the network and the implications of a metaphorical virus, to apprehend viruses more as abstractions and as such more as process-oriented entities. My aim is to not only underline the processual dimension of networks but also the process oriented nature of viruses attached to them. The analysis of Artaud's use of the plague has helped to reveal the detoured dimension of virus and to focus on its disguised representation.

It was intended in this chapter to explore and discuss the idea of viruses in a piece of Internet Art. The chapter has focused on the work *Biennale.py* by Eva and Franco Mattes as a way to start an analysis of the type of network that a virus not only invades but also creates. As such, I

have explained that apprehending networks as metaphors was misleading and that in the case of the Mattes' work the network displayed was of an abstract nature, and as such aimed at materialising in real time the contamination that a computer virus undertakes. The process-oriented dimension of network was underlined as a way to emphasise the temporal perspective in which they operate. It has also been demonstrated that the virus in *Biennale.py*, by duplicating itself on a variety of surfaces, was evolving in a highly heterogeneous environment that formed the ideal ground for an Epistemology of Search to foster. I've outlined the Epistemology of Search as Joselit described it and have pointed out that the computer virus was actually acting as an agent, facilitating the Epistemology of Search. Following further investigations, it became apparent, in *Biennale.py*, that the virus was locked in a perpetual state of contamination without ever destroying the system it's supposed to conquer. With the help of Burroughs's theoretical writings, I have commented upon the stable symbiosis that *Biennale.py* maintained with its virus and I'd like to submit that, in the case of the Venice installation, this stable symbiosis prevented the work from realising its full potential as a temporal illustration of the 'powers' that a virus can reveal. Indeed, it has then been argued, by referring to Artaud's work *The Theatre and Its Double*, that the introduction of the idea of a virus in a work of art, rather than facilitating an Epistemology of Search, has the ability to bring out struggles and blockages within the logic of networks. It is not the virus itself that is disruptive, but its appropriation and dissemination among artifices in a work of art that can slow down the function of an Epistemology of Search.

Chapter Eight: Roussel/Jodi and the Allegorical Labyrinth

- 8.1 Jodi's encoding and Roussel's *procédé*
- 8.2 Concealing/ revealing: oscillating metaphors
- 8.3 Explosive artifice and the pulverisation of language
- 8.4 Labyrinth and network
- 8.5 From metaphor to allegory

In *Speech and Phenomena* (1973), Derrida, as he critically describes the Dresden Gallery, remarks that the gallery is 'the labyrinth which includes itself, its own exits' (1973:104). The image that the French philosopher uses to discuss the readability of inscriptions in Husserl's phenomenology, seems here to resonate with the display of online art. Indeed, if the metaphor used by Derrida to describe a museum experience could be seen as allegorical, in the case of early Internet Art, and in particular Jodi, the duo of artists have built an online maze as a piece of art. Following up on issues of online curating seen in Chapter Three, here the chapter explores the labyrinth as a paradigm of resistance to the Epistemology of Search. I will map out how this digital labyrinth operates and trace back some of its points of connection with the poetry of Raymond Roussel. First I will compare Roussel's literary *procédé* with Jodi's ASCII as a way to grasp the way both examples construct the walls of their respective labyrinths with words and codes. Then, I will examine the alternative and contradictory tactics of concealing and revealing that Roussel and Jodi exploit in their works. It will be explained that the promises of elucidation provided by Roussel in his expanded sentences in brackets and Jodi's succession of links create a dynamic deception which not only strengthens the critical position of their work, but in Jodi's case sprays with irony the network paradigm it's located within. The irony of *jodi.org*, paired with the artifices dotted about the website, which lead the viewer to doubt the veracity of the information s/he witnessing, creates a form of irregular theatrical language which resonates with Roussel's pulverisation of language. Then I will expand my analysis of the structures of both Roussel's poem and Jodi's website by describing in detail their labyrinthic attributes.

Following up from the study of the *procédé* used by Jodi, their strategy of concealment/illumination and their labyrinthic setup populated with artifice, I will conclude the chapter by arguing that through Jodi's practice digital debris appear more allegorical than metaphorical. This shift in figures of speech, I will affirm, can hold a certain amount of potential to rethink critically phenomena such as digital debris.

8.1 Jodi's encoding and Roussel's *procédé*

Among the first generation of Internet Artsits who preceded 0100101110101101.org, Jodi's practice, with its viral aesthetics, represents the most striking implementation of digital allegorical artifices. If one just considers *map.jodi.org* for instance, a personal map of the Internet created by the duo of artists that leads to a succession of 404 error pages, various fake websites and Internet junk interfaces. The opening page of <http://wwwwwwwww.jodi.org/> also mimics the appearance of a virus code. Their websites *jodi.org* and *text.jodi.org*, composed of dead ends, broken links and constructed glitches, deliberately nurture a viral aesthetic, where technology imitates technology and mirrors itself in an endless maze riddled with digital debris that have been created for the piece and not always retrieved from the Internet. In the Mattes' case, with its virus displayed on a computer and its other illustrations, one can wonder which was the original virus that started the contamination. Is the virus the work or are the supporting system and installation together the work? Moreover, every surface reenacts the virus by supporting a copy of it, as it also modifies it and disguises it. However, unlike the Mattes', who provide a literal account of viruses, Jodi's playing with the idea of virality and its representation. The metaphorical take on viruses and the implementation of artifices deploy a stratagem that aims at blurring the lines between the interface and the architecture of the Internet.

Such a metaphorical, or to put it differently, detoured approach to computer viruses is what enables Jodi to install a hiatus within the Epistemology of Search. Such a pause of the Epistemology of search is rendered possible

thanks to the implementation of artifice in data, which resembles in part the posture that French playwright and poet Raymond Roussel pioneered with language. Beyond the easy comparisons that can be drawn between the literary *procédé* that Roussel invented to compose some of his poems and the programming skills of Jodi, there is a more profound parallel that can be teased out, of not only their methodology, but of their ontologies of data and language, all supported by artificial and deceptive networks. The most visible trace of such an enterprise is Roussel's *New Impressions of Africa*, which stands out from his previous writings. The book is comprised of four cantos, which together describe for the most part, Roussel's travels to Egypt and his imaginative depiction of the battlefield after Napoleon's victory at the Battle of the Pyramids in 1798. The poem, which had been written in a caravan with covered windows that Roussel had built for himself, so that he could compose his poems without being distracted by the sight of the outside world, seems to function as a list, a sort of dictionary in verse, an enumeration of debris found in the aftermath of the Battle of the Pyramids. Yet *New Impressions of Africa* wasn't composed according to the same principles as, for instance, *Locus Solus*, and as Michel Foucault reminds the reader in *Raymond Roussel (The Death and The Labyrinth)*, Roussel only partly revealed some of his stratagems. *How I wrote certain of my books*, written by Roussel and published after his death in 1933 conceals more than it reveals. The book is meant to give clues to decipher some of Roussel's early novels but completely omits some of his most important works as a playwright and poet. Thus no lead is given to understand *New Impression of Africa*. As Roussel declares: 'It goes without saying that my other works, *La Doublure*, *La Vue*, and *Nouvelles Impressions d'Afrique*, are absolutely outside of this process' (Foucault, 2006: 7). Here by 'process', Roussel refers to the *procédé* according to which he substitutes some of the letters of a word that don't dramatically change its sound but which completely alter its meaning, leading to a playful sense of confusion in the reader. As he explains in *How I wrote Certain of My Books*:

I chose two almost identical words (reminiscent of metagrams).

For example, billard and pillard. To these I added similar words capable of two different meanings, thus defining two almost identical phrases.

In the case of billard and pillard the two phrases I obtained were:

1. Les lettres du blanc sur les bandes du vieux billard...
2. Les lettres du banc sur les bandes du vieux pillard...

[...]

(Roussel, 1977: 3)

In an essay for *October*, Joselit studied Duchamp's *Monte Carlo Bond Machine* through the lens of Roussel's *procédé*. Joselit sees Roussel's narratives as been generated 'from chains of associations and *double-entendre* in which text was produced through a continuous process of recycling' (1992:15).

As Foucault stipulates, one shouldn't forget that *How I Wrote Some of my Books* is before anything else one of Roussel's books and as such one is led to think that his last book too, contains its own secret. In other words, the book is meant to deceive, refusing to clarify the poet's most important works by focusing on minor plays, thereby turning this book into a work strategically consistent with his fiction. Thus, according to Foucault, Roussel's *New Impressions* is partly allegorical since the meaning of the poem is hidden, detoured in a system that inverts the structure of the poem by placing parts of the structure, the *procédé* – what Foucault calls the horizon – in the foreground and the meaning of the verses in the background. In that regard, in his last book Roussel is scattering some dialectical literary secrets, both at the same time a poison⁴⁵ – to use Artaud's terminology – and an antidote of his work. Poison because they complicate and even obscure the reading of his poems, and antidote because they provide an anticipated key that promises to enlighten his words and which, more importantly, reframe the entire corpus of his own work. I would like to suggest that the strategy adopted by Jodi shares some of this enigmatic principle, and that throughout the revealing of data that they undertake by highlighting some links and connections within the network of the Internet, Jodi, in a quite Rousselian fashion, conceal more than they connect with the network they are using. As in Jodi's work, where the viewer is left to decide what is real and what is

⁴⁵ The comparison between the work of art and poison is one that Artaud refers to in *The Theatre and its Double* to talk about the 'poison of theatre, [that] when injected into the body of society, destroys it' (2010: 21).

fake, what is debris and what is artifice, the secret of *Nouvelles Impressions* is not disclosed in *How I wrote certain of my books*, for as Foucault concludes, if it was possible to completely explain Roussel's poetry and plays by virtue of some codes and secrets, it wouldn't be a Rousselian piece. As for the Mattes, they also play the clarity card that Roussel presents by disclosing the structure of the virus they have created. One of the characteristics of the *Biennale.py* virus is that, unlike a traditional computer virus, it has been made absolutely transparent. As such, the programmer's names and domains were written within the code. Additionally, before starting to spread the code, it was sent to all anti-virus software houses, together with an explanation of how to erase it.

8.2 Concealing/ revealing: the unrealised embodiment of metaphors

However, a little bit like Roussel, by explicitly explaining the core of their virus, the Mattes conceal some aspects of their work too. Indeed, like Roussel, with his planned strategy of revealing his practice, the Mattes turn their work into a form of structural oxymoron figure, and by merging the semantic with the formal, they create a structure that conceals as it illuminates, rendering the work even more impenetrable. Here I would argue that the concealing-revealing aspect of Roussel echoes the symbiotic relationship their virus has with its host. Similarly to the Mattes virus, which is intentionally limited in its lethality for it otherwise would kill its host and thus the whole work, the concealment undertaken by Roussel is only partial, for it otherwise wouldn't give the reader any access to the poem. Thus the virus metaphor becomes at the same time more than a metaphor, because on the one hand it partly operates as a virus, yet on the other hand it also remains just an analogy insofar as its function as a virus is limited. I would submit that the Mattes therefore present the viewer with an on-going oscillation of the viral metaphor. The paradoxical distance and embodiment contained within the virus metaphor allow the artist to introduce some self-reflexivity in the work and thus enhance the criticality of the piece.

As for Roussel, punctuation is one of the points of access by which Roussel partly opens up his text. Indeed one of the specificities of *New Impressions* is the extensive use of parentheses that Roussel employs. The poet builds a system of long sentences in parentheses, which are nested within several other layers of parentheses. The result becomes a Russian doll assemblage of enunciation, which contains up to eleven layers of sentences in parentheses. Thus, *Nouvelles Impressions*, unlike other examples of Roussel's early works, with its use of parentheses unfolds a process of elucidation. As Foucault puts it:

In *Nouvelles Impressions* it takes the strange form of ever-expanding elucidations always interrupted by the parenthesis of a new light shed on the subject.
(2006: 9)

The expanding elucidations turn the poem into a 'dark machine' as Foucault puts it, which by use of repetition creates a void where meaning is swallowed up and 'words hurl themselves in pursuit of objects, and where language endlessly crashes down' (Foucault, 2006:138); leaving the reader with an infinite indecision; just as in Jodi's work where the inner structure of codes and hyperlinks crash upon themselves so as to create a viral aesthetic. In parts, *New Impressions* seem to have been affected by some computer virus, which has turned the whole poem into a glitch manifestation. Yet, unlike a glitch aesthetic, the generative aspect of the poem is developed as a stylistic device whose aim is to duplicate language. Thus, throughout the 415 verses of the text and the 200 examples that Roussel describes, the author has dislocated language to such an extent that it becomes doubled.

The result is even more effective because the sentence being repeated no longer refers to things themselves but to their reproductions: sketch, cryptogram, enigma, disguise, theatrical performance, a spectacle seen through glasses, symbolic image. The verbal doubling is carried on at the level of repetitions.
(Foucault, 2006: 25)

John Ashbery, who talks of a 'stereo effect, which enhances the experience', also comments upon the doubling of language in Roussel's work (1991:16). If, for Roussel, words duplicate things and language lifts from itself the object it refers to when you repeat it, Jodi's manipulation of data separates

the codes and the information it refers to in order to incorporate a separation within the medium that supports it. Like Artaud who argued for an 'essential separation' of theatre, language in both Roussel's and Jodi's case has a revealing power. In the instance of Roussel's poetry, Foucault explains:

It's as if the function of this doubled language was to insert itself in the minute separation between the imitation and what it imitates, to bring out the flaws and duplicate that imitation to its greatest extent. Language is a thin blade that slits the identity of things, showing them as hopelessly double and self-divided even as they are repeated up to the moment when words return to their identity with a regal indifference to everything that differs. (2006: 25)

Yet the meaning of the poem doesn't seem to follow the arborescent structure that I have extracted from Artaud's writings on theatre, but according to Foucault forms a rather monotonous wave of language. Indeed, according to Foucault, behind the wave of language and the generative nature of Roussel's poem, meaning is actually immobilised in *New Impressions* (2006: 24).

8.3 Explosive artifice and the pulverisation of language

It is during the halt that occurs within the doubling of language for Roussel and when meaning is immobilised that an 'enigmatic figure rises at the threshold of language: a motionless close-up which withholds its own meaning' (2006: 22). Foucault enthusiastically describes every Rousselian poem as a party, but a silent party, like a mute *fête galante*, at the same time still and frightening. Meaning is first immobilised by the incorporation of all the parentheses, which act, as Foucault puts it, as 'explosive light[s]' (2006:9) that break the rhythm of the descriptions by promising to elucidate the examples Roussel chooses. In an article for *October*, entitled '*Monte Carlo Bond*' Machine, on Duchamp's work, Joselit does draw a comparison between Raymond Roussel and Marcel Duchamp where he explains that both 'exult in pulverising and reforming language' (Joselit, 1992: 16). The art historian pursues his comparison by describing the phrases Roussel treats as readymades 'reduced to a similar-sounding string

of fragments whose chance conjunction became the basis for a narrative passage of tale' (Joselit, 1992: 16). However, in Roussel's poetry the promises of elucidating the text are quickly interrupted by the intrusion of another parenthesis, which instead of shedding 'another brightness, originating from the preceding one' to the text, holds and suspends time (2006: 9). If Foucault talks about *New Impressions*' meaning as being immobilised or as a fortress (2006: 9), John Ashbery also shares this point of view and describes the Rousselian poetry as being crystallised. He even borrows a metaphor that Henry James used in *The Golden Bowl* to translate the hidden relationship between the Prince and Charlotte. For James, the hidden relationship between the two characters is like an elaborate pagoda without any visible entrance. For Ashbery the analogy with the pagoda reflects the understanding that 'behind their polished surface an encrypted secret probably exists'. Ashbery adds that 'this persistent feeling of not knowing precisely what he is up to paradoxically adds to the potent spell of the writing' (1991:16). Jodi seem to have inherited Roussel's intention. *jodi.org* or *text.jodi.org* represent instances in which the viral aesthetic at play displays an incomprehensible grid of coloured codes, which themselves open to a vast variation of codes. The codes seem to be partly readable and as such strengthen the frustration of the reader, given the understanding that there might be some reason and logic behind what is immediately perceivable.

8.4 Labyrinth and network

Each parenthesis that Roussel deploys is like another room in Jodi's website. Here the poetical parentheses echo the use of < and > that each HTML tag requires. For the author of *Death and the Labyrinth*, the reader of Roussel's poems is thus led to read them as one walks into a subterranean corridor. As in Jodi's website, where the viewer is navigating a succession of digital passages, Roussel's poetry becomes a mineral web that leads quickly from banality to a treasure, from the real to the impossible. A virus is just as functional as it is a useless technological artifice. Roussel's writings are full

of artifice. Throughout the *Nouvelles Impressions*, the reader can spot Roussel's taste for *papier-mâché* celebrations, golden papers, and clock-machine-like parties, which echo the aesthetic of excess that Jodi are propounding. The author of *Death and the Labyrinth* invites the reader to consider Roussel's work as one of these strange and trapped gardens, like Marny designed in the 17th century. Gardens where nature imitates itself, intertwined with artifices, where true things appear fake and where landscapes mime theatre sets. A trapped website like a trapped garden, at the same time deceptive and mesmerising; Jodi's practice provides the viewer with such an illusion. A website where technology imitates itself, intertwined with all the artifice of codes, where true debris gathered from the Internet cohabit with fake debris and where the interface mimes a television set. In Roussel's world, the loyalty of words is 'imperfect' and the reader can't trust them. According to the poet words 'should represent the things that are their proper masters but instead they distort and degrade them' (2006: ix). Like the data employed in Jodi's work, 'words are bad actors who botch their roles. They are copies made of used, leftovers, pre-fabricated and reprocessed materials' (2006: ix). Roussel was preoccupied with the prefabrication of words, and has exhausted their artificial quality in order to reveal their misleading nature. Thus, Roussel's enterprise is to partly destroy language in order to reveal its flawed nature. Here Joselit reverses the comparison to point out that:

Like Roussel, Duchamp envisioned language as a cycle of destruction and production where the distortion of words begets words, where readymade signifiers from Larousse are transformed into the 'letters of a new alphabet.

(Joselit, 1992: 17)

Here the double movement found in both Duchamp and Roussel between destruction and birth creates a language always in the state of being realised.

It could be said that to some extent Burroughs followed the traces left by Roussel in his critique of language, insofar as they both shared some concerns about what Foucault calls the 'white' power of language to give meaning to the world by duplicating things in a language that for Roussel can potentially betray the real. By 'white' Foucault refers to words whose

meaning seems straightforward and explicit, words meant to illuminate. Yet, as Foucault stressed, in Roussel's poetry even the simplest words are not what they seem to be. Consequently, in relation to Roussel's writings, Foucault asks, can language cover up things without concealing them? Like a digital virus, which attaches a copy of itself to contaminate a computer system, words attach a copy of themselves to things and contaminate language. By aestheticising digital debris, Jodi create an assemblage in perpetual oscillation between its statuses as a semantic object and a visual artefact. It is that unstable and on-going nature of digital debris as a continuum of information that intervenes within the Epistemology of Search. The Epistemology of Search feeds on a saturation of the network it is located in. In order for the Epistemology of Search to function as a system, it needs to not only connect images between themselves and to re-capture them in different fashions, but it needs to do so by creating intelligible patterns of links and connections through the agency of formats. According to Joselit, formats have the capacity to be a 'configuration of force[s] rather than discrete objects' or 'nodal connections and differential fields' to 'channel an unpredictable array of ephemeral currents and charges' (2012: 55-56). A format is the digital equivalent of an analogue medium, it 'regulate[s] image currencies (image power) by modulating their force, speed, and clarity' (Joselit, 2012: 52-53). Owing to their process-based dimensions, digital debris, once they are displaced in a piece of work, undermine the capacity of formats to clarify the images they are connecting. Through the act of blurring, the digital debris observed here complicate the task of formats that strive to isolate intelligible patterns of meaning within the saturation of networks. As such, digital debris, because of the displacement they've been through and the new meaning they acquire once displayed in another context, complicate the meaning of the interface and creates an assemblage of significance, which weighs down on the Epistemology of Search.

8.5 From metaphors to allegories

The doubling of language apparent in both Roussel and Jodi's work, their capacity to conceal and reveal at the same time what the work is reaching for, led me to try to specify precisely the metaphorical nature of the debris used. Indeed, the unresolved metaphor of the virus deployed in *Biennale.py*, added to the exhaustion of the television metaphor in Thomson & Craighead's *Weightless* invite me to read in those instances allegories rather than metaphors. Art critic Craig Owens wrote for the *October* journal in 1980 a series of essays on the role of the Allegorical in Postmodern Art. Owens' account of allegories starts by stating that 'whenever one text is doubled by another', allegory occurs (1980:68). He goes further by explaining that the allegory creates a meta-textual layer, which therefore 'points at the direction of its own commentary' (1980: 68). The mirroring language developed by Roussel, like the copy/paste sequence of codes used by Jodi, strike a chord with Owen's definition. More importantly, the critic puts the acts of appropriating and confiscating images as integral parts of the allegory (1980:69). At the time when Owens wrote his essay ' *The Allegorical Impulse: Towards a Theory of Postmodernism*' he drew four connections between the allegory and contemporary art. The first condition, which resonates strongly with the re-appropriation of online discarded information, asserts that an allegory occurs when images are generated through the reproduction of other images. Interestingly, in the case studies examined so far the image of digital debris is indeed generated through the actual reproduction, or more precisely, the transcoding of other 'digital born' images. The second condition of the allegory is to rely on a strategy of accumulation. The archive displayed in *Weightless, Once Upon* and the sheer juxtaposition of words typed in *Beacon* testify to the effect of accumulation used in the production of digital debris. Thirdly, Owens advocates the need for the allegorical to stem out of discursivity. The notion of semantic ratios introduced via the work of David Larher has helped to explain the way in which digital debris are the projection of a cultural concept onto a technical reality. The back and forth dialogue they allow between the computational and the cultural stresses the importance of the discursive as one facet of the digital debris. Finally, the fourth condition foregrounds the site specificities

inherent in the allegory. The online display and curating of the case studies testify to the specificities of online dissemination and the questions they raise once displayed in a gallery setting.

For Owens the site specificity aspect of the allegory comes from Benjamin's view on ruins as 'the allegorical emblem par excellence' (1980: 70). Owens thus points out that allegory is consistently 'attracted to the fragmentary, the imperfect, the incomplete' (1980: 70). The ruin of Internet Art that *The Digital Landfill* embodies now sheds an allegorical light onto the work. Here, in the context of digital debris, the fragmentary, the imperfect not only evoke the romanticism of ruins but more interestingly translate the ongoing nature of digital debris, locked in a perpetual state of realisation and visualisation. The allegory, then, is sharper than the metaphor and deploys a doubling of meaning by isolating a single element in a sequence. Owens concludes that the capacity of the metonymy to single out an element within a whole represents not only an attitude, a perception, but also a technique, a procedure (1980: 68), which here resonates with the procedural nature of digital debris.

The aim of this chapter was to draw a parallel between some Internet Art pieces by Jodi and some aspects of Raymond Roussel's poetry in *New Impressions of Africa*. Beyond the historicising method used to study *jodi.org*, examining the website through the lens of Roussel's poem allowed me to uncover the *procédé* of concealing and revealing used by Jodi. I have argued that it is within the partial concealment of codes that a hidden resistance of the software was possible. Eventually, the essay has shifted from an analysis of the representation of viruses and has argued that viruses can be partly allegorical in as much as, in Jodi's work for instance, they are scattered within a piece of Internet Art as a way to reveal the 'white power' of code to cover up information. The detour via Roussel clarified the nature of the metaphor of digital debris and led me to propose that digital debris are more precisely allegorical. Indeed, by underlining the limitations of metaphors and by bringing together the elements outlined in the argument

so far, I have mapped the course from metaphorical and stable viruses in the case of *Biennale.py* to allegorical viruses which , with their explosive lights, immobilise part of the network in the case of Jodi. The pulverisation of language at play in Roussel has also been discussed in relation to Jodi, to affirm that *jodi.org* does perform an atomisation of codes, which participates in structuring the allegory as Owens identifies it. If the latter defines the allegory as symptomatic of the postmodern, here the aim was to open up his argument and to test its relevance to digital art practices. Through the examples of Jodi and the Mattes it becomes apparent that the allegory, both as a procedure and as a critical posture, retains a lot of potential in this digital age. It is not surprising then that in 2003, Joselit wrote for *October* an essay titled '*An Allegory of Criticism*' in which, via Craig Owen's theories and the life and work of Michael Shamberg, the author proposes to look at allegory as a pertinent and striking motif for art criticism. For Joselit, critique as an allegorical form is just as much about constructing an audience as it about constructing an argument.

Chapter Nine: *Asdfg*: The Entropy of Digital Debris

- 9.1 *Asdfg*: burst of codes onto screen
- 9.2 Mallarme's blank: when language flashes
- 9.3 Jodi's dazzling resistance to the network
- 9.4 Online radicalism and the merit of confusion
- 9.5 Meissalloux: encoding serendipity
- 9.6 Performativity
- 9.7 Digital debris-to-be: entropy

The predominance of digital information and its quality as an encoded continuum impacts on the reading that one can have of both language and writing. Hence, ten years ago, the curators of *Ars Electronica* decided to construct their show around the idea of code. The same concept of code was also the theoretical ground for an exhibition entitled *Decode* at the V&A in 2010. This notion of code, which gained a new definition with the dominance of the digital culture, can also lead to the revisiting of former accounts of codes and may heighten the differences in the evolution of the concept. Indeed, from the theory of codification in Latin poetry revealed by Ferdinand de Saussure (Starobinski: 1979) to the use of code as a material by contemporary artists, the chapter will investigate computer coding, such as HTML, as a writing form and will examine its aestheticisation in art practices. I argue in this chapter that digital debris are entropic and I will map out the different steps of the argument that leads me to this conclusion. As such, I will start by asking, to what purposes can information be aestheticised? The ambiguity of code as an image and as a writing form can be found in a piece called *Asdfg* by Jodi. The piece generates digital debris by conferring some visibility to discarded links. First, I will study the ways in which Jodi turns code into a flashing sequence of language that bursts onto the viewer's screen. From the idea of flashing hyperlinks, I will draw parallels with early computer graphics and symbolist poetry. More specifically, the chapter will study Jodi's work in the light of Mallarmé's poem *Un Coup de Dés* and will argue that *Asdfg* operates as a form of resistance to the network paradigm. Subsequently, I will stress the radicality of Jodi's work and point at the role of confusion in their practice. I will frame the randomness that drives the algorithm that runs *Asdfg* and its openness

to unpredictability, by looking at the ways in which serendipity is conceived in Mallarmé's poem. In order to study chance in *Un Coup de Dés*, I will refer to the interpretation of Quentin Meillassoux in *Un Coup de Dés*. Drawing on Meillassoux's account of *Un Coup de Dés*, I will assess the performativity of the poem and will argue that the debris presented in *Asdfg*, by their cumulative and unpredictable arrangements, are entropic.

9.1 *Asdfg*: burst of codes onto screen

Jodi (Joan Heemskerk and Dirk Paesmans) are a Dutch/Belgian duo of artists living and working in Amsterdam and Barcelona. In 1998 they produced a piece entitled *Asdfg*, which is among the first online works to aestheticise code and reflect on the nature of codes as a language form. As such, Jodi invite the reader to think about codes from a pictorial perspective as well as a series of commands. The work is an ASCII-based piece, in other words, built with a character-encoding scheme originally based on the Roman alphabet. The title *Asdfg* refers to the ordering of letters found on the second row of a Qwerty keyboard. The expression *Asdfg* is the Internet equivalent of the 'no comment' phrase. Turning now to the question of the work itself, *Asdfg* is based on an algorithm that randomly picks up discarded directory links located in the history of the web browser. More precisely, the algorithm takes the sequencing of codes that makes the directory structures and turns them into computer animations. Each address is used and translated by the algorithm for approximately 20 seconds and then picked up by another link. Indeed, a closer look at the address bar reveals how the browser automatically jumps between several different websites. The result is a minimalist, abstract, black and white, nervously twitching animation, which is quite difficult for the viewer to watch.

Not only does *Asdfg* seem uncontrollable and distorts the perception of the machine, but it also comments on it. As Jodi describe it themselves: 'we explore the computer from the inside, and mirror this on the net' (Jodi: 1997). The artists are raising the curtain on the unseen architecture of the technology. Thus, the digital leftovers treated in their work are turned into a

lens through which an exploration of the medium is rendered possible. Such a strategy in *Asdfg* can remind the viewer of the work of artist George Ness, and his exploration of error in early computer graphics. Both works share some similarities in their appearances; both are abstract, black and white patterns of flickering lines across the screen, which short-circuit the operating system in order to create a quiver within the system. As its title suggests, Ness' *Curtains* fosters a theatrical metaphor with the technology it explores and, like *Asdfg*, gives the viewer a peek behind the scenes of the medium. The piece, conceived in 1971, insists on the spectacle of the computer screen and plays with its newness and wonder. However, *Asdfg* was produced in the late 90s and refused to display the wonders of the Internet, depicting instead an unforgiving account of the technology it investigates.

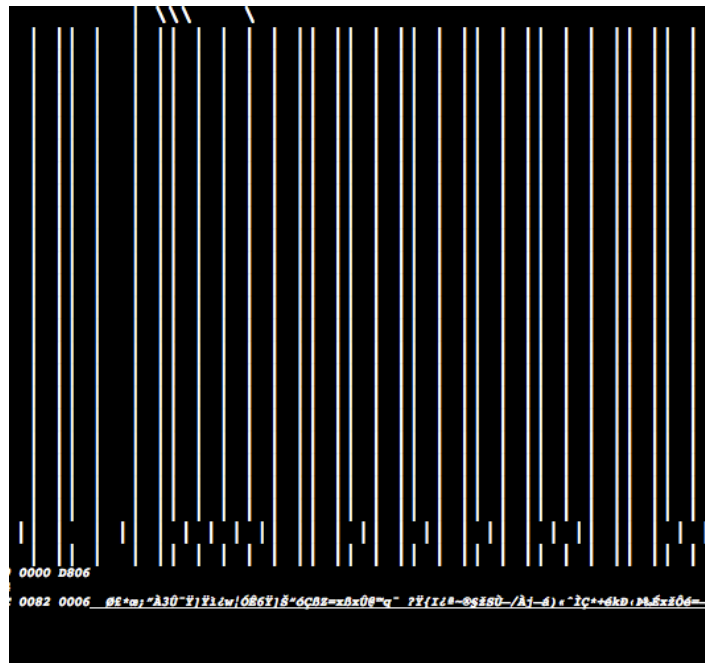


Fig. 24) Screenshot from *Asdfg* (1998) by Jodi, accessed on 16/04/2013 at <http://asdfg.jodi.org>

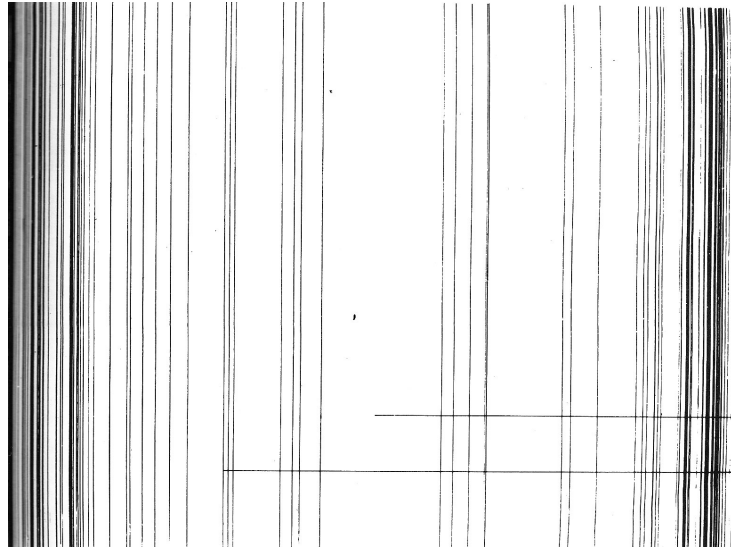


Fig. 28) *Curtains* by George Ness in *Cybernetics, Art and Ideas* (ed.) Jasia Reichardt (1971)

9.2 Mallarmé's blank: when language flashes

I'd like to pause for a moment on the flashing phenomenon at the heart of *Asdfg* and conceptualise it by historicising it. Indeed, with its title and its structure as an ASCII piece, *Asdfg* does not simply deconstruct the operating system but brings into the light the ambiguities and polysemy of language via an exploration of hyperlinks, which can be perceived in early modernist poetry and its use of typography. Thus, the aestheticisation of hyperlinks, in addition to the presence of black and white twinkling graphic design, invites us to read Jodi's *Asdfg* work in the light of Stéphane Mallarmé's *Un Coup De Dés*.

In 1897, Mallarmé wrote his poem *Un Coup de Dés jamais n'abolira le Hasard* (*A Throw Of the Dice Will Never Abolish Chance*). The poem is part of the poet's last project called *Le Livre* (*The Book*). *Le Livre* was never finished and would have consisted of ten volumes that could be shuffled at will. The poem depicts the aftermath of a shipwreck and describes a captain, who having forgotten to make nautical calculations, has navigated his ship into a storm and is floating on the surface of the sea, contemplating the night sky before the sea engulfs him. The captain, also named the Master, holds a dice in his hand but hesitates to throw it and give up to fate. As a result, *Un Coup*

de Dés juxtaposes the mathematical permutations of the *Livre* with the random computation of a dice, superimposed on the captain's character.

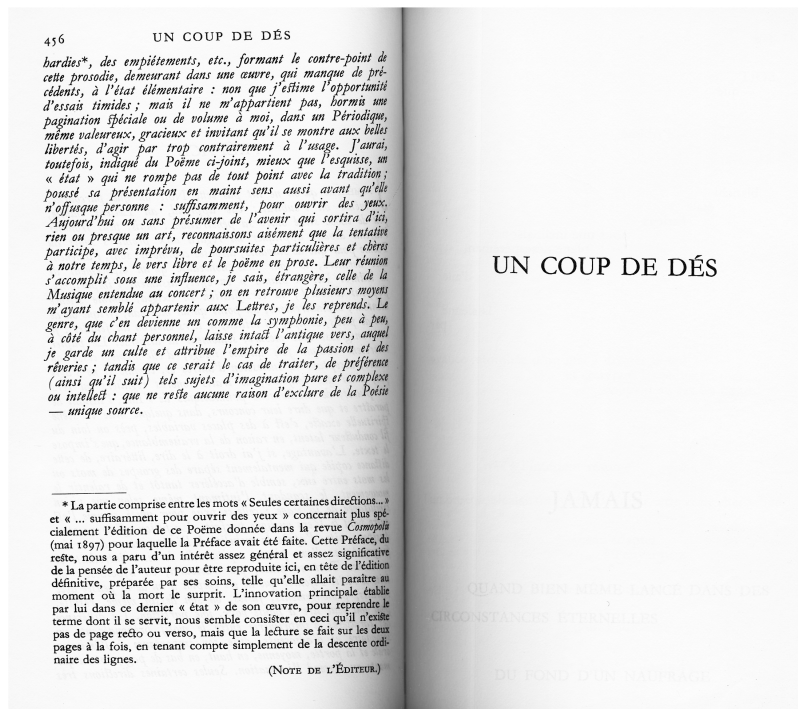


Fig. 29) Stéphane Mallarmé, *Un Coup de Dés* (1897), Bibliothèque de le Pléiade, Gallimard, 1979.

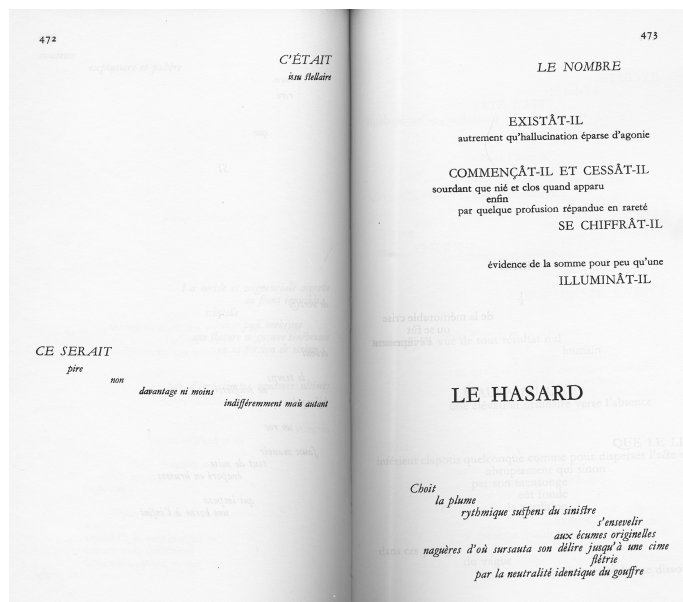


Fig. 27) Stéphane Mallarmé, *Un Coup de Dés* (1897), Bibliothèque de le Pléiade, Gallimard, 1979.

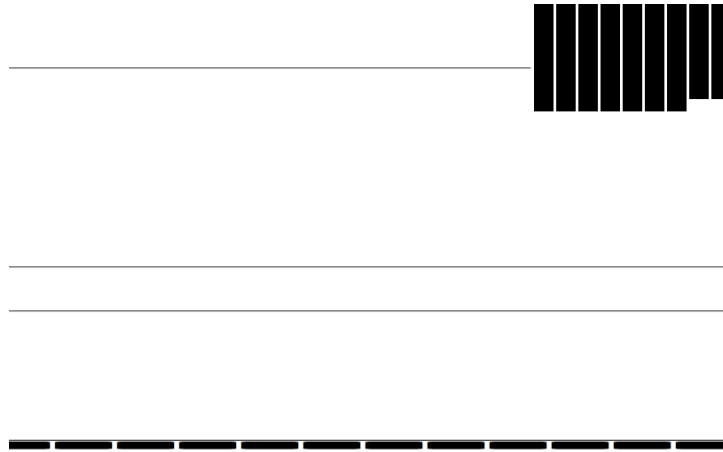


Fig. 30) Screenshot from *Asdfg* (1998) by Jodi accessed on 16/04/13 at <http://asdfg.jodi.org> .

It is striking how *Asdfg* and *Un Coup De Dés* echo one another. Both works deal with a form of debris. Mallarmé sets the scene of his poem in the middle of the debris of a shipwreck right after the ship has gone under and the text also works on the accumulation of the remains of verses, while *Asdfg* uses the remaining files in the web browser. But it is their visual compositions, the flashing aspect of the animations, the alpha-numerical elements displayed on the screen in *Asdfg* which seem to echo Mallarmé's use of the blank, of different types of font and the alternative use of capital letters. The flashing dimension of Mallarmé's typographical experiments at the end of the 19th century has also been underlined by Walter Benjamin who, in the 1920s, compared Mallarmé's poem to the flashing street signs of the modern city (1923-1926: 456). Between 1923 and 1926, in a short passage of his writings entitled *One-Way Street*, Benjamin explained:

Mallarmé, who in the crystalline structure of his manifestly traditionalist writing saw the true image of what was to come, was in the *Coup de Dés* the first to incorporate the graphic tensions of the advertisement in the printed page.

(Benjamin, 2005: 456)

If Benjamin doesn't develop his point at length, he nonetheless describes Mallarmé as an artist who foresaw the codes of modern visual communication and included them in his writing. Benjamin also stipulated that the Mallarméan typographical experiments not only influenced the Dadaists and Surrealists (as for instance Man Ray in his 1929 film *Les*

Mystères du Château de Dé), but that it also marked the beginning of an evolution of both the book as an artefact and the way one reads it. Here, Benjamin's mention of the 'blizzard of changing, colourful, conflicting letters' of the street signs (2005, [1923-1926]: 456) can remind the viewer of the visual effects of *Asdfg*.

The typographical dimension of the poem was also explored in the late 1960s by Marcel Broodthaers. Indeed, in 1969, the member of the Groupe Surréaliste Révolutionnaire blocked out the original lines of the poem with solid black bars, varying in width according to the different typographies of the poem. In his interpretation of Mallarmé's poem, Broodthaers reduced the text to its spatial dimensions and forces the viewer to consider the poem solely as an image. Accordingly, he even substituted the word *Poème* by the word *Image* on the title page.

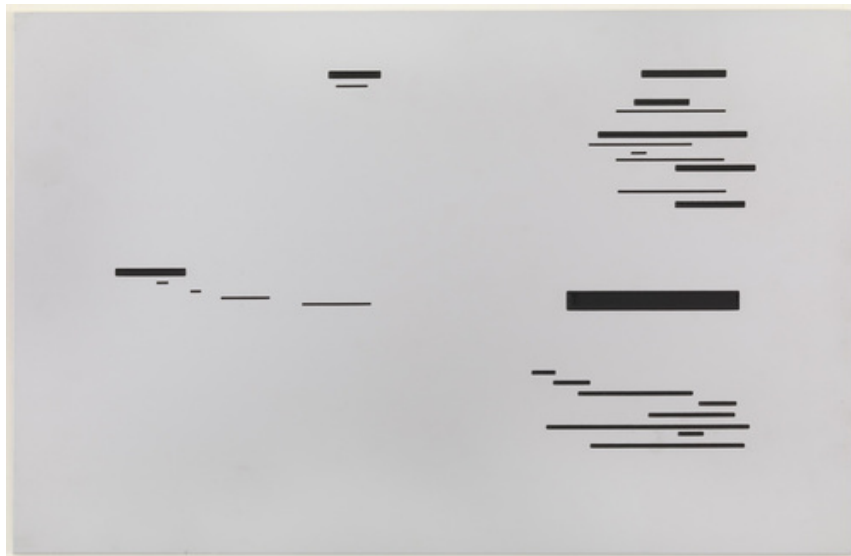


Fig. 29) *Un Coup de Dés jamais n'abolira le hasard* (1969) by Marcel Broodthaers available at http://www.moma.org/collection/object.php?object_id=146983

If on the one hand, the mention of Broodthaers' piece seems to fill a gap between Mallarmé and Jodi, in that it turned the text into an artefact that resembles the computer animations generated by *Asdfg*, it also flattens out the complexities of language to create a minimal encoding of the text, where each line is morphed into a black line, thus erasing the poetic work on verses by the Symbolist poet. If both *Asdfg* and *Un Coupe de Dés* trigger

processes of visualising information respectively on a computer screen and a book page, the information contained in the compositions created is, even if manipulated, still present in the final artefact. Broodthaers erased the narration of the poem to reduce it to a minimal abstract composition.

It is worth remarking that the structure of the poem itself, with its use of alexandrine verses, frames the blankness and flickering language of Mallarmé. The alexandrine verse here is the starting point, the metrical unit from which the poet can explore the deconstruction of poetic rules. The use of alexandrine by Mallarmé is all the more significant in that it occurred during the crisis of free verse. This crisis of verse, qualified as such by Mallarmé himself, was, among other factors, a reaction to the death of Victor Hugo in 1885. The disappearance of the overarching figure of Hugo left the throne of poetry vacant and a lot of debate ensued among the post-romantic generation as to what direction poetry should take. The introduction of a code would be a part of the new system that Mallarmé set up for himself. In this context, Mallarmé also tried to substitute the rules and constraints of the alexandrine by a new system. His position on free verse was as follows:

The alexandrine must be reserved for the 'solemnity' of 'grand occasions', whereas free verse is the place for individuation, the place where the poet forges his instrument, a voice that belongs to him alone.

(Meillassoux, 2011: 22)

In the new system that Mallarmé constructed for himself, the poet took full advantage of the blanks that French verse allows and which is in that regard, according to him, superior to antique verse. The French scholar of philosophy, Quentin Meillassoux, in the analysis of the poem he presents in *The Number and the Siren, A Decipherment of Mallarmé's Coup de Dés*, asserts that French verse, unlike antique verse, is comprised of stanzas and couplets and as such contains a certain rhyme (2011: 58). Thus 'the regular metric insists (in this lies its modernity) that the Beautiful contains at its centre a void, a blank: that very blank that separates the two verses while permitting them to resonate together' (Meillassoux, 2011: 58). Mallarmé not only develops the alternative use of blanks and verse between stanza and couplet, but he radicalises it by substituting any punctuation marks by a blank. Thus, a compound word such as 'au delà' (beyond) is here separated

by a blank and thereby becomes two distinct elements. It is this aspect of the work that Broodthaers would later expand on in his interpretation of the poem. The result of these manipulations that Mallarmé carries out is the expression of a form of violence towards the rules of French Poetry, but also towards his own text. It seems indeed that Mallarmé has himself atomised his poem onto the page of the book. Thus the text is randomly scattered over the page, as if depicting the aftermath of a violent literary explosion. This violence finds an echo in the explosive nodes that Jodi display on the Internet.

9.3 Jodi's dazzling resistance to the network

The critical visualisation of the Internet network produced by Jodi, and which can be dated back to *Un Coup de Dés*, is an instance of what Austrian artist and theorist Norbert Pfaffenbichler describes as syntactic-abstraction. Pfaffenbichler, who coined the term, defines it as the:

production [of] strategies that (re)translate the machine code, as unfiltered as possible, into an event which can be perceived by humans.
(Pfaffenbichler, 2004: 63)

Pfaffenbichler clarifies the notion of syntactic-abstraction in a book accompanying the exhibition *Abstraction Now*, which aimed at inserting software art within the larger fields of contemporary cultural production and thought (Manovich: 2003). He refers to syntactic-abstraction in relation to the Austrian Abstract, a group of artists concerned by principles of abstraction through a variety of media. The definition provided by Pfaffenbichler, by incorporating the idea of an unfiltered approach, helps us to understand the importance of using codes as raw material in order to reveal the technology the machine is working with. Thus Jodi use discarded codes to reveal the normally invisible networks that constitute the Internet. Indeed, one of the interesting aspects of *Asdfg* is its use of the Internet network as an incongruous material. Indeed, with its placelessness and elusive boundaries, the Internet resists being defined as material, which by definition implies form and boundaries. Yet Jodi defy the elusiveness of the

Internet network by reversing its architecture and revealing some of its backbone.

The resistance to the network that is manifest in *Asdfg* is also conveyed via a form of visual violence in its relentless succession of 20 second flickering animations. The random method by which *Asdfg* picks up the links it then translates into bold contrasted animations renders the piece even more challenging to watch. The violence at play in Jodi's work can also be found in Mallarmé's poem. The violence of the poem is manifested in several ways. In the French version the skipping of prepositions produces saccades within the text; for instance on page three Mallarmé writes 'jusqu'adapter à l'envergure' (to the point of matching the span) instead of 'jusqu'à adapter' and by conflating the two words, the poet highlights the rhythm of his text and confers some violent agency to it. *Un Coup de Dés* is reduced to a minimal succession of blanks and letters, of positive and negative elements not so dissimilar from what constitute the binary sequences of code displayed in *Asdfg*. This use of the blank also highlights the 'flashing' appearance of the poem, which can also be observed in Jodi's *Asdfg*.

I'd like to propose here that *Asdfg* disseminates what Foucault names in Roussel's poetry 'explosive lights' (1986: 9). For Foucault, Roussel's explosive lights are a succession of parentheses used to elucidate the text, but which placed within the poem, become an enigmatic text in itself 'both luminous and shadowy' (1986: 9). The explosive lights of the parenthesis are disruptive and yet transform the poem into an 'impregnable fortress' (1986: 9). Similarly, the hyperlinks of Jodi's website are explosive lights which symbolically and visually destabilise the network it lives off. Being emblematic of Internet Art, or in other words, being a piece of art that happens on the Internet in the in-betweens of information exchange, the website nonetheless disrupts the very platform that supports it in order to question not only the use of a framework of information as a material but also to critique the structural dangers of the network. Jodi have indeed declared that their practice is 'the product of anger at the administered and coercive functionality of the Net and the computer interface generally' (Baumgärtel, 1997). If Jodi provide the viewer with a visual critique of

networks, a theorisation of networks as paradigms for the circulation of information is discussed in relation to digital culture in *The Exploit, A Theory of Networks*, by Cultural and Media theorists Alexander Galloway and Eugene Thacker. The book is an attempt to critically investigate the nature of networks by underlining the fact that behind the rhetoric of liberation associated with them, networks are actually weapons in which connectivity is a threat (Galloway and Thacker, 2012: 16). This position echoes Jodi's use of links, where a virtual link, which is supposed to facilitate communication and connect to another page, becomes misleading in their hands. In other words, Jodi, through the manipulation of debris they undertake, reveal and sharpen the nodes of the networks' structure to such an extent that these nodes become potential points of rupture rather than points of connection. The visual flash becomes a translation of the conceptual short-circuit they operate within the Internet, as a mean of suddenly and dramatically bursting the connection between pages on the interface. The disruptive approach adopted by Jodi seems to resonate with Pfaffenbichler's view of the techno-syntactic approach:

The techno-syntactic process involves [...] various interventions- most of them destructive- reveal these techno-syntactic structures and employ them artistically.
(2004: 64)

I would add that their approach could even be described as a *macro*-techno-syntactic one insofar as, in *Asdfg*, Jodi focus on the nodes, the links of the network they are manipulating. By doing so, they work from a detail of the overall structure they are dismantling and blow it up, in front of the viewer's eyes.

Jodi play with the nooks and crannies of the Internet to blaze them in a bespoke fashion onto the viewer's screen. Through the retrieval of partly hidden information, Jodi visualise and destabilise the network by sharpening its nodes. Following up Galloway and Thacker's account of networks, one realises that networks represent just as much a technical reality as they become a cultural concept that illustrates notions of power and surveillance. The debris are the agents which flash the two sides of the definition of network onto the screen. Since digital debris are themselves

the projection of a cultural concept onto a technical reality, they allow a back and forth dialogue between the computational and the cultural. This position also highlights to what extent, in an online piece like *Asdfg*, the walls of those cultural concepts are permeable and how they inform one another. The permeability of concepts is also illustrated through the blurring of the spaces that the viewer experiences. By treating networks as a material, Jodi invite the viewer to think about what constitutes the Internet and what role the different copies of a webpage plays.

9.4 Online radicalism and the merit of confusion

The capacity of Jodi to expose the nodes of the Internet and to formulate a reflection on the state of language, writing and what constitutes Internet Art and its display, testifies to the radicality of their work and positions Jodi as the most well known representatives of avant-garde Internet Art. Even though their work is rightly not labelled as 'political art', I read in Jodi's early 1990s work a form of resistance and radicalism that goes beyond an Oulipo strategy, despite the fact that Cosic describes Oulipo as one of the main influences of net.art (Cramer, 2005: 112). Indeed, in light of Galloway and Thacker's account of strategies that challenge the function of networks, Jodi's approach is not formalist but political. Thus one starts to realise that Jodi's work is not solely about a visualisation of obsolete data but about an absurd aestheticisation of discarded data, in order to point at the network as a tool of control and surveillance. As such, it could be argued that Jodi's tactics embody a form of resistance, which involves 'discovering holes in existent technologies and projecting potential change through those holes' (Galloway and Thacker, 2011: 81). These holes are what Galloway and Thacker refer to as exploits:

The goal for political resistance in life networks, then, should be the discovery of exploits – or rather, the reverse heuristic is better: look for traces of exploits, and you will find political practices
(2011: 82)

These holes seem precisely to echo the nodes of networks that Jodi blow up. The exploits are represented here in the debris of links, the traces of the

web navigation that Jodi use. As Jodi describe in an interview with Internet Art theorist Josephine Bosma, 'the work we make is not politically oriented, except that it stands in the net like a brick' (Bosma, 1997). In this instance, I would like to submit that the brick Jodi are mentioning is the flash with its signification that, temporarily, creates a halt in the Epistemology of Search and which thereby renders their work political. As part of the first generation of net artists Jodi very much embody the radicalism and political activism that have characterised much of early experiments with the Internet as a medium. It is thanks to the combination of its political subject matter, its online dissemination and display that *Asdfg* and *Jodi.org* are according to Stallabrass, radical pieces (2004: 25). I would argue that the political activism or radicalism evident in a piece like *Jodi.org* gains another significance in today's artistic productions, where 'political art' is so in fashion. As Stallabrass explains in an essay titled 'Can Art History Digest net.art':

[...]much Internet art has been connected with radical political activism. At the time of its inception, this was in itself enough to have it judged to be of the utmost naivety and unfashionability. Now, when "political" art has been back in fashion for some years, a deeper problem is revealed: while documentary forms that examine the representational rhetoric of the political are deemed acceptable (in part because they reflect upon and thus also instantiate the autonomy of a medium), work that might be put to political use or encourage popular participation are much less so.
(2009: 14)⁴⁶

I'd like to submit that Jodi's work is radically political in as much as it fulfils the two conditions of what Stallabrass describes as political activism; namely the capacity to explore the representation of politics and at the same time to encourage participation. Jodi's work fulfills these two conditions in one of their most well-known pieces: <http://www.jodi.org/>.

Started in 1993, the piece represents an instance of early Internet graphic design and has been subject to several reconfigurations throughout the years. The website opens on a jumble of green text, figures and punctuation which are all flashing. The opening page then leads to an enigmatic map of

⁴⁶ Available at http://www.courtauld.ac.uk/people/stallabrass_julian/2011-additions/Digest.pdf (last accessed 27/02/15).

the website, where links redirect to a series of dead ends filled up with Internet debris that send the viewer back to even more dead ends. The piece, in its aesthetic, borrows elements from military vocabulary and as such reminds the viewer of the origins of the Internet. Accordingly, I would argue that according to what Stallabrass maintains in his definition of political activism, the website documents the political genesis of the Internet. Moreover, the website appears as if it has hacked the viewer's computer system, forcing her/him to be part of the piece. Furthermore, the fact that the website feeds off the viewer's data strengthens the call for participation that *Jodi.org* purports. The activism of the piece is most noticeable in what the website encrypts. Indeed, one look at the source code of the opening page and one realises that the HTML of the opening of *Jodi.org* contains the diagram of a bomb.

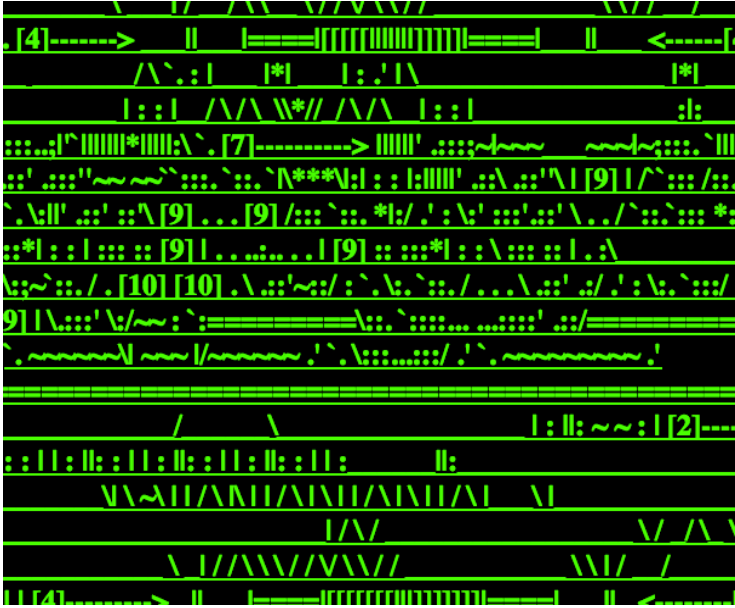


Fig. 30) Screenshot from <http://wwwwwwwww.jodi.org/> (1993-) by Jodi accessed on 30/01/15 available at <http://wwwwwwwww.jodi.org/>


```

1 <html><title> %Location | http://wwwwwwwww.jodi.org </title>
2
3 <BODY BGCOLOR="#000000"
4 TEXT="#00ff00" LINK="#00ff00" VLINK="#00ff00" ALINK="#ffffff">
5 <font size=5><CENTER><blink><b>
6 <A HREF="100cc/index.html">
7
8 [3]
9
10
11
12
13
14 [4]
15 [5]
16
17
18
19
20
21
22
23 [6]
24 [7]
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26 [8]
27 [9]
28
29
30 [9]
31 [10] [10]
32
33 [9]
34 [10] [10]
35
36 [9]
37 [9]
38
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Fig. 31) Screenshot from the source code of the opening page of <http://wwwwwwwww.jodi.org/> (1993-) accessed on 30/01/15 available at <http://wwwwwwwww.jodi.org/>

Mallarmé famously stated ‘I don’t know any other bomb than a book’ (Marchal, 1995: 504), yet his approach was quite different, for he explained in the preface of *Un Coup de Dés* that his work was not so much about subverting the alexandrine meter or breaking down any poetic conventions but about dispersing them (Mallarme, 1897: 455).

The unintelligible page of flashing green text, which opens *Jodi.org*, plays with the ignorance of the viewer and displays fragments of HTML script which resemble codes, but which may or may not be codes. The aim of the work is to create a virtual maze that undermines the viewer’s navigation of the website and forces her or him to blind navigation. What is striking in *Jodi.org* is the implementing of a form of confusion, which participates in a questioning of the meaning of data. As Cultural theorists Galloway and Thacker explain, data has no meaning in itself:

Data has no technique for creating meaning, only techniques for interfacing and parsing. To the extent that meaning exists in digital media, it only ever exists as the threshold of mixtures between two or more technologies. Meaning is a data conversion. What is called ‘Web content’ is, in actual reality, the point where

standard character sets rub up against the hypertext transfer protocol.
(2011: 145)

Thus, I would say that Jodi's work invites the viewer to operate a conversion of meaning as to what data stands for, through a distillation of confusion. Similarly Meillassoux in *The Number and the Siren* remarks that the techniques experimented with by Mallarmé, as early as the 1870s, 'consisted in losing readers from the outset with an opening line whose construction initially escapes them entirely' (2011: 118). I'd like to argue that the confusion deployed in both *Un Coup de Dés* and Jodi's work participates in a strategy that implies that the work escapes self-containment and starts when it is encountered or experienced by a viewer. The confusion of the piece, which also strengthens its radicality, lies in the refusal of meaning and the viewer's necessarily fruitless pursuit of it. The confusion also arises from the viewer's assumption that the piece *has* a meaning. As such, the strategy of confusion grounds their work in an anti-finalist position, in other words a refusal to be useful as an artwork. To understand the implications of *Asdfg* and the sense of confusion it produces in the viewer, let us examine another of Jodi's works, entitled *404*. *404* helps to grasp the function the artists attribute to confusion. *404* is a website which revolves around the idea of the error page. Each of the three numbers of *404* leads to a different page comprised of a typing box surmounted by a list of codes. The typing box invites the viewer to interact with the piece, although several filters, implemented by Jodi, distort whatever the viewer might type, making his or her input look like what is already present on the screen.

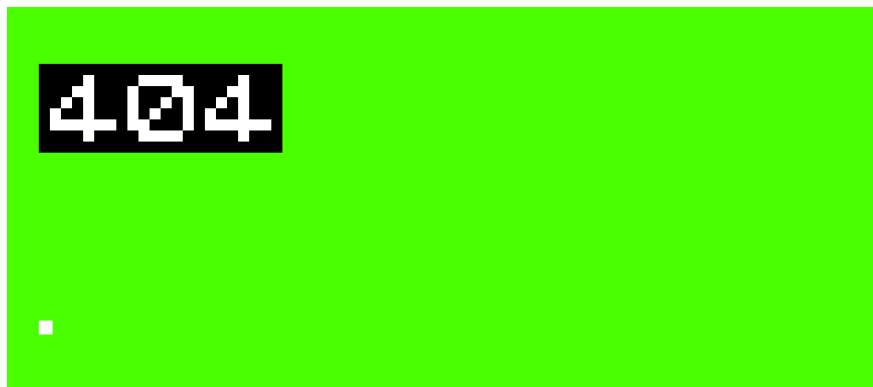


Fig. 32) Screenshot from *404* (1994) by Jodi accessed on 16/04/2013 available at <http://404.jodi.org/>

As such, the piece negates the role of the viewer as a user and confines her or him to a more passive role. In that regard the work illustrates the differences between programmer and user. The emphasis on widening the gap between viewer and producer appears to be a strategic move to shift the user's view of the technology she or he uses. Thus a programme such as the one in *Asdfg* or *404* seizes control over the machine, which keeps generating more content and confusion. The data generated and displayed on the screen may act as a link to the opening page, if the viewer manages to find the link hidden within the abundance of material on show. Part of the difficulty of Jodi's work is to be able, as a viewer, to distinguish what are real codes, what is actually the backbone of the webpage and what is the product of the artists' manipulation. What is actually debris and what has been created to fill up the space of the website? Jodi's works, by displaying indiscernible streams of scripts, fosters the idea of confusion and unintelligibility and thereby resistance to decipherment. Yet a question remains, is Jodi's work difficult or encrypted? The presence of the diagram bomb in *Jodi.org*, which contains most of the work's signification, seems to confirm the thesis that Jodi's websites may be encrypted just as much as *Un Coup de Dés*.

9.5 Meillassoux: encoding serendipity

In *Le Nombre et la Sirène, un déchiffrement du Coup de Dés de Mallarmé* (*The Number and the Siren, a Decipherment of Mallarmé's Coup de Dés*) Meillassoux proposes that the poem is encrypted and that it can be deciphered. In that regard, Meillassoux distinguishes his position from the one held by Jacques Rancière. Indeed, the latter in *Mallarmé: the Politics of the Siren*, argues that the poem is not hermetic but difficult, and dismisses the possible presence of any key or clue to interpret its hidden structure (2011: 10).

Meillassoux' book then reads as an *exposé* as to why and how the poem is coded, and he attempts to decipher *Un Coup de Dés*. His analysis reads as a

detective plot being solved in front of the reader's eyes. Meillassoux's analysis can be compared to a fictional piece, in dots, that aims at defending that the ultimate finality of the poem is to prove a necessary contingency. It could be said that the book is at times self-defeating in the types of clues it gathers to prove the existence of a code, but this would be to miss out the original intention of the book, which is about proving the determining role of contingency in the text. The theorisation of Mallarmé's poetry, as I read it in *The Number and The Siren*, oscillates between the plausible and the impossible. As such, I would argue that the speculative enterprise intended in his book prevails over the actual facts and series of clues he gathers to support the idea that the poem is necessarily coded. Nonetheless, his research on the poem represents a solid account of Mallarmé's work and can be referenced to contextualise the work.

Meillassoux argues that an endogenous code lies at the heart of *Un Coup de Dés*. According to him the code is a secret number, which is at the same time contained in and revealed by the poem itself. Thus, *Un Coup de Dés* contains and conceals the code of its decipherment, which resembles *Jodi.org's* source page code that reveals the diagram of the bomb interlaced in the website. Meillassoux advocates that there is a reason for Mallarmé to encrypt his poem with a number. The author begins by explaining that the code, present in *Un Coup de Dés*, is endogenous insofar as it can only be decrypted by means of clues disseminated throughout the poem. The author backs up his argument by referring to the manuscript of the *Livre*, where large sections of the work are dedicated to calculations. Another reason given by Meillassoux to justify the presence of a code in the poem is that Mallarmé intended to have his poem read aloud during performances called 'ceremonies', in which the reader of the book is described as an operator.

After numerous calculations – among which is the realisation that the title of the poem contains seven words – of the number of letters in the poem, Meillassoux finds that seven is the secret Number. Then he reveals that the secret Number of *Coup de Dés* is actually encrypted within 707. The 0 contained in 707 reflects, for Meillassoux, the presence of a void, a vortex – which mirrors Mallarmé's extensive substitution of punctuation by blanks.

He then advocates that the palindrome 707 reflects on the quality of the Number, while at the same time it contains itself and reveals itself. Thus, the secret code of the poem has a certain self-reflexivity. Furthermore, the self-reflexivity of *Un Coup de Dés* to disclose itself is expressed, according to Meillassoux, in a couple of verses on the central page of the poem. Interestingly, *Asdfg* can also be described as self-reflexive. Insofar as the piece has the ability to recycle itself by reusing discarded links, the site can recycle its own http address. Thus, the viewer can observe the re-appropriation by the machine of its own debris. As a result, the website can be described as an instance of self-referentiality. Interestingly, it has to be noted that *Asdfg*, with its automated algorithmic process, even embraces an analytic method that isn't necessary for self-recycling.

9.6 Performativity

Asdfg and *Un Coup de Dés* provide images which are in constant motion and which are subjected to a continuous process of generation. As such, one of the interesting aspects of Jodi's tactics in *Asdfg* is how they confer some performativity on their work by employing the viewer's screen as a material and not just as a surface to display the work. The performative component of *Asdfg* seems to resonate with Mallarmé's *Coup de Dés*, which can also be thought of as performative. Meillassoux's intention is to defend the idea, in line with his speculative realism, that the poem is self-generated, that it unfolds itself before our very eyes, without emphasising the role of Mallarmé. Not only was *Coup de Dés* designed to be performed during ceremonies, but the space of the poem also becomes a space in which one witnesses Mallarmé's thought process. As such, the poem represents a thought in its genesis, i.e. the thought of composing the poem, as it unrolls before the reader/viewer's eyes. Similarly, *Asdfg* translates 'the machine code' and renders it visible to the viewer in real time. It could also be argued that the work duplicates the image of the viewer. Indeed, as the algorithm retrieves the codes that make the discarded links, the viewer is invited to visualise his or her use of the Internet. Thus it could be pointed out that

Asdfg performs, by proxy, a form of portraiture on behalf of the viewer. Moreover, the connection that was revealed between *Asdfg* and some instances of Austrian Abstraction⁴⁷, here can highlight the performative dimension of Jodi's work. Indeed Pfaffenbichler describes some of his work as *tableaux vivants* (2003: 64) in order to distil some performativity from his generative abstract pieces. Thus Pfaffenbichler, in 2003, describes abstract as a self-referential approach or, in other words, as art about art. However, the artist asserts that if modernism was about creating a completely autonomous abstraction in regards to its status as an artwork and its meaning, contemporary practices, such as the one displayed in *Abstraction Now*, offer a more layered vision of abstraction which encompasses, for instance, comments on history or psychology (2003: 64). The performative dimension of *Un Coup de Dés* has been well understood and revealed by Jean-Marie Straub and Daniele Huillet's film, *Toute Révolution est un Coup de Dés (Every Revolution is A Throw of the Dice)*. The film, approximately ten minutes long and shot in 1977, takes place at the Père Lachaise Cemetery in Paris and opens with a quote from 19th century French historian Jules Michelet which reads: 'Toute révolution est un coup de dés.' Straub and Huillet here associate *Un Coup de Dés* to the historian who is renowned for having written a large *Histoire de la Révolution* between 1847-1853 and who wrote that sentence before Mallarmé's project. After this opening sequence, Straub and Huillet link Michelet's quote to the 19th century Parisian revolution, the Commune, by pausing the camera for a moment on a monument to the dead of the Commune (1871). Then the film depicts nine characters, five men and four women, including Daniele Huillet, sitting in a large semi-circle on the grass of a little hill in the cemetery. The hill, close to the monument shown at the start of the film, is actually the place where the last *Communards* were buried, after being killed along the wall where the monument now stands. Each character, one for each typographical style of *Un Coup de Dés*, is then individually filmed as she or he, recites verses from the poem. As each actor is performing the verses,

⁴⁷ From the exhibition catalogue of *Abstraction Now*, available at <http://www.pfaffenbichlerschreiber.org/en/Texte/ABSTRACTIONNOWCATALOGUETEXT> (last accessed 27/02/15).

the film displays English subtitles on the bottom left of the screen, respecting the typographical configuration set up by Mallarmé. Thus men recite the verses in capital letters while women recite the verses in lower case. Interestingly, the diction of each participant, by respecting the rules of alexandrine reading (dierèse and mute 'e'), where every syllable is meant to be pronounced in order to keep the count of syllables to 12, is syncopated and as such respects the importance of the blanks, here turned into silences, of Mallarmé's poem. The film, by accelerating the succession of shots in the middle of the poem, emphasises the rhythm created by Mallarmé. The saccade of images is also underlined by the position of the actors in the space, for as they speak, the men look towards the right while the women look towards the left at different angles. The result is an interpretation of the poem, which, in light of *Asdfg*'s blaze of hyperlinks, highlights the radical performativity of the verses contained in *Un Coup de Dés*.

For Meillassoux, the poem is also performative, but for another reason. According to him, the Number thrown by Mallarmé in the text – in other words by including the cipher key in the poem – becomes a sacrifice to the poem's artifices, which confer a performativity to the text.

For us, the fact is established: Mallarmé counted the words of his Poem to engender the Number. The word 'sacre' is indeed performative: it really does consecrate the Number through the sole fact of being written, delivering to it the last unit of the count necessary for its completion.

(Meillassoux, 2011: 80)

Meillassoux refers to another type of encoding, which operates at a different level from the visual encoding experimented with by Broodthaers. If the secret Number contained in the poem is seven, Meillassoux insists that it needs to be activated in order to explicate the text and shouldn't remain in its latent state. The strategy doesn't seem too dissimilar from an algorithm, which runs a work like *Asdfg*. In *Asdfg* Jodi deliberately radicalise the autonomy of the work by simplifying the algorithm. Indeed, traditionally, an algorithm is composed of two intrinsic elements: Automation and Decision. Automation implies that the algorithm must convert a theoretical procedure into an automated mechanical procedure, thus enabling the algorithm to perform a task over and over again. Decision refers to the ability of the

algorithm to 'decide' on a particular user input or to select the optimal result among a set of possible alternatives (Jackson: 2013). In *Asdfg*, the algorithm is reduced to its automatic nature and the decisional purposes are substituted with unpredictability, in order to disable the usual function of the algorithm where a goal is always programmed. It could be argued that Mallarmé, by creating a new set of poetic rules for himself, programs his writing in a fashion that seems to resonate with the way in which Jodi created an algorithm to run *Asdfg*. The algorithm created by Jodi to perform the work resembles the Number, which on the one hand is the anticipated result of the throw of the dice in *Un Coup de Dés*, but on the other hand, its trigger.

The modification of the algorithm in *Asdfg*, combined with the contingency of the result in retrieving data, renders the whole piece open to chance. Not only is the visualisation of the links unpredictable, but data turned into animation differs from one computer to another. In view of the chance explored in the website, the viewer is left with a sense of undecidability. This undecidability is an idea that Jodi has explored in several of their works. It is notably present in <http://www.jodi.org/> and *404*, where the viewer observes what may or may not be fragments of codes. The incomprehensible scripts displayed, which may or may not be real system error messages, are one of the ways by which Jodi convey their ironical view of the technology. Thus the artists place the viewer in a constant tension between what is artificial and what is not. If Jodi disrupt and turn the networks that constitute the Internet upside down, nonetheless they do not disclose what is real code and what is not, putting the viewer in an uncertain position. Interestingly, to pursue a comparison with Mallarmé's poem, the undecidable is the key idea in Alain Badiou's reading of *Un Coup de Dés*. In *Being and Event*, Badiou suggests that *Coup de Dés* is the poem of the undecidable, of the bet. The bet that Badiou mentions refers to the speculative nature of Meillassoux's theories about the potential secret that can be found in the poem. In *A Throw of The Dice*, the Master declares: 'A throw of the dice will never abolish chance', (*Un coup de dés jamais n'abolira le hazard*), a key sentence that runs throughout the whole poem.

The sentence 'a throw of the dice will never abolish chance' becomes a meta-text, inviting a reading of the poem not only as a symbolist poem, but also as a poem about poetry and about the place of unpredictability in a work of art. The sentence, as a leitmotiv of the poem, may show some similarities with the algorithm that runs *Asdfg*. Meillassoux also sees in the 0 of 707 the expression of the eternal contingency of the poem.

Following up this reading of Mallarmé's poem, Meillassoux pushes Badiou's investigation further by stating that *Un Coup de Dés* is paradoxically, at the same time, contingent and necessary. Meillassoux postulates that the sole implementation of a code by Mallarmé is not enlightening enough to understand the poem, for the motivation to do so is more revealing. It is as if the French scholar is reading Mallarmé's poem as a piece of conceptual art, where the focus of the piece lies in the intention, more or less embedded in the final production.

After his speculative demonstration, Meillassoux makes a contradictory claim that the Number in *Un Coup de Dés* can only be discovered by chance. Indeed, it is only the Number that can activate the poem. Therefore if one doesn't find the Number one can't access the meaning of the poem. Thus in *Un Coup de Dés*, chance is not only explored but also exhausted to the point of becoming absurd. For Meillassoux, here lies the key to *Un Coup de Dés*, a poem that perpetually oscillates between contingency and necessity. He points out that accordingly chance obtains a contradictory status:

Here 'Chance' is credited with a power of contradiction (it 'contains the Absurd') that allows it to be what it is, as well as what it is not – and thus to be 'infinite' in the dialectical (rather than mathematical) sense: to contain always already what is beyond its limit, and to absorb that which tends to oppose it.
(Meillassoux, 2011: 30)

Here, the mention of 'the Absurd' by Meillassoux seems to resonate with Jodi's tactics. Indeed, in both cases, the exploration of chance is so extensive that it becomes an alienating component of the piece. The idea of resisting chance could be perceived as the literal leitmotiv of Mallarmé's poem, whereas *Asdfg* acknowledges and embraces it. Although, Mallarmé's poem is an attempt to challenge chance, in vain Mallarmé ends the poem with the sentence 'Any thought is a throw of the dice' (*Toute pensée émet un coup de*

dés) as a sign that the sailor and the author may have surrendered, after all, to chance. Meillassoux explains the paradoxical nature of chance by using a dice game analogy. When a player throws dice, the result, as Meillassoux puts it, is often 'erratic' and the insignificance of the result of the throw confers an absurd quality on chance. On the other hand, if a throw offers a player a double-six, thus giving her/him the upper hand, the course of things seems to be oriented in a favourable manner and chance becomes meaningful. Consequently, for Meillassoux, contingency is infinite in the precise sense that it always contains its opposite in 'all its dismal evidence and that which denies it in the luminous appearance of a Meaning' (Meillassoux, 2011:31). Mallarmé then gives chance a sort of 'inversion of Hegelian infinity' by attaching a contradiction to chance that yet constitutes it (2011: 31). I would suggest that Jodi's radicalism also lies in their ability to create an online platform, which draws from this Hegelian infinity. The remark made by Meillassoux on the internal contradiction of chance as containing what's beyond it and what contradicts it can also be noticed in Jodi's work. Indeed in *Asdfg* as in *Jodi.org* (like *Biennale.py* by the Mattes), the website entertains a paradoxical relationship with the network that supports it. Jodi's pieces, which question the role and paradigm of networks, require the websites to reside and live off the Internet (by recycling debris) in order to intervene and disrupt it. Besides, in *Jodi.org*, the diagram of the bomb drawn in a different language than the one displayed on the website, and its quality as revealing what is contained within the opening page is an instance of containing something that can destroy the website, for it elucidates it when part of the work lies in creating confusion. Besides, in *Asdfg*, the algorithm which runs the work absorbs all the http addresses located in the history of the web browser and as such can absorb content that might be in opposition to its status as an Internet Art piece. The infinity of *Asdfg* also lies in the fact that it feeds off the Internet and as such taps into the limitlessness of the Internet as a place. As for *Jodi.org*, is it also infinite, inasmuch as the maze that the website mirrors presents the viewer with an endless possibility of navigation.

9.7 Digital debris-to-be: entropy

It is worth noticing that in his book Meillassoux stipulates that the Number that encrypts Mallarmé's poem needs to be understood in its metrical sense. As such, the Number becomes the measure of *le hasard*. Accordingly, I would argue that the Number could be thought of as entropic. By entropy, here I am referring to entropy in the context of the second law of thermodynamics. In a now influential text titled *Entropy and Art, an Essay on Disorder and Order* (1971), film and art theorist Rudolf Arnheim introduced the concept of entropy to the arts. Arnheim stresses how entropy is not a force or an energy but simply a 'quantitative measure of the degree of disorder in a system' (1971: 4). The author then specifies that entropy does not measure the organisation between elements in a system but 'only its overall product, namely [...] the amount of tension available for the work in the system.' The measure of this tension level is gained by calculating the 'probability of its coming about by chance' (Arnheim, 1971: 12), hence making entropy a measure of the unpredictable, of chance. Hence a sequence of fifty white balls followed by fifty black ones will be described as possessing a low entropy, for it is a sequence of elements that is very unlikely to be repeated by chance a second time. On the other hand, a random sequence of black and white balls is very likely to reoccur in a disorderly fashion and as such possesses a high degree of entropy.

In the first example the orderly arrangement of balls is in order and has low entropy, whereas in the second sequence it is in disorder and has high entropy. Arnheim completes this statement of facts by explaining that entropy is inherently bound to increase:

disorder predicts a steady increase of entropy in closed systems because among the permutations of a given number of elements the irregular ones are much more frequent than the regular ones and therefore shuffling will increase irregularity until it reaches its maximum.

(Arnheim, 1971: 12)

Therefore, at the core of the concept of entropy as defined by thermodynamics lies the premise that 'the material world moves from orderly states to an ever-increasing disorder and that the final situation of the

universe will be one of maximum disorder' (Arnheim, 1971: 4). Arnheim remarks that if the notion of entropy, which started to enter the public consciousness in the late 19th century, suggested at the time an apocalyptic vision of the course of future events (Arnheim, 1971: 5), it can be now apprehended as valuable critical tool in reading contemporary art productions. Arnheim thus demonstrates that entropy can be read as a pattern implying accidental or deliberate production of disorder through the use of random compositions in art. For the theorist, such tendencies can even be traced back to Dutch still lifes, where sequences of objects are randomly gathered, or to the 'untidy scenes of social criticism in the generation of Hogarth' (Arnheim, 1971: 6), with its depiction of groups of unrelated individuals. Robert Smithson wrote in *Entropy and The New Monuments* (1966) that the work of artists like Dan Flavin or Sol LeWitt could be regarded as a reaction to the increasing disorder described by entropy (1966: 11). Smithson explains that the artificial nature of the materials used and the immediacy of their work are oblivious to the future (1966: 11). Arnheim then expands his interpretation by referring to 'the more or less controlled splashes and sprays of paint' in modern painting or in sculpture relying 'on chance textures, tears or twists of various materials, and found objects' (1971: 6). The use of found information in *Asdfg* and its ongoing random recomposition seems to consolidate Arnheim's views on entropy as applied to art, but I would say that *Un Coup de Dés* operates differently. On first inspection it seems, indeed, that Mallarmé's poem is composed according to chance and its apparent disorder displays a high level of entropy. However, I would argue that *Un Coup de Dés* is more likely to be seen as a reshuffling that aims precisely to throw the dice in order to create disorder. Thus the poem creates a system, like an assortment of cards, which aims at a random sequence, creating a homogenous system unified by the purpose of the reshuffling. I would argue that Mallarmé, despite Quentin Meillassoux's thesis that the poem is run by chance, virtuously re-creates an idea of chance and herein lies the connection of the poem with Symbolism. The strength and radicality of the poem lie in letting the reader believe that the text has been composed by chance, when I would

submit that it is the result of a peerlessly stylised and poetic idea of chance that surpasses a simple representation of serendipity. Thus *Un Coup de Dés* opens itself up to a different reading, where the work doesn't just document chance but creates its own ideal of chance that goes beyond the poem. It is an instance where the idea of chance is created in order to make the reader think about absolute chance. If *Un Coup de Dés* were randomly composed as an example of what chance can deliver and a testimony of its manifestation, it would deny the Symbolist context present when the text was written. Symbolism was a reaction to realism and naturalism, affirming that art should represent truths and that those truths could only be described indirectly, hence the use of metaphors, symbols and allegories by its members⁴⁸. Meillassoux's view on the poem incarnates a form of realism applied *a posteriori* that dissociates the poem from its original historical and literary context of 1897. Meillassoux' thesis argues that the poem is structured by chance, but I would argue that in this instance, chance as structural driver of the poem exhausts itself rather quickly, in as much as the poem would only then depict the result of one throw of the dice. *Asdfg* is different inasmuch as it is real-time, constantly recycling new hyperlinks located in the history of the web browser and creating more and more disorder, increasing its entropy. Yet considering that *Asdfg* deals with information, it is worth noticing that information has a different relationship to entropy than material objects. Indeed, Arnheim clarifies that information is the opposite of entropy because transmitting information requires order, and the more order a sequence of items holds, the less entropy they possess. Conversely, the less likely an event is to happen, the more disorderly it is and the more information it holds. As such, information theorists and entropy physicists have a different view on the same event. While the entropy physicist reads in disorder and unpredictability a high level of entropy, the information theorist reads in disorder a maximum of information and yet realises the impossibility of transmission, for

⁴⁸ Bradshaw, D., and J. H. Dettmar, K.. Malden, (eds.) 2006. 'Literary Symbolism' published (as Chapter 14) in *A Companion to Modernist Literature and Culture*, MA : Blackwell Publishing, pp. 155–162, available at <http://digitalcommons.unl.edu/modlangfrench/28/> (last accessed 28/02/15).

information requires order to be transmitted. *Asdfg* is somehow a striking illustration of that tension. As described above, the website is entropic as it evolves in an unpredictable space filled with disorder, yet on the other hand, despite being pure information, it fails from an information theory point of view since the increasing mass of information it contains can't be transmitted for it would require order to be effectively transmitted.

At the beginning of the chapter it was asked how the ambiguity of code, as both a writing form and an image, was realised. I also intended to investigate to what end HTML, for instance, is aestheticised. I have demonstrated that the digital debris in *Asdfg* are explosive lights in the network paradigm that resist the Epistemology of Search. As such, I have also demonstrated that in *Asdfg* Jodi embark on a critical political strategy. I have explained how Jodi's radicalism goes first through blazing the discarded links located in the history of the web browser in twenty second sequences. It has also been explained that the artists in *Asdfg* deployed tactics borrowed from early computer graphics in the 1970s, and from symbolist poetry. More specifically, the chapter studied Jodi's work under the light of Mallarmé's radical poem, *Un Coup de Dés*, and discussed the typographical experiments at play in both pieces. Consequently, I have pointed out that the syncopated, flashing features of *Asdfg* and *Coup de Dés* were introduced into the work as a way of respectively dismantling the network paradigm and dispersing Romantic rules of poetry.

I have pointed out that confusion was a key factor in the radicalism of Jodi. I have analysed the randomness that drives the algorithm running *Asdfg* and its openness to unpredictability, by revealing the ways in which serendipity is conceived in Mallarmé's poem. My observations on chance in *Un Coup de Dés* were informed by Quentin Meillassoux's reading of the poem, and drew on Meillassoux's views on the autonomy of *Un Coupe de Dés*. The performativity of the text has also been touched upon, as a step towards revealing the form of entropy at play in the work. Indeed, the serendipity of *Asdfg* has been reexamined through the lens of the notion of entropy as

defined by physics. Drawing from the concept of entropy I have distinguished Mallarmé's exploration of chance from the one propounded by Quentin Meillassoux. The weight of evidence showed that the debris of codes displayed in *Asdfg* are more than residues of language, and could be thought of as entropic critical agents which, by displaying explosive lights, cumulatively disrupt the network paradigm, and consequently resist the Epistemology of Search. Jodi's work represents the first step in the elaboration of an alternative language, one which would embody at the same time image and writing, and which, with its entropic logic, would foreground the radicality of the piece.

Conclusion

1. Answer
2. Refuting Zombie Formalism
3. A Kaleidoscopic Narrative: the Merits of the Speculative Methodology
4. The Limitations of Digital Debris
5. Summary
6. Future Avenues of Research

1. Answer

The aim of the thesis was to propose an alternative methodology in the study Internet Art by developing the speculative concept of digital debris. Throughout a series of nine case studies, I have argued that the digital debris of Internet Art represent an allegorical and entropic resistance to the Epistemology of Search. In my argument, digital debris have become critical agents that intervene in the network paradigm created by and for the Internet. I have developed the concept of digital debris as a discursive assemblage. It is within this discursive assemblage that the cultural concept of debris has met with technical reality, thus allowing a back and forth dialogue between the computational and the cultural. It is now also paramount to stress that digital debris are processes, hence their description as entropic. In Internet Art, digital debris are reciprocal processes of translation between the computational and the cultural, between the hidden architecture of the Internet and the stage of the interface. Throughout the thesis it became apparent that the Epistemology of Search not only depicts connectivity but upholds absolute connectivity as a form of knowledge. I have presented digital debris as not only a resistance to the logic of networks, but also as an intervention into the knowledge incarnated by the Epistemology of Search.

2. Refuting Zombie Formalism

If the thesis has focused on the form of information and the ways it was visually constructed, the research wasn't a formalist exercise. Indeed, the

emphasis on the exchange between the inside and the outside, embedded in the radicalism of Internet Art displays, challenges a formalist reading. As such, I would argue that the project questions the notion of 'Zombie Formalism' coined by Critic Walter Robinson on *ArtSpace*.⁴⁹ The term implies the absorption of the residues of Clement Greenberg's aesthetics into the reductive methods employed in making art. One could say that the early examples of Internet Art studied in the thesis are the remnants of 1990's post-modern aesthetics, and that bringing them into a contemporary theorisation of online knowledge morphs them into a tactic not too dissimilar with Zombie Formalism. Yet, condoning such a strategy ignores the fact that digital debris operate on several levels. Indeed, I have shown throughout the thesis that digital debris aren't one-dimensional but that they simultaneously participate in the way art is displayed, encountered and disseminated, and that they help to investigate cultural and abstract concepts such as History, Debris, Processes, Materiality and Form. Furthermore they manage to perform all the above while at the same time exploring the specificities and challenges of the Internet as a medium.

3. A Kaleidoscopic Narrative: the Merits of the Speculative Methodology

By a series of comparative studies, the project has also painted a history of Internet Art from the perspective of its residues. The thesis doesn't represent an absolute narrative of Internet practices, but was a hermeneutical speculative exercise. The image of the digital debris presented in the thesis isn't an exhaustive story of what discarded pieces of online information become, but a kaleidoscopic presentation of some online phenomena. I use kaleidoscopic purposely here to stress the multifaceted and ongoing dimension of digital debris. The notion of entropy, as a measure of an unpredictable and ever increasing state of events, becomes part of the methodology and underlines the idea that a study of digital

⁴⁹ 'Flipping and the Rise of Zombie Formalism' on ArtSpace (April 3, 2014) available at http://www.artspace.com/magazine/contributors/the_rise_of_zombie_formalism (last accessed 22/02/15).

debris is a study of processes and that their definition is always to-be. The renewal of interest in entropy becomes a new critical frame through which art production can be decoded. Like Goethe, who tapped into the chemistry theories of his day and on which he based the plot of his *Electives Affinities*, entropy might become a relevant lens to not only comprehend the ever-growing mass of information produced through the Internet but also to embody a new form of paradigm for online knowledge. The language used throughout the thesis, both at the same time technical and poetic, reflects an underlying ambition of the project to elaborate an adequate language to seize the various phenomena at play in Internet Art. The ambition of the language developed throughout the thesis was also find an expression capable of reaching to audiences outside the realms of art history and media studies. This is where the contribution of the methodology lies, in its capacity to trigger a dialogue among various art practices and disciplines. The speculative methodology of my project, in light of the online works studied, enables me to trigger a dialogue between two opposite theoretical systems in the study of New Media, i.e. Media Archaeology and Media Aesthetics, and to look at the points where those two systems collide with one another within the conceptual space of the digital debris. Media Archaeology here is understood as a field of enquiry focusing on non-human agencies and mechanistic arrangements that are at work in technologies. The premise of this nomadic discipline is that the temporal operations of media can't be grasped by human perception. Conversely, Media Aesthetics pays attention to the phenomenological interface between machine systems and human perception. The aim of my project, with its allegorical dimension, is to locate a space between the agency of the artist and the autonomy of the algorithm.

4. The Limitations of Digital Debris

The thesis acknowledges the limits of the concept of digital debris as it tends, like any label, to crystallise qualities, processes of excess and saturation at play in Internet Art. The idea Digital Debris was a method

inscribed within the speculative methodology of the research. The concept of Digital Debris runs the risk of flattening the multiple layers of reading contained within the works and provide a deterministic view on the artworks. Furthermore, despite underlying the process-based nature of the debris and their behaviours, the very allegory of debris suggest immobility. Besides, even though, the thesis is an attempt to bridge the gap between a new form of materialism and idealism, the terminology of debris, with its geological undertone, tends to tilt in favour of a form of speculative realism and its notion of deep time.

5. Summary

In Part One, I have asked how and where do digital debris appear? By surveying some examples of Internet Art such as *Data Diaries*, *Once Upon* and *The Digital Landfill*, I have remarked that digital debris are not so much found as they are generated. Indeed, if online forgotten or discarded information can be retrieved and recycled, I have suggested that digital debris are the result of a variety of processes intended to transform data. Then I have detailed the different methods encountered in producing digital debris. As a result, processes such as automation and transcoding have been examined. I have contextualised the method deployed, for instance in *Data Diaries*, by comparing it to the set of instructions that Sol LeWitt pioneered in his drawings. I have then pointed out the similarities between the two works and also distinguished them, to highlight that if there's a denial of the gesture in LeWitt's conceptual tactics, Cory Arcangel does present and frame his work as being the result of some labour. In Chapter Two, I have analysed the ways in which digital debris, as they are traces, could be used in a historiographical manner. As such, through the work *Once Upon*, I have reviewed and stressed the inadequacy of some of the potential theoretical tools available to study digital debris and argued that Olia Lialina and Dragan Espenschied offer an instance of data archaeology which, with its use of HTML frames, writes a kaleidoscopic history where personal testimonies and the history of the Internet are intertwined. More precisely,

referring to Carlo Ginzburg's *Thread and Traces* I have demonstrated that *Once Upon* presents two types of temporalities: a macro one (dealing with the history of the Internet as a whole) and micro one (referring to personal histories linked to the development of the Internet). Following up the analysis of *Once Upon*, I have concluded the chapter by submitting that one can read Internet art history by navigating between the frames of macro and micro time displayed by the website. In Chapter Three, I have focused on the ways in which digital debris are visually encountered, asserting that if online discarded information is elusive and hidden, digital debris are necessarily visible, for it is only once they have been generated that they become visible. In other words, it is Internet Art that renders digital debris visible. It is once digital debris start their process of generation that they materialise on the screen. Expanding on the way digital debris are visually constructed, I have examined their display and underlined the specificities of online curating. The example provided by *The Digital Landfill* helped me to grasp the problematics of online curating, when the technology of the piece itself is no longer supported by the network which allowed it to exist in the first place. As a result, I have argued that Mark Napier's work here has become an instance of online ruin which comments not only on the challenges of online conservation, but also on the state and form that abandoned information can take today.

By the end of Part One, it was apparent that digital debris are not only the result of programming processes, but that they also represent a canvas at which cultural concepts are thrown. Part Two therefore examined what constitutes digital debris and looked at their metaphorical dimensions. In Chapter Four, via a piece entitled *Weightless*, by Thomson & Craighead, I have studied an instance of work where metaphor is used as an epistemological paradigm. I have discussed how the use of metaphor was in *Weightless* part of a critical strategy aimed at depicting, in a satirical manner, some aspects of online communication. The use of metaphor was here intentionally exhausted in order to reveal the limitations of applying analogue terminology to the digital sphere. As a result, I have started to

reveal the critical agency that can be conferred on digital debris and have historically contextualised it in relation to a Debordian *détournement*. Yet I have remarked how Thomson & Craighead's tactic, with its gesture quality – as seen in Chapter One – depicted a form of unrealised *détournement* rather than a *détournement per se*. Chapter Four bridged the gap between digital debris, from a pure semantic point of view, and materiality, by observing the commodification of information in today's cognitive capitalisation. Following the status of information as a commodity, I have argued that *Beacon* by Thomson & Craighead can be read as a linguistic readymade, or a development and displacement of Duchamps' idea in an online environment. Through *Beacon*, I have also uncovered how digital debris are not in a state of immobility once they've been generated but are carried in processes of materialisation as technical objects and semantic signs. The oscillation between object and sign performed by an online and linguistic readymade, such as *Beacon*, was an opportunity to read Charles Sanders Peirce's theories on what constitutes a sign in a different light. Indeed, I have insisted on how, in the context of information economy, his situation-bound and interpretative theories gain a new relevance. I've ended Part Two by elaborating on the dialogue that occurs in a work between object and sign, and by stating that here lie the medium specificities of Internet Art. Informed by Rosalind Krauss' writing on what constitutes a solid critical piece of art, I devoted Chapter Six to defend the need of a medium specificity or as Krauss calls it, 'technical support'. I have demonstrated that all the case studies of Internet Art presented in the thesis were successful insofar as they paired an exploration of the concept of debris with a critical investigation of the technical platform they worked with. I have suggested calling this phenomenon a semantic-ratio, derived from McLuhan's sense-ratio, to associate the cultural concept of the debris with its technical reality.

Part Three has asked, what do digital debris do? I have answered the question by arguing that digital debris represent critical agents, which intervene in the logic of Internet networks described as Epistemology of Search by Joselit. I have proposed in Part Three that digital debris, by their

allegorical and entropic aspects, resist the Epistemology of Search. I have started, in Chapter Seven, by exposing the concept of the Epistemology of Search and have illustrated it via an online and installation piece titled *Biennale.py*. The piece deploys a viral aesthetic that echoes the principles of density of connection and saturation of information held by the Epistemology of Search. However, I have nuanced my argument by comparing the dissemination of digital debris to the circulation of a virus, and by asserting that if there's a virality in the way in which digital debris populate networks, it is a viral aesthetic in a stable symbiosis. Consequently, I have refreshed the understanding of viral aesthetics in relation to Internet Art practices by referring to Burroughs' viral language. I have also examined the theoretical writing of Antonin Artaud on theatre performance as a virus in order to underline its subversive potential. Expanding on the metaphorical capacity of digital debris revealed in Part Two, and after analysing Jodi's work, I have concluded that digital debris are more allegorical than metaphorical. I have conceptualised the information allegory by referring to Raymond Roussel's poem, *New Impressions of Africa*, which, with its original literary *procédé*, could be thought of as an early instance of programming language. I have explained that the mirroring of hyperlinks that Jodi install, in addition to the confiscating of online information and the incompleteness of the on-going process of generating debris they are presenting, creates allegorical debris. I have also noticed that the motif of the labyrinth not only plays a part in Jodi's online set of allegories but also, combined with the implementation of artifices, generates a strategy which disrupts networks. In the last chapter, I have centred my argument around a piece titled *Asdfg* by Jodi. The work, which plays on the unpredictability of its outcome and which manipulates discarded data to create a flux of digital debris in real time, was an opportunity to reveal and discuss the entropic nature of digital debris. I have introduced the concept of entropy, as understood in the second law of thermo-dynamics, by quoting Rudolf Arnheim's writing in *Entropy and Art*. To illustrate the theorisation of chance provided by Arnheim, I have observed the exploration of chance that Stéphane Mallarmé carries out in his poem *Un Coup de Dés*. The entropy at

play in *Asdfg* is realised in multiple ways: the strategy of accumulation, the on-going realisation of the work and the ever-increasing mass of information absorbed and generated by *Asdfg* in an unpredictable fashion. I have concluded that the serendipity present in Jodi's work becomes the vector, which allows Jodi to throw 'explosive lights' that disrupt the dissemination of information in networks.

6. Future Avenues of Research

Considering that the research has only looked at digital debris in Internet Art practice, I am aware that it only represents a starting point to think about the evolution of online information. It would be interesting to extend the research to the role of digital debris from a social perspective and to observe its appearance in, for instance, social media. As such, the impossibility of actually deleting an account and its mere deactivation opens up a series of questions: what happens to the data of a deactivated account? Moreover, what happens to the still active accounts of deceased users? The Epistemology of Search, as it fosters data production so that it increases its performativity, leads to an exponential mass of information, which transforms the very definition of knowledge. A series of questions arises: will the sheer amount of information drown the visibility of any information? Which tools will be required to navigate through vast quantities of information and to filter it to give it meaning? In what shape and following which criteria should those tools be designed? A gulf seems then to form between the expanding production of data and human memory. Internet Governance expert Viktor Mayer-Schönberger wrote in 2010 *Delete: The Virtue of Forgetting in the Digital Age*, as a way of stressing the importance of forgetting from an anthropological point of view and how the capacity to forget is overridden by Google, which remembers everything. Here, I am pointing out the nuance between the discarded, thrown away and forgotten, which could provide some fertile ground for future research. As I write this conclusion, the amount of sources now available online has vastly increased compared to the number of theoretical texts that were

available even in 2010, at the genesis of this research. The amount of scholarly information now available online has led me to wonder if this astounding amount of theoretical information would serve as theoretical grounds for research into itself. As Art Historian Marquard Smith remarks in an essay entitled, *Theses on the Philosophy of History: The Work of Research in the Age of Digital Searchability and Distributality* for the *Journal of Visual Culture* (2014), it would be interesting to pursue research into the analysis and evolution of online knowledge by relying solely on what's available on the Internet. The state of the object studied – i.e. knowledge available online – would thus become the foundation for an alternative research methodology and an opportunity to shed a different critical light on to digital culture. In other words, just as Thomson & Craighead have created pieces of work, such as a *Short Film About Flying* (2002), whose intention is to rely only on material available online, one could shift this practice into the field of theoretical exploration to participate in the field of enquiry that digital humanities represent. From a methodological point of view, the fact that all the illustrations presented in this thesis are screenshots that I have captured from the online artworks studied, does represent a first step towards the self-contained methodology described above. Besides, after having explored in this Ph.D. the possibilities and limitations of a speculative approach, it would be valuable to depart from speculative theorisations in order to adopt a combination of both quantitative and qualitative research. A quantitative method would provide a direct application of Media Archaeology while a qualitative method would embody Media Aesthetics. As such, the combination of the two methods would be a way of exploring some of the ideas explored in the thesis but in a concrete way.

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- *Larcher, David's website*, available at
<http://www.khm.de/~davidl/cicv/LARCHER/vie.html> (last accessed 10/02/15).
- *Museum of Ordure* (UKMO) is subject to the vagaries of an uncontrolled internal auto-destructive process (not a virus) which slowly deforms and disables all information held in the museum. This is comparable to the decaying processes which affect all artifacts in museums, regardless of all attempts at preservation: the retouching, repainting, cleaning, etc, which are incorporated risks to the purity of artifacts when first acquired by museums.
<http://www.museum-ordure.org.uk/> (last accessed 16/02/2016).
- *New Media Art Histories*, 'Renew 2013', <http://www.mediaarthistory.org/> (last accessed 12/12/15).
- *NetBehaviour* - is an open email list community engaged in the process of sharing and actively evolving critical approaches, methods and ideas focused around contemporary networked media arts practice."
<http://www.netbehaviour.org/> (last accessed 7/04/14).
- *Rhizome* is dedicated to the creation, presentation, preservation, and critique of emerging artistic practices that engage technology.
<http://rhizome.org/> (last accessed 7/04/14).
- *Rosalind*, is an upstart New Media Art lexicon. Feed Rosalind with your own words and definitions to express and declare what you are, what you do and the worlds you create, on your own terms.
<http://www.furtherfield.org/rosalind/> (last accessed 7/04/14).
- *Runme.org* is a software art repository, launched in January 2003. It is an open, moderated database to which people are welcome to submit projects they consider to be interesting examples of software art.
<http://www.runme.org> (last accessed 12/02/15).
- *Tate Channel Archive*
<http://www.tate.org.uk/onlineevents/archive/wireless.htm> (last accessed 16/02/2016).
- *The White Building*, <http://thewhitebuilding.org.uk/> (last accessed 16/02/2016).

- *Thing/Thought: Fluxus Editions/ 1962-1968* at the MoMA, http://www.moma.org/interactives/exhibitions/2011/fluxus_editions/category_works/fluxkit/ (last accessed 16/02/2016).

- *Transmediale* is an international festival for contemporary art and digital culture. Located in Berlin, it presents advanced artistic positions reflecting on the socio-cultural impact of new technologies. It seeks out artistic practices that not only respond to scientific or technical developments, but that try to shape the way in which we think about and experience these technologies. *transmediale* understands media technologies as cultural techniques which need to be embraced in order to comprehend, critique, and shape our contemporary society. <http://www.transmediale.de> (last accessed 12/02/15).

- *Turbulence* is a journal/newspaper in which to think through, debate and articulate the political, social, economic and cultural theories of their movements, as well as the networks of diverse practices and alternatives that surround them. <http://turbulence.org.uk/2009/> (last accessed 7/04/14).

- *Variable media network*: the variable media paradigm pairs artists with museum and media consultants to provoke comparison of artworks created in ephemeral mediums. <http://www.variablemedia.net/> (last accessed 12/02/15).

- *WebWaste.net* by Ragnar Helgi Olafsson <http://www.webwaste.net/> (last accessed 16/02/2016).