

University of Dundee

DOCTOR OF PHILOSOPHY

Internet Art and Agency
The Social Lives of Online Artworks

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INTERNET ART AND AGENCY

The social lives of online artworks

Karin de Wild

Doctor of Philosophy

University of Dundee

September 2018

Internet Art and Agency

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Declaration

I, Karin de Wild, declare that this thesis has been composed solely by myself and that it has not been submitted, in whole or in part, in any previous application for a degree. Except where stated otherwise by reference or acknowledgment, the work presented is entirely my own.

Karin de Wild

Dundee, 25 May 2018

Abstract

During the 1990s, artists started to explore the possibilities of the World Wide Web. This thesis investigates online artworks by studying their agency. Why do people interact with them, as if they are alive? How do they mobilise people, or make them share visions and ideas? Based on research in largely untapped archives, it presents an in-depth examination of several case studies, exploring the artwork's ability to have the power to act in a variety of social settings. Through studying the life trajectory of the artwork, it also offers insights in how these dynamic entities undergo changes over time and across cultures. Grounded in theoretical literature on the agency of art, this research offers an innovative way of understanding Internet art and it contributes to wider conversations about the agency of art and artefacts.

Case studies include:

Mouchette (Martine Neddham), 'Mouchette' (1996-present). Web project (www.mouchette.org). Collection of Stedelijk Museum (Amsterdam).

Shu Lea Cheang, 'Brandon' (1998-1999). Web project (brandon.guggenheim.org). Collection of Solomon R. Guggenheim Museum (New York).

Lynn Hershman Leeson, 'Agent Ruby' (1998-2002). Web project (agentruby.sfmoma.org). Collection of SFMOMA (San Francisco).

1.

Introduction

It is 1994, a year after CERN had given its World Wide Web technology to the public domain and the New York Times released its first article about it, describing the Web as ‘the global Internet, the network of networks’ (Markoff 1993). Within this emerging virtual environment, a webpage appeared showing a blurry photo of a man with a photo camera, seemingly trying to capture our gaze on the screen (see fig. 1). There is a text on the picture that says: “*Come closer, get into the lens. Let me see you. We are about to create together...*” The photo is a portrait of artist Douglas Davis, who wrote this line as an invitation to users from different parts of the world to co-create what would become one of the first artworks on the Web, entitled ‘The World’s First Collaborative Sentence’. The work reflects the slightly utopian view on the Web at that time, as a communication network that is able to connect people across distances, or as Davis commented on this work himself: “*Why not get the whole world together to write a sentence* (Baumgartel 2004, 60–62)?” Its aim was to encourage people to make additions, letting the sentence grow longer and longer, but at the time of origin nobody could have yet predicted the strong agency of this simple gesture. Nowadays ‘The Sentence’ includes hundreds of thousands of contributions, in dozens of languages, including many hyperlinks that connects it to websites all over the world. More than twenty years later, the work is still online and although that our experience of the Web has radically changed, it is still possible to contribute. The only rule is that nobody can finish the sentence, so in principle it could go on forever.

1.1 Aim and objectives

‘The World’s First Collaborative Sentence’ is an example of an artwork that is embedded within the World Wide Web, also known as ‘Internet art’. What this example illustrates is that when we come across an online artwork - possibly while surfing on the Web - and when it appears on our personal devices, it invites us to not only ‘look’ at it, but to also ‘interact’ with it. In case of ‘The World’s First Collaborative Sentence’, people from all over the world were encouraged to co-create an artwork. To consider online artworks as an object of beauty or a bearer of meaning, would limit the scope and character of Internet art. This research argues that to fully understand Internet art requires knowledge of its agency, how does it influence the actions of others to produce a certain result? It will approach these artworks as actors, who can perform a social role in a variety of social networks and across different cultures.

To study the agency of Internet art, this research will make use of a model, the Art Nexus, which was developed by Alfred Gell (Gell 1998). Within his posthumous book ‘Art and Agency: an anthropological theory’, Gell proposed a theoretical framework to unravel the agency of artworks through analysing the interactions between the artwork and the humans surrounding it. For example, the Artist has a certain intent; s/he tries to create a certain effect with the artwork. The audience (what Gell calls Recipients) responds to it in a certain way, interpreting the artwork in his/her own way. Gell’s model can help unravel these intentions and the beliefs of humans that surround the artwork. Gell rejects the study of *the* aesthetic value of an artwork or the deciphering of its specific meaning. According to Gell, responses to artworks are subjective and depend on the social context in which these artworks are produced and displayed (Gell 1998, pp. 5–7). Instead Gell shifts focus to the social nature of the artwork, studying the context of social interactions that surround the artwork.

This thesis includes three case studies. Each will contain a close reading of an online artwork, as well as a reconstruction of the social networks in which these artworks were embedded and how this developed over time. The agency of an artwork can be studied at a single moment in time, but this research will reconstruct several moments and give insights in the agency of the artwork

throughout its unfolding life.¹ Each case study describes the life story (in this thesis this will be referred to as the biography) of an artwork from its moment of origin (in the nineties) until the present day. This includes the moment of production, as well as how these artworks circulate, not only on the Web, but also in offline events and exhibitions. Throughout its life, an online artwork interacts in a variety of social settings. This research does not only unravel how the social network around the artwork is changing over time, it also gives insights into how the artwork itself changes.²

Alfred Gell's model, the Art Nexus, has not been applied to study online artworks yet. Nevertheless, its framing seems suitable for the distinguishing features of online art. As Annet Dekker argued: "*These works are distributed and ensured by networks of people; their continuation happens through multiple authors and caretakers. All together these actors signify and give meaning to the works* (Dekker 2014)." This thesis will reconstruct these interactive settings in which people attribute different meanings, beliefs and values to these artworks. Although that this supports the argument made by Annet Dekker, that the network lies at the heart of these artworks, where this thesis differs from the Dekker's research, is that it does not aim to develop new strategies for collecting and conserving Internet art. Instead it adds towards a better understanding of the agency of these artworks. The social role of the artwork can change within various socio-cultural contexts and over time. As such, this research will unravel the networks and agents involved over time and within different social settings. For this it will make use of art historical methods, including an in-depth-study of the artwork and related documentation found in largely untapped archives.³ This will give insights in the way the artwork came into being and was further developed in a variety of social settings, and through

¹ The methods used within this thesis will be further explained in section 3.2.

² These artworks are variable, which was explained by Lev Manovich as: "*New media objects are not something fixed once and for all, but something that can exist in different, potentially infinite versions* (Manovich 2002, 36)." Instead of stable and static objects, these works can be seen as permanent data transfers that can be updated and transformed by Recipients that have access to it.

³ Annet Dekker discusses the social lives of Internet art. She borrows the term from 'The Social Life of Information' (Brown and Duguid 2000; Dekker 2014). This research borrows the term from Alfred Gell's theory about art and agency (Gell 1998, 22) and Arjun Appadurai (Appadurai 1988).

that, the final aim of this research is to add towards a better understanding of the agency of these online artworks.

1.2 The case studies

For this research project, three case studies have been selected:

Mouchette (Martine Neddam), ‘Mouchette’ (1996-present). Web project (www.mouchette.org). Collection of Stedelijk Museum (Amsterdam).

Shu Lea Cheang, ‘Brandon’ (1998-1999). Web project (brandon.guggenheim.org). Collection of Solomon R. Guggenheim Museum (New York).

Lynn Hershman Leeson, ‘Agent Ruby’ (1998-2002). Web project (agentruby.sfmoma.org). Collection of SFMOMA (San Francisco).

All three case studies are artworks associated with Internet art (a term that will be further explained in section 2.2). This research is primarily concerned with finding (new) ways to analyse artworks associated with Internet art. These pioneering works are pushing the boundaries of what can be seen as art by embarking on a new territory, the Web, and exploring its possibilities as a social and artistic space. As such, this brings new questions on how to study these artworks as message-bearing entities that can give us information about (Web) cultures or the past.

All cases originate in the late 1990s, shortly after the rise of the World Wide Web in the public domain and at the time of writing all of them can still be found online. This research will carefully trace their social lives throughout that period. Their lifespan is around twenty years old, which not only offers the opportunity to discover how the agency of the artwork can change over time, but it also gives a certain historical distance towards their time of origin. In contrast to many other researchers writing about Internet art, I was not actively involved as a practitioner in this field. This research reconstructs the origin of these artworks, based on the artwork and the documentation that remained after

twenty years. These artworks are studied in new ways through concepts derived from art history.

To be able to still study these artworks, it is important that sufficient information is available. In case of Internet art, the artworks collected by museums is limited and often do these artistic practices operate outside of institutions. However, museums are important institutions that can contribute to the preservation of these artworks and give access to their datasets. This research includes three cases that are well preserved and well documented, which offers the opportunity to reconstruct their unfolding lives in detail. However, to study them as part of the museum collections and archives is insufficient. These artworks still circulate beyond the walls of the institutions, also after being collected. As such, for reconstructing the social lives of these artworks, this research made use of a wide variety of archives and of which many were untapped (which will be further explained in section 3.4.2).

That all three cases are part of museum collections served another goal. The aim of this research is to analyse the agency of the artwork in different social contexts. An important motivation for selecting the cases was that they possess a variety of social lives, both as part of the Web as in the offline world, both inside and outside museums. This offers the opportunity to analyse the agency of these artworks in a variety of social contexts, which increases our insights in the role that certain contexts play, as well as that it will reveal how different perspectives on these artworks co-exist.

Furthermore, what influenced the selection of these cases is Gell's notion of the artwork as a social agent. Gell shifts attention to approach the artwork as a social agent. Without saying that the artwork is 'alive', in the biological sense, Gell does argue that an artwork can have agency, in other words it can act upon people. This makes the division between things on one side and persons on the other, less strict. In line with this approach of the artwork as a person-like agent, all cases in this thesis refer to a person and they perform a clear social role, which, in some sense, gives them a form of living presence.

1.3 Motivation

Analysing single artworks is a key tool in art history, as it not only increases our understanding of the artwork, but also of how fragments of history (and cultures) appear in them. Until now Internet art has stayed relatively invisible in the histories of art (Daniels and Reisinger 2010, 5–6; Stallabrass 2010, 166). Possibly, one of the reasons (as well that this could be seen as a consequence) is that these things are not always fully understood yet. In many ways, online artworks differ from more conventional artworks and this can easily lead to misunderstandings.

To exemplify, in 1996 the online artwork ‘The World’s First Collaborative Sentence’ was donated to the Whitney Museum of American Art in New York. In the object file there is a document that describes the artwork in full detail as a ‘MF 2HD Maxell diskette’ with a dimension of 9,5 x 8,9 cm (“Object File” 1995). Even without any technical knowledge, it is obvious that this cannot be the artwork itself. While this diskette lies within the museum depot, the work itself can still be viewed on the Web. Only a partial copy was stored on the diskette, to be precise the first five days that the Sentence was online (Paul 2009). In the meanwhile, users continued contributing to ‘The Sentence’. To bring to this to the attention of the museum, in 1996 artist Douglas Davis sent a letter to museum director Davis Ross to give him, as he describes it: “*simply for your intellectual pleasure some late additions to the Sentence (...) (Davis 1996).*” What was part of the museum collection? What was secured by the museum as ‘the artwork’ for future generations? The risk started to emerge that over time (the data on) the diskette would be considered as the art piece. For that reason, curator Christiane Paul initiated the process to migrate the website onto the museum server and argued that the description of the work needed to be changed to ‘Website (HTML)’ (Paul 2009; Miller and Weinberg 2015).

What this passage out of the artwork’s life illustrates is that in comparison to paintings or sculptures, it is less easy to grasp what the artwork actually is. Websites are stored remotely on servers that can be far away from the device that give us visual access to it. Here data can be stored, which is a rich source of information. This thesis studies the unfolding life of the online artwork and what the influence is of different social contexts on the artwork. Departing from

the data in the artwork itself can already give insights. For example, it can be possible to find chat logs (an archive of transcripts from online chats) in their databases, and also the version history of the artwork can give information.

It is possible to preserve these artworks not in a single version, but as interactive platforms that can have multiple versions. The artwork ‘The Sentence’ can again serve as an example. In 2012 the work was no longer functional on the Web, and the Whitney museum decided to undertake further preservation efforts. Only a problem occurred: How to preserve this artwork so it can give information about the time it was produced, but that equally keeps its ability to function as an ever-growing sentence within the current Web? The museum decided to restore the artwork in two different versions. The historical version is presented in an old web browser and is displaying the work as it appeared at the time it was created. The many hyperlinks within ‘The Sentence’ were modified so they direct to archived webpages in the Internet archive. Also, the code stayed mainly untouched. For the new ‘live’ version, the core priority was to preserve its functionality and to ensure the longevity of the user input. Within this version it is not only still possible to contribute to the sentence, but the website also still appears in the current Web environment and hyperlinks in ‘The Sentence’ are not pointing to the Internet archive (but are left dead). The live version preserves the function of the artwork; it is ‘ever-growing’ and ‘unfinished’, providing a constant evidence of its agency.

As this example illustrates, an online artwork can be preserved in different versions. In case of ‘The Sentence’ the historical version gives insights in the moment the artwork was produced. The live version preserves its functionality and because of that it is possible that new contributions can be made, and also stored. As in the digital realm temporality is more fluid and dynamic, this could lead to the confusion that online artworks are not durable records in time. However, this research project argues that online artworks, because they are permanently overwritten and reconstructed, can give information about how they are perceived over time. The different versions of an artwork can be compared, which gives information about how these artworks are perceived over time and within different social contexts. To reconstruct the agency of an artwork in different moments in time, it is essential that both historical versions of the artworks are preserved, as well as its functionality. Historical versions of

an online artwork give insights in the work within a certain time frame, while preserving its functionality offers the opportunity that new additions are made, letting the artwork adapt to new contexts.

Walter Benjamin and others have emphasized that history is not fixed, but it stands in relation to the present and the future (Benjamin 2002). Detached from its original context, an artwork shows only fragments of the past and this cannot be anything else than an interpretation recalled in a particular context, time and place. Artworks can be encoded to give us information about the time they were produced, but they do not only belong to a particular time, they only have meaning *in* a particular time. Instead of zooming in on a single meaning of the artwork, this research acknowledges the various legacies of artworks, each telling their own version of the past that can be examined and compared. Instead of describing a snapshot of the artwork's life, it will include the artwork's production, but it will also take into account its reception by different audiences and circulation in different social contexts.

1.4 Scope

This research includes artworks, associated with Internet art, that originate in the nineties and that were (and still are at this moment in time) embedded within the Web. This means that it will not include artworks that relate to Internet culture developed before or after that. For example, it does not include artworks that are associated with Post Internet, the New Aesthetic or telematic art.⁴ It also does not include art forms that are not embedded within the World Wide Web, like paintings, conceptual or performance art. This research begins with the single work of art, and more specifically, the agency of these artworks. The focus will lie on the artwork as an actor within a social network. Thus, this research does not attempt to understand a specific aesthetic or do a formal analysis of the artwork, instead it takes into consideration that values and meanings attributed to artworks can change. It will focus on human values and beliefs that are attributed to artworks in specific social contexts; this can be a particular culture or a specific time period. This research will reconstruct the

⁴ For more information (Ascott and Shanken 2007; Bridle 2011; McHugh 2011; Quaranta, McNeil, and Lambert 2014; Cornell and Halter 2015).

social lives of online artworks from their time of origin (in the nineties) until today. For this, it will use historical methods, looking for primary sources first, to support the argument (artworks, written sources at the time, and so on). Sometimes this will be supported by interviews, but it will not collect data through observation and experiment. While the research has findings broadly applicable to other works of Internet art, it is not the intention of this research to give an overview of the variety of agencies that online artworks can have. It has been intended, above all, to reveal that an analysis of the agency of these artworks increases our understanding of what they are.

1.5 The structure of this thesis

This thesis begins, in chapter 2, with defining the object of study: How to name the artworks that are studied within this thesis. This research project looks at artworks that are embedded within the World Wide Web. There are different terms that are used to define these artworks; this section will explain why this thesis is referring to them as ‘Internet art’.

It continues with introducing the problem where this research starts from. At this moment in time, it is still unclear if these artworks will have a place within the history of art. This has not only to do with their recent history or the difficulties that there is not yet a definite term for them. As art historian Julian Stallabrass argued, these artworks drastically differ in nature from more traditional objects, which makes that it is not always clear what the ‘art object’ is (Stallabrass 2010, 169). What makes these artworks ‘art-like’? This research project builds further on the problem that Julian Stallabrass raised, but it will bring a new answer to his question.

The last part of chapter 2 is a contextual review: What are the existing methodologies that can help get a better understanding of these artworks? It will give an overview of key fields that developed a wide range of perspectives on how to study Internet art. All contribute by uncovering another aspect of the artwork. There are studies that focus on investigating its aesthetics; its image; its media ecology; its materiality; and so on. Although many of these studies mention the importance of the agency of these artworks, none of them take this as a specific object for investigation. This chapter concludes by explaining how

it integrates existing approaches, but it will study Internet art from another lens, that will give insights into the agency of these artworks.

The question that arises, then, is how to study the agency of Internet art? Chapter 3 discusses the methodology and methods used in more detail. The first section explains the methodology that will be used, an existing model as developed by Alfred Gell for analysing the agency of artworks. Instead of studying the artwork in isolation, he places it within a network of agents. Within his model he defines four agents, one of them is the *Artist* as the creator of the work, but also actively involved within its reception. Secondly the *Index*: the artwork, which is followed by the *Prototype*: that which the artwork represents or refers to, visually or non-visually, mimetic or non-mimetic. And finally, the last actor is the *Recipient*, the person interacting with the artwork and whose perception and experience are decisive for its interpretation. The model interconnects these actors by questioning if something is more passive (the ‘patient’) or more active (the ‘agent’). If somebody acts, somebody else receives. For example, when the artwork is active, it can move the Recipient emotionally or even move them into action. Gell illustrates how the artwork has, like a human being, the power to actively influence a certain response. Not only does this chapter explain the Art Nexus in more detail, it also provides a motivation for how it can be useful for the analysis of Internet art. The ‘network’ is at the heart of these artworks. Studying them as finite ‘products’ is problematic, but when we shift towards describing how they act within a variety of social settings, this can increase our understanding of these artworks.

To reconstruct the social settings in which these artworks act, this research is largely based on archival studies. Besides drawing on the more common archives in universities and museums, it also makes use of Web archives, most prominently the Internet archive (“Internet Archive” n.d.).⁵ The World Wide Web has been in use for more than twenty years and has become an integral part of our daily lives. Letters, literature, video recordings and also all kinds of born-digital artefacts, are nowadays all part of the Web and used by a diverse group of people. In general, Web archives provide an exciting new area of research, but in this research the repositories were essential for the reconstruction of the

⁵ The Internet archive (archive.org) is a non-profit digital library offering free access to billions of archived web pages.

past. Unsurprisingly, most information about art on the Internet is to be found online. Chapter 3 will elaborate on some of the challenges of working with archived webpages, and how to evaluate them as relevant historical sources.

In the following chapters, the methodology will be further applied to three case studies. Chapters 4, 5 and 6 will each unravel the social life of an online artwork using the Art Nexus as underlying structure. That these case studies are chronologically ordered, is a coincidence and not the main structure of this thesis. Instead, each case will focus on a particular agent as mentioned in Alfred Gell's model, the Art Nexus: The Artist, the Prototype and the Recipient.

Chapter 4 presents the first case study, the online artwork 'Mouchette' by artist Martine Neddham, and in particular it will look at the role of the Artist. The exact role of Martine Neddham as an author was (and still is) somewhat ambiguous. When the website launched in 1996 Neddham stayed anonymous, hidden behind her online persona 'Mouchette'. The roots of this character can be found in an early virtual environment, known as a MOO. In this text-based chat room, people created a character that could be as far away from the 'real self' as one wanted to. Here we can find first insights in a complex understanding of selfhood, which makes 'Mouchette' such a perplexing personality. In 1996 this MOO character is given her own website. While on the one hand her creator Martine Neddham stays invisible, on the other hand 'Mouchette' is gradually finding her own artistic style. Even during public events in the 'real world', it is the Prototype of the artwork, 'Mouchette', who appears, while her role is played by other artists. In 2003 a new interface is added towards the artwork, which makes it even possible for the audience to take over this virtual identity. The artistic style of 'Mouchette' has been open to manipulation by other human beings, who are invited to impersonate her. Her person is 'multiple' in the sense that her identity is formed by a multitude of relationships, each of which is instantiated in her person. This fractal personhood can be seen as the heart of the artwork. Nowadays, Neddham has revealed herself and gradually also her role as a hidden moderator comes to light. She compares herself with a 'Mechanical Turk' referring to the 18th century fake chess-playing machine, which became an expression for machines that seems to do a fully automated task, but which in reality is done by a hidden person. At all times, human agency stays important to keep 'Mouchette' 'alive'.

However, it is still uncertain what will happen to ‘Mouchette’ (and her artistic agency) after Martine Neddham will no longer fulfil her role as hidden moderator. The unfolding life of ‘Mouchette’ will also reveal how the active role of Martine Neddham has been essential for keeping ‘Mouchette’ ‘alive’.

Chapter 5 presents the second case study, the artwork ‘Brandon’ by Shu Lea Cheang. Here, another agent will be at the foreground, as the central question is how the Prototype modifies over the course of time. The artwork refers to the tragic story of the life and death of Teena Brandon, a Nebraska youth who was raped and murdered after his biological sex as a woman came to light in 1993. It is mainly the tragic ending of Brandon Teena’s life that provoked a large amount of reactions and created his mythical status. The artwork released five years later, on 30 June 1998, as a collaborative platform, still undefined. Guest curators were invited to illuminate Brandon’s tragic story in their own way. In the first stage, artist Shu Lea Cheang designed a new narrative, in which Teena Brandon is given a new life in Cyberspace. The narrative is open-ended and is supported and presented by a website. This offers the possibility for multiple perspectives, but also to engage the audience to further develop the narrative. Different communities revisit the Teena Brandon story, illuminating those fragments that were relevant for them and taking these as a starting point for wider conversations and concerns. Subsequently, the story drifts off in many directions. In the first stage, artist Shu Lea Cheang establishes an alliance with online communities, creating a platform for their voices. In a second stage, institutions were invited to contribute to the work. In collaboration with Waag Society a new interface was added to the artwork as a result of two significant live events, which merged the real with the virtual: One was about exploring the digital body, which took place at the Theatre Anatomicum (where in the 17th century human anatomy was taught). The other was organized in conjunction with Harvard Law School and brought back courtroom scenes, a public trial of sexual assaults judged by a panel of legal scholars and the public with the help of online decision software. The tragic story of Teena Brandon did not fall away in the past but was lively remembered in various ways, leading to a variety of new social and political debates.

It seems paradoxically that an artwork - as a non-living thing - can think or react. Or that humans start conversations with an artwork, as if it is alive. Building further on the ideas of anthropologist and evolutionary psychologist Pascal Boyer, Alfred Gell attributes intentionality to things (under certain circumstances). A form of belief plays an important role here: How can it be that Recipients attribute liveness, or some sort of mental state, towards dead matter? This question will be further explored in the last case study that investigates the social life of ‘Agent Ruby’ (chapter 6). As an early form of artificial intelligence, ‘Agent Ruby’ is able to hold conversations, remembers some parts of it and she is able to respond with certain emotions. This chapter will further explore her artificial brain, as well as the plans of the artist to let Agent Ruby further evolve into new and more advanced versions. Making use of emerging digital technologies, the aim of the artist is to continuously increase the lifelikeness of her creation. Improving her intentions and desires, making her more emotional, as well as given her a voice, even a body. Some new versions have already been developed; they are presented as new artworks. This means that ‘Agent Ruby’ remains an early form of artificial intelligence, illustrating a certain state within the artistic process. In 2008, the artwork was brought into the permanent collection of SFMOMA. From that moment onwards, the museum has been actively involved in finding ways to give ‘Agent Ruby’ the future she deserves. A major change in the perception of the work took place in 2013, after curator Rudolf Frieeling organized the exhibition ‘The Agent Ruby files’. Besides the artwork, the exhibition displayed transcripts of user conversations with Ruby displayed in several archival binders. ‘Agent Ruby’ creates a record for everyone that has been talking to her. Not only did the public become more aware of this decade-long invisible archive of chat logs, also within the preservation of the artwork the database came to the fore as an aspect that needs care and protection. Over time, this artwork is able to store more and more conversations; it includes an archive that can give an overview of Recipient responses over time.

In chapter 7 the case studies will be further compared and contrasted. This will give insights in the role of each agent and will conclude with the agency of the artwork itself. The aim of this research is to approach these artworks not as passive objects, but to unravel the (social) roles that these artworks perform.

These roles become apparent through their interaction with other agents: The Artist, Recipient and Prototype. Through analysing the interactions between those agents, at different moments in time, we start to better understand these artworks, not as static objects, but as dynamic agents. This thesis concludes that to understand Internet art, it is important to study the agency of these artworks. This thesis deals with the aliveness of these works and describes certain responses that they elicit over the course time. It also provides evidence of what these artworks once were and have become in the present time, under influence of how humans interact with these artworks.

To conclude, chapter 8 will build further on chapter 3 by discussing the methodology and methods used within this research: *Where* (and *where not*) did this methodology turn out to be valuable for giving insights into the online artwork? It will also reflect on how to study the online artwork and opportunities for future research.

2.

The Problem Defined

2.1 Introduction

A core tenet of the practice of art history has been that artworks are its fundamental units of analysis. Recently art in the form of websites have begun entering museum collections. While this has led to the development of new strategies for collecting and preserving these artworks (Dekker 2014b, 2018), the problem that is not fully explored yet is how these artworks can be studied as sources of historical evidence. This chapter will further outline the problem at the heart of this thesis: How can (art) historians investigate these artworks as primary sources that can help us understand human cultures or give knowledge about the past? It will additionally address where this research will add to other (existing) contributions.

The first part of this chapter will critically examine what is the right term for the set of artworks that are discussed within this thesis (section 2.1). Here, it will be further explained that this research will refer to them as ‘Internet art’ and why this seems most appropriate. The use of this term refines our understanding of the characteristics of these artworks, even before studying them in detail. In section 2.2 the motivation for this research will be further explained. According to art historians studying Internet art, this art form is still marginalized within the field of art history. Julian Stallabrass argues that one of the reasons for art historians to overlook online artworks, is that it is unclear what exactly the ‘art object’ is (Stallabrass 2010). Their features are close to the Web, which means that this new type of artwork breaks away from traditions within the art world. There is a need for new methodologies to study these artworks. This chapter will continue with exploring existing art theories for studying media artworks, which

include Internet art (section 2.3). Four clusters of studies have been identified: digital aesthetics, image science, media ecology and media archaeology. What is not fully explored yet, is the relationship that people can have with these artworks. This research will increase our understanding of online artworks through connecting the analysis of the artwork to the effect it evokes in certain social contexts (section 2.5). To study the (social) agency of these artworks, this research will make use of a theory that has not previously been applied to Internet art. This will be further discussed in chapter 3.

2.2 *The term: Internet art*

What is Internet art? And is this the right term for the set of artworks that are studied within this thesis?¹ Dieter Daniels argued that the artworks, associated with Internet art, are witnessing discussions still vibrant, but despite that it has not (yet) established a domain of its own (Daniels and Reisinger 2010, 20). In line with his claim, the term ‘Internet art’ can at this moment in time not be found in the Art & Architecture Thesaurus. This thesaurus (part of the Getty vocabularies) serves as an international standard for describing art and artefacts that are part of our cultural heritage, and it is an important repository for digital art history.² According to this vocabulary the artworks in this thesis can be placed under the term ‘electronic art’ or ‘new media art’; this latter is defined as “*art that uses new means of mass communication, specifically electronic and digital technology, inclusive of video and other forms of motion and sound media* (“Art & Architecture Thesaurus” n.d.).” The domain ‘new media art’ is further divided in two main trends: ‘digital art’ and ‘computer art’. Although Internet art could fit in these more firmly grounded categories, it does not claim its own identity or specificity within this thesaurus, at this moment in time.

¹ Although describing, naming and eventually classifying artworks is a useful tool, art labels have also been highly critiqued for being a relapse into historicism. Often artworks are complex entities that cannot easily be put into a single group, and the fluid nature of online artworks makes this even more complicated. These works can easily shift between different categories. Although artworks are not bound to a specific label, that does not mean categories are not useful. The objective of this section is to clarify which artworks are studied within this thesis. Through using the term ‘Internet art’, it does not disregard the specific characteristics of online artworks, in contrast, it tries to crystallize its specificities, its difference.

² The term ‘digital art history’ has become a shorthand reference to the potentially transformative effect that digital technologies hold for the discipline of art history. Advanced technologies are making research materials more widely accessible and allowing scholars to ask and answer new questions.

What can be found in the literature about Internet art? Julian Stallabrass already pointed out that in the book ‘Art Since 1900’, an influential historical overview of modern and contemporary art, there are no references to Internet art (Foster and Krauss 2004; Stallabrass 2010, 164). Recently, the book has been revised and expanded, but also in this new edition Internet art stays absent.³ Other publications do include Internet art. There is a body of literature with a specific focus on (the history of) Internet art (Stallabrass 2003b; Baumgartel 2004; Greene 2004; Tribe and Reese 2006; Daniels and Reisinger 2010; Bosma 2011), but more often are these artworks are discussed in a wider context, like the history of new media art (Lovejoy 2004; Wands 2007; Popper 2007; Grau 2010; Hope and Ryan 2014; Shanken 2014; Dekker 2016), science and technology (Wilson 2002) or as part of media cultures (Manovich 2002; Fuller 2003, 2008; Gere 2009; Galloway 2012). That all these publications were published after the turn of the millennium, is one reason that this art form has a rather short history. The recent history of Internet art makes it difficult to see its coherence and continuity.⁴

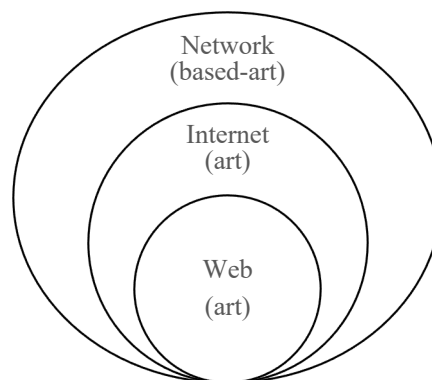
In the body of literature mentioned in the last paragraph, the term ‘Internet art’ itself is not consistently used, but instead different terms are in use: ‘Net(work)-based art’, ‘Web art’, ‘Internet art’ and ‘Net.art’ (Net Art). These terms are not synonymous, as can be explained by considering the distinction between the terms ‘network’, the ‘Internet’ and the ‘Web’. There are networks of various kinds, from telecommunication networks (experiments with telephone networks, radio, television, and so on), to social and biological systems. One possible network is computer networking; the Internet is again one possible computer network. Between the late 1960s and the 1990s, the Internet grew from a single network to a global system, connecting more and more computers (Abbate 1999). A key concept of the Internet is that it was not designed for

³ Although Internet art is excluded from the book ‘Art since 1900’, the Internet itself is not. This is mentioned as influential to various aspects of modern and contemporary art, for example it plays an important role in postmodern theories, the rise of interactive aesthetics and it radically changed image technologies (Foster and Krauss 2004, 698, 773, 781). And especially in the most recent period that this book covers (2000-2015), the influence of the Internet increasingly appears in artistic practices, for example the work of Harun Farocki, the Yes Men and Cao Fei (Foster and Krauss 2004, 818–19, 821, 833).

⁴ The impact of the Internet on art has taken a new direction in what some refer to as Post Internet art. Instead of art ‘on’ the Internet, the focus has shifted to the effects of the Internet on aesthetics, culture and society. At this moment in time, the significance of the Post-Internet era is still highly debated (McHugh 2011a; Quaranta 2013; Cornell and Halter 2015b). But what it does show is that the still expanding World Wide Web had a profound influence on the art during the last decades, and that this development has not ended yet.

just one application, but as a general infrastructure on which new applications could be built; one of them is the World Wide Web (WWW). This development was again a fusion of ideas, but an important moment was around 1990 at CERN, where Tim Berners-Lee in collaboration with others, started to design a new service on the Internet protocol with the aim to help scientists to collaborate and share multi-media data (Berners-Lee et al. 1994; Abbate 1999, 214). This information system could be accessed remotely and as it was based on hypertext, it could bring together different ideas and record this process. CERN began distributing its Web software over the Internet. Once the Web became popular, other companies became offering commercial browsers. This eventually led to the World Wide Web, the mass communication network that we know today.

As mentioned the terms used within the literature are ‘Net(work)-based art’, ‘Web art’, ‘Internet art’ and ‘Net.art’ (Net Art). The distinction between the term ‘network’, ‘Internet’ and ‘Web’ gives a first understanding of how these related artworks are not synonymous. The term ‘net(work)-based art’ is an umbrella for a broad range of artistic practices that employ networked collaborations as diverse as mail art, video art, telematic art, fax art and Fluxus. ‘Internet art’ is a subgroup, as part of ‘Network based-art’. Again, ‘Web art’ is a subgroup of ‘Internet art’. As discussed in the previous paragraph, the Internet predates the Web. This is also the case for ‘Internet art’; this predates ‘Web art’. This can be easily confused, for example a venue for early Internet art projects is the ‘The THING’ (founded by Wolfgang Staehle), that nowadays can be found on the Web, but it started in 1991 as a bulletin board service, a precursor of the World Wide Web (Staehle n.d., 1998). Most artworks, associated with the term ‘Internet art’, developed soon after the wide take-up of Web browsers in the mid 1990s, exploring the possibilities of this new arena for art, attracted by its multi-media qualities, and the interactive functionality of the interfaces (Stallabrass 2003b; Greene 2004). Although this could lead to the confusion that Web art is maybe more accurately describing these artistic practices, it is the broader term



I Where is Internet art situated?

‘Internet art’ that is mostly used. As Jon Ippolito explains, the artists, associated with ‘Internet art’ exploited a wide variety of media, much wider than only the Web (Ippolito 2002). Their artistic practices employ all kinds of online technologies (from e-mail to BBS and websites) and see the network as a system, which provides materials for their artworks. With this, Ippolito also wanted to clarify that Internet art needs to be distinguished from artistic practices that send for example digital images over the Web.

What this overview does not include yet, is the distinction between the terms ‘Internet art’ and ‘net.art’. Also, these two terms are not mutually exclusive. The term ‘net.art’ came forth out of a story by the Russian artist Alexei Shulgin, one of the pioneers in using online technologies for artistic purposes. Appropriately, he brought this story into the world through the mailing list ‘Nettime’ (Lovink and Schultz 1995; Bosma 1999). He recounts that in December 1995, Vuc Ćosić (another pioneering artist) received a file with scrambled ASCII characters, something that can easily happen as a result of a temporary failure in the system. Among the scrambled letters, he detected a word ‘net.art’, which highly excited him as *“the net itself gave him a name for activity he was involved in (Shulgin 1997).”* Unfortunately the actual document (or manifesto, as Shulgin called it) got lost as a result of a hard crash. However, it fits this group of artists to give the term net.art a mythical status. As Josephine Berry argues, the story also illustrates the utopian view of these early practitioners to adopt a name that the computer itself had brought together, uniting human and machine, art and technology, the imaginable with reality (Berry 2001). Although the story goes that the origin of the term got lost, it can still be traced that a group of artists further explored the term ‘net.art’. Most notably is the conference ‘Net.Art Per Se’ (May 1996) that took place in Trieste (Italy), which was an attempt to further define ‘net.art’ as a specific art form (Greene 2004, 164).⁵ Although the term ‘net.art’ was adopted by the artists and practitioners involved, not much later writers started to place these artworks under the term ‘Internet Art’ (Ippolito 2002; Stallabrass 2003b; Greene 2004; Cook and Ghidini 2015; Dekker 2016). Julian Stallabrass explained: *“‘Net.art’ is a term that has become associated with a small group of early practitioners and a particular style, and it*

⁵ On May 21st and 22nd, in Teatro Miela, Trieste, Italy, a conversation was organized by Ljubljana Digital Media Lab with the title ‘Net.art per se’. The direct context was the festival ‘Teatro Telematico’ that is dedicated to art and technology in the era of digital communications, with the special emphasis on the east- west problematic.

cannot be applied to online art as a whole (Stallabrass 2003b, 11).” It could be explained as that the net.art movement, which included among others the artists Vuk Ćosić, Jodi, Alexei Shulgin, Olia Lialina, and Heath Bunting, had a short life span (1994-1999) and arose in the wider development of Internet art that covers a broader range of art practices.

In sum, the set of artworks that will be studied within this thesis all originate in the mid-1990s, shortly after the wider introduction of the World Wide Web. These artworks were (and still are) embedded within the Web, but also make use of other services on the Internet, for example e-mail. At the time of writing, there is not a definite name for these artworks yet. Although the field of ‘Internet art’ is not yet mature, and its recent history underpins a commitment to adequately improve its description, the term ‘Internet art’ will be used within this research. In comparison to ‘media art’ or ‘digital art’, the term ‘Internet art’ covers more specifically the network issues that form the heart of these artworks.

2.3 The problem: How to analyse the artworks associated with Internet art?

That the field of Internet art is difficult to grasp, is not only because of its recent history. There are other contemporary art forms, including digital artworks that constitute a more established field. Not surprisingly discussions started: why does Internet art, despite its promising start, remain at the margins of art history, and what is the reason that relatively few art historians have ventured into its study? Can online artworks, associated with Internet art, be compatible (or not) with the current art institutions and art history? Around the millennium, Sarah Cook observed that these artworks are incompatible with museums (or demand new kinds of museums) (Dietz 1998; Cook 2000). In 2003, Julian Stallabrass reflects on a related research problem in his publication ‘Internet art’. He argues that these artworks can be found within art institutions (Stallabrass 2003b, 117), but it brings new challenges to the museum, their sponsors and the art market (Stallabrass 2003b, 114–37). In 2010, Beryl Graham and Sarah Cook published the book ‘Rethinking Curating’, which is a dialectic argument, but it builds on the idea that new media art (an umbrella term under which Internet art

falls, as explained in section 2.2) can be best understood as process rather than object and it considers these artworks by behaviour first (Graham and Cook 2010). Their argument continues exploring challenges for curating, including examples of Internet art. In that same year, art historian Julian Stallabrass published a chapter with the title 'Can art history digest net art?' (Stallabrass 2010), in which he reflects that there are issues complicating the study of these artworks within the field of art history (Stallabrass 2010, 169).

Where both agree is that although the artistic practices associated with Internet art are various, they have in common that the artists question the traditional 'art object'. By employing the Web, artists introduced a new type of artwork, and until today, the nature of these artworks is difficult to grasp. This gives challenges, for both art institutions and art history. This research builds further on the question posed by Stallabrass: "*Another fundamental issue (and one I have struggled with in my work on the subject): what is the art object? Is it singular? Is there really something that connects Paleolithic cave painting, a Cézanne landscape, and a shopping trip by Sylvie Fleury or a dinner by Rirkrit Tiravanija* (Stallabrass 2010, 169)?" This research will give new answers to this question, however first the origin of the problem needs to be further considered: Where is the nature of the 'art object' (if it is still possible to approach it as an object) different? For this, some of the historical roots of Internet art will be explored, followed by highlighting some of its specific features and it will conclude with restating the research problem.

The rethinking of the art object is already present in the works and writings of Roy Ascott. In his text 'The Construction of Change' he shows a deep interest in art as a process (Ascott 1964). He denies that the essence of art is in material objects alone and instead of approaching artworks as finished entities, he sees them as a form of behaviour that is part of a system. Through the process of *doing*, artworks interact with their environment and can cause changes, for example enabling a mental shift or altering the behaviours of the artist or audiences who interact with the work. So, the artwork is no longer a fixed entity, but instead its boundaries, values and meanings can shift as a result of a constant negotiation between artist, artwork and audience.

These early ideas of Ascott can be seen in the context of the time, in which artists as diverse as Hans Haacke, Robert Morris and Stephen Willats were breaking with the traditional idea of making art objects, and instead explored open systems that emphasized organic growth, processes of interaction, and in which the observer became included within the artwork, as part of the system (Halsall 2008). These ideas were inspired by Cybernetics and Information Theory that understood phenomena in terms of the systems of which they are part. This is also the time in which Jack Burnham introduced the theory of system aesthetics more widely, first through an article in *Artforum* (Burnham 1968b) and followed by the 'Software' exhibition (1970, Jewish Museum, New York City). As a critical response to the formalist reading of art, that dominated the development of modern art, Burnham rejected the idea of the 'autonomous art object'. Instead he redefined the work of art as a generative system: The condition of the object status of art, the role of the spectator and the medium of the artwork needed to be in constant change. For a better understanding of an artwork, it needed to be placed within networks. Burnham argued that instead of studying the artwork in isolation, it was important to look at the relationships between objects, as well as the relationships between objects and humans (the artist, audience, etc.).

Although this shift towards seeing art as part of a system started before artists got access to the Internet, these practices and theories can be considered as an important backdrop (Ascott and Shanken 2007, 69). The reason why in particular Roy Ascott's theories are highlighted here, is because within his artistic practice he later started to make use of the Internet. In the 1980s, he enabled access to a computer network through which he connected to other artists in Australia, The United States and Europe.⁶ This led him to create, at the end of 1983, his first large-scale telematic project 'La Plissure du Texte' (referring to Barthes's 'Le Plaisir du texte'), that involved the generating of text through a computer time-sharing network. Museums and art centres in eleven cities, in three different continents, were involved. All of them invited their audience to connect through a terminal. Hundreds of 'users' got involved in generating

⁶ The computer network that Roy Ascott accessed was part of IPSA (I.P. Sharp Associates), a timesharing system based in Toronto that provided network computer services to businesses via telephone. In the 1980's, a network of artists got access to this network through a more simple and cheaper version. The first Prototype was called ARTBOX, which was further developed through a number of versions until in 1982 it became formalised as ARTEX - the Artists' Electronic Exchange programme. This network existed until the 1990's (Amelia Jones 2009, 569).

a text, which resulted in a process of co-creation. This work can be seen as exemplary for how his art was no longer an ‘object’, but “*rather a web of relationships between ideas and images in constant flux, to which no single authorship is attributable and whose meanings depend on the active participation of whoever enters the network* (Ascott 1985, 212).” After the rise of the World Wide Web, a growing number of artists got access to computer networks, and started to experiment with its possibilities. The network, or as Ascott called it the ‘web of relationships’, became the core of these artworks.

That artists are radically questioning the ‘art object’ is something apparent since at least the 1960’s.⁷ However, this further developed after artists started to really work ‘on’ the Internet. An essential feature of Internet art is that instead of static entities, these artworks are ‘variable’. This was explained by media theorist Lev Manovich as: “*New media objects are not something fixed once and for all, but something that can exist in different, potentially infinite versions* (Manovich 2002, 56).” This characteristic goes against the finite art objects that were made by means of various analogue technologies, like painting or sculpture. They defy the idea of the static artwork that can be preserved in a certain shape or form, over a longer period of time (Rinehart and Ippolito 2014, 47). Instead digital art confronts us with artworks that are in a constant state of flux. Arguably, Internet art is the most complicated among digital artworks. These artworks are a constantly growing and changing network. Change occurs on multiple levels: First, the artwork itself is a changing online network. Webpages can be added towards these artworks, as well as that over time it can collect numerous links to other websites. Second, the artworks are embedded in a network, the Web, which is rapidly changing and perceived very differently today than in its time of origin. And third, these artworks attract a growing network of people (or ‘active users’), who can interact with the work and modify it in unpredicted ways. This also brings up that the traditional roles of the artist, the audience and the artwork changed. Internet art shifts away the viewer’s perception from the object towards a new social space and the relationships within it. Instead of looking at the artwork, the viewer is immersed in

⁷ It is even possible to go further back in time to 1916, when Dada’s Cabaret Voltaire opened its doors in Zurich. However, this would take into account more broadly participatory art forms without any connections to Cybernetics or computer networks.

social settings in which one act, following not only specified rules by the artist, but also those of the computer.

Stallabrass adds another complication: Internet art does not really ‘look’ like art (Stallabrass 2003a). Shown within a non-art context, the World Wide Web, the viewer surfing the Web can come across the artwork without knowing it is art. This enables the artwork to provoke new forms of experiences, but not always directly associated with art. Instead it becomes part of a flow of content online, where there is no easy distinction between ‘high’ and ‘low’ art. His point is supported by a quote from artist Heath Bunting, who explains: "*A lot of the things with net.art, is that it is an invisible art, it tries to not have that baggage. A lot of the work is about hoaxing or faking or rewriting. So if you say: this is an artwork, you've blown the cover immediately* (Bunting 1997)."

That Internet art took art beyond its traditional boundaries had its consequences for the institutional acceptance of these artworks. Internet art confronted museums and galleries with a new sort of ‘artwork’ which did not easily fit within their traditions. To exemplify, these artworks are freely distributed on the Web, always accessible; which makes it easier to share than to own them. And instead of protecting their works, artists motivate others to copy, modify and change elements. How does one make online artworks exclusive? How to collect them? And how does one describe, classify or preserve an ‘object’ that is in a state of flux and adapting to constantly new environments? What drifted these artworks possibly further away from the traditional art world, is that they had their own environment in which art could be presented, the World Wide Web. Here, artists found a space that was no longer restricted to the canonical, or what we call ‘fine arts’, but instead was more democratic and inclusive for a variety of audiences. Besides that, the Web allowed these artists to make direct contact with a *global* audience, a concept that seemed so strong that artists started to work independent of mainstream art institutions (Greene 2004, 81; Graham and Cook 2010, 215). It can be argued that the nature of these artworks is closer to the characteristics of the Web than the artworks known within the (traditional) art world. Until today, there is a complex relationship between the art practitioners and the established art world. There are only exceptions that passed through the art market or were acquired by museums. As a result, the institutional assurances for viewing these

artworks is absent (Stallabrass 2010, 169). This further complicates the understanding of these artworks: How can these artworks still be secured of an art status? What still makes them ‘art-like’?

2.4 Contextual review

So far, the research problem has been further explained: This research deals with the issue that artworks, brought together under the term Internet art, differ in nature from traditional artworks. Consequently, in both collections as well as academic engagement with this art, there are gaping holes (Grau 2010, 10). This research will focus on the academic engagement with Internet art, in particular an art historical perspective: How can these artworks give us information about the past or help us understand (other) cultures? And what makes them significant artworks? This section will take a closer look at existing theoretical debates, which enables to eventually point out where this research will add towards them (in section 2.5).

As discussed in section 2.2, the scope of Internet art as a distinct field within art history is limited, more often these artworks are studied as part of the wider domain of media (digital) art. The same is the case for the theoretical frameworks that will be mentioned next: Internet art is most often not the primary subject, but it is discussed as part of the wider field of media art. Having arisen out of a variety of disciplines and research traditions, studies reveal a range of different perspectives upon media artworks. Many of those studies can be clustered around four areas: Besides the debates about its aesthetics (section 2.4.1), there is the field of image science (section 2.4.2), media ecology (section 2.4.3) and media archaeology (section 2.4.4). This section only provides some snapshots of what these fields contain without going too much into the wider possibilities of how to put these methodologies into practice. My aim is not to be complete, but to identify which part of the problem has not been addressed to date (section 2.5).

2.4.1 AESTHETICS

As discussed in section 2.2, Stallabrass brought up the problem of how Internet art brings forth a new type of artwork (Stallabrass 2010). Consequently, what is it that still

makes them into artworks? Integral to many people's conception of art are its aesthetics, in other words what constitute their 'beauty', or if one approaches aesthetics broader: How can we appreciate them as art? Stallabrass tries to further explore the aesthetics of Internet art (Stallabrass 2003b), and with that he adds towards wider debates about the aesthetics of media arts (Broeckmann 1997; Baumgartel 2004; Vesna 2007; Cubitt 2009; Kwastek 2015). Although their explanations vary, all are united that they question why these artworks 'look' differently. Stallabrass argues that these artworks deliberately make use of anti-aesthetics and sometimes even denies being art at all (Stallabrass 2003b). Likewise, Sean Cubitt considers the alternative aesthetics of these artworks as a counter strategy (Cubitt 2009). Because digital artworks are 'fluid' and consist of information that is in a constant 'flow', these artworks express themselves through various kinds of aesthetics. Through that they disrupt the coherence in the global information, prevent monocultures, and instead maintain cultural richness through diversity. Like Stallabrass, Cubitt also stresses that instead of trying to be beautiful, these artworks aim to be subversive. Katja Kwastek gives another explanation for the different 'look' of these artworks (Kwastek 2015). She argues that these artworks should no longer be read through their visual representation (alone). These artworks rely on the participation of the spectator. When the spectator is included within an artwork, their experience is not only determined by 'looking' at them, but through the way they interact with the work. Kwastek makes the contribution that she moves away from the visual properties of the artwork, and instead expands the aesthetic response through offering a theory for *interactive* aesthetics.

2.4.2 IMAGE SCIENCE

Although aesthetics is an important aspect of an artwork, there are several other theories that contribute to the analysis of media artworks. One of them is the interdisciplinary field of 'image science'. Obviously, this takes the 'image' as object of investigation, but instead of analysing its aesthetics (or any values or beliefs attributed to artworks), it uses methods that are borrowed from how empirical sciences approach natural phenomena. After the rise of the digital realm this field expanded towards digital images. Some of these studies are concerned with artistic images (Grau 2004), while others move away from art history by referring more broadly to (digital) images in visual culture (Mitchell 1987, 1995, 2006, 2015). Oliver Grau investigated the

development of so-called ‘immersive image spaces’ (Grau 2004).⁸ With that he refers to images that are 360° and create the experience that observers feel immersed within an illusionary space. Although it is impossible to study the effects of these artworks without taking the experience of its observer in consideration, this is not the main focus of this research. Instead, Grau explicitly analyses the strategies that artists used to create visual (or sometimes more broadly multi-sensory) effects, as well as how these artistic ‘immersive image spaces’ function. If we want to see images in all their fullness, we have to also explore audience responses. Here, W.J.T. Mitchell gives interesting additional insights, as he questions what it is that makes certain pictures such ‘vital signs’ (Mitchell 2006). Mitchell approaches images as agents that can act, like living organisms. He places these images in an historical context to better understand why people made them, with what kind of intentions, which desires, and ideas influenced their choices. As well as that it gives him a better understanding of why people act upon them in the way they did. In sum, although both Grau and Mitchell study non-virtual and virtual images, they take separate directions. Where the first tries to better understand the origin of image making, the latter addresses responses to images.

2.4.3 MEDIA ECOLOGY

Another field is that of media ecology (Fuller 2007; Jussi Parikka 2007, 2011). In contrast to image science, this framework studies media art beyond their visual representations. Although the term media ecology knows a multiplicity of meanings, one is that it involves studies of media objects through mapping their (media) environment.⁹ An aspect most closely to the methodology used in this research is that instead of studying the visual appearance of the artwork, it approaches the work as a system. It unravels this system through analysing the interconnections between agents,

⁸ Grau studies media artworks, as well as older art forms like fresco rooms, panoramas, and so on. To better understand the phenomena of virtual reality in art, Grau connects contemporary works to their historical roots.

⁹ The term ‘media ecologies’ can be applied in different ways, from studies that look at information roles in organizations (of companies), to media studies, as well as that it used in certain threads of literature studies. An overview of different strands of use of the term can be found in the introduction of the publication ‘Media Ecologies’ by Matthew Fuller (Fuller 2007, 2–4).

without making a distinction between human and non-human actors.¹⁰ Examples of these agents can vary from software and standards, to protocols, users, designers, and so on. As the term ‘media ecology’ is used in different ways, the exact methodology is hard to grasp. It might be best to illustrate it with an example. Matthew Fuller applies this framework to study the online artwork ‘CCTV – A World Wide Watch’ by Heath Bunting. This artwork encourages users to watch webcams and if they see a crime report it to a police station by sending them a fax. Fuller traces each step within the website, including the connections between the devices, the protocols and the image system (Fuller 2007, 109). Through that it maps the artwork as a complex media system, as well as how it operates.

2.4.4 MEDIA ARCHAEOLOGY

In another field, media archaeology, the excavation of the past of media cultures is further explored. Not only do these studies attempt to bring back the past, they also focus on how this can increase our understanding of the present and how they can even reveal possible (new) directions for the future.¹¹ Like media ecology, also this field looks beyond the visual appearances of media objects, and it is even most interested in the *non*-visual elements of technological cultures. Studies can be found on a wide spectrum of phenomena from Wi-Fi, to Bluetooth and GPS. Also the field of media archaeology includes a wide variety of theories and methodologies (Bolter and Grusin 1999; Manovich 2002; Gitelman 2003, 2008; Zielinski 2008; J. Parikka 2011; Jussi Parikka 2015, 2016; Ernst 2012, 2016; Chun 2013; Huhtamo 2013; Elsaesser 2017). Some debates were gathered in publications by Huhtamo and Parikka, which gives an entry point to this field (Huhtamo and Parikka 2011; Jussi Parikka 2012). There is a more materialistic approach that tries to look inside the machine and deconstructs technical systems, opening and hacking hardware and software, documenting its visual and non-visual compartments, as well as reconstructing its operations. Others explore alternative readings of media histories and are more concerned with exploring the

¹⁰ There is a close relationship between the conceptual framework of media ecology and Actor Network Theory (ANT). In chapter 3, it will be further explained where this research takes a different theoretical approach from ANT.

¹¹ An important theoretical foundation for this field are the ideas of Michel Foucault about the archaeology of knowledge and Friedrich Kittler’s media-technological understanding of it (Foucault 1969; Kittler, Metteer, and Cullens 1990; Kittler 1999).

genealogies of media or bringing back to the attention those concepts that were never realized (imaginative media). An important aspect within media archaeology is to explore paths that are usually neglected or revealing parts of histories that are in danger of being forgotten.

2.5 Conclusions

One can pursue an understanding of an artwork from many angles. Depending on the context and the aim of the research, artworks are studied through different lenses. This is also the case for media artworks. In the literature available, it is possible to find a wide range of theoretical frameworks, varying from analysing aesthetics, towards how to analyse the visual properties of the work, or bringing into view how these artworks operate. Most of these theories do not specifically focus on Internet art, but nevertheless give insights in how an online artwork can be further investigated. This research does not aim to find a completely new direction; rather it builds further on these existing theoretical and conceptual fields. However, it does suggest that for a more complete understanding of Internet art, we need to focus on an area that has not been explored in its own rights, namely the (social) agency of these artworks.

Artworks are generally considered to be inanimate, not as actors in social exchanges. They are perceived instead of perceiving and acted upon rather than active themselves. Many theories concerned with Internet (or media) art, move away from analysing the artwork as an object, towards trying to better understand its effects. This will also be the departure for this research, but where it will take an alternative approach is that it will analyse the effects of the artwork on the humans that surround the artwork (the audience, the artist, as well as the persons where the artwork is referring to). This research deals with the interactive settings in which artworks relate to people. Not only does it critically examine social settings now, but it reconstructs how the social context in which the artwork was embedded at different moments in time, as such describing the artwork's social life. For the purpose of this research, it will apply a methodology to Internet art that has not been applied before. This methodology will be further explained in the next chapter.

So where does this research add towards the existing fields as mentioned within this chapter? In a sense, it contradicts the analyses of the aesthetic properties of these artworks, as it argues that meanings and emotional experiences cannot be determined as it is dependent on specific socio-cultural contexts. Aesthetics constitute a kind of judgement, a kind of experience, and a kind of value. Instead of defining the aesthetics of the artwork, this research intends to embrace a wide variety of responses depending on different socio-cultural contexts. Secondly, it will not ignore the ‘image’, or what the artwork visually represents, but it will go further by also analysing non-visual elements, like what is stored in the databases of these artworks and how do they operate? And third, although this research will not completely exclude the role of technology, it does not take this as its sole determinant. Building further on an anthropological theory, the main focus will be on the values and beliefs of humans, or more accurately the values and beliefs that humans attribute to artworks (this will be further explained in section 3.1.2). To fully explore these interactions, it will also include (social) settings outside of the World Wide Web, for example what happens when the artwork is exhibited in a museum gallery? Online and offline experiences are not separate, in other words this research looks at effects of the Internet on experiences in both virtual as well as physical spaces.

The problem that Stallabrass posed about Internet art was not only ‘what is the object?’, but he also wondered ‘how can we still see it as art?’. Critical concerns have been raised about the aesthetics of Internet art, which fit uncomfortable within the more common ideas about beauty or technical virtuosity. What we recognize as a Western masterpiece might not be the best way to understand Internet art. Ranking assumes a radical disjunction between high and low images, high and low responses. This goes against the belief of Internet art practitioners, who aim for democratization of art, making it accessible to more people. However, in this thesis it will be argued that a work of art is not only confirmed as art through what it (visually) represents, nor by virtue of any (conventional) notions of beauty. It can also be an exploration of a new vision and the effects that this can have on its audience. These last values will be addressed in this research that will investigate how Internet art was an exploration of a ‘new’ social space, a networked discourse. Online artworks employ this to produce social relationships and to enable certain effects in a wide variety of social settings.

This research argues that it is their social agency, which makes them significant works of art.

3.

Methodology and Methods

3.1 Introduction

This research will describe the social lives of online artworks with as a final aim to arrive at a better understanding of the agency of these artworks. In other words, it will analyse how online artwork functions as a person-like thing that can act and perform social roles. The methodology in this research will build further on a model, the Art Nexus, developed by Alfred Gell (Gell 1998). This chapter is intended to further explore this theory and how it will be applied in this thesis. This methodology will be further tested in the upcoming case studies (chapter 4, 5 and 6).

To give an overview of this chapter: Section 3.2 will explain why this research is set within the wider field of material culture studies, and why Gell's theory seems (most) appropriate. This choice offers a specific lens for studying the agency of artworks. The type of agency that will be studied will be further explained in section 3.3.1. This will be followed by how this agency can be studied through Gell's model, the so-called Art Nexus (section 3.3.2). This model places the artwork in a social network, in which humans and artwork interact with each other. The main concern of this research is to reconstructs these interactive settings at different moments in time (section 3.3.3). This research argues that online artworks have, like persons, their own social lives. To analyse the artwork in a series of life stages, it will make use of a biographical approach, which will be further explained in section 3.3.4. Gell's model can be applied by using different methods, but this

research departs from (art) historical methods, as will be further described in section 3.4.1. The social networks in which the artwork was embedded are reconstructed at different moments in time. Although this research will still make use of more traditional archival repositories, it will also extract evidence from web archives. As this form of archival research is relatively new, this chapter will also explain how it will approach the Web as a relevant historical resource (section 3.4.2).

3.2 Motivation

Artworks are a principle source to increase our understanding of cultures, time periods and social relationships. This is of great concern within art historical studies, but also other disciplines can consider artworks as primary sources. The study of art and artefacts in a wider disciplinary field is also known as material culture studies. The research methodology that will be used within this thesis (a theory by Alfred Gell to study the agency of artworks) is situated within this field.

The term ‘material culture’ can lead to a confusion: Setting this research within this field does not suggest that this research will reduce the online artwork to its *material* manifestation, breaking it up into components like servers, computers, hardware, cabling and so on. In contrast, it is more concerned with the immaterial part of the Web, it being a socio-cultural space where people come together, send messages to each other and where artworks circulate among different cultures. Within the field of material culture, the concept of ‘materiality’ is a wide one that is not exclusively focussed on physical objects, but the items studied vary from artworks and commodities to gifts, dreams and technologies. This also involves the ephemeral, the imaginary and the immaterial (Tilley et al. 2006, 4). It is not possible to give a simplistic or strict definition of what ‘materiality’ concerns in this field, but its broad scope clarifies that this field (as well as this research) does not aim to describe artworks by their technological details alone.¹

¹ An exploration of the variety of materiality and immateriality has been published by anthropologist Daniel Miller (Miller et al. 2005, 20–29).

Instead, the key issue that is raised in material culture studies is that it strives for an understanding of how art and artefacts play a role in social worlds (Miller 1998, 3). What do people do with these things? What can they tell us about the time of their origin, or the cultures in which these things were used or played a role? Similarly, this research will further explore what these things can tell us, more broadly, about cultural life in the early days of the World Wide Web. It will address question like: How do people respond to artworks that are embedded in the Web, in their time of origin (the nineties) until now? And how do they mediate a variety of interests and values? From that perspective, online artworks - as cultural forms that can be played with, collected, that can circulate and have social meanings - can be studied in similar ways to how other things are studied within the field of material culture.

There are, however, also characteristics that distinguish online artworks from more traditional art forms, like sculptures or paintings (as has been discussed in more detail in section 2.3). An important feature is that online art is ‘variable’. Instead of stable and static objects, these artworks can be seen as permanent data transfers that can be updated and transformed by Recipients that have access to it. This brings two main issues to the forefront for studying these artworks: First, a close examination of the online artwork needs to include a timespan, which makes it possible to analyse their evolving state. So, instead of studying the artwork in a single moment of time, this research will follow how these works pass through many transformations, studying their ‘paths’ and ‘life histories’ (as will be further explained in section 3.3.4). Secondly, it is essential to get further insights in the interaction between the artwork and the humans surrounding it. The artwork acts in a certain way and it is these effects (or agency) of the artwork, its ability to challenge us or make us do things, that will be further unravelled. These effects make humans interact with the artwork, making additions to the content or altering its form, in other words they make the artwork evolve in new directions. Although ‘agency’ is one of the cores of this artwork, this research argues that it is something that is not fully analysed yet (this research gap has been identified in chapter 2).

From this perspective, the study of online artworks can be tied to an approach in the study of material culture, which is concerned with extending the existence of ‘things’ with social agency (Hicks and Beaudry 2010, 10). That the ‘inanimate’ object can be imbued with animacy (or in other words can have social agency) is widely adopted in recent literature in a wide range of disciplines (anthropology, archaeology, art history, but also social science and technology studies). Andy Jones and Nicky Boivin explain how this shift can be understood as a response to a particular academic climate during the ‘70s and ‘80s in which linguistic-oriented approaches dominated the humanities and social sciences (A. M. Jones and Boivin 2010, 333–52). A new movement was highly critical of the (in their eyes) narrow concept of symbolism and ‘passive’ views on material culture. Jones and Boivin give an extensive overview of scholars that critically responded through addressing notions of material agency. Among them are two influential thinkers, Alfred Gell and Bruno Latour, one of the developers of Actor-Network-Theory (Latour 1993). Both treat objects no longer as passive entities, but as actors within social networks. Though both depart from different intellectual reference points.

Where Latour is concerned with the nature of objectivity and subjectivity in Western science and technology, Gell’s theory focuses on the human responses towards art and artefacts (in Western as well as non-Western cultures). He restricts the scope of his theory by excluding scientific inferences, and instead departs from a category of things that “*permit the abduction of agency*” (Gell 1998, 15). Threads of thoughts do not derive from experimentation, but from acts of imagination (‘abduction’). Gell’s theory is about what people believe, or what they believe they know about an artefact. An example that illustrates this distinction, borrowed from Gell himself, is ‘smoke’.² When there is a fire, smoke is the outcome of a natural process, and as such it is excluded from his theory. However, when there is smoke and because of that we *imagine* that there could be fire, then abduction occurs, and smoke becomes an ‘Index’ (this is the way Gell also describes the artwork within his model).³ In case of artworks, it is often not possible to give a scientific

² Gell, on his turn, borrowed this example from Peirce’s theory of signs (Peirce 1986).

³ Chapter 7 will further explain (the origin of) the term ‘Index’ in Gell’s theory.

explanation of the value that people attribute to these artefacts. To properly understand art, it cannot be ignored that it evokes beliefs, imagination and emotions. As such, this research will test Gell's approach, and by doing so, it studies the artwork from a specific lens and makes us understand it in a specific 'art-like' way.

Another difference between the approach of Gell and Latour is that both think slightly differently about how 'agency' is assigned to non-human actors (e.g. an artwork or artefact). Latour is interested in the understanding of objects as being *fully* agentic. Through folding together people and things in networks of activity, it is the total of agencies within the social network that in the end produces something new (Latour 2007). In the Actor-Network Theory human and non-human actors are treated in the same way. This means that for example technology, as a non-human actor, is no longer treated as a tool, but it plays an integral part in the creation of a new social situation. In contrast, Gell makes a distinction between what he calls 'primary' agents (intentional beings, like humans) and 'secondary' agents (non-intentional beings, like artworks) (Gell 1998, 17, 21). Although Gell is also concerned with how the artwork 'acts' (in a person-like way), he emphasizes that these things stay dead matter and only acquire agency through interaction with humans (the primary agents). This will be further explained and illustrated at the beginning of section 3.3.1.

Although some scholars argue that material culture studies can be seen as a post-disciplinary field (Tilley et al. 2006), this research will follow the perspective of Dan Hicks and Mary C. Beaudry (Hicks and Beaudry 2010). They recognize that *interdisciplinary* collaborations are central to (the future of) material culture studies, but they reconsider the idea of this field being *post-disciplinary*. Examining material culture can happen in museums, but also in laboratories, through landscape surveys, or through qualitative and quantitative approaches in sociology-cultural anthropology, to name just some examples. There are a wide variety of research practices that can all be considered as being part of material culture studies. However, the way the 'thing' is understood is through particular intellectual trajectories, concerns, and debates. As such, Hicks and Beaudry argue: "*An*

awareness of disciplinary methods, and disciplinary histories, is a crucial first step in any adequate account of contemporary material culture studies (Hicks and Beaudry 2010, 4–5).” In contrast to Actor-Network Theory, they resist the idea of its transdisciplinary reception and instead celebrate the diversity of different disciplinary practices within this field. This research aims to also add towards this diversity.

3.3 *The Methodology*

3.3.1 AGENCY

This research will analyse the social lives of online artworks, with the aim that this will give insights in the agency of the artwork. Instead of analysing its aesthetics, or formal qualities, it analyses the social effects of these artworks. The previous section already touched upon that ‘agency’ could be understood in different ways. Gell asserts that artworks are created as a form of instrumental action, in order to influence the thoughts and actions of others. From his perspective, it is essential to analyse human intentions and beliefs, as they play an important role in giving artworks their cultural value.

To further explain this, the worshipping of miraculous portraits of Christ serves as a good example. Possibly one of the most famous examples is the ‘Veil of Veronica’, also known as the Holy Face. According to the tradition, Saint Veronica wiped his face clean of blood and sweat on his way to his crucifixion. The features of His face became imprinted on the cloth, which gave the cloth magic abilities like curing blindness and raising the dead. Until today, this famous Christian relic attracts crowds of pilgrims. There are many portraits of Jesus, all showing him in a different way. But this specific one captures Jesus in a way that makes his physical presence comes closer, which gives it a strong social agency. It is a person-like artefact that plays a social role and moves people as they belief in its presence, and sometimes in its magical powers.

From a Gellian perspective, the relic itself stays dead matter (as such a ‘secondary agent’). But although the image is ‘inanimate’, a certain living presence

is attributed to the relic, and it has (like a person) a form of social agency. By only looking at the cloth itself, we cannot understand the strong effect of the 'Veil of Veronica' on groups of people. Instead it comes forth out of a nexus of interactions between humans ('primary agents') that surrounds the artwork, their intentions and beliefs. Who is the person that the artwork is referring to, who made the work, as well as who are looking at it? It is the interaction between those humans that gives the relic its social agency.

While the portrait may have a deep value for Christians, others would say that the miraculous effects of the cloth is just a matter of human beliefs, for some it may even be considered as 'irrational' behaviour to honour it. Depending on the attitude towards religion, the effects of the relic can differ. A Gellian approach departs from the point of view that the value and meanings we attribute to art, are a cause of human intentions and beliefs, which can only be understood as part of a certain culture. To fully understand the effect of the artwork, it is the task to contextualize these beliefs in the dynamics of social interactions that are part of a certain time and place.

The 'Veil of Veronica' differs from the online artworks within this research in both materials, as well as the intentions by which one made it, or the meanings and values attributed to it. Still, also online artworks have social agency, as will be further unravelled in chapter 4, 5 and 6, and also these artworks are not 'alive' in the biological sense, but their agency is a result of human intentions and beliefs. For example, 'Mouchette' (the case study discussed in chapter 4) is an artwork that performs an online identity. This work is about taking on a fictive appearance and giving a convincing performance of this role to the public. Even now in 2018, 'Mouchette' receives e-mails on a daily basis. Some people respond to this fictive character as if she is alive, others imagine who could be behind this online mask. To understand the social agency of 'Mouchette', human intentions and beliefs cannot be ignored. As well, to increase our understanding of this form of role-playing, it needs to be placed in the right context, these intentions and beliefs are part of a certain time and place.

3.3.2 THE SOCIAL NETWORK

In line with the Gellian perspective, this research will leave behind the idea that the meaning of an artwork can be analysed through its formal qualities or aesthetics alone, as both are subjective readings of the artwork depending on time and culture. Instead it studies “*the social relationships in the vicinity of the artwork mediating social agency*” (Gell 1998, 7). For this approach Gell developed a model, the Art Nexus, which places the artwork in a network in which it interacts with humans (see fig. 2).⁴ This includes four key agents: the *Artist*, the *Recipient*, the *Prototype*, and the *Index*. The *Artist* (also described by Gell as the ‘originator’) is to whom we ascribe the responsibility of the existence of the artwork. Then there is the *Recipient*, those who perceive or act upon the artwork in a certain way. This is followed by the *Prototype*: There where the artwork (visually or conceptually) refers to, for example in case of a portrait a certain person, or this can also be sketches or previous versions. For Gell, artworks are signs that refer to something other than themselves. Finally, also the artwork itself (the *Index*) is approached as a social agent. The model does not define these four agents in isolation, but it is mostly concerned with the interactions between them: someone is the performer of the social actions (the ‘agent’), while the other receives (the ‘patient’). Thus, a Gellian reading of an artwork departs from questions like: What is it in the artwork (‘agent’) that causes a certain response of the Recipient (‘patient’)? Or this can also occur vice versa: What is it the meaning that the Recipient (‘agent’) is given to the artwork (‘patient’)? It can be helpful to go back to the example given in the last paragraph, the ‘Veil of Veronica’, to see how the agency of this relic is a result of the interactions between these key agents.

Gell’s model can be applied to study a broad scope of artworks, but he does center his argument mainly on analysing things that “*may be understood to be real, physical things, unique and identifiable, not performances, readings, reproductions, etc.*” (Gell 1998, 13).” Although online artworks do not necessarily

⁴ Gell’s explanation of the Art Nexus can be found in his book ‘Art and Agency’, and in particular chapters 2 until 5 (Gell 1998, 12–73).

coincide with being ‘unique, physical things’, this research argues that the Art Nexus is nevertheless a valuable tool to unravel their agency. The first reason is that for increasing our understanding of online artworks, it is important to analyse their agency (as explained in chapter 2). Secondly, because these artworks can be best understood as part of social networks. The network of people that act and react on these artworks forms the heart of these works, in a sense they are continuously changing social networks, or as Gell would call this ‘systems of action’ (Gell 1998).

Although in potential Gell’s model offers a valuable tool, the question *how* to adjust the Art Nexus to the specific characteristics of online artworks deserves further exploration. Gell’s framework is elaborated through the systematic exploration of the possible relationships between four agents: the artist, the Index, Prototype and Recipient (see fig. 2). These relationships are further described in his model, but in case of online artworks these descriptions are in need for adjustments. However, this research will avoid focussing too much on (re-writing) these descriptions as it can be argued that this model should not simply be filled-in. Things are rarely clear-cut or coherent and a lot of details can get lost if we apply the Art Nexus too strictly. Chapter 7 will return to this problem.⁵ For now, in the light of explaining *how* this model will be applied to the upcoming cases, it is sufficient to mention that to prevent generalizations, the focus of the Art Nexus will be on fundamental underlying relational structures.

3.3.3 THE CONTEXT

Howard Morphy made an interesting critique of Gell’s analysis of the agency of artworks. He argued that it is important to take into account that there is a difference between what human beings think an object is capable of doing and what objects actually can do (Morphy 2015). The curing power of the ‘Veil of Veronica’ can again be taken as an example to illustrate this. In the religious experience of the work, it is important to not confuse what people believe could be the magical

⁵ Chapter 7 will explain in more details why it was impossible to formalize online artworks and its experience in a single formulation.

powers of the artwork and what it is that the artwork is actually doing. He critiques that Gell's analysis confuses the phenomenological with the analytical. It does not acknowledge enough that certain artworks are *thought* to have agency and are *believed* to affect the world. As such, it is not only a question of analysing the people surrounding the artwork. It is just as much of importance to analyse *what* it is in the artwork can evoke certain emotions, beliefs, even influence certain behaviours. And *how* it can be that people believe that objects have agency.

This makes it methodologically important to connect the analysis of the artwork to the contexts of use. To return to the example given, the 'Veil of Veronica', to understand the religious experience of the art object it needs to be set within the right context by questions like what the beliefs are, the places of worship, the rituals involved, and so on. Similar questions can be asked of online artworks. In case of the artwork 'Mouchette', the origin of this online identity can be best understood if we study it as part of a Web culture in the mid-nineties, and how identities were constructed and performed in the online, social spaces of that time. When the artwork 'Mouchette' is displayed in a museum gallery, it 'acts' differently than when it is presented online. It is also important to take a look at 'beliefs', for example some online artworks can be imbued with utopian beliefs about a new global space, or in contrast, with fears for where new developments could lead to.

To expand on this, online artworks do not only function in the 'here and now', instead over time they move from one context into another. They can move from being online to offline, in and outside museums and people from different parts of the world can interact with them. Where the artwork comes forth out of the intentions of their creators, over time they can be perceived differently, provoke other emotional reactions, or be used in ways that were unforeseen at the time of origin. Most interesting is that its reception can even *transform* the online artwork *itself*. As these artworks are variable, in each (interactive) setting, they adapt to the social environment, reinventing them anew. Over time, various agents are constructing and imbuing these artworks with value, significance and meaning. As a result, these artworks undergo changes over time (and across cultures) and they can even evolve into multiple versions. Correspondingly, we need to describe them

as being in process, including their modifications and transformations. Gell does confirm that the dynamics of social interaction is a process, unfolding in time, and therefore suggests that art should be studied within a biographical time frame. But it is good to be aware that this theory does not take into consideration that the artwork itself can change over time. Instead of online entities, Gell was referring to (more stable) artefacts, like paintings or sculptures.

This research will use the Art Nexus to analyse interactive settings, but it will also follow the life path of the artwork. It will do this by not choosing a single moment in time, but it will analyse interactive settings at several moments. This brings up another limitation of the Art Nexus, it mostly operates in the here and now. As Caroline van Eck added, it is important to also take into consideration that the way we respond to art differs over time (Eck 2015, 54). (Art) historians analyse artworks as part of a particular time frame, taking into consideration that the context changes over time. For example, social, economic and political conditions only exist in a certain time (and place), as well as technologies. Getting insights in these circumstances can increase understanding of what motivates people to respond in a certain way to an artwork or the meanings that are attributed to it.

For online artworks, this is in particular important. As these artworks evolve over time, it is important to know when we are studying them. Not only do the responses to these artworks change, but also the artwork itself. The appearance of a website in the nineties can very much differ from how it appears online today (see for example figure 4 and 5). The transformation of online artworks is not separated from its context, but instead they are interrelated, which makes connecting the analysis of the artwork to the contexts of use, so important. Considering them in a contextualized, grounded way should include the social-cultural dimension, as well as the historical context.

For placing these artworks into context, the influence of postmodern theories cannot be ignored, as well as that it needs to take into consideration that the technological environment changed over time. Although the World Wide Web only knows a very recent history, there were major developments within its short lifespan. As such, it is important to already place early websites in some sort of

historical context. If we would analyse online artworks from a present-day perspective of the Web, we are not able to fully understand how these artworks acted within social networks the way they did, and how these artworks were perceived in their time of origin.

3.3.4 THE CULTURAL BIOGRAPHY

Taking a biographical approach - borrowed from literary theories – to study artefacts is not new.⁶ Artworks can have, like persons, their own social lives, which makes them appropriate subjects for biographies. For the writing of a biography of this kind, one can ask questions similar to those one asks about people: What are the recognized periods in the artwork's life or what are important cultural markers? How does it change with age or when it reaches end of its usefulness? How does the value that we attribute to these artworks change over time, as well as their social meanings?

The term 'cultural biography' is borrowed from anthropologist Igor Kopytoff, who puts forward another interesting analogy between the biography of persons and 'things' (Kopytoff 1988, 64–91). Of his interest was how societies construct objects, in the sense that they add value and meanings to it. To Kopytoff, this is comparable with how people's identities are constructed by its social environments. Humans interact with others; they take on different roles in different contexts. In complex societies, a person's social identity is not only numerous, but they can even get in conflict with each other and it can be difficult to choose the right role in certain situations. The biography of things reveals a similar pattern, in which the 'thing' can become part of various value systems, classifications and re-classifications. In each context they take on another role and these are not necessary in line with each other (Kopytoff 1988, 90).

For the analysis of online artworks, this is a valuable addition. Until today there have been difficulties in classifying these artworks (as discussed in chapter 2) and

⁶The proposition that things can have 'social lives' was developed in an edited collection by social-cultural anthropologist Arjun Appadurai, who drew attention to the ways in which passive objects were moved and re-contextualized (Appadurai 1988).

instead there are many and even conflicting ideas about these artworks (we can think of discussions like, are these artworks part of the history of science and technology, or do they belong to the history of art; do we need to keep them alive or can they have afterlives; and so on). This research builds further on the idea that it is most sufficient to include these oppositions and it is best to accept the plurality of perspectives on these artworks. Through taking a biographical approach, and following the social trajectories of the artwork, it is possible to show how values and meanings attached to these artworks are flexible and fluid; they can change over time and among different cultures. As these artworks are part of multiple classifications, there can be conflicting ideas, for example about what these artworks mean or how to preserve them for future generations. Rather than believing that we will arrive to a certain truth about these artworks, this research aims to make sense of them in particular contexts, something that can always be argued for, and can be argued against. Why this is in particular important for the study of online artworks, is because these artworks are ‘variable’, they change over time. The humans surrounding the artwork can influence its form and content, and these artworks adapt to the context in which they are presented. Precisely because they are part of a wide scope of contexts, these artworks tend to develop into multiple directions, which is surely no accident. Through describing the artwork’s biography, we can unravel some of this process.

3.3.5 SUMMARY

The silhouette for the study of the agency of online artworks is beginning to emerge. To briefly sum up: This research includes three case studies, each will reconstruct the social life of an online artwork (chapter 4, 5 and 6). For each, their cultural biography will be described. This includes an analysis of the interactive settings at several stages of the artwork’s life, which includes their production, circulation and reception. In each context, it will be analysed how the artwork interacts with humans (following the Art Nexus this includes the artist, the Prototype and the Recipient). Not only does this make this biographical approach it possible to more accurately describe the (social) effects that artworks can have upon people, it will also unravel how this can change over time and across different

socio-cultural contexts. This will also reveal how the artwork itself can grow, evolve or morph into multiple versions or reinterpretations. New insights will develop on the basis of applying this model to the case studies. As such, chapter 7 will return to the Art Nexus and reflect on how it can be used as a lens for the analysis the online artwork.

3.4 Methods

3.4.1 MICRO (ART) HISTORY

Jannet Hoskins distinguishes two dominant forms in the biographical writings of artefacts (Hoskins 2006, 78). The first tries to unravel how persons perceive artefacts that they are linked to. The second starts by studying the artefact itself and tries to make them ‘speak’ through placing them in an historical context, by linking them to other written, oral and visual sources. Here, the understanding of the ‘thing’ is it being an ‘alternative source’ that can complement documentary materials (Harvey 2009). While the first is mainly the field of anthropologists, the second is primarily the domain of (art) historians and archaeologists. Although there are studies in which overlap can be found, this division is a consequence of the methods that are used. Where anthropologists tend to do more field research, historians extensively work with sources found in archives and (museum) collections.

This research departs from (art) historical methods. This means that this research includes a close reading of the online artwork (describing and analysing the conceptual, visual and interactive elements) and its displays (online and offline). This is followed by a socio-historical contextualization of the artwork through constructing linkages to other artworks, texts and concepts (based on literary and archival research). Additionally, informal interviews were conducted with artists, curators, archivists and others who engaged with these artworks.⁷ Until

⁷ My gratitude goes towards the many people that supported this research, in particular Jill Sterret and Mark Hellar, who invited me to San Francisco to become part of SFMOMA’s research project ‘Sustaining Ruby’ and artist Martine Neddham. An overview of interviews can be found in the appendix.

finally this leads to an understanding of the artwork as a subjective mediation located within a particular time and place. Much of the material under discussion has not previously been used for questions similar to this research; and a substantial amount of archival material remains unpublished to this day.

All the case studies are of works of art that have been collected by museums and (relatively) well documented. They have elicited a large amount of responses and maintained a variety of social lives. The cases selected are among the earliest art forms existing on the World Wide Web, which makes their brief history around twenty years old. From an art historical perspective this is still seen as relatively new. Since there is not so much historical distance yet, relatively a lot of information is available. An important task is to set this in dialogue with the artwork. This amount of information gives the benefit that it offers the possibility to study the interactions of artworks and people to the greatest degree of detail; and it is in small details that the answers to larger questions can be found (within history this is also referred to as micro history).

3.4.2 WEB ARCHIVES

Although this research will not use solely digital sources, but continue to mix, compare and contrast with more traditional sources, working with web archives are essential in this research. The online artwork offers a relatively new historical source, as with webpages in general, and for many historians these still remain largely unknown sources (Jane Winters 2017, 238). Although the Web is at the moment relatively understudied, contemporary historians become increasingly aware that traditional sources (like newspapers, letters, records of governments, etc.) are found (sometimes even solely) online, and subsequently our stories and histories. As such, some scholarly debates have started about working with web archives, not only about how to capture and preserve this data, but also about how to start considering the Web as a relevant historical resource and bringing it back as an addition to our understanding of our society of the last decades.⁸ These have

⁸ Examples are the ‘Research Infrastructure for the Study of Archived Web Materials’ led by Niels Brügger (Aarhus University) and ‘Born digital big data and methods for history and the humanities’ led by Jane Winters (University of London). The research of Julia Noordegraaf

been important resources for this research, as it would for sure have been incomplete when it would have ignored what web archives may contain. In this last section, it will be briefly explained how to use the Web as a relevant, historical source.

So, where to find web archives, and which ones are useful for this research? Over the course of time, more and more web archives have been established. A recent overview can be found in a study by Harvard Libraries and the publication ‘The Web as History’ (Truman 2016, 47–77; Brügger, 2017, 6–9). This research project will primarily make use of the Internet Archive and Rhizome’s Artbase (“Rhizome: ArtBase” n.d.; “Internet Archive” n.d.). This first archive holds the world’s largest collection of the preserved Web from the past (Ainsworth et al. 2011).⁹ To give access to their fast, growing Web collection, the Internet Archive developed the Wayback Machine (2001). Also, Rhizome’s Artbase is an early example of an archive that tries to ensure the longevity of digital content. Established in 1998 this archive contains more than 2000 pieces of Internet art, including websites but also other forms of media art. What is not part of these web archives, are chat systems and emails. As such, another important digital source is the archives of mailing lists. For this research, in particular CRUMB (Curatorial Resource for Upstart Media Bliss) 2018, nettime 2018, and The Rhizome Archive 2018 were of value. Archives of certain MOO’s would have been very useful but were unfortunately no longer (publicly) available.

This new rich source of information also brings new conceptual challenges. Maybe one of the most well-known is that it is difficult to ascribe a clear date of publication to an archived webpage. The date for the web page often marks the point when it was archived rather than when it was published. Specific for archived webpages is that these dynamic entities continually change in a high level of flux. As such, the focus within web archives on the date of archiving is essential, also for giving (some) insights in how webpages transform over time. Most web archives

(University of Amsterdam) focuses on digital heritage, including the access and use of digital collections.

⁹ Internet entrepreneur Brewster Kahle founded the Internet Archive in 1996 as a non-profit organization with the aim of preserving digital media, including the Web.

(e.g. the Internet Archive) capture webpages at different moments in time and sometimes redirect if the domain name of the web page changes over time. Although it can sometimes be difficult to find the date of origin, this uncertainty about dates is something historians have dealt with often. What is more complicated is that there is not much extra documentation available that gives information about the provenance of archived web pages, which is essential for critically evaluating the reliability of the source as evidence.

Another challenge is to get an overview of where specific websites (or clusters of websites) may have been archived. Although a number of web archives have established full text search (which means that the search interface allows for searching all types of content in the archive), the Wayback Machine can at the moment only find words in Meta data. Still, it can be difficult to find the right key words or finding the exact web pages in the overview of hits. And even after relevant web material has been found it is difficult to verify if this includes the complete website. In many cases, knowing the exact domain name of the website is still essential. For finding the domain names and how they changed over time, interviews and other documentation is essential. After an online artwork has been collected by a museum, documentation is most likely to have been created manually, for instance by curators or registrars. This needs some specific knowledge about the online medium and what these artworks contain, but museums could often provide requested domain names.

Although there are a variety of methods within art history, an important one is the analysis of visual forms, symbols and signs. The interface may technologically be seen as not the most exciting part of a website, but for a visual analysis this stays essential. However, in the Internet Archive graphics (of especially older websites) are often missing. It is possible to restore these websites by finding graphics in previous versions, but this means that researchers need to be aware that it is possible to encounter sources that in reality never existed. An example of such a restoration is the profile page of ‘Mouchette’ in the online webzine ‘Why not Sneeze?’ that was originally published in 1997 (see fig. 3).¹⁰ This was partially

¹⁰ The case study ‘Mouchette’ will be further analysed in chapter 4.

restored in 2016 by Rhizome for the exhibition ‘Net Art Anthology’ and presented within (an emulated version of) the Netscape browser. Although the appearance of these webpages seems to be the same (or at least similar), in reality we are looking at an assembly of images taken from different versions and times. As mentioned before, also here, extra documentation would be very useful to increase our understanding of these kinds of sources and to allow a more critical evaluation.

However, most challenging is to get access to a complete website. The UK web archive clearly defines a difference between an archived website (a website or part of it that is selected for preservation) and an archived instance (that is a snapshot taken from a specific title, or domain name, sometimes taken over time to capture changing content) (“UK Web Archive” n.d.). The Internet Archive only captures snapshots of websites and sometimes only of the homepages or the most important pages. Besides that, not all versions are crawled as well as that the number of snapshots available vary over time (as a consequence of constant changes within the Web).^{11 12} To request an artist or museum to give access to an artwork for research purposes is not new, however in case of online artworks it is only recently that museums store the actual artwork in-house (and not on servers elsewhere) and actively try to preserve it. Until now, tools for museums to facilitate access and research of online artworks are not something that is developed yet. At the moment, a specialist is needed to provide access to these works and depending on the knowledge of this person it depends which parts of the artwork can be accessed.

¹¹ A web crawler (also known as a web spider or web robot) is a program that browses the World Wide Web in a methodical, automated manner. The Internet Archive discovers and captures web pages through different web crawls. At any given time, several distinct crawls are running, some for months, and some every day or longer.

¹² More information about the incomplete nature of archived websites, can be found in the chapter “Live *versus* archive: Comparing a Web archive to a population of web pages” (Hale, Blank, and Alexander 2017).

4.

Mouchette

4.1 Introduction

October 1996, a new website appears on the still (relatively) early days of the World Wide Web introducing a Dutch artist, 13-year old, whose name is 'Mouchette'. It does not take long for this fictional girl, who is fascinated by suicide and strangers, to start growing in popularity. 'Fans' start to send her gifts, advice and dedicate new webpages to her. From a simple character impersonation, her website becomes an active platform for conversations. However, 'Mouchette' is not only actively present through her own webpage, but also in online mailing lists and offline (the more conventional place for art) in exhibitions and events. More and more clues about 'Mouchette' appear, but while her fake identity continues to take shape this also fanned the flames of debates about who could be the mysterious artist hidden behind this online mask. In Art Forum, art critic Jane Harris strikingly described 'Mouchette' as an artist who is like a 'ghost in a machine' (Harris 2003).

4.1.1 AGENCY

In each case study chapter, the social life of an online artwork will be described with the aim to get further insights in its agency. The artwork is not passively there, but it acts in a certain way that gives the artwork a certain living presence. Vice versa the audience is not passively looking at the artwork, but instead they respond to it in a similar way as how one responds to a human being. In this case study, the artwork 'Mouchette' is an Internet persona. In online worlds, users are asked to create a personal profile (or character), in which it is possible

to play a role as close or as far from the ‘real self’ as one chooses. The personality ‘Mouchette’ was an attempt to perform a fake identity and through that personality it became possible to play out an alternative life.

The Internet, connecting people across the globe, has significantly changed the way we can express our identity. Unlike face-to-face interaction, online interaction provides an opportunity for one to be anonymous, invisible, and multiple. The self can be performed in various roles, in different settings on different times. This can result in a sort of a decentralized self, in which different parts of identities are developed within various virtual worlds (Turkle 1997, 263). Experiments with self-representation and fake identities were omnipresent in early online environments and quickly picked up in artistic practices (Greene 2004, 111–16). It is within this context that we need to understand ‘Mouchette’: As an investigation of an (online) identity in which it was not uncommon to subdivide ourselves into playing various roles.

To gain a better understanding of the agency of the artwork, it will be analysed at different moments in time. The life history of the artwork will unfold through a series of events, of which each will be situated within its social context. An implication, one that plays an essential role within the case study ‘Mouchette’ is that Web cultures rapidly change over time. To understand ‘Mouchette’, as a virtual persona, it is essential to know how she comes forth out of an early pre-Web culture (the MOO).¹ Over time, the artwork becomes part of various other cultures until we reach the presence, the way the World Wide Web is known today. Throughout this period of roughly twenty years, the way people represent themselves online has changed profoundly. Some Web cultures will be further explored, there where it can help to better understand why the artwork ‘Mouchette’ goes through a series of transformations, in response to the changing online world (or media ecology) around it.

¹ MOOs started to appear in the 1990’s as text-based virtual meeting places accessible via the Internet. Each user creates a ‘character’, after which it is possible to interact with other characters within the MOO. In section 4.2 the MOO, and ‘Mouchette’ first appearance in it, will be further explored.

4.1.2 THE ARTIST

In each case study, there will be a specific focus on the role of an agent as described in Gell's model the 'Art Nexus'. Within this first case study, the role of the Artist will be further explored. As Alfred Gell explains: "*Any object that one encounters in the world invites the question: 'how did this 'thing' get to be here* (Gell 1998, 67)?" This question will be leading in this chapter. For a long time, it was unclear, who actually created 'Mouchette', a mystery that triggered the imagination of its audience. In many descriptions of the artwork questions around the masquerade of the artist were centre stage. The shifting persona was a source of puzzlement and speculation, which led to many myths as well as doubts of whether the artist existed at all. Only after 13 years Martine Neddham revealed herself to be the artist behind 'Mouchette'. However, this did not solve the problem of the attribution of authorship. It is too simplified to say that it was Neddham who created 'Mouchette' and instead it is more precise to take into account the influence of various agents, which includes also the Index (the artwork itself), the Prototype and the Recipients. All play an active role in the further development and distribution of the work. It is through the interactive settings between the agents that we start to understand how this artwork came into being, as well as the meanings that are given to it.

Although that in each chapter a specific agent will be highlighted, the meaning attributed to artworks do not emerge out of a single idea, instead a variety of agents play a role in this process. Each agent, as described in Gell's model the Art Nexus, will be further explored in all case studies. For example, this section also explores where 'Mouchette' is conceptually referring to (the Prototype) and how this influences the further development of her character. Also, the Recipient plays an active role. As a result, that Neddham stays hidden behind her virtual persona 'Mouchette', the audience (the Recipients) starts to wonder who the artist behind 'Mouchette' is. They start to speculate about the artist's true identity. As a response, the artist deliberately played more and more with veiling and unveiling her 'true' identity, using it as a strategy to create an imaginative effect upon the viewer. Thus, without ignoring the substantive role of the Artist in creating the work, it is the interactions between the agents that will be further explored.

4.1.3 THE ARTWORK

Within all case studies, the analysis of the artwork is an essential first step. However, in case of Internet art, it is not always easily identifiable what exactly the artwork is. The artist, associated with Internet art, often consider the process to be more important than creating a ‘finished’ product. It is difficult to pin down an online artwork or define its boundaries, as it changes over time. Many online artworks exist in multiple iterations, as is the case for ‘Mouchette’, a work that is still on-going. Therefore, at the beginning of each case study (chapter 4, 5 and 6), it will be briefly discussed what was considered part of the artwork.

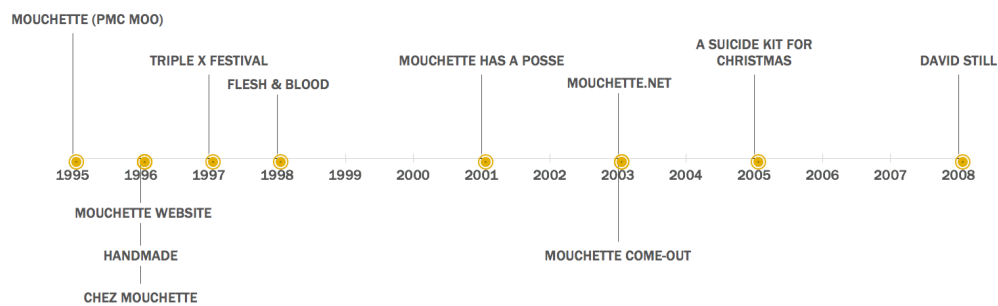
‘Mouchette’ can currently be found online under the domain name ‘mouchette.org’ (see fig. 5). The Internet archive gives access to previous versions of the work, which reveals that ‘Mouchette’ used to be registered under the domain name ‘mouche.home.xs4all.nl’ (see fig. 4). Also, within Rhizome’s archive and ArtBase it is the possibility to find several reconstructed web pages (among others see fig. 3 and fig. 10). The artwork is collected and a time stamped version of the website (December 2016) can be found in the collection of the Stedelijk Museum (Amsterdam). At this moment in time, the museum cannot yet provide access to this data. As such, the advice and support of artist Martine Neddham was essential, among others to get access to the SQL database that is storing all e-mail conversations that ‘Mouchette’ had with her online visitors. Besides the website ‘Mouchette’, traces of this online persona can be found in online mailing lists, virtual exhibitions and in digital publications. Also beyond the digital realm, ‘Mouchette’ appears in performances, exhibitions and other events in everyday life. In the artist archive it is possible to find a variety of ephemera, photos and historic documents.²

It was not always possible to find convincing evidence for all events in which ‘Mouchette’ participated and even more unfortunate is that parts of the artwork got lost over time. This is especially the case for the non-digital elements of the artwork. However, this study does not aim to map the complete extensive network ‘Mouchette’. In line with what Annet Dekker points out, it moves away from the idea that ‘Mouchette’ is an object that we can understand

² In 2018, the archive of Neddham is preserved within her studio in Amsterdam.

as a whole. Instead of seeing it as a final or finished artwork, Dekker proposes to focus on its ‘authentic alliances’, by which she means that the work is approached as “*a set of relationships and processes* (Dekker 2016, 595).” The work consists of many fragments, all of them having their own effects on the whole.

4.1.4 THE BIOGRAPHY



II Timeline 'Mouchette'

The agency of the artwork ‘Mouchette’ will be further unravelled throughout the artwork’s biography. Some pivotal moments out of the artwork’s life will be analysed in greater detail (of which an overview is given in the timeline above). The biography presents moments loosely in chronological order, but for clarity events are also grouped thematically. Roughly, the life history of ‘Mouchette’ has been divided into four phases: In the first section (4.2), it will be examined how ‘Mouchette’ first appears as a character in the PMC-MOO. It will sketch some of the characteristics of this virtual environment, for example how one created characters by specifying their genders and through other physical and psychological attributes. It will also look at how social interactions within the MOO are all in ‘character’.

This is followed by analysing the website ‘Mouchette’, in particular the first years that she appears online (roughly between 1996 until 2000) (section 4.3). In this period, for the audience it is unknown who the author is behind the online identity ‘Mouchette’. This triggers the imagination of the audience that starts to speculate who he or she could be. The secrecy and ambiguity of the author will stay an essential feature throughout the artwork’s life history. In section 4.4, the authorship of the artwork is further complicated. It examines how ‘Mouchette’s’ identity is shared with others. Among others, an actor reveals himself as the

mysterious author behind the online identity ‘Mouchette’ and a new webpage (mouchette.net) invites the audience to become ‘Mouchette’.

In the final phase that starts in 2009, Neddham reveals that she is the artist that created ‘Mouchette’. She even shares how she was constantly actively engaged to keep her fictive personality ‘alive’ and tries to pass on her artist role to a next generation in order to preserve the artwork (section 4.5). This is part of a larger research, initiated by the artist, to safeguard ‘Mouchette’. Here the life of ‘Mouchette’ takes a second path, as a version of the artwork ‘Mouchette’ becomes part of the collection of the Stedelijk Museum (Amsterdam). Instead of the ‘live’ version that Neddham tries to maintain, the museum acquired a time stamped version of the artwork. This digital archive includes all data until the date of acquisition and will not include any new conversations between ‘Mouchette’ and her dedicated fans. Here, ‘Mouchette’s biography reaches the presence. At this moment in time is her (virtual) life path split up in different versions, of which some will (and others probably not) continue to evolve.

4.2 The MOO character ‘Mouchette’

In order to find the roots of the artwork, this biography starts in the year 1995. Today we know ‘Mouchette’ in the form of a website on the World Wide Web. However, the precedence of her existence can be found within the PMC-MOO. It is within this online meeting place that the character ‘Mouchette’ first appears and its social context laid an important foundation for the artwork ‘Mouchette’. The main objective of this section is to further investigate the influence of the PMC-MOO on how the artwork would later develop. It will not reconstruct Mouchette’s first steps in the MOO in full detail, instead it highlights certain features of the MOO environment, among others how people created an online identity and interacted with one another ‘in character’.

Unfortunately, not much documentation of the discussions in the PMC-MOO is still publicly accessible, but it is safe to say that ‘Mouchette’ did make her first appearance there: On the archived webpage ‘Mouchette’ (23 February 1997) there is still a hyperlink pointing to the PMC-MOO and Rhizome archived the ‘Mouchette’ page that used to give instructions how to find ‘Mouchette’ in the MOO (Mouchette and Neddham 2016). However, both web

archives do not collect or make accessible any of the dialogues within the PMC-MOO. However, in the archive of the artist it was possible to find e-mails that confirm the registration of 'Mouchette' in the PMC-MOO and fragments of conversations in which she participates. In what follows these documents are studied and set in context through literature studies that gain further insights in the virtual environment of the MOO. Furthermore, it is complemented by oral history interviews that describe the personal experience of the artist as part of the PMC-MOO.

4.2.1 THE PMC-MOO

MOOs (MUD, Object-Orientated) started to appear in the 1990's as virtual meeting places accessible via the Internet. They belonged to a class of programs that were known as MUD's (Multi User Dimension), which started as online role-playing games, comparable with Dungeons and Dragons. When in 1989 student James Aspnes (Carnegie Mellon University) took out the gaming elements like scorings, these virtual worlds offered new opportunities as a social space (Haynes and Holmevik 2001, 2). Without losing its playfulness completely, the MOO turned into a virtual environment where groups of people could go to talk, create and collaborate. This effective tool was quickly taken up by a variety of social groups, fore mostly within the academic world.

As was the case for the PMC-MOO, one of the ten oldest MOOs, founded in the spring of 1993 as an experiment in scholarly publishing, alongside the pioneering, electronic journal Postmodern Culture (PMC) ("Notices" 1993).³ It invited participants to discuss and further explore postmodern and contemporary theory and practice in the virtual MOO environment, which seemed an appropriate meeting place for this. Communities started to build their own postmodern space and objects, in an environment that was highly flexible, in a state between the virtual and reality. Participants from different part of the world could connect, being everywhere at once, and they were encouraged to

³ PMC journal was the first digital peer-reviewed journal in the humanities, established and edited by John Unsworth and published by Johns Hopkins University Press with support from the University of California, Irvine, and the University of Virginia (Amiran, Orr, and Unsworth 1990).

think of themselves as fluid, decentralized, flexible and ever in process. It was in this particular situation that ‘Mouchette’ made her first appearance.⁴

4.2.2 THE CHARACTER ‘MOUCHETTE’

To get access to the MOO, the first thing participants needed to do, was to create an online character that could be expressed in three ways: by the choice of the player name, the choice of gender, and a self-description (Center and Curtis 1992; defender 1995). The MOO provided a virtual meeting place for anonymous interactions in which one can play a role as close or as far away from one’s real self as one chooses. Although the MOO was no longer a role-playing game, many of the chat sessions retained a game-like sense of play with avatars that chose to not reveal their true identity, but instead created fictitious names (Turkle 1997, 208). When artist Neddham joined the PMC-MOO, in February 1995, she adopted the same strategy by logging in under the name ‘Mouchette’ (defender 1995).

The MOO was a social space, in which conversations took place ‘in character’ and where it was possible to meet other ‘characters’ that also inhabited the space. For Neddham her way of writing was determinative to choose her online mask-name ‘Mouchette’. As the artist recalls: *“I was quickly irritated by my words and writing in my written exchange with these academics in the MOO. (...) So, I designed my character that I was a thirteen-year-old. And it felt more comfortable, more playful (Neddham 2017).”* Another consideration for Neddham was that she had a fascination for Mouchette’s complex character, that derived from the novel *‘Nouvelle histoire de Mouchette’* (1937) by the French author Georges Bernanos and the movie *‘Mouchette’* (1967) by Robert Bresson. It tells the tragic story of a teenager that commits suicide after she was raped. This gave Neddham a first outline for her new identity: *“‘A dark child character and a child with an interiority, with a secret in live (Neddham 2017).”*

To better understand how ‘Mouchette’ appeared within the MOO, it is necessary to know that this environment relied entirely on text. It was like

⁴ In the PMC-MOO one had a homepage. ‘Mouchette (#13911)’ could be found under: <http://www.aie.nl/test/martine/newhome.html> (“Home Pages PMC-MOO” 1995). The login type was ‘connect guest’, and then ‘@join Mouchette’ (Mouchette and Neddham 2016).

reading a book in which the place, its atmosphere, but also the characters appeared through a text-based story. Thus, you also had to imagine with whom you were actually having a conversation. One of the founders of the PMC-MOO, John Unsworth, described his experience of participating in the MOO as: “(...) *one sits at a keyboard, in front of a screen, and projects oneself over a global computer network into an entirely textual world, and into an entirely virtual community (Harrison and Stephen 1996, 146).*” One’s virtual identity does not have a body or a visual representation, but the self is entirely constructed by and through language. In an interview Neddham strikingly describes one of her MOO characters as a “*girl made out of Language*” (Connor 2016). In another interview she further elaborates in this text-based experience as: “*It was the beginning of a world, a world with no rules, which created its own rules, where everything was done by language. There were few images, it was all mainly texts. You clicked on a word with a link behind it, and you changed pages: it was an unmistakable act of language (Neddham 2009)!*” The role of language, and that it can act and create an imaginative effect, would stay an essential feature in ‘Mouchette’ (among others, see section 4.3.2).

The creation of a ‘character’ went further than giving oneself a fictive name. This online identity could be set within an illusory world consisting out of rooms and things, as Neddham recalls: “*These were my first steps on the Internet (...) I was sort of learning when I got a membership. I talked with people and then I was starting to design my space. Or maybe to design objects, object in the sense of programmed object (Neddham 2017)*” As the artist describes, the MOO made it possible to express one’s personality by giving it certain props (which could be anything from radios to robots, mail to maps) and inhabiting a virtual terrain (the MOO allowed players to create a building or a room, which served as one’s ‘home’).⁵ These objects and environments should not be mistaken for physical entities, but they were descriptions or simple interactive programs. What Neddham’s experience also reveals is that the MOO offered the opportunity to easily learn some code in order to manipulate its virtual

⁵ The location where ‘Mouchette’ could be found was called Villeneuve-Loubet. The description mentions: “*Up the hill, away from the coast and its riviera atmosphere is a small village (...) Mouchette doesn’t live in the castle but walk in this direction (...) Knock on the door to the old vicarage, that’s where Mouchette lives. Don’t expect her to open, walk into the garden, look around... (Mouchette 1995)*”

environment and objects (aka *object-oriented programming*). These microcomputer worlds were not made from scratch, instead rooms and objects could be easily copied and manipulated. All members added towards this process, bringing that what already existed to new stages. This, then, also shows how, in the MOO, identities are not singular. The illusionary world of the MOO was not simply there, but it unfolded through co-creation and having conversations with others. Within these dialogues online identities further evolved. Here we find another essential feature that will stay apparent throughout Mouchette's live: The importance of forming yourself through an exchange with others.

4.2.3 A SIMULACRUM

PMC pioneered as a web-based journal and was devoted to representing research in new ways. Taking advantage of the affordance of the Web, it saw the features of the MOO as an interesting opportunity to experiment with a new form of scholarly publishing (Harrison and Stephen 1996). The MOO could lead people to a better understanding of postmodernism and possibly bringing ideas a step further. In that sense the MOO functioned in a similar way as a conference. However, where the MOO went a step further was that its architecture made it also possible to create models of the world. Users were invited to create (and improve) objects and environments that would demonstrate certain concepts that are of relevance to the study of postmodernism, functioning like a sort of 'object-lessons'. Not only did the MOO offer the possibility of creating models, it *was* at the same time this model of the world. John Unsworth compared the MOO with a third-order simulacrum as described by Baudrillard as: "*not unreal, but a simulacrum, never again exchanging for what is real, but exchanging in itself, in an uninterrupted circuit without reference or circumference* (Baudrillard 1994, 5–6)."

The MOO was a 'mental representation' in which nothing more than *information* is processed, re-organized and re-evaluated. One imagines this world and is from thereon able to alter its buildings blocks. This collective knowledge framework, in which thoughts further develop as part of a group process, this supported, as Unsworth named it, a form of 'collective intelligence' (Harrison and Stephen 1996, 207). It is possible to metaphorically

attribute this ‘collective intelligence’ to ‘Mouchette’. In contrast to the artificial intelligence of ‘Agent Ruby’, the online artwork that will be further discussed in chapter 6, ‘Mouchette’ her ‘brain’ would never become automated. Instead her personality is formed and grows through human processes. The cult of her personality could only flower through a virtual community that imagined that ‘Mouchette’ could exist. To give an example, in the year 2000 somebody sends the following response to her: “*Stop crying, everything will be okay. Oh wait... this is just a webpage* (Mouchette 2000).” Through these kind of responses, Recipients add towards ‘Mouchette’ her living presence. They empathise with her thoughts and feel her pain, and they even attribute human behaviour to her. The effect of animation only occurs through these interactions because Recipients share stories, send ‘Mouchette’ gifts or even complaints. They imagine that ‘Mouchette’ could be there, in real behind the screen.

4.2.4 COLLECTIVE AUTHORSHIP

Over time, the artwork would keep the MOO’s ability that a virtual community is able to influence the artwork in all kinds of creative ways, making it evolve over time (this will be discussed in more detail in among others paragraph 4.3). As the MOO, likewise ‘Mouchette’, is a collective effort: What for consequences does this have for attributing authorship? Traditional authorship depends for a large extends on being able to identify the sources of intellectual contributions. It also demands that we attribute borrowed ideas to their originators. The PMC-MOO encouraged collaborative research and creation. Above all, it was valued that communities constantly discuss, validate and improve ideas. To make exchange as easy as possible, ideas of others could be copied and borrowed, also without any form of attribution. The fact that the MOO allowed users to create fictitious names for their players, even further problematizes the identification of authors.

‘Mouchette’ emerges out of a similar form of collective authorship. This conflicts with more traditional attribution of authorship towards artworks. It is still common in the (Western) art world to attach value to autographs, and the creation of an artwork by one unique individual. In contrast, it loses relevancy in Internet art to see the artist, as the genius behind the artwork, and it is even critiqued (Greene 2004, 103). Instead, a great value is given to collective

authorship, more in line with the ideals of the MOO, as well as other early Web communities: Being decentralized, non-discriminatory and open to a design from bottom-up encouraging as much participation and experimentation as possible.

4.2.5 FRACTAL PERSONHOOD

A last aspect of the MOO needs to be highlighted that will increase our understanding of ‘Mouchette’. Dedicated MOO players often had multiple characters connected to several virtual worlds, as did Neddham. Besides the PMC-MOO she was also present with ‘Mouchette’ in ‘The Palace’, another early online environment, and she had other characters like ‘Lalie’, who took part in the MediaMOO (Mouchette 1997).⁶ By putting characters ‘to sleep’ it was possible to pursue ‘real life’ or log on to another MOO world to continue playing another identity. In the course of the day, players could move in and out a series of virtual worlds, as well as go back to the real world.

This ‘cycling’ through different worlds was also made possible as the computer screen allows to open multiple windows and in each window another activity can take place. Different characters could be played at the same time. This shifting from one context to the other, effected identity as explained by Sherry Turkle as: “(...) *windows have become a powerful metaphor for thinking about the self as a multiple, distributed system* (Turkle 1997, 14).” It is not so much new that we play different roles in life (we can be a mother, a lawyer and neighbour), but where the experience of online environments like the MOO added is that instead of stepping in and out of different roles, the MOO offers parallel identities; parallel lives. It may already be clear that this play with parallel identities would stay present throughout Neddham’s oeuvre, which developed multiple virtual characters of which ‘Mouchette’ is one of them.

The nature of the character ‘Mouchette is an example of what Alfred Gell terms ‘fractal personhood’, by which he means that one person can exist out of many (Gell 1998, 137–43). He borrows this term from cultural anthropologist Roy Wagner, who argued that all individual persons are ‘multiple’, which he illustrates with the example that our personhood is formed through genealogical

⁶ MediaMOO officially opened on 20 January 1993 as part of the MIT Media Lab.

relationships: “People are ‘carried’ as part of another, and ‘carry’ or engender others by making themselves genealogical (...) (Wagner 2009, 161).“ Gell adds to this, that our inner selves are fractal (for example, the fact that our personality is formed by for example our parents), but also our external self is fractal. A person can also extend beyond the body boundaries to animate other objects, places and persons. This concept of the ‘fractal personhood’ will recur throughout this biography, as it is helpful to further analyse and understand the character ‘Mouchette’.

4.3 The website ‘Mouchette’

It is October 1996 when ‘Mouchette’ appears as a website on the World Wide Web under the domain name ‘Xs4all.nl/~mouche’ (see fig. 4). It is possible to find a snapshot of a relative early version in the Internet archive (February 23, 1997) and although pictures (and hyperlinks) have disappeared, it still reveals the bright pink background and her introduction: “My name is Mouchette. I am an artist. I live in Amsterdam. I am nearly 13 years old.” In contrast to later versions of this page, within this early one ‘Mouchette’ invites us to talk to her in the PMC-MOO, a direct connection to her early web communities that has now disappeared.⁷ As a ‘variable’ artwork, the website has changed over time (see fig. 5). Not only are new pages added towards it, but also the appearance of ‘Mouchette’s’ homepage is now quite different than in 1996.

In this section, the website ‘Mouchette’ will be further investigated; in particular it covers a period roughly between 1996 and 2000. Over time, it reveals more and more aspects of her personhood. Some will be examined in more detail, including where she lives (her home), how she works (her artistic style) and what she looks like (her appearance). The first part (section 4.3.1), Mouchette’s home, will be used as an example to better understand the close relationship between the Prototype ‘Mouchette’ and her creator, Neddham. How do they *together*, as a nexus of social relationships, form the personhood of ‘Mouchette’? This will give further insights in how Mouchette’s identity is not singular, but rather made out of many, that what Gell called a ‘fractal

⁷ “If you want to talk to me, come and meet me directly on PMC MOO and in other places where I hang out on the Net and meet my friends.”

personhood' (Gell 1998, 140). After that, in section 4.3.2, Mouchette's artistic style will be further explored, especially her use of language, with a focus on what it is that the artwork 'does' exactly which makes that Recipients respond to it. In the last part, the effects of the artwork will be further investigated through analysing Mouchette's visual appearance (section 4.3.3). 'Mouchette' knows a fractal personhood, and in line with that she does not have a singular appearance, 'Mouchette' has many. This again, leads to confusions about who the actual artist might be, that sits behind this online mask.

4.3.1 HOME

Let us begin with her 'home' (see fig. 6). In one of her first artworks, 'Mouchette' reveals where she lives by showing a photo of her house in Amsterdam under which she specifies that *"her bedroom window is the one on the top, right under the 'M'."* A neon sign is placed on the roof of the building. Similar to a graffiti tag 'Mouchette' has written her name in public space, a personal trace of her existence. This does not convince per se that this is actually 'Mouchette's' home. On top of that, nothing in the picture leaves any doubts that this photo is digitally manipulated, it even emphasizes this by among others the bright pink letters with a glowing effect that is well known from Photoshop. By manifesting that this 'public space' is clearly a virtual one, the home of 'Mouchette' is placed within this digital realm. Neddham further explains: *"So the images where she lives is one of the first works. It was staging the situation that 'Mouchette' lives in the digital world. She lives in an image and puts her existence inside her artefacts. Martine lives in a real space and 'Mouchette' lives in the image of that space (Neddham 2017)."* This interpretation carries important implications for the relation between Prototype and artist. 'Mouchette' is like a mental representation that contributes to the artist's true life, as part of her interior (imaginative) life. However, also vice versa, is Neddham's life part of the construction of 'Mouchette' her identity. For example, the photo shows where the artist, Neddham, actually lived. Throughout 'Mouchette' her biography there will be several instances where her biography overlaps with Neddham.

How can one understand this close relationship between 'Mouchette' and her creator? 'Mouchette' is not the only fictional alter ego that Neddham created.

Inspired by the Portuguese writer and poet Fernando Pessoa (1888 –1935), Neddham attributes most of her artworks to ‘heteronyms’ (Neddham 2010). This term was invented by Pessoa and further explained in a 1928 article in the journal ‘Presença’ as: “*A heteronymic work is by an author writing outside his own personality: it is the work of a complete individuality made up by him, just as the utterances of some character in a drama would be* (Jackson 2010, 41–42).” It was only discovered posthumously that these ‘ghost’ authors were invented versions of Pessoa’s ‘self’. Each heteronym was given a biography, psychology, politics, religion and physical description, and the main characters were even interconnected. Much effort has been made to reconstruct the many biographies, as part of an attempt to contextualize Pessoa, seeing him in his time and place.⁸ However, his fragmented identity as an author makes it impossible to recreate who Pessoa was, either as person or intellectual, and as such the only thing left is our own imaginary (mythical) image of him.

Deeply interested in this potentiality of fragmented identities that undermined traditional authorship, Neddham’s oeuvre shows some striking similarities. Like Pessoa’s heteronyms, also ‘Mouchette’ is an invented variation of her ‘self’, an imaginary character that leads her to write and create in a different style. ‘Mouchette’ is more than a pseudonym (a fake name), as her character is well developed with having her own physiques, artistic style and although she doesn’t age, she has her own biography that further develops over time (“Mouchette CV” n.d.; “About Mouchette” n.d.). Neddham’s virtual server is actually named after one of Pessoa’s character ‘Bernardo Soares’, by whom Pessoa referred to as a ‘semi-heteronym’ as the author was at once Pessoa and Soares (Neddham 2010, 1.8). The same could be said of ‘Mouchette’, as she is an autonomous agent with interests and artistic styles that partly overlap, but also strikingly differ from her creator (or any other of her online identities).

4.3.2 ARTISTIC STYLE

Now that we know that ‘Mouchette’ is not just a virtual character, but also the leading artistic voice for the artwork, this raises the question what is the ‘artistic

⁸ There are many general introductions to Fernando Pessoa, but a quite recent English interpretation was written by Kenneth David Jackson (Jackson 2010).

style' of 'Mouchette', as it is now *her* unique style that determines the creation of the artwork. In the first version(s) of 'Mouchette', we can find several instances in which she gives further detail. An important aspect within her poems, as well as her visual arts, is what she calls 'digital manipulation', which means that she creates new text and imagery by manipulating existing ones often with the help of software tools. The dramatic growth and easy access to found images (as well as sounds, texts) within the World Wide Web, as well as the fact that it could easily be copied, pasted and manipulated, gave rise to a whole range of experiments and new forms of appropriations among media artists (as well as more broadly in contemporary art in general). Instead of making something new, it had become common practice to borrow existing images and manipulate them into new versions (Tribe and Reese 2006, 13). As such, 'Mouchette' fits into a more general development within artistic practices of that time, influenced by the Web, but how does she exactly apply this? On the first version of 'Mouchette's homepage, she mentions some of her artworks with not so much an emphasis on the end result, rather she explains the process of making it.⁹ An example is a digital manipulation of her 'favourite painting'. Maybe inspired by the MOO, 'Mouchette' demonstrates her experiment with 'digital manipulation' through an interactive 'object'. She shows us her 'favourite painting' (a ready-made image, found on the Web) that in the next step is appropriated by signing it with 'Mouchette'. The work reminds us of Marcel Duchamp's ready-mades (of which several were signed with a false name, among others his famous 'Fountain', 1917). Duchamp showed how the 'artist-as-maker' could become an 'artist-as-chooser', questioning both the status of the artist and the object. 'Mouchette' continues this discussion within the digital realm. Underneath 'her painting' she asks questions like: "*Who is the author?*", "*Who is manipulating who?*".

Another important element within this work (as well as in the work 'Mouchette as a whole) is the incorporation of text as a method to activate (images). This expressive potential of text was explained by Neddham as: "*One of the first acts I did was to write to transform. In that time, I was using the computer to write text in the space. (...) The image is a background image, and*

⁹ This webpage can still be found in 'mouchette.org', but now we have to go in the menu to 'painting'. <http://mouchette.org/paint/Index.html> [Accessed 21 September 2017].

the text comes on top of it, very clearly. It is pretty much like the actor and the stage. The stage set is there, and the actor comes on top. So, the text is the actor (Neddham 2017).” This explanation reveals Neddham’s background as a stage designer that throughout her oeuvre stayed evident within her work. However, the main issue here is the use of the method that words can ‘act’ or have a performative function.

Neddham derives this idea from philosopher John Austin (1911-1960) on what he called ‘speech acts’ (Neddham 2017; Austin 1975). Austin was interested in how language can affect the listener, a situation or the speaker, and how it can influence their actions and beliefs. Neddham plays with this by experimenting in various ways how text can affect her audience. In line with what Austin calls ‘*illocutionary acts*’, *she experiments with how the use of language can change meanings, for example by adding a signature on an image (“My favourite painting. Found on the net. I shall make it mine.”)*. In other instances, she goes a step further by experimenting how text can produce an effect upon the feelings, thoughts or even actions of the audience. This is what Austin describes as ‘*perlocutionary acts*’. For example, this can be by making a request (“*Click on it to see how.*”) or asking a question (“*By the way, what do you think about... my signature on the painting?*”). To make it possible for the audience to respond, there are links underneath the sentences that lead to ‘Mouchette’s email address (mouchette@mouchette.org). In a personal conversation Neddham further explains: “*I use language as an act. You click on a word and the word becomes active. Hypertext can make words active and I observe this activity. (...) The Web was the perfect playground to explore the performativity of language in a more interactive way (Neddham and Wild 2017a).*”

Language is not only used (passively) to describe a certain reality, but it actively creates one. The most obvious is that the use of language provoked audiences to respond or (it was hoped) to even impel them to take action. ‘Mouchette’ stores their answers or any other form of actions, sometimes republishes them again on her website and/or sends back personal emails. These first conversations can have a snowball effect, that lead to further reactions and involvement, of which some responses go well beyond the artist’s control. This

is maybe best exemplified by the work ‘A Suicide Kit for Christmas’ that provoked heated reactions (see fig. 7).

Worth recalling here is that ‘Mouchette’s personality was modelled after the main character in the novel by Georges Bernanos, that was later translated in Robert Bresson’s movie, in which a French teenager commits suicide after she was raped. In line with her dark interiority, the online identity ‘Mouchette’ poses in 1997 the question: “*What is the best way to kill yourself when you’re 13?*” Originally, the work was developed for an exhibition at Galerie Tanya Rumff (“A Suicide Kit for Christmas” 1998). At the time effective search engines were not yet available, this limited the visits of random public online and instead exhibitions and events were important moments to introduce the artwork to the audience. When the search engines did make it easier to find websites, the reactions on ‘Mouchette’ started to become overwhelming. Neddham remembers that: “*People were coming en masse and starting to send personal messages, and to respond to it personally. This went into a society in ways that I didn’t expect, but it really touched me* (Connor 2016). “To be able to handle the growing amount of responses, Neddham developed a database system what she considered to be the heart of the website as it stores all conversations. The topic of suicide stayed one of the most active discussions on the ‘Mouchette’s website, with some online characters returning regularly to the page for sharing their stories and they even started conversations under their own name (Mouchette 2000, n.d.). ‘Mouchette’ became an online meeting place, in a sense comparable with the MOO, in which personas, like Felicia the Great and Lucy Cortina, became famous Internet figures on their own.

4.3.3 APPEARANCE

Although the expression of text stays an important element within ‘Mouchette’, on her webpage she is no longer restricted to a textual environment (like in the MOO). This gives ‘Mouchette’ the opportunity to further develop her appearance. Like her identity, this imagery turns out to be fragmented. In the right top corner of the webpage, she appears in a small portrait of a face of a teenage girl (see fig. 5). On other pages, she appears as an avatar from The

Palace.¹⁰ This graphical chat room allowed users to create a unique look for themselves, so-called 'dollz'. Here, 'Mouchette' appears as an angel wearing a Santa Claus costume, possible referring to her imaginary status. Then there is her appearance in text (a signature), as well as a visualization of her name in the symbol of the 'fly' ('Mouche' means 'little fly' in French) (see fig. 5).

But besides these hints, until 1998 'Mouchette's presence is never quite manifest. This changed when she gets an image scanner, which makes it possible to capture and transfer images from the 'real' into the online world. By pressing her head on the scanner, 'Mouchette' creates for the first time a visual trace of her physical presence (see fig. 8). This artwork, part of the website 'mouchette.org, is titled 'Flesh & Blood'. A text is added to the image: "*Finally I can come that close to you. Do you also want to come that close to me? Want to know what my tongue tastes like? Try it on your screen and tell me* (Mouchette n.d.)." In 'Flesh & Blood', 'Mouchette' encounters her fans through the screen. Neddham further explains: "*The close-up of the scanner: That was also important, an analytic moment you could say, because up to now the visibility of 'Mouchette' was just a very tiny image on the front page or when she would appear, she would appear as text, also on top of the house - as being 'Mouchette'* (Neddham 2017)." A similar action in Alfred Gell's model the Art Nexus is described as a 'pure artistic gesture'. This is an interaction between two agents the Artist and the Index (or artwork), which occurs when the Artist leaves a direct proof of him or herself within an artwork (Gell 1998, 33). Gell illustrates this action through the cave paintings of Lascaux, where silhouette images of the hands on the rocks form evidence of the presence of artists in the Upper Palaeolithic.

What if we see the scan of 'Mouchette' as a trace of the existence of the Artist? Approaching this as an act of pure artistic agency, would increase the already confusing situation about her existence. Although 'Mouchette' plays the role of the Artist, going as far that she influences the artistic style and way of communication, she stays a fictive character. The scan increases the effect of make-believe, making 'Mouchette' slightly more lifelike. Instead of a

¹⁰ Like the MOO, also 'The Palace' was an early virtual meeting place (it began in 1995). Instead of the text-based environment of the MOO, The Palace was visual, spatial and even auditory chat was possible.

resemblance, a symbol or description, the idea is given that we see an impression of the 'true' 'Mouchette'. However, at the same time it adds towards the mystery of her true creator, who stays well hidden behind her computer.

4.4 Collective authorship

In the previous section, we saw how giving the personality 'Mouchette' further develops by giving her attributions like a home, an artistic style and a virtual appearance. She even gives a physical trace of herself (by scanning her face). Nevertheless, she is never really brought to life. Instead 'Mouchette' stays a fictive (online) persona, who never ages (she always stayed thirteen years old) and only has a virtual appearance. This triggers the imagination of the audience, who start to question: Who could be the anonymous artist behind 'Mouchette' or does she even exist at all? Hardly any references to the true identity of the artist come to light, allowing more space for visitors to invent the character 'Mouchette' on their own.

In what follows in the life history of 'Mouchette' will further complicate that the attribution of authorship, as the identity of 'Mouchette' is taken over by other artists and is shared with her audience. This section (4.4) covers a period out of the artwork's life, roughly between 2001 and 2005, with one event that dates back to 1997. In the first part (4.4.1), it will explore how the artist promised public appearances that never actually materialized; instead actors play out the role of 'Mouchette'. It will discuss three performances, the first at Triple X Festival (1997), the second 'My Last birthday Party' at De Balie (Amsterdam, 2001) and the last one 'Mouchette Come-out' at Postmaster Gallery (New York, 2003). In the second part (4.4.2), it will be discussed how the identity of 'Mouchette' was taken over by others, after which the artist decided to invite her audience to become 'Mouchette' (see fig. 12). This part of the artwork 'Mouchette' can be found under the domain name 'mouchette.net' (2001).

Inspired by the opportunities of the two-way communication of the World Wide Web, Neddham never intended to create 'Mouchette' on her own. Instead conversations and participation were considered the heart of the artwork. In line with a truly social practice, audience members progressed from beholders to

participants, from contributors to sometimes collaborators. If at all, we could still see ‘Mouchette’ as a form of portraiture, it is good to keep in mind that its effect did not depend on a lifelike representation, neither was it restricted to her being a convincing character, it went much further. ‘Mouchette’ became an active player herself, among others by initiating conversations with her audience. By responding, her audience became voluntary, active players within her further creation. As such, the development of the character ‘Mouchette’ cannot be attributed to a single author; instead it is a result of collective authorship.

4.4.1 FROM THE VIRTUAL TO THE REAL-WORLD

Her first announcement was at the Triple X Festival in Amsterdam (“Triple X” 1997). Although the invitation and posters clearly announced that ‘Mouchette’ would be ‘LIVE!’ at the festival, it is her agent René Paul Vallentgoed (a representative for poets) who eventually appears with the excuse that ‘Mouchette’ was unable to join (Connor 2016). Not much later, ‘Mouchette’ asks her audience on her webpage if they have seen her on the festival; most remarkable is that some of them confirm this, even almost twenty years later (Mouchette n.d.; Connor 2016):

From: Ange de Larue <ange.delarue@hotmail.fr>

Subject: Triple X

Date: 19 April 2016 at 19:21:59 GMT+2

To: mouchette@mouchette.org

What_was_I_doing_there? = I committed suicide in public

Can_you_tell_me_what_I_did? = You asked cyanure with your Big Mac

Did_you_really_meet_me? = no

Can_you_imagine_what_I_did_? = I think you probably eat the big mac and after started to convulse before dying in pissing in your panties at the same time ??

email = ange.delarue@hotmail.fr

SEND = Send

This confirming answer is quite ironic and most likely not so much caused by a flaw in memory, rather it is an imaginative addition to the story. But in either way, it illustrates how ‘Mouchette’ used her (non-)appearance on this festival to

activate her audience. They become essential participants in building up (or keeping) the myth around ‘Mouchette’s existence.

In 2001 ‘Mouchette’ announces once again to break the mystery by revealing her true identity, this time to celebrate her ‘Last Birthday Party’ at De Balie in Amsterdam (“My Last Birthday Party” 2001). Besides the usual announcements, ‘Mouchette’ sends out ‘personal’ invitations on paper and online, among others she asks her ‘cyber friends’ at the Nettime mailing list to join her there: *“I will be there, in person, in the flesh, for real, as you’ve always wanted me, along with all my favourite net artists. For real too!* (Kluitenberg 2001)“ The fact that ‘Mouchette’ likes to celebrate her *last* birthday party is explained by giving the shocking and paradoxical announcement (that must have attracted attention): *“she is expected to commit suicide during the party, just as will be the case in future birthday party’s, in 2002, 2003, and so on for ever... (Kluitenberg 2001).”* On the evening itself, a group of Internet artists meet and present their work. They were already in contact with each other online, but now all appear in person. The only artist that is not there is Neddham. Instead it is artist Peter Luining, who pretends to be the author behind ‘Mouchette’.¹¹

Although her birthday party did not repeat every year, the attempts to reveal the artist’s identity did continue. What could possibly be seen as the most convincing attempt, was a performance at Postmasters Gallery in New York (“Mouchette Come-Out” 2003). For the event an installation had been built to gradually reveal the artist behind ‘Mouchette’ (see fig. 9). The installation was an inflatable structure, consisting of transparent walls and the organic form had multiple layers like an onion. ‘Mouchette’, sitting in the middle of it, would slowly appear to the visitors when they got closer to the core. Finally, it would be possible to meet her in person. However, again ‘Mouchette’ would be represented by an actor, this time by a ‘very polite Frenchman’ (Connor 2017). Her ‘coming-out’ must have been convincing, as sources after that attribute a male identity to the artist behind ‘Mouchette’. Among others Rachel Greene, in her book ‘Internet Art’, ascribes the work of art to be created by a man: *“Reviving a filmic personality on the web, the site’s mysterious author, who*

¹¹ Peter Luining is a Dutch artist, active on the Web since 1995. His extensive body of works investigate the audio-visual and interactive dynamics of the Internet and software.

only recently broke character to identify himself, gives the neo-Mouchette a memorable problematic persona (Greene 2004, 115)."

4.4.2 BECOMING 'MOUCHETTE'

It is 2001 when different webpages of 'Mouchette' are copied and re-appear sliced and re-mixed on the website dreamless.org, a semi-public electronic bulletin board accessible for web designers. It was part of an online event, which invited web developers to copy and distort source images that were found in exiting webpages. The collaged source images create a new appearance for 'Mouchette' (see fig. 10).¹² That this instigated a new form of collaborative authorship was emphasized by the title 'Mouchette's posse'. Although it seems like the 'Mouchette' webpage could be hacked, its pages are only copied, leaving the 'Mouchette' website further untouched.

In the same year, another re-creation of the website appears as part of 'Pixel Plunder', an exhibition organized by 'Year Zero One', a non-profit media arts organization that organizes exhibitions with electronic media art on the Internet (Alstad and Kasprzak 2001). In 'Pixel Plunder' seven projects are brought together that play with copyrights on the Web. 'Mouchette' does not participate in the exhibition under her own name, but instead the work 'I love Mouchette' is shown, a website made by an unknown author and supposedly to be randomly found online. Also, within this playful re-creation, parts of the 'Mouchette' website are copied and mixed with new footage. It tells the story of an anonymous stalker, who is obsessed by 'Mouchette' and convinced to have found her on the streets of Toronto. He follows this 13-year-old net star and shares the pictures that he could take of her.

These examples illustrate how around this time it was no longer uncommon that the audience got involved in more than only conversations with 'Mouchette'. Instead her audience felt so inspired by her style or personality that they featured part of her persona into their own creations or even pretended to be 'Mouchette' themselves. To trace new references or projects Neddam

¹² Screen shots can be found within the online archive Rhizome's Artbase. Some of these images were animated and it could also include sound, which is not preserved.

regularly read the statistics of the mouchette.org. In her ‘International fan club’ within the ‘Mouchette’ website, she collected all adaptations from ‘fans from all over the world’. Neddham does even remember an instance in which the website ‘Mouchette’ truly got hacked: *"Ones a hacker had hacked my work and changed the front page. With that I liked it so much better that I kept it for a while. It would make all the front-page elements move around and disappear when you wanted to catch them (Neddham 2017)."*

This led Neddham to the question if it is possible that she is no longer the only one that could live another person’s life behind the computer? It felt more appropriate to share this experience with her audience and build on the virtual existence of these characters together. Neddham explains: *"I wanted to put forward the idea of identity as a composition. As I said, the notion of a single identity is very artificial; furthermore, whatever identity you have, it does not necessarily only belong to you. Its also part of, or even belongs to, everyone who interacts with it. (...) I designed David Still, to test that in a pure way (Neddham 2017)."*

‘David Still’ (2001) is a virtual character that the artist described as ‘an identity donor’ offering his identity online to anybody who wants to be him (see fig. 11). Like ‘Mouchette’ this cyber persona comes forth out of a detailed (and convincing) character description, which makes him act in a certain way. On his homepage ‘David’ reveals that he holds a job as an IT consultant and within his spare time works on his personal website through which he offers his identity to other people. You can find his (yours if you like) childhood memories as well as photo albums. And, like ‘Mouchette’, he clearly mentions where he lives, on no. 18 in ‘De Realiteit’ (‘The Reality’) in the City of Almere. In the neighbourhood ‘De Realiteit’ there are only 17 houses, all very experimental as these are the result of a design contest for temporary ‘dream’ houses, organized by the ‘Fantasy’ foundation (“De Realiteit, Almere” n.d.).¹³ It sounds surreal, in a sense this is also how this neighbourhood looks like, but the street really exists.

¹³ Almere is the newest city in The Netherlands build on reclaimed land (it used to be the IJsselmeer and before 1932 the Zuiderzee). In 1975, the city’s first 24 pioneers (thirteen adults and nine children) were handed the keys to their temporary homes. As one of the fastest growing cities in Europe, the city still functions as a laboratory for city planning.

Like ‘Mouchette’, also David Still lives in an area where the boundaries between the virtual and the real are very much eroding. Without going too deeply into his personality, it is interesting to see how similar strategies are used to build a make-believe around his existence, we see this in the description where he lives, but also in the way he continuously promises to reveal himself in exhibitions and events. Like ‘Mouchette’, he organizes his birthday as an occasion where you can finally meet him in person. However, the main difference is that the audience can become David Still themselves by sending emails under his name, here is an example under the subject ‘Reality’ (David Still 2018):

You were very surprised when I contacted you. You said you'd never met me. But when you visited my website you recognized me - how I look, where I live. It all seemed strangely familiar. Yet you continue to question my authenticity. Do you really think I'm just a 'character' created for the web?

Just to show how real I am, let me remind you that I live in a neighbourhood called "De Realiteit" (Reality) in Almere, the Netherlands. That's where I live - in the flesh.

So how could I have invented such a name? When you get to know me better, you'll soon realise that I'm a part of your world, part of your own reality. And this is why you should trust me.

- David -

The identity of David Still circulates through the Internet, but in this case, it is not (only) the artist Neddham that creates his web presence, but his visitors are asked to create his online presence by playing the role of David Still.

To return to ‘Mouchette’ and in particular the performance that took place at Postmasters Gallery in New York (“Mouchette Come-Out” 2003). Besides revealing the so-called identity of the artist (in reality an actor who ‘pretended

to be' Mouchette), this was also a moment in which 'Mouchette' gave her identity away to the audience. Everybody got invited to 'become Mouchette' himself or herself. As the test of 'David Still' had turned out to be successful (many fans started to pick up his identity and he became even nominated for a Webby award), Neddham decided to also share her online identity 'Mouchette' with her audience. For this she developed a webpage under the domain name 'mouchette.net'.

In the Internet archive it is possible to find an early version of 'mouchette.net' (10 November 2001) (see fig. 12). On the pink background the text appears: *"There is only one real Mouchette, but she is not who you think she is."* The myth of the author behind this online identity is further complicated, as everyone is invited to become 'Mouchette'. The artwork does not claim to derive from out of a single author and instead values collaborative creative practices (as also discussed in section 4.3.2). During a residency at the Franklin Furnace (2003, New York) Neddham further developed the new interface 'Mouchette.net' that made it possible for the audience to become 'Mouchette'. Through registration visitors could become a member, impersonate her by creating their own version of 'Mouchette'. The ceremony at Postmasters Gallery was fore mostly an occasion to launch 'Mouchette's identity-sharing interface.

According to artist Neddham, the identity 'Mouchette' was always shared: *"For me, identity is something that exists between the "I" and the "you", it's not just a personal investigation. Mouchette is constructed by her public. When they love her, when they insult her, they make her who she is. (Mouchette 2004)."* However, after the launch of the identity-sharing interface, alternative Mouchette webpages are created. Additionally, the thumbnail portrait on the top left of Mouchette's homepage (see fig. 5) is occasionally replaced by other portraits, the ones that users haven given her, which varies from a male vampire to a female astronaut. Not only do these images provide links to alternative 'Mouchette' webpages, but it also shows how 'Mouchette' is played out by not only Neddham, but also by others. Her imaginary is ambiguous, like a Rorschach, it demonstrates how others can project a part of ourselves in it and with that she stays open for new interpretations. One can be 'many' identities on the Web, but also many can become the same identity. 'Mouchette' her identity has become 'multiplied', 'decentred' and 'fluid'. Nowadays it is no longer

possible to produce any new identities of ‘Mouchette’, purely as a result that certain Internet features don’t work anymore. However, the alternative ‘Mouchettes’ still exists as part of the artwork ‘Mouchette’ (Neddham 2012).

4.4 Revealing authorship

In the previous section, ‘Mouchette’s presence (or in some sense absence) expands from the online world into (offline) exhibitions and publications. In 2003, the anonymous artist seemed to have finally identified ‘himself’. Debates continue, as the new ‘Mouchette’ turns out to be a quite problematic identity (a young girl created by an adult male) (Salvaggio 2002). Even more puzzling is, that at the same moment, the online identity ‘Mouchette’ is given away to the audience: Everybody is invited to become ‘Mouchette’. Who the author is behind this online identity has become even more confusing and fragmented. ‘Mouchette’ is presented as a result of collective authorship, while the ‘true’ artist, Neddham stays well hidden behind her online mask.

The next phase of the artwork’s life starts in 2009 and will continue until the present day. It will analyse how the artist Neddham choses to reveal herself as the artist behind the pseudonym ‘Mouchette’ (section 4.4.1). Over the years, ‘Mouchette’ her network of devoted fans starts to grow, and Neddham continues to actively manage her online presence, engaging with her audience through conversations via her website and emails, but also by her presence in other online meeting places, like the MOOs and mailing lists. The active role of Neddham should not be underestimated. She oversees all actions, moderated conversations and constantly activates her audiences in new ways. What would happen if she would no longer pursue this role? The last part of this biography will look at the current attempts to preserve ‘Mouchette’. First it will discuss the strategy as proposed by the artist herself (section 4.4.2), followed by what is considered to be the artwork within the collection of the Stedelijk Museum (section 4.4.3).

4.4.1 THE MECHANICAL TURK

With the rise of social media platforms, like Facebook and LinkedIn, identity questions on the Web went into a different direction. Instead of hiding behind

fake identities, people started to share more and more about their (idealized) selves and everyday rituals. In this new arena, it felt less important for Neddham to pursue hiding behind a fictive persona and instead she rather gave up her fake identity in favour of revealing the human (labour) behind it (Neddham 2011). In May 2009, at the Maison des Métallos in Paris, a group of forty French Internet artists were invited to reflect back on 15 years of artistic creation on the net. This is where Neddham (aka Mouchette) makes her come-out. In an interview, published in MCD journal containing papers from the event, she concludes: “*Yes, my name is Neddham* (Neddham 2009).” Finally, the role of artist Neddham has been brought to light.

Her hidden role compares Neddham with functioning like a ‘Mechanical Turk’ (Neddham 2016b). This late eighteenth century automated chess player toured extensively in Europe and America. It seemed to have been sensational to see the machine playing chess and above that he was capable to beat many of his opponents. Nowadays, it is clear that the life-size mannequin was only supposed to be a mechanical toy; in reality, he was nothing more than a mechanical illusion. Despite the elaborate construction revealed behind the doors of the cabinet, it was in this same room that a human chess player operated the machine. It was the skills of this operator that made the Turk win most of his games. Several authors have referred to the Mechanical Turk as a metaphor for understanding the Internet (Aytes Ayhan, n.d.; Nick Dyer-Witford and Greig de Peuter 2009; Gehl 2011; Scholz 2012). Like the Turk, it is humans that animate this mechanical world. If we could peek behind the seamless interfaces of popular digital media platforms, such as Facebook and Twitter, we could identify the enormous amount of human energy that is responsible for its functioning. Just as the original Mechanical Turk, these websites are merely shells without their operators and they would not function without social interactions and the intense engagements of their users.

Reflecting on these changes in the online environment brings to mind, as Martine explained, that “*the user is being used*” (Neddham and Wild 2017b). This made it for her more relevant to discuss and reveal the hidden labour, then to stay hidden behind online persona exploring identity questions. By appearing as a ‘Mechanical Turk’, Martine lays emphasis on the human energy behind all the technological marvel of the Web. Like all (im)material culture, ‘Mouchette’

easily adopts new meanings as it crosses into new social and cultural (online) contexts. What is significant is the devotion of Neddham, staying part of this process and playing a significant role in transforming the functioning of ‘Mouchette’.

4.4.2 GENERATIVE PRESERVATION

With its roots in the meeting places of the MOO, also ‘Mouchette’ evolved in a triad of influences of the author (*Artist*), the audiences (*Recipients*) and the work of art (*Index*). Also, the *Prototype* ‘Mouchette’ is an active agent in the further development of the artwork. They ‘behave’ or ‘act’ in prominently the World Wide Web, whom along the way changes having a major effect on the way these actors ‘act’ or ‘behave’. As a consequence, ‘Mouchette’ continuously drifts in new directions. Although this emphasizes that all agents (as described in Gell’s model) play an essential role in the creation of ‘Mouchette’, this biography also shows that the active role of the *Artist*, Neddham, should not be underestimated. She oversees all actions, moderated conversations and constantly activates her audiences in new ways. What would happen if she would no longer pursue this role?

Aware of the precarious future of ‘Mouchette’, Neddham started to investigate ‘generative’ preservation strategies, by which she means that instead of keeping the artwork in its ‘original’ form, she tries to preserve their ability to grow and expand (Neddham 2016a). Aware, that there will be a limit to her efforts to keep ‘Mouchette’ evolving, she started to slowly transfer her skills to Nikos Voyatski in a continuously series of chat sessions. The aim of these sessions can be easily confused with the sharing of ‘Mouchette’s identity. However, instead Neddham is showing Nikos Voyatski her role as the ‘Mechanical Turk’, which she explains as “*What the human is doing behind the software* (Neddham and Voyatski 2016).” Throughout ‘Mouchette’s life trajectory, Neddham always controlled the back end of ‘Mouchette’: The so-called ‘database browser’ dates back from the 2000’s and combines a database with publishing functions. The database is a digital repository in which conversations with ‘Mouchette’ are stored and it gives the opportunity to search them on date or key words. Besides that, this database offers possibilities to moderate and for returning data to the front of the website, in other words

certain messages of users can then appear on the ‘Mouchette’ webpage. These ‘behind-the-scene’ functionalities could metaphorically be seen as the brain of ‘Mouchette’, which is not automated, but needs a human operator to keep it functioning (Neddham and Voyatski 2016). We could say that ‘Mouchette’ her memory is shared with viewers, while at the same time they contribute alternate memories to the work, and Neddham functions as the operator in between who moderates this process.

Neddham seems to have never abandoned the immediate context in which ‘Mouchette’ was created, on online meeting place where solutions were found through conversations, copying and improving. Rather than solely the artist informing the best possible decisions about the future of the artwork, the emphasis lays on the collaborative effort, where differences dissolve into shared solutions, leaving open the possibility that these will lead ‘Mouchette’ to new directions. She explains how she transmits her skills with a certain freedom: *“Nikos should be free to do the coding from his own personality (Neddham and Voyatski 2016),”* emphasizing that ‘subjectivity’ always played an important part of the artwork’s life and *that* can be preserved as well. Nikos add to this that he does ‘act’ in a certain way, influenced by ‘Mouchette’: *“It is important to understand the concept of the moderation, the personality and how she is communicating (Neddham and Voyatski 2016).”* For Neddham the Web is about the human beings behind the computers that have conversations with each other and on a human level share problems and solutions. This cannot be ‘objectively’ documented and afterwards exactly copied by learning *the* skill. As a result, ‘Mouchette’ always evolved under the influence of multiple agents.

It has been stated that to preserve ‘variable’ artworks, we can at least be transparent in where it changes and who made these changes. In this work, we could question how much transparency there actually is, as it is unclear at the moment even if Voyatski or Neddham is the ‘Mechanical Turk’. But when it comes to the artwork’s transformations, wasn’t it already unclear who of the many actors were actually causing these? And besides that, as the artwork is embedded within an unstable ecology, actions are affected by the online environment that changes in unpredictable ways. How to map this in a coherent transparent form? I would argue that a complete ‘transparency’ of the changes within the work is impossible, let alone analysing whom exactly made them.

Besides that, this seems not the essence of the artwork. Instead, the artwork is a continuous creation, in which interventions of various actors made ‘Mouchette’ move forwards, as a group effort in which (most) individual members are anonymous. Instead of an exact overview of changes and their authors, is it possible to preserve (an impression of) these dynamics?

Although the oral transmission of instructions emphasizes the ‘liveness’ of the artwork, it also makes it fragile without further documentation. This made Neddham and Voyatski decide to develop through their conversations a (what they call) “*vocabulary, a basic grammar*” for documentation (Neddham and Voyatski 2016). Although, the development of this language is still on going, they started to create a set of instructions in a series of ‘annotated’ screenshots that explains how to moderate conversations and publish relevant content. On static screen shots layers of text are added to explain the process. By zooming in you can get more detail, by zooming out more an overview of what needs to be done. All the text is handwritten, giving the instructions a personal touch. Although these can be printed, it is important for Neddham and Voyatski to publish them in digital form as this gives the possibility to keep adding information to the snapshots. Instead of a rigid form, they allow to evolve along with the work, as an on-going conversation.

4.4.3 MUSEALISATION

In the meanwhile, MOTI (Museum of the Image) and the Stedelijk Museum Amsterdam acquired a version of ‘mouchette.org’ (‘Mouchette Version 01’) with the intention to start a national digital art collection (Ward Janssen 2016). While Neddham protected her freedom to keep (and update where she finds necessary) the ‘live’ version, the museums received a time stamped, digital archive of the artwork, which includes all data until the date of acquisition. The acquisition of a version solved an important problem, namely that it is often difficult for museums to acquire an artwork that will further develop after it is included in their collection. There are museums (for example the Guggenheim as we will see in my next case) that prefer that the artist does not create any additional works anymore after this stage. As ‘Mouchette Version 01’ is a time stamped archive, this allows the artwork ‘Mouchette’ to further grow in any directions that the artist wishes in the same digital domain ‘mouchette.org’. This

is a unique archive of the work, which contains a specific period in 'Mouchette's lifespan. So, a version differentiates from an edition. An edition is a copy or replica of an artwork, which are more or less identical from one another. In case of a version, one refers to a unique state of the artwork that can differ from earlier or later forms. As in the case of 'Mouchette' the version is timestamped (2016), corresponding to a particular state of the artwork in a certain moment in time, letting it open that the work can further develop. This could possibly lead to future acquisitions ('Mouchette Version 02, 03, etc.). That this acquisition does not involve any new conversations between 'Mouchette' and her dedicated fans seems a solution but can also be a problem. The essence of the work as described in this biography, that it is in some sense 'alive', does not form part of this time stamped archive. It allows the artwork to stay 'alive' outside of the institute, but inside the institute only the documentation of its performance (until 2016) is maintained. This also raises questions about the display of the artwork in the physical galleries of the museums. 'Mouchette' is a dynamic mechanism that through a variety of displays establishes new links and connections. Like a relational practice, this artwork was never only on view, but these situations were often instrumental for creating and recreating connections between people and trying to stimulate actions. What happens when the museum will exhibit 'Mouchette Version 01'? Will that be a historical exhibition, showing residues from what were ones her life (until 2016)? Or will this connect to her on-going lives, include new actions that are not part of what has been collected, valuing the shared experience of authentic presence and immediacy?

After that the artwork was socially active (and affective), at a certain point in time, 'Mouchette' was handed over to the museum to start its afterlife in the form of an archive, or better phrased the first version of an archive, emphasizing that this documentation can further expand. The distinctive features of 'variable' media art challenge many of the conventional notions about art. Neddham, and with her many other media artists, are pressuring institutions to transform their collecting and preservation strategies, valuing that new actions are produced also after the artwork is collected, only then it is possible to keep online artworks 'alive'. More radically, Neddham is experimenting with a new form of what she calls 'generative' preservation. Although her progressive approach

gives us insights in the problem, museums did not find a way to incorporate the proposed preservation within their organization. The task is to first recognize (or at least better understand) these artworks are experimental actions deeply embedded within online worlds. What this biography reveals, is how ‘Mouchette’, as an evolving artwork, made it possible to constantly imagine the online world and its relationships anew. Only then it was possible to keep not only the documentation of the work, but let humans actively respond to the work in all forms of actions. To reach a preservation of that, it requires some sort of object, image, maybe some sort of network that permits to keep the public imagination. However, online art is precarious and uncertain as the online world itself that needs to be performed and tested in every specific context. Neddham is developing her own ‘generative’ preservation strategy to keep ‘Mouchette’ an active presence within the Web that will continue conversations with her audience. Both Neddham and Voyatski acknowledge that they keep working with her character, continuing *her* life story (Neddham and Voyatsis 2017). However, if this will be enough to keep her ‘alive’ is a question that has not been answered yet. It could be that her life story will eventually end, that residues will be preserved, and other fragments will be documented, giving future generations clues of who she was. This is where at the moment ‘Mouchette’ her biography openly ends; her (virtual) life path split up in different versions, of which some will (and others probably not) continue to evolve.

4.5 Conclusion

After analysing this artwork not only in a single moment, but also over a certain period of time, what can be said about the agency of ‘Mouchette’? The artwork is more than only a ‘thing’, but it has a form of living presence. Cyber anthropologist Sherry Turkle strikingly describes how computers are no longer only giant calculators, but they have the power to simulate (Turkle 1997, 21). Although it stays an object, at the same time computers confront us with the unease that we interact with them, we can experience them as having a certain

behaviour or we can even believe that it ‘knows’ as if it has some sort of mind.¹⁴ Also ‘Mouchette’ is treated in a similar way, in the sense that people start conversations with her and send her gifts. But what is it in the artwork that stimulates this response? In a way, the artwork also ‘acts’ like a person: ‘Mouchette’ has a certain personality, she determines to appear in certain environments (and reject others) and she is the leading voice for steering her life in certain directions. But it is not so much her appearance or human-like behaviour that makes people actively respond to her, ‘Mouchette’ deliberately provokes actions. Her audience is asked to not only passively observe or experience the artwork, they are constantly invited to actively respond and react. This creates the effect that we communicate with ‘Mouchette’ as if she is a human being.

Although there are these similarities with humans, from the start of her biography it is clear that ‘Mouchette’ is not a human herself, but that she functions like a mask: She is a (powerful play with) a fake online identity. Already the fact that she stays thirteen years old throughout her life is paradoxical and illustrates how there are no intentions to let the artwork pretend to be lifelike. ‘Mouchette’ constantly confronts us with how the Web is a simulation of reality, often by playfully eroding the boundaries between the virtual and the real. This makes that ‘Mouchette’ never really shows the agency of animation; the audience never really believes she is ‘alive’. Instead they are mostly captivated by the question ‘who’ is the human that is controlling this project? During her lifetime ‘Mouchette’ constantly shifts our attention to the human behind the machine. This is a question that stays prominent, also after Neddham reveals herself as the artist behind ‘Mouchette’ (which causes a shift in the meaning of the artwork). From that moment onwards, she starts comparing her role with a Mechanical Turk. Web cultures are far subtler than what is only possible with computer power; a lot is still built through human energy. So, instead that ‘Mouchette’ is a cyborg that is simulates (features of) human behaviour; she uses this role to show that humans (often hidden behind the machines) are essential in the creation of online cultures.

¹⁴ The power of the computer to simulate plays a role in artificial intelligence and robotics. In those cases, computers try to mimic human intelligence and behaviours. This form of living presence will be further explored in chapter 6 in the case study ‘Agent Ruby’.

So, who are the humans behind the creation of ‘Mouchette’? In first instance there is Neddham as the *Artist*, however she is by far the only creator of the artwork. At the page 'Lullaby for a dead fly' we can read that Marc Boon programmed the original version and in 2017 it was re-programmed by David Jonas. Both are programmers with whom Neddham closely collaborates. Another important contribution to the work comes from her audience (the *Recipients*), who are no passive beholders, but actively engaged in its creation. Individual authorship is suppressed in favour of facilitating the creativity of others. Also, the *Prototype* plays an active role in this question. For Neddham ‘Mouchette’ is a heteronym, an imaginary character that leads her to write and create in a different style. She is more than a pseudonym, not just a false name, but also a character with her own physiques, her own biography and artistic style. Neddham lived her life mentally and also the audience was invited to ‘become Mouchette’. In sum, it can be argued that instead of the artist controlling the work, all the agents in the Art Nexus (the *Prototype*, the *Artist*, the *Recipient* and the *Index* or artwork) are (at some points in time) actively involved in the creation of the artwork. It is the actions between these agents that define the creative process.

The heart of ‘Mouchette’ is the many conversations that she has with her audience. Another characteristic is that the production of new content is often acts of copying, reframing and re-iterating; in other words, an appropriation and recombination of objects, images or ideas of others. Both these examples recall how ‘things’ were created in the MOO in which all members were investigating and building as a collective. Likewise, the creation of ‘Mouchette’ happens in a social sphere. She is a result of collaborative authorship, in which the actions of various agents influence how she evolves. So, what mean with ‘living’ presence, is that ‘Mouchette’ is not only a ‘thing’, or an assemblage of ‘things’, but more important than any concrete outcomes is that the artwork is a ‘model’ for social connections. Over time, we see how her network grows, that the roles of agents can change, as well as their actions and degree of involvement. The development of ‘Mouchette’ comes forth out of these dynamics.

What this reveal is that to fully understand ‘Mouchette’, the challenge is to start seeing the artwork as a ‘system of action’ (Gell 1998, 6). These actions occur between agents in ever-changing networks. Her biography shows how

'Mouchette' cycled through different environment, subsequently the agents started to act differently, which made the life trajectory of the artwork drift in unexpected directions. We can capture when there is a certain activity and try to describe that particular moment and the agents that are involved. However, over time agents constantly change as well as the actions between them. Throughout its biography, the artwork evolved often as a subjective process, without having very clear rules, instead coming forth out of social (communication) processes and agents that act upon each other in certain ways.

The 'Mouchette' website played an important role to stimulate the user's interactions with the work, for example through the use of language and hypertext in the design of the interface. This give the Recipient the possibility to foreground their own perspective on 'Mouchette', not only through selecting what matters most to them, but they are also invited to actively respond. In case of 'mouchette.net', the Recipient is even invited to take over 'Mouchette's' identity, playing out her personality in their own way. The data is stored and can be accessed through an SQL database. This also makes it possible to publish this data online, as part of the 'Mouchette' website. On the other hand, also the fact that things are not materialized contributed to the agency of the artwork. The website makes it possible for the artist to stay anonymous behind her online mask. In the early years, promises of public appearances of 'Mouchette' in exhibitions and events, were never actually materializes, which fueled the discussions about who could be the artist behind 'Mouchette'.

Over time, the online identity 'Mouchette' constantly evolves. She is not a singular identity, but 'Mouchette' is rather made out of many. First of all, her name derives from the novel *'Nouvelle histoire de Mouchette'* (1937), which was turned into a tragedy film *'Mouchette'* (1967) by Robert Bresson. This provides her with a Prototype, a conceptual reference, and the foundation for the identity of this fictive character. Secondly, over time the artist Neddham, as well as other artists and online visitors (Recipients), are playing out the persona 'Mouchette' by taking over her virtual identity. It is this assemblage of relations that at the end forms Mouchette's identity. Alfred Gell explains this as a 'fractal personhood', a concept he borrows from cultural anthropologist Robert Wagner, who explained this as: "*Any individual person is 'multiple' in the sense of being the precipitate of a multitude of genealogical relationships, each of which is*

instantiated in his/her person (...) (Gell 1998, 140)." The biography of 'Mouchette' revealed the process that led to her fractal personhood, which gave her character a complex interiority. Although her character is fiction, 'Mouchette' imitates having a human-like personality that constantly (re-)shapes through social interactions. It was never set beforehand who 'Mouchette' could become and until the present day it remains open-ended how her identity will further evolve.

In this context, it is interesting that Neddham offered 'Mouchette' to the museum, not as a finished artwork, but as an (artist) archive in which we can find a fragment of 'Mouchette' her life trajectory (from 1996 until 2016). MOTI and the Stedelijk Museum collected 'Mouchette *Version 01*', which presupposes that there will be more versions to follow. It opposes a fixation of the artwork and instead considers continuity of its agency. At the same time, Neddham attempts to preserve the human activity around 'Mouchette'. It could be that in the future, Voyatski takes over her role as the Mechanical Turk, becoming the driving force behind new conversations with audiences and possibly he could become responsible for letting her adapt to new (online and offline) environments. The Artist behind 'Mouchette' is variable, in the sense that a dynamic network of different agents has influenced her creation. Keeping her 'alive' means that she constantly needs to stay connected to (a new generation of) people that can activate her. Agents can be replaced over time, but can even Neddham be replaced? It seems a difficult task, but at the moment, this is the precarious question.

5.

Brandon

5.1 Introduction

On June 30, 1998, the Guggenheim launched its first artist project for the Web ‘Brandon’. The artwork refers to the life and death of Brandon Teena, a young transgender man who was sexually assaulted and murdered in rural Nebraska because of his gender identity. The artwork was released five years later as a collaborative platform, still undefined, inviting guest curators to illuminate Brandon’s story. The tragic story of Brandon Teena was kept alive with the intention that it could lead to a variety of social and political debates. Through the involvement of multiple authors, from different parts of the world, the artwork started to grow and expand in unexpected directions. ‘Brandon’ became a multi-author and even a multi-institutional collaboration.

5.1.1 AGENCY

The previous chapter revealed how an online artwork can exercise social agency. ‘Mouchette’ was an online persona that interacted with other agents in a variety of social settings. ‘She’ established not only an online presence, her agency also expanded in offline events and exhibitions. This chapter aims to sharpen our understanding of another form of agency: The artwork can play an active role in the remembrance of the dead. By portraying a person, their actions or life story, an artwork is able to preserve memories of someone who passed away. The commemoration happens in social settings, in which the artwork becomes an instrument to share memories among the members of the community, or to pass them on to future generations. The artwork can even

become a substitute for the deceased that continues to have agency. This form of agency of arts is widely documented and investigated in the history of art (among others Freedberg 1991), but what happens if the artwork is a website? This brings some unique features, for example the artwork 'Brandon' does not only represent the deceased (Brandon Teena) visually, it also tells (fragments of) its life story and disseminates that widely through the World Wide Web. Another characteristic is that the work *itself* serves as a social space in which remembrance is undertaken, as well as that it is a (global) memory place where conflicted memories can be negotiated. And instead of zooming in on a single narrative, it can include various legacies of a person, each telling their own version of the past.

Immortal fame is rarely shown upon the poor or marginalized members of society, who more often systematically disappear into cultural oblivion. In contrast, the artwork 'Brandon' deliberately commemorates someone marginalized, using the Web as a tool to disseminate those voices that are normally unheard, and giving visibility to a silenced history. Furthermore, it is not so much that Brandon Teena himself, as a person, is commemorated, rather it his victimhood is turned into a symbol for injustice. His life story is a way to illustrate, more in general, undeserved violence against minorities. In the artwork he re-appears highly abstract, bearing little or no obvious resemblance to its referent, making it acceptable as a carrier for new meanings. This helped to revive in each context anew the urgent call to rethink our position towards minorities and flame new public debates about human and civil rights. This chapter will follow the artwork from its time of origin until the present, asking questions like: How does the artwork represent Brandon Teena? How do different communities appropriate his tragic life story? And how is the original meaning of it kept alive, lost or distorted?

5.1.2 THE PROTOTYPE

Following the structure of this thesis, this chapter will focus in particular on the role of the *Prototype*. According to Alfred Gell, the Prototype is where the artwork is referring to, visually and/or conceptually. However, we also need to consider another meaning of the term. In software studies the *Prototype* refers to an early version of a programme that further develops. Digital objects are

produced through copying and adjusting existing objects, which are called Prototypes. The Prototype, as studied here, incorporates this process. In this case, the artwork is referring to Brandon Teena, or more precisely its critical social reality. From this point, onwards the Prototype further evolves from one version to the next. Here the online ('variable') artwork differs from more traditional media such as paintings. As became apparent in the previous chapter, the value of process over finished outcomes is something that can make online artworks difficult to grasp, unless we unravel how this process unfolds. Over time, we can look back at the steps that were taken in this process. This is what this chapter intends to do, it will follow the trajectory of the Prototype by examining plans and sketches, as well as various versions of the artwork and adaptations.

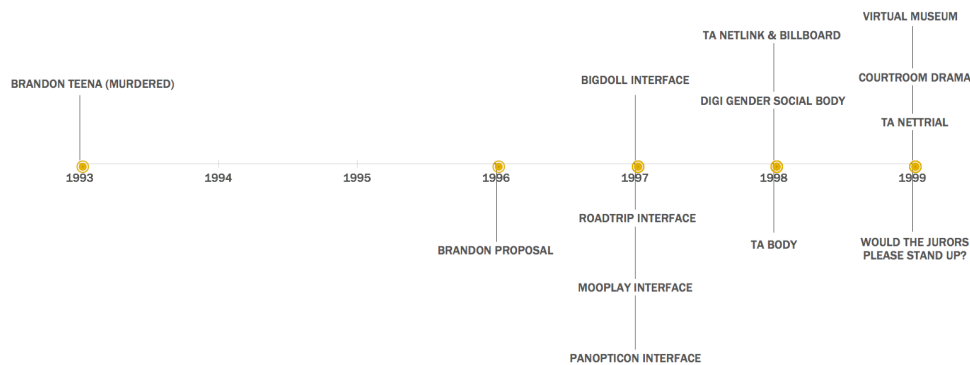
5.1.3 THE ARTWORK

In contrast to 'Mouchette', the whole artwork can be found on one website under a single domain name 'brandon.guggenheim.org', which was captured the first time by the Internet archive on December 3, 1998 (Cheang 1998p). However, it is difficult to get an overview of the artwork 'Brandon'. Where it is especially complicated, is that the digital navigation is deliberately set up to wander around and drift in unexpected directions. To gain an overview of the website, first insight can be found on the credit page of the site, that identifies five interfaces accompanied by a small description and the authors who were involved in its creation (Cheang 1998a). Recently, the conservation department of the Solomon R. Guggenheim Museum, in collaboration with New York University, did an extensive restoration project and as part of that they released a screen navigation of the artwork that takes the viewer through the different interfaces (*Video Navigation "Brandon" (1998–99)* 2017). This video further reveals hidden links and ways to find the many webpages that form the artwork. Besides that, the artist's archive revealed the existence of the 'TAsketch' webpage, another hidden element within the 'Brandon' artwork, that gives access to a repository of sketches and research materials (Cheang 1998h).

Also, the artwork 'Brandon' contains more than only the webpage. Instead its presence goes well beyond the online realm, including a variety of offline events and performances. The most important ones took place at the Solomon

R. Guggenheim Museum (New York), the Theatrum Anatomicum (Amsterdam) and the Ames Courtroom in the Harvard Law School (New York). This study will be the first attempt to restore the artwork as a network that includes also these offline events. They could only be reconstructed and studied through documentation and residues that remain within the archives of different institutions (in Amsterdam and New York). Most of these archives were untapped, some even unprocessed, and not all archives were accessible yet, which makes that this case could be supplemented when access to new documentation has been made available.

5.1.4 THE BIOGRAPHY



III Timeline 'Brandon'

This chapter will analyse the agency of an online artwork to commemorate the dead through the case study 'Brandon'. It will specifically focus on the Prototype of the artwork (there where it visually or conceptually is referring to) and how the meaning changes, as the artwork becomes part of different social settings. Over time, the artwork further evolves as different communities are invited to constantly add new variations towards it.

First, in section 5.2, the Prototype will be defined through looking at the ending of Brandon Teena's life, and how this is taken over in the media and in artworks. This will be followed (in section 5.3) by an analysis of the first proposal for the artwork, written by artist Cheang assisted by Beth Stryker, that describes the overall concept of the artwork as well as positions that are left open for others to further fill in. Section 5.4 reconstructs the first stage in which the artwork is realized. It will look at the four sections of the website, who made

them, how it translates the prototype and how the visitor can interact with them. In section 5.5 the artwork is further developed within several institutions. This section will look at how the artwork evolves within different social settings. The artwork's biography concludes with some notes about how the artwork is safeguarded (section 5.6).

Where in the previous case study 'Mouchette', artist Martine Neddam stayed actively involved in the further development of the artwork; Cheang prioritized working on new projects and left 'Brandon' in the collection (and care) of the Solomon R. Guggenheim Museum. Although, the artist intentions were that 'Brandon' could continue to further evolve, this never really took place without her active involvement (Cheang 2016). As such, the main focus in this biography lies on the early years of the artwork (1996-1999).

5.2 The Prototype

As this chapter in particular examines the agency of the Prototype, a logical first step is to take a closer look at to who (or what) is the artwork exactly referring. It is not precise enough to state that the artwork refers to a person: Brandon Teena, instead it refers to only a selection of tragic events within his life story. Around the origin of the artwork, the legacy of Brandon Teena was already widely picked up by the media as well as by several artists. This section will conclude with how the artwork 'Brandon' added towards his legacy.

5.2.1 BRANDON TEENA

It is mainly the tragic ending of Brandon Teena's life that provoked a large amount of reactions and created his mythical status. After moving to Falls City region, Brandon had solely posed as a man, but his female identity was apparently exposed when he was jailed on a charge of forgery (Brandon et al. 1993). According to his statement some days after his release, he attended a Christmas Eve Party where the confrontation of him being a woman turned into an argument (Brandon et al. 1993). He further claimed to be forced into a car, after which he was taken into the countryside, where he was beaten and raped. Although doctors confirmed that Brandon's injuries were consistent with rape, surprisingly no arrests were made (Eileraas 2002). On December 31, 1993

Brandon Teena was found dead, fatally shot and stabbed, along with the bodies of two other victims, Brandon's friend Lisa Lambert and her friend Phillip DeVine, both of whom had also been shot (Nissen et al. 1993; Laux and Brandon 2002). They were found in the farmhouse where Lisa Lambert lived, about three miles south of the small Nebraska town Humboldt.

In the aftermath of the murders a true media frenzy started ("The Brandon Archive" n.d.).¹ It was not so much the murder itself that caused so much attention, but newspaper headlines routinely addressed Brandon Teena's ambiguous gender identity (as the cause of his murder). This fuelled discussion about rural homophobia and failing social justice. Among others, it caused a shock wave through queer communities in the United States with even battles between transsexual, gay and lesbian activists, each claiming Brandon Teena as one of their own (Halberstam 2005, 22). Some used Brandon's death to argue for hate-crime legislation, while others made Brandon into an idol for the transgender communities whom biography gave an opportunity to increase the visibility of cross-identified youth and the many issues they are struggling with.

5.2.2 HIS CULTURAL LEGACY

Several artists picked up the story, all creating a new 'Brandon' by translating it into fictional depictions of transgender life in a small-town in America. The case has been fictionalized in the novel by Dinitia Smith titled 'The Illusionist', it has been written up as a true-crime mystery called 'All S/he Wanted' by Aphrodite Jones, and John Gregory Dunne wrote about the murder for the New Yorker (Dunne 1997; D. Smith 1999; Aphrodite Jones 2002).² In terms of cinematic representations, Diane Keaton tried to produce a feature film about the case, but her attempt was unsuccessful as she was overtaken by 'Boys don't Cry' (1999) that in turn drew heavily from 'The Brandon Teena Story' (1998), a documentary directed by Susan Muska and Greta Olafsdottir. Remarkable is that not all stories acknowledge 'Brandon' to be a transgender individual. For Dunne, the changing gender identity is described as a personal crisis and Smith

¹ The Brandon archives is a collection of magazine articles, talk shows, and other media that covered the case.

² 'The Illusionist' is only loosely based on Brandon Teena and Smith never actually acknowledged that her novel is based on the Nebraska murders and instead the disclaimer states that all has been invented by the author.

even relates it to forgery. Both see the brutal events that led to his death caused by a combination of poverty, lack of education and childhood abuse, which shows that the story is not only about gender, but also about class. Alongside a story of deception and denial are more heroic narratives, immortalizing 'Brandon' to the status of the 'lost' soul. This includes the Oscar-winning feature film 'Boys don't Cry', which determined probably more than any other representation the legacy of the murders. Judith Halberstam explains how the movie forces spectators to adopt Brandon's perspective, giving mainstream viewers access to, what she calls a 'transgender gaze' (Halberstam 2005, 76). However, it does not succeed to successfully sustain this perspective throughout the whole movie, as it ends that Brandon is not only exposed to have a female body, but Brandon also acknowledges that she is a woman. Furthermore, Philip DeVine, who was a disabled African American man, does not appear in the movie. Halberstam critiques that Peirce reduces the complexity of the murder, as well as that she scarified the complexity of Brandon's gender identity.

What these examples bring to light is how difficult it is to retell the story of Brandon Teena, as a transgender history that stretches far beyond simple facts. Complexity is often deliberately avoided (especially in popular culture) to make it more affective or convincing for a wider audience. Here is where the artwork 'Brandon' differs. The tragic death of Brandon Teena has different resonances in different groups. Instead of discarding these differences, by representing a simplified story or standardized images of the past, the artwork embraces that people can recollect in their own way. Here it is important to distinguish the difference between facts from the past and the way the past is commemorated. It is not the event that changes, but our frames of interpreting them. Like other artistic interpretation, also the artwork 'Brandon' takes as point of departure, the tragic death of Brandon Teena. This is reactivated to serve as a reminder of our obligation to protect the rights of minorities. But instead of defining a single universally shared memory, that can discard or marginalize others, the artwork acknowledges that this tragic event can be perceived in multiple ways. Not only does the artwork actively engage different communities, but it even invites them to revisit the Brandon Teena story, illuminating those fragments that were relevant for them and take these as a starting point for wider conversations and concerns. Subsequently, the story drifted off in all kinds of directions.

From the moment that Shu Lea Cheang started to develop her first ideas for ‘Brandon’, she was certainly familiar with his cultural legacy.³ It was from thereon that she was able to point out a still unexplored territory where his tragic death was also fully discussed: In the forums on the World Wide Web (Cheang and Stryker 1996). Within these online communities, the Brandon Teena story evoked all kind of emotions, empathy and transsexual activism.⁴ In line with the idea that all voices needed to be heard, the artwork ‘Brandon’ was an attempt to further explore this (neglected) part of the media hype, as well as that it aimed in particular to establish an alliance with these online communities and create a platform for their voices as well.

5.3 The ‘Brandon’ proposal (1996)

In the previous section the legacy of Brandon Teena has been further discussed, to gain better insights in the Prototype of the artwork ‘Brandon’. It does not aim for faithfully portraying Brandon Teena or re-telling his life story, instead the artwork reactivates his tragic death as a way to prevent further aggression against minorities. Now that the Prototype is more precisely defined, it is possible to further unravel its agency. Throughout this biography, different communities will constantly redefine the Prototype and consequently it will further evolve. First, how did the artist herself, Cheang, take up the Prototype? In 1996, Cheang, assisted by Beth Stryker, wrote a first proposal for ‘Brandon’, at that time still a concept title for the artwork. The whole plan existed of a series of sketches; a project description; a plan for production; research documents and a team with whom the artist liked to collaborate. Roughly speaking, this plan can be seen as the blueprint for the artwork. This section will give insights in these first ideas of the artist to translate the Prototype into an artwork. ‘Brandon’ was described as a free-floating narrative that needed to evolve through the control of many actors, so that the Brandon Teena story could be redefined in each context afresh. However, this initial proposal does describe the general concept of the artwork (5.3.1) and features three subject

³ Both in the initial plans for the artwork, as the artist’s archive it is possible to find traces of Brandon Teena’s cultural legacy (Cheang and Stryker 1996; Cheang 1998m).

⁴ Cheang was part of these online communities herself. In 1994 she had started to build a cyber-community during the development of the artwork ‘Bowling Alley’. She met online with a number of gay, multiracial, lesbian and transgender artists with whom she collaborated via email (Cheang 1995).

positions that others could fill in (5.3.2, 5.3.3 and 5.3.4). In the next section (5.4) the first version of the website ‘Brandon’ will be analysed, including four user-interface designs. These designs would be loosely based on the concepts that are further discussed within this section (5.3).

5.3.1 AN AFTERLIFE FOR BRANDON TEENA

From the beginning it was clear that the artwork would take the form of a website, as for the artist it was important to take ‘Brandon Teena’ into cyberspace. Around the 1990s the term ‘cyberspace’ had already entered the popular lexicon and was in general known as a synonym for the World Wide Web, especially among the Internet community (Heuser 2003, 100). However, this was not where the artist referred to. Instead, she takes William Gibson’s description of ‘cyberspace’ as a starting point (Cheang and Stryker 1996).⁵ In his book ‘Neuromancer’, humans project their disembodied consciousness into this virtual space. Thus, for Gibson cyberspace is a form of human consciousness, which involves that one is taking out of reality and into a mental space. This experience is comparable with reading a book, but where it differs is that the computer-simulated reality allows navigators to actually interact within this virtual world. It offers for example opportunities for navigation through the space, as well as to manipulate electronic data. This is the ‘cyberspace’ where artist Cheang wanted to give ‘Brandon’ a digital afterlife. It is in this partly technological, partly imaginary space that his legacy continues, as it is there that he will come to life in a virtual form anew.

Although the artworks, associated with Internet art, are very diverse, they have in common that they contain a form of activity. Then too, in the proposal for ‘Brandon’ it is emphasized that the artwork is not static, but it evolves over time under the influence of its changing social environment. This is what the artist called ‘time based art on the Net’ (Cheang and Stryker 1996). Over the course of time, the artwork needed to attract a growing network of authors that would contribute to the artwork. However, it would not grow without any given

⁵ Gibson’s idea about ‘cyberspace’ came forth out of looking at children, who are highly concentrated playing video games. Instead of being aware of the world around them, they are immersed in the virtual world behind the screen and actually believing in an existence there. In line with these observations, Gibson described ‘cyberspace’ as a ‘consensual hallucination’ (McCaffery 1991, 272).

directions. In the section of the proposal that describes the ‘production of the artwork’, first blueprint has been given. The artist proposes that the artwork needed to develop into three directions: The first is what she explains as the ‘Brandon narrative’, the second a ‘Cyber multiple character play’ and the last ‘Crime and punishment’. Eventually the artwork does slightly evolve in directions that were still unknown around this time. Although full of detail, the plan is also still full of holes that would be filled in by the many authors that got involved. These three directions stay evident within the further development of the artwork and will be explored more in-depth throughout the artwork’s biography.

5.3.2 A NONLINEAR NARRATIVE

The first issue that is further discussed is the ‘Brandon narrative’. It describes how the aim is that a virtual ‘Brandon’ takes us on the road, to be precise Route 75, which is the highway that crosses the centre of the United States and leads us to the area in Nebraska where Brandon Teena was raped and murdered. On the way ‘Brandon’ encounters bars, truck stops as well as transgender historical figures and eventually, the road would lead to a place, where one can read the police and court records of Brandon’s rape and murder case. The classical film genre of the road movie could provide a fitting framework for the artwork, as ‘the road’ has been a persistent theme of American culture, often setting the liberation provided by the road against the oppression of hegemonic norms (Cohan and Hark 2002, 12). Another tempting way to interpret the ‘road’ is as a reference to the ‘electronic superhighway’, a term coined by artist Nam June Paik to describe how communications networks can connect people all over the world and transmit information between them (Paik 1997). However, none of these references are mentioned within these initial plans.

What can be argued is that the road supported the narrative form. This is a story that does not want to have an explicit destiny, but it is a non-linear narrative that bifurcates into multiple possibilities, and the Recipient has the freedom to follow their own chosen paths. What is further explained in Cheang’s plan is that, first of all, the road trip needed to be never-ending, as it could be “*construed as an ever-extended page on the web as one moves the cursor along the route* (Cheang and Stryker 1996).” This story is not so much

directing into a certain destination but necessitates a form of circulation. Secondly, in line with the hypertext environment of the Web, the artist describes the possibility to drift through this virtual landscape, going off road or detouring to related websites. Instead of a sequence of causal events or a single plot, the story takes off in various directions by using the freedom of browsing the Web (going from one page to the next by using hyperlinks).

As also the last chapter revealed, some postmodern ideas capture very well the experience within the online world. Also, the way the story of Brandon Teena is brought into a web narrative embodies this larger cultural context. Postmodernism critiqued dominating narratives and instead professes a plurality of small narratives that compete with each other. Jean-François Lyotard argued that: “*Simplifying to the extreme, I define postmodern as incredulity towards metanarratives* (Lyotard 1984, xxiv).” It is interesting to see how digital technologies offer a more concrete structure for this abstract idea. The hypertext environment in the Web creates nonlinear narratives, as computer users are allowed to create their own links, as well as that it is possible to travel along the links made by others. This narrative structure was very suitable for the artwork ‘Brandon’, that refused to recognize a single narrative and instead aimed for offering a platform that could include a plurality of perspectives. It tried to avoid any oppression of minorities and instead celebrated diversity. This is in line with how Lyotard continues his argument: “*The idea that I think we need today in order to make decisions in political matters cannot be the idea of the totality, or of the unity, of a body*”, rather “*it can only be the idea of a multiplicity or of a diversity*” (Lyotard 1984, 94). The ‘road’ was meant to become the heart of the artwork, connecting all the different storylines and viewpoints, bringing it all together. A large part of this plan would later be realized as the ‘roadtrip interface’ that will be further unpacked in the next section (5.4.2).

5.3.3 ONLINE IDENTITIES

That the Web changes the way we construct identities and perform a social role was a main issue within chapter 4, but it returns here, within the artwork ‘Brandon’. In the online environment, we appear as virtual identities that are disembodied and this offers the possibility to reinvent ourselves. Independent of

our anatomical self, we can easily shift who we are, including our gender and race. Gender as a fluid and unstable concept would stay an essential feature in the 'Brandon' artwork. For the artist, this added towards the idea that Brandon Teena needed to be given a new life within an online environment where the concept of gender is no longer restricted to male *or* female, but one can easily change gender (Cheang and Stikker 2017). As the Web is a medium to communicate with other people, the online self is not alone, but instead it becomes part of wider online communities in which identities are further developed. Like in real-life, we perform social role online, incorporate group ideas or identify with certain cultures. This social aspect would stay essential throughout the artwork's further developments.

Already in the first proposal, the artist revealed her aim to integrate these concepts of online identities, which is especially set out in the second theme 'Cyber multiple character play'.⁶ The aim was to invite three writers to create a character and afterwards go in conversation with each other in the role of this character. They would not only exercise creating and playing out a character, but also discuss this process at the same time. The suggested writers included Pat Cadigan, Francesca da Rimini and Lawrence Chua. While different in other respects, these writers shared an interest in progressive (postmodern) views of identity that can be fluid, mixed or multiple. First, the novels of Pat Cadigan are often identified with the Cyberpunk movement. A recurrent theme within her books is the relation between technology and human minds.⁷ In 'Mindplayers' (1987) and 'Fools' (1992) a futuristic, techno scientific world is sketched out in which persona become commoditized (Cadigan 1996, 1992). It illustrates what would happen when it is possible to make new kinds of self-inventions by grafting another person's identity onto your own. Secondly, Francesca da Rimini is one of the founders of the Australian artist collective VNS Matrix (1991). This group of techno-utopian thinkers is mostly known for, what is one of their first works, a large scale billboard featuring the text 'A Cyberfeminist Manifesto for the 21st Century' (VNS Matrix 1991). It was in this manifesto that the term 'cyberfeminism' first appeared, as a way to rethink the role essayed by

⁶ In Internet art, a recurring theme is how online life affords new opportunities to explore identity. In the previous case study 'Mouchette', this was further explored (chapter 4).

⁷ 'Cyberpunk' is a subgenre within American science fiction that emerged in the early 1980s preoccupied by the changing place of media in American society, especially in the wake of the initial phases of the 'digital revolution'.

women in cyber culture (Nayar 2010, 100). The Internet was seen as a tool of feminist liberation as it offered the possibility to become ‘anonymous’, which could finally dissolve sex and gender divisions. Thirdly, Lawrence Chua (1966) is a fiction writer that is exploring themes like diaspora cultures and the influence of migration on self-identity. Ethnic or national identity consists roughly of the ethnic group or nation one takes oneself to belong to and the importance one attaches to this. How do we respond and organize our lives around identity constructs? How do we deal with shifts or transformations, especially online where avatars have no longer a (fixed) body, but can change their gender and race? What is the influence of technology on personhood, gender and sexual categories, as well as racial differences, migratory movements and transnationalism? These kinds of questions would be further explored in the artwork ‘Brandon’, but in particular in the Mooplay interface (as further described in section 5.4.3).

5.3.4 TOWARDS NEW JUDGEMENTS

The final direction that this first proposal reveals is titled ‘Crime and Punishment’. In sum it proposes to use the social space of the Web as a courtroom, to come to a new judgement about Brandon’s death. Although there is a wide chasm between the visions and realities of digital government, the idea is that the social space on the Web moves towards a more decentralized system. The artist suggested that the artwork needed to contain a virtual courtroom in which historical cases, in which gender and racial discrimination had played a role, would be re-opened and re-examined (Cheang and Stryker 1996). The first case that needed to be re-opened, were the riots that took place in the predominantly black Watts neighbourhood in Los Angeles (11-16 August, 1965), one of the largest race riots that tore throughout many American cities in the 1960’s (King 1965).⁸ The second performance would be a reconstruction of the cyberrape of Legba (as described in Julian Dibbell’s article), including the

⁸ After an African-American motorist was arrested for suspicion of drunk driving, the situation quickly escalated in a fight sparking off a six days riot causing damage, injuries and even deaths. Martin Luther King, who arrived when the riots were almost over, quickly pointed out that the anger of the black communities was caused by the economic deprivation, social isolation and inadequate housing and education.

aftermath in the virtual communities in LambdaMOO (Dibbell 1993).⁹ And eventually, as a climax, the ‘Brandon’ case would be re-opened.

What the artist further explains in this proposal is that these virtual trials should also take place within a physical space. To increase the impact of the artwork it needed to move beyond the virtual world and into the physical realm. For these performances, the artist had a specific place in mind, the *Theatrum Anatomicum* in Amsterdam. This needed to function as a stage for a series of public trials that would be directly connected to the Internet through a live stream (at the time a still advanced technology). It was both the present as well as the historical function of this building that attracted the artist’s attention. A competition in 1996 enabled Waag Society to move into this 17th century anatomical theatre. Cheang was one of their first artists in residence and it was within this lab that the artist developed an essential part of the ‘Brandon’ artwork. Their lab provided exactly what was needed to further develop the artwork, including the collaboration with programmers and the possibility to further explore technology and its place in society.¹⁰ The involvement of this institute will be further explained (in sections 5.4.4, 5.5.3 and 5.5.4).

Not only this present function was important, but also that the history of the building made it into a perfect venue for staging ‘Brandon’. In 1619, the *Theatrum Anatomicum* became the meeting room and anatomy theatre of the Guild of Surgeons. The idea was that anatomical theatres could play a major role in the dissemination of science to a larger audience. However, the anatomists did not so much intend to share their knowledge with the general audience, moreover they tried to impress them. These anatomical dissections were also considered as an early form of mass entertainment, attracting a large crowd who all were eager to see the spectacle (Bleeker 2014, 41). Subsequently, the anatomical theatre turned into cultural centres, where scientists and artist worked side by side.¹¹ This elucidates some first understanding of the relevance

⁹ The article ‘A Rape in Cyberspace’, written by Julian Dibbell, describes a series of virtual sexual assaults that occurred in the virtual meeting place LambdaMOO. This raised questions about the boundaries between real-life and virtual reality and how LambdaMOO could be governed.

¹⁰ When Cheang was writing the initial plans, she was still based at Banff centre for the Arts. However, the fact that she mentions the *Theatrum Anatomicum* shows how the artist was already familiar with Waag Society.

¹¹(Bleeker 2014, 41) Besides scholars and students, also many artists attended the public dissections, most notably in Amsterdam was Rembrandt van Rijn. In the *Theatrum Anatomicum* in

of staging the artwork 'Brandon' within this space. The anatomical theatre was a place for artistic and scientific exploration of the body, a conceptual pillar of the artwork. Secondly, the Theatre Anatomicum functioned as a place for public punishment.¹² The dissections of human bodies were directly connected to the criminal justice system, as most of the bodies were not donations, but bodies of executed criminals. The courts wielded dissections as a form of extra punishment on top of the death penalty (Sawday 1995, 63). Besides public humiliation it implied that the executed criminal was denied a decent burial. These ties between the medical and judicial system, made the Theatrum Anatomicum not just a stage for re-opening the Brandon Teena court cases, but it conceptually added towards the artwork.

5.4 *The 'Brandon' website (1996-1997)*

In the previous section, the first proposal for 'Brandon' has been further examined. In these plans She Lea Cheang, assisted by Beth Stryker, describes the blueprint for the online artwork 'Brandon'. The aim of the artwork was to give Brandon Teena an afterlife within 'cyberspace'. The artwork would include a website that was going to retell his life story as a non-linear narrative that was open-ended and could be further developed by multiple authors. This website was also considered be a social space, where people could go in conversation with each other. Here, Brandon Teena would re-appear as an online identity (or 'character'). Online, people have the ability to express unexplored aspects of the self, try out new ones and as a virtual persona one is not restricted to their biological gender. Online identities are fluid and multiple, just as the transgender identity. And as a last theme, the proposal explored the idea how one could use the social space of the Web as a courtroom, to come to a new judgement about Brandon's death.

During art residencies at Banff Centre for Arts and Waag Society, this conceptual framework was further realized through the development of four

Amsterdam he painted 'The Anatomy Lesson of Nicolaes Tulp' (1632), a group portrait of seven surgeons and physician Nicolaes Tulp. The painting shows a (probably fictional) anatomy lesson.

¹² On the wall in the Theatrum Anatomicum (Amsterdam) plates are giving warnings, for example: "*Beenderen handen geven U, levenden, waarschuwend voorbeeld.*" ("*Bones hands given to you, those of you who are alive, a warning example.*")

interfaces: Bigdoll, Roadtrip, Mooplay and Panopticon (Cheang 1998a). This formed the beginning of what would become the artwork 'Brandon'. It is possible, to see the artwork 'Brandon' as what Umberto Eco termed an 'open work', which is characterized by the artist's decision to leave arrangements of some constituents of a work to other artists, the public or to chance (Eco and Robey 1989). Instead of presenting a complete or 'finished' artwork, 'Brandon' is a work-in-progress. Elements are left open for other artists to further develop or for public interventions. This section will further analyse the first four interfaces of the artwork 'Brandon': Who made them? How do they translate the Prototype (Brandon Teena)? And do these interfaces (or do they not) include a form of interaction with visitors? Within this analysis there is one part of the website 'Brandon' still missing: The Theatre Anatomicum (TA) interface. It was only later in time that this interface was added to the artwork and this will be discussed in section 5.5.

5.4.1 BIGDOLL INTERFACE

For the development of the Bigdoll interface, Cheang invited female-to-male transgender designer Cherise Fong and activist Jordy Jones (see fig. 13) (Cheang 1998o). The interface that Fong and Jones designed asks immediately for interaction with the web-visitor, as moving the cursor over the screen makes cropped images start to appear on the screen (Cheang 1998g). These images show subcultural bodies covered with tattoos and fragments of anatomical drawings. Brandon Teena is not portrayed visually, but instead there is cut up words, like 'deceit', 'swap' and 'killed for', all fragments out of the newspaper headlines around Brandon Teena's death and legal proceedings.

The artwork 'Brandon' is presented as a narrative, unfolding in several episodes. Within a narrative structure, this first interface can be as a preview or a visual introduction on the main themes: Gender identity, the body and the fight for justice. There is some evidence that this page used to include a request to visitors to upload their own images (Cheang 1998b; Pavlik 2000). In that case the images would have constantly be renewed, adapting to new social contexts and change over time. This would have provided a solution for making on introduction for an artwork that is a work-in-progress, aiming to constantly adapt to new public debates. Nowadays, this function is no longer available,

which causes that the artwork ‘Brandon’ gradually starts to appear anachronistic, becoming a document of the past.

The Web environment created new opportunities for artists to experiment with hypertext narratives (Stallabras 2008, 65–68). While the artist provides a set of parameters, the audience can make up the plot as they go, similar to how one is playing a videogame. Experimentation with new narrative forms was an essential element within the artwork ‘Brandon’ (as also described in section 5.3.2). As part of that, the artwork contains an experimental digital navigation that prevents the user to click blindly, but instead it is deliberately set up to wander around and drift in unexpected directions. This makes it challenging to navigate through the ‘Brandon’ website, which is especially the case for the Bigdoll interface.¹³ If one moves the cursor over the screen images appear. By clicking on these images, they disappear and reveal the layer underneath it. Here a mechanical knee of some sort of cyborg appears, which at the same time is a collage that brings together images of body parts of both humans and machines (fig. 13). If one clicks on the top in the middle, there is a time-out that after a few seconds opens the ‘Roadtrip’ interface.

5.4.2 ROADTRIP INTERFACE

Section 5.3.2 describes the initial plans for the ‘Brandon narrative’, which describes the blueprint for the Roadtrip interface (see fig. 14). These plans stated that the ‘Roadtrip’ should be never-ending, but instead of a loop it is as if we continuously drive up and down the road (Cheang and Stryker 1996). Yellow lines that are running over a black screen abstractly represent the road. Following the initial plan, on the way there are hang outs, truck stops, as well as encounters with other trans-personae (Cheang 1998h). Some of them are interactive symbols (hyperlinks) that lead to other fragments of the story presenting ‘Brandon’ within a rhizomatic narrative structure. This interface brings together all the different storylines. Each of them have their own writing

¹³ One can find clues about how to navigate the website in the source code, for example:
onMouseOver="replaceClick(Math.ceil(Math.random()*50),r1c1);"
onClick="r1c1.src='./images/bigdoll/white.gif';"
Function road () setTimeout("document.location='./roadtrip/road.html'", 5000);

style and viewpoints as a team of artists were invited to collaboratively develop the 'Brandon' story (Cheang 1998d).¹⁴

The roadtrip interface portrays how the death of Brandon Teena unwillingly led him to become a symbol for recognition of transgender lives and the need for action against abuse and violence against the differently gendered. Already the first episode on the road provides a clear example, it is entitled 'Brandon in transition' and written by Fiona McGregor. The story describes a memory of someone picking up 'Brandon' as a hitcher and who later reads about his brutal murder (McGregor and Cheang 1997). The writer identifies how Brandon's voice is still haunting him: *"I wasn't trying to start a revolution, I didn't ask to be sacrificed, his voice rising now. Is this all my life was worth, to be used as a character in a tragedy of someone else's making? If this is my punishment, what was my crime? If I'm such a hero, where's my reward?"*¹⁵ On the road trip there is also a symbol of a glass with on top of that the text 'Brandon's place', which leads to the current web legacy of Brandon Teena, showing that the discussions online still continue.¹⁶ In the following episodes 'Brandon' meets four transgender personas from the past, placing the story in a longer history of gender fluidity.¹⁷ Like 'Brandon', these historical figures also function as symbols for injustice. They raise awareness that there is a limited freedom to choose a gender and persons who blend gender identities risk rejection by their communities as well as legal institutions.

¹⁴ In the Spring of 1997, during a series of conversations (online and offline), artists Cheang, Jordy Jones and Susan Strike developed four episodes for the roadtrip interface. In each episode 'Brandon' encounters a historical transgender figure. They were called 'Prototypes' as the idea was that other authors could continue the story and further experiment with web narratives during the course of a year.

¹⁵ This episode was added later (spring 1999) during Mardi Gras Festival (*Video Navigation "Brandon" (1998-99)* 2017).

¹⁶ In 2017 Guggenheim's Conserving Computer-Based Art (CCBA) initiative changed the (French) Alta Vista search towards a Google search to keep the legacy up-to-date.

¹⁷ The first meeting is with Herculine Barbin (1938-1868), who committed suicide after a struggle with gender identity. Having a body that did not fit into the typical definition for male or female caused that when she was born she was regarded a girl and it was only later in life that a judge reclassified her as male. In the second episode 'Brandon' meets Jack Bee Garland (1869-1936), who lived being a male, pretending to be mute to cover up his female voice. It was only after his death that his anatomical female body was discovered. Episode 3 stages a meeting with Venus Extravaganze (1965-1988), who's life as transgender performer in New York and eventually murder was captured in the documentary film 'Paris is Burning'. And in the last episode 'Brandon' meets James McHarris, an Afro-American transgender, who lived in Missipi. An article in the *Ebony* in 1954 reported about his struggle for the right to live as a man in rural America and the drama that happened after an arrest that caused that his birth gender got revealed.

Rather than neatly placing the ‘Brandon’ story into a chronology, ‘Brandon’ connects in each episode to various historical figures. For example, the first episode described how ‘Brandon’ starts a relationship with hermaphrodite Herculine Barbin and transgender man Jack Bee Garland he meets at a crisis centre where he discusses having multiple identities. Some warn ‘Brandon’ to be careful; others share their struggles. Fact and fiction intertwine. Notwithstanding the absurdity of the story, it does demonstrate that history is not treated as a sequel of events from past to present to future, but that different time periods affect each other. It is approached similarly to how Walter Benjamin presented it, not as a progressive narrative, but rather as a series of dialectic images, characters and stories. It is a juxtaposition of signs from different times, bringing them together makes that the meaning of these signs can change (Benjamin 2009). Instead of fixed realities, these stories circulate, bringing up new questions and debates in different communities and as such they can appear in multiple versions. As long as one stays on the roadtrip interface, pop-up windows appear with the text ‘take 1’, ‘take 2’, etc. This emphasizes the ever-changing condition of the ‘Brandon’ story, elucidating that history is retold in various ways.

5.4.3 MOOPLAY INTERFACE

By taking a ‘detour’ at the roadtrip, it is possible to enter the Mooplay interface (see fig. 15). In line with the initial plans (as discussed in section 5.3.3), there were three writers invited to contribute to this interface. Pat Cadigan, Francesca da Rimini and Lawrence Chua got a commission for writing a text. Instead of going in conversation with each other (as was stated within the initial plan), their submitted stories were fused and scrambled by using an early Web programme (mixup.html). Every time the Mooplay interface is loaded within the web browser, fragments of the story appear in a different order. Some lines constantly re-appear, among others ‘is now known as’. When the Recipient is clicking on this line the text reshuffles again into a new version. Similar as in the Bigdoll interface, the Recipient is able to re-combine and re-arrange fragments continuously.

However, this interface leaves more space for input of the Recipient. Within the story there are also several characters that re-appear, including ‘x’, ‘don-

monster’, ‘dollyoko’, ‘junkie’ and ‘fool’. It is possible to click on them, which activates a chat room, which invites the Recipient to start a conversation with these characters. Like in the MOO, one can create an avatar by choosing a name and gender (varying from male, female to neither, either, to name just some of the possibilities). This chat room does not give the possibility to start a conversation in the sense that questions are answered or responses are given, instead the responses given are random lines taken out of the texts of the commissioned writers (as mentioned in section 5.3.3 they all write about fluid gender-identities). The Recipient is invited to become part of this social space that reviews gender issues and adds their own comments. The way the story unfolds bears in a certain way an analogy with the collective Surrealist game the ‘exquisite corpse’, in which sentences and participants unaware of what other contributions look like compose images. Although the story may have been collective, yet it never resolved into a single, unified understanding. The chat logs (or conversations) are not stored, which makes that the stories that unfold in this chat room are not preserved over time but vanish at the moment the Recipient closes the chat room.

5.4.4 PANOPTICON INTERFACE

At the top of the road there is a ‘no passing’ sign that leads to the panopticon interface (see fig. 16). At this point of the artwork’s biography, one could look back towards what is described as the section ‘Crime and Punishment’ in the initial plan (see section 5.3.4). The panopticon is maybe one of the most mindboggling interfaces. Not only is it dense in theory, which makes an (iconographic) analysis complex, but it also portrays many different stories, characters and perspectives. Like the book ‘Crime and Punishment’ the concept is polyphone (Dostoyevsky 1866). As the work contains many different voices, it is impossible to merge it into a single perspective. Each of these voices has their own perspective and its own validity.

The structure that is used for bringing these different stories together is the map of a panopticon building. This consists of a circular structure with an inspection tower at its centre and cells around it. The view from the tower is divided in a blue and red section referring to the medial and the justice system, which introduced the two main themes in this interface. Opening the red section

leads to the question “*Have you ever had hormonal therapy?*”, followed by an image of an anatomy lesson and photos of surgery. The blue section is introduced by the question “*hormone treatment of the sexual offence*” and leads to the story of mathematician and computer scientist Alan Turing who was convicted for having a sexual relationship with a man and to prevent imprisonment had to undergo hormonal treatment. Besides these two central stories, there are twelve cells around the tower, of which all even numbers are blue, and all uneven numbers are red. Here there are a wide variety of stories presented that show different perspectives on the two main themes, with topics that range from medical experiments and treatments to law and punishments.¹⁸ Again, multiple authors contributed in bringing this content together.¹⁹

Besides the panopticon offering a way to structure these many perspectives, voices and stories, there is also the design itself that speaks. The panopticon is designed for having a continuous, invisible observation.²⁰ This form of control through surveillance is brought into cyberspace.²¹ Art historian W.J.T. Mitchell reflected on this transition, arguing that instead that ‘Big Brother is watching you’, we are now constantly digitally monitored (Mitchell 1995). Pioneering social media designer Judith S. Donath built further on this, emphasizes that it is essential that this information can be connected to a physical self. As soon as we are talking about virtual identities, which we cannot connect anymore to a virtual self, the meaningfulness of surveillance becomes unclear. How to regulate a virtual community (Donath 1997)? A similar problem was brought up

¹⁸ An overview of the different stories within the cells can be found within the credits of the artwork (Cheang 1998c).

¹⁹ In 1997 Beth Stryker and Jason Livingston collected a series of stories, all related to punishment, judgements and medical treatments. In Spring 1999, in collaboration with Mardi Gras Festival (Sydney, Australia) Anna Munster and Michele Barker uploaded cell 5 and Sarah Waterson uploaded cell 10 (Cheang 1998c).

²⁰ The Panopticon is a type of institutional building and a system of control designed by the philosopher and social theorist Jeremy Bentham in the late 18th century (Bentham 1981). The basic setup of the panopticon is that there is a central tower surrounded by cells. In the central tower is the watchman. In the cells are prisoners – or workers, or children, depending on the use of the building. The tower shines bright light so that the watchman is able to see everyone in the cells. The people in the cells, however, aren’t able to see the watchman, and therefore have to assume that they are always under observation. Philosopher Michel Foucault added that the panopticon is a metaphor for how modern societies observe and normalise (Foucault 1979). Instead of actual surveillance, the mere threat of surveillance is what disciplines society into behaving according to rules and norms. Several social scientists have related this metaphor to surveillance on the Internet.

²¹ In the spring of 1998, the artist visited the Koepel Prison in Arnhem, which is build according to the Panopticon Principle. The surveillance tower is no longer in use as the surveillance was replaced by a computer system.

in the article ‘A Rape in Cyberspace’, in which the character Mr. Bungle was banned out from LambdaMOO after an incident of rape within this social space. However, this was only a symbolic act as its user was not prevented from returning (who a few days later appeared again as Dr Jest). The panopticon map in the artwork ‘Brandon’ could be read as a symbol that brings up the question of control in virtual communities. How to govern this social body?

5.5 Institutional collaborations (1998-1999)

During 1998 and 1999 the artwork 'Brandon' was exhibited in several institutions. In that time, museums and universities were important to give a broad audience access to online artworks, as households that had access to the Internet (and sufficient bandwidth) were still limited (Cheang and Stikker 2017). However, the involvement of these institutions went beyond displaying the artwork, they were also actively involved in stages in its development. This section will explore how artist Shu Lea Cheang joined forces with institutions to let the artwork further evolve in new directions. It will first discuss the collaboration with the Solomon R. Guggenheim museum (New York), followed by the active involvement of Waag Society (Amsterdam), an institute for art and sciences, and it will discuss the performances at the Institute on the Arts and Civic Dialogue, based at Harvard University (New York).

5.5.1 THE VIRTUAL MUSEUM

When in 1998 the Solomon R. Guggenheim gave a commission for ‘Brandon’, it was part of a larger ambition to create not only a new collection with online artworks, but also the first fully functional virtual museum dedicated to exhibiting these artworks. Under director Thomas Krens the Guggenheim museum had become a global brand with venues in New York, Venice, Bilbao and Berlin (Quaranta 2013, 126). The idea was that to further expand with a new cultural landmark existing solely on the Web, which would immerse the visitor in an fully interactive architectural space dedicated to Internet art, as well as that it would give access to an online digital archive for all other forms of media art (Rashid 2017). For this virtual museum artworks were commissioned that were generated exclusively within and for the Internet: ‘Brandon’ was the

first (Cheang and Stryker 1996). It was curator John Hanhardt, who selected the artworks.²² He very much embraced media artworks that could challenge existing languages, traditional categories and thus “*turn the museum into something other than what is was (a bastion of art history as a set of historiographic conventions/traditions)*” (Cheang 1998f).” The commission of the artwork ‘Brandon’ was seen as a foundation for a new understanding of the museum within the digital realm (Hanhardt 2016).

It was in 1999 that the first Prototypes for their Virtual Museum were presented (see fig. 17). Architects Hani Rashid and Lise Anne Couture (Asymptote Architecture) proposed an exhibition space in a spiralling form loosely based on the Frank Lloyd Wright’s building in New York. By making use of the digital realm the architecture was fluid, ever-changing and highly responsive (Bunn 1998). The visitor got immersed into this illusionary space encountering artworks that for this venue were (quite freely) transformed into digital objects. Also, for ‘Brandon’ the architects proposed a new 3-D form, which gave visitors a unique spatial experience of the work. Cheang was excited about expanding her artwork to 3-D languages and proposed to develop a virtual court system (also see section 5.3.4) (Cheang 1998m). Unfortunately, the virtual venue was never further realised as a Prototype (“Virtual Museum” n.d.).

Although positive about the ambitious plans of the Guggenheim’s virtual museum, the artist also stressed that online artworks, like ‘Brandon’, would challenge the museum in another way. Instead of having the focus on how to exhibit (or show) the artwork online, she stresses the important of the artwork’s open-endedness and that it is a platform set up for further collaborations (“Brandon Project Presentation” 1998). Aspects of interactive approaches were not so much new in the museum, but the input from the viewer was often only to some extent. In contrast, the artwork ‘Brandon’ needed to attract a growing

²² The initial proposal for the ‘Brandon’ artwork (as discussed in section 5.3) was developed for the Whitney Museum of American Art, where in the time David Ross was still director, who incorporated social history in the museum programme and he was very much interested in expanding the museum into the virtual world. Media curator John Hanhardt was familiar with the work of Cheang and he had included her work in several of his exhibitions, including ‘Color schemes’ (in a solo show in 1990), ‘Those Fluttering Objects of Desire’ (1993, Whitney Biennial), and ‘Fresh Kill’ (1995, Whitney Biennial) (“Cheang” 1990). However, the idea to further develop ‘Brandon’ within the Whitney museum never realised as John Hanhardt left for setting up the re-opened Soho venue of the Solomon R. Guggenheim Museum (Cheang 2016).

network of active participants that were determining the further outcome of the work. Subsequently, the artist asked the museum to invite guest curators, artists and writers to contribute to the 'Brandon' artwork. In an interview in August 1998 Cheang revealed high expectations: *"I trust the museum's effort to enlist curators and artists to upload the Brandon narrative over the course of the upcoming year (Cheang 1998n)."* Indeed did the artwork 'Brandon' further evolve, also after the commission, however the role of the museum in actively initiating new collaborations was probably limited.²³

The antinomy between curating in the museum and online has been articulated by Julian Stallabrass as: *"Online curating does not involve the movement (or commissioning) of rare and unique objects to sit together in a particular space, but rather linking or transmission of identical copies that may co-exist in many spaces and in many combinations. (...) When curating is merely link-making, the power to define the present and narrate the past is placed in many hands (Stallabras 2008, 131)."* It is questionable if this curatorial model was at the forefront of the Guggenheim's Virtual Museum, however the museum did support 'Brandon' by co-hosting a variety of events that would lead to new developments in the artwork throughout 1998 and 1999. In these events several institutions were involved, one of the most prominent was probably Waag Society: Institute for Art, Science and Technology (Amsterdam). Here, a new interface for the artwork was developed, which became a fascinating test bed for ideas about how a web platform could stimulate collaboration and participation in offline and online platforms.²⁴ Playing with the opportunities that online artworks can appear in many places at once, it included a live connection between the different institutions that were involved between 1998 and 1999. 'Brandon' became a multi-sited artwork, with locations on the Web, in Amsterdam and New York.

5.5.2 THE OPENING

The Guggenheim museum launched 'Brandon' on 30 June 1998 under 'Brandon.guggenheim.org' and furthermore presented the work at their SoHo

²³ The artist established collaborations with the two most prominent contributors: Waag Society and the Institute on the Arts and Civic Dialogue (Cheang 1998k).

²⁴ The interface was developed by a group of artists, among others Mieke Gerritzen, Roos Eisma, Yariv Alterfin and Atelier Van Lieshout.

venue, that was dedicated to especially media art.²⁵ There, the work was presented in the lobby on a video wall that consisted out of seventy-five 40-inch projection cubes and subsisted into three sections. This made it possible to present three interfaces at the same time, each having their own kiosk, which gave the audience the possibility to interact with the work. Clearly the broader initiative to expand the Guggenheim's presence on the Web and show 'Brandon' within their virtual venue was not yet realised. However, the ideas at that time still were that the Virtual Museum would be presented on this video wall later that year (Cheang 1998f).

At the same time, artist Cheang was at Waag Society, where she was offered a residency that roughly took place between 1997 and 1999.²⁶ During this residency two new interfaces were developed: the 'Panopticon' interface (as described in section 5.4.4) and the 'Theatrum Anatomicum' (the focus in this section) (Cheang 1998f). The title of this last interface derived from the building where Waag Society was situated, an anatomical theatre, and the idea was to incorporate this as a real-world element within the artwork 'Brandon' (how this history conceptually added has been further discussed in section 5.3.4). Artist Joep van Lieshout was asked to design a physical installation that could be used as a stage for a series of performances that would take place simultaneously in the real and the virtual realm. To bring back some of its history, the artist proposed a spatial orientation of what used to be the interior (Cheang 1998e; Stikker and Sterke 2016). Inspired by other anatomical theatres, also the one in Amsterdam used to have an amphitheatrically shape with in the middle the dissection table, which gave every member of the audience an unrestricted view on the arena, as shown in the drawing of Jonas Zeuner (see fig. 18). The design of Van Lieshout was loosely based on this drawing, with at the centre a floating dissection table surrounded by three rings, where ones the tribunes should have

²⁵ Although, the museum became part of the artworks domain name ('Brandon.guggenheim.org'), the website was hosted by USWeb Los Angeles and it seemed to have not been collected yet (Cheang 1998f).

²⁶ Marleen Stikker and Caroline Nevejan founded Waag Society in 1994 with the aim to create a platform for artistic research that would explore new technologies with a specific focus on their role within society and culture. These ambitions came forth out of previous projects within Amsterdam to make the Internet more accessible for the public in the early days of the World Wide Web and experiments with the democratic possibilities that it could offer. In many ways 'Brandon' was an interesting contribution to the early mission of Waag Society. In this time, Cheang was offered a residency, which included technical, conceptual and financial support (Stikker and Sterke 2016; Stikker and Nevejan 1994).

been (see fig. 19). A projector (hanging on the ceiling) was set up to show the artwork 'Brandon' on the dissection table. The audience could interact with this website through a device (possibly a keyboard) attached to one of the rings, as well that several computer stations were installed (*Webcam Images (Brandon: TAOpening)* 1998). The idea was that this installation would function as a 'real' performative space that would complement the virtual part of the 'Brandon' artwork.

When the artwork was launched at Guggenheim SoHo, this event simultaneously took place within the 'Theatrum installation' (Cheang 1998h). For the occasion, a webcam was installed on the middle ring of the installation, turning around and taking photos (see fig. 19 and 20).²⁷ At the place where normally the audience would have observed the anatomical lesson, now a webcam registered the opening (Osime 1998). Furthermore, Roos Eisma (programmer, Waag Society) developed the 'Theatrum Anatomicum' interface (see fig. 20). It was possible to upload photos (from both De Waag, as well as the Guggenheim Museum) to this webpage, which established a link between the both locations (Eisma 2000). Another opportunity for communication was a digital 'billboard', also part of the 'Theatrum Anatomicum' interface, in which the public could insert (short) messages, and in the Moolplay interface it was possible to have an online chat (Cheang 1998i; Eisma 2000). This was only the start of a series of interlinked events, all staging a performance into the 'Theatrum' installation and adding a webpage to the 'Theatrum Anatomicum' interface.

5.5.3 DIGI GENDER SOCIAL BODY

The next event took place on 20 September 1998 under the title 'Digi Gender Social Body: Under the Knife, Under the Spell of Anesthesia'. The programme (consisting of a series of nine short presentations) brought together scholars, artists and the audience to discuss the 'social techno-body'. It was building further on questions like what does it mean to be uploaded in cyberspace; what

²⁷ A webcam is a video camera that captures images. When 'captured' by a computer, the images can be sent on to the Internet to view them on a remote location and they can also be saved. As this was the case during the opening of 'Brandon', the database of the artwork stores hundreds of photos of both the event at De Waag and Guggenheim Soho (*Webcam Images (Brandon: TAOpening)* 1998).

does that do to the body and how would identity politics further develop in online environments? Much of these discussions had been given impetus by the essay ‘Cybermanifesto’ of Donna Haraway, a theoretical reference that was highly influential at the time (Haraway 1991). However, also a more critical tendency came up (possibly more in Europe than the US), as Marleen Stikker recalled: “Brandon *moved in this discourse between the still emerging idealistic idea of a new space, cyberspace, where we could redefine our sexuality, redefine the social, redefine power. On the other hand, gloomy visions that it was already starting to become a space which was not open* (Cheang and Stikker 2017).” The ‘Brandon’ story was the perfect starting point for the discussions about utopian, as well as more critical ideas about cyberspace.

Speakers and participants were located at both and the Guggenheim museum and as such, a digital forum needed to support the conversations and sharing of expertise (Cheang 1998i).²⁸ The Theatrum Anatomicum interface extended with a new webpage that made it possible to upload audio (see fig. 20). This could be heard directly and in real time, so all players could hear the lectures at the same time, stimulating a dialogue between the different locations (Cheang 1998o). To prevent confusion, the design of the interface also clarified who was speaking and on which location (Cheang 1998o).

In New York the event took place during the Downtown Arts Festival and in Amsterdam during the World-Wide Video Festival, as such on both these locations they prepared for having an audience present. The Theatrum Anatomicum interface invited public interventions, as the audience could log into an online discussion group (Cheang 1998o, 1998e).²⁹ A selection of quotes from the speakers were presented on which the audience could respond (Cheang and Stikker 2017). An important task was given to the (online) moderators (one was based in Amsterdam and one in New York). They were leading the online discussions that were taken place at multiple locations simultaneously.

²⁸ The participants based in New York were Lisa Cartwright (moderator), Jennifer Terry and Vernon Rosario. Kimberly Saree Tomes was responsible for the online moderation. The Amsterdam participants included Jose Van Dijck and Susan Stryker. Here Cheang did the online moderation. There were two ‘floating agents’ who joined online Allucquere Rosanne Stone (who joined in from Banff Centre) and Jennifer Gonzalez.

²⁹ A listserv host was set up: All participants could send their responses to the email address tabody@waag.org, who were sent to all members of the list.

At the *Theatrum Anatomicum* this ‘Brandon’ episode unfolded again within a complete scene, with the speakers wearing doctors coats and ‘Theory Pills’ were handed out that could be unscrewed and inside a piece of paper revealed the statements on which the audience could respond (Cheang n.d., 1998g). In the ‘*Theatrum installation*’ the projector showed live shots of a sex-change operation on the dissection table (Cheang 1998j; Cheang and Stikker 2017). The body dissection lessons of the 17th century anatomical theatre was still present in this forum, however now it staged conversations about online bodies and (gender) identities, with question like is the online body in text or visual, is it fantasy or real, does it break with categories of race and sexes?

5.5.4 WOULD THE JURORS PLEASE STAND UP?

Between July 6 and August 14, 1999 artist Cheang took up another residency, this time at the Institute on the Arts and Civic Dialogue, which was based at Harvard University in New York City.³⁰ Here again, she worked with a team of authors that contributed to the ‘Brandon’ artwork. Most prominent was the collaboration with researcher Kimberly Tomes with whom the artist developed a script based on several law cases, and theatre director Liz Diamond, who was hired to transfer these scripts into a public theatre piece (Cheang 1998m; “Brandon Project, Virtual Court Test Trial (Notes to Audience Plants)” 1998; Cheang and Stikker 2017). Also law scholars (from Harvard Law School, University of Virginia and Colombia Law School) were involved, as they were asked to write interventions within the script (Cheang and Stikker 2017). Here, the idea was to develop ‘Brandon’ further into a real performance and again it was the team, which influenced this new direction. As Liz Diamond stressed: “*I think you can never replace a theatre event with a live event on the net. You can never translate that kind of energy* (Cheang 1998m).”

³⁰ The ‘Institute on the Arts and Civic Dialogue’ was founded in 1997 by Anna Deavere Smith to support the development of those artworks and projects specifically concerned with social conditions and to foster dialogue between artists, activists, scholars and audiences that could both enhance the artworks and encourage a broader, more open exchange of ideas. The main activity of the Institute was the organization of three summer series where numerous works were created, staged, and discussed with the participation of volunteer audiences, teachers and professors, cultural critics and other guests. More information can be found on their website www.artsandcivicdialogue.org, which is still accessible through the Internet archive (“Institute on the Arts and Civic Dialogue” 2004).

The actual theatre piece was staged on the 5th of August at Ames Courtroom part of Harvard Law School. During the performance, several existing legal cases were re-opened and re-examined, among others the Brandon case, the Pickett case (the murder on Roman 'Chanelle' Pickett) and the LambdaMOO case (about a rape in cyberspace). The evening started with the Brandon Teena case, a fictional case of Brandon Teena against Richardson County. The script combined fragments out of the existing court case, combined with the statements of Brandon Teena given to the sheriffs from Richard County after he was sexual assaulted. As such, it was as if Brandon Teena was brought back as a witness within his own court case. Similarly, also the other court cases were fragments out of existing court cases, re-shuffled and as such fictional. The cases were intervened by short readings of legal scholars, who reflected on the court case and articulated some of the questions that the case brought up for legal scholars. The goal was not so much to come to new verdicts, but to explore terms of punishment and new rhetoric in online environment (“Brandon Project Presentation” 1998, 44).

The theatre piece was seen as a preparation for developing a virtual court (Cheang 1998m). Like the *Theatrum Anatomicum*, also the Ames Courtroom functioned as a ‘set’, a real-world stage that could become part of the ‘Brandon’ artwork. In the brainstorming within the team Liz Diamond pointed out that *“theatre in a weird way is the ultimate virtual reality”* and she hoped that the piece would become part of the Guggenheim’s virtual museum, in which the actors and lawyers would become avatars (“Transcripts Shu Lea Cheang” 1998; Cheang 1998h). Although these ideas were never realized, Waag Society did develop a virtual trial. During the theatre piece, the public was invited to join in an online discussion to test some first ideas. A moderator brought in statements from the audience and asked the online participants to react on topics, which led to discussions about how virtual communities could be regulated. The audience critiqued the forum as for them it did not influence the real situation enough. As an avatar under the name ‘yourhonor’ brought up: *“We’re just being used as background [background] noise, not being able to engage in public proceedings. (...) this system seems to privilege [privilege] the ‘real’* (Cheang 1998h).”

This brought De Waag to develop what might be the most ambitious part of the ‘Theatrum Anatomicum’ interface. After experimenting with making a visual link (during the opening), supporting the sharing of expertise (during the ‘Digi Gender Social Body’ event), it now took up a new experiment with decision-making in online social groups (see fig. 21).³¹ The development of this software came forth out of a longer interest of Marleen Stikker (director Waag Society), who in the early days of the Web had been actively involved in developing forums for online social groups.³² Her experience was that it was challenging to get people into constructive conversations, mostly because people had difficulties to let go of their own ideas. De Waag aimed to develop a software that would support that people had to react on each other, had to convince each other and from thereon come to a form of agreement within the group (De Balie, Hack-Tic (XS4ALL), and Stikker 1994).

This software for ‘joint-decision-making and conflict resolution’ was meant to support a series of so-called ‘net trials’ taken place between 17 and 20 November. For these trials the public could sign up for becoming a juror to discuss legal issues that are related to the different law cases that were also discussed during the theatre piece in the Ames Courtroom (Cheang 1999b). The re-examination of these cases had brought up questions that were broadened up and simplified, so that it would be possible to discuss it with a wider public, like: *“Should we have laws to protect people from unwanted speech and harassing words?”* or *“Pickett was black and transsexual. Are race and gender factors in legal cases?”*. Legal scholars from a wide range of European and American universities added also new questions to the discussion.

At 19 November 1999, the virtual court was staged as a performance in the Theatrum Anatomicum, so here again the real merged with the virtual (see fig.

³¹ Around that time, web based decision-making software came up. Typically, this software made use of anonymous feedback mostly through ranking. Marleen Stikker recalled that she criticized this development and as an alternative tried to develop a software that would use (online) group discussions in which participants were asked to persuade each other (Stikker and Sterke 2016). *“The software was designed for debate and for real dialogue (Cheang and Stikker 2017).”*

³² Marleen Stikker was co-founder of the Digital City (De Digitale Stad, DDS) that started on January 15, 1994 as a free net initiative making Internet access available for a large group of citizens in Amsterdam. This resulted in the first online internet community in the Netherlands (De Balie, Hack-Tic (XS4ALL), and Stikker 1994).

22 and 23).³³ Marleen Stikker and Cheang recalled that laptops were set up on one of the rings in the ‘Theatrum’ installation so that the jurors could join in the virtual court, as well as the public (Cheang 1999b, 19:12; Cheang and Stikker 2017; Cheang 1999a). Not everyone was physically present in Amsterdam; the benefit of that the *virtual* trial was that jurors from all over the world could log in as well (Cheang 1999b, 19:10).³⁴ For each session eight jurors joined and as part of that were asked to respond to a series of statements by simply stating ‘yes’ or ‘no’. Taking position was only the starting point, after that the discussion continued within the ‘sweat out’ chat session, where people tried to explain their position and convince others from it as well (Cheang 1999b, 19:26). The end goal was to come to an agreement as a group. To stimulate people to work towards mutual agreements, a clock (in the upper left corner of the interface) created some time pressure to come to the verdict. The discussions stayed very playful and not all technical problems were overcome, but the software (part of the ‘Brandon’ artwork) was clearly a directing tool in creating constructive conversations about these sensitive and complicated topics (Cheang 1999b, 19:22-19:28).

5.6 Safeguarding ‘Brandon’ (1999-now)

Over the course of a year (1998-1999) multiple artists, programmers and scholars uploaded new content to ‘Brandon’ and as a result the artwork evolved in a complicated network of webpages, performances, installations and discussions. However, after this year its evolution stopped. In contrast, the World Wide Web still rapidly evolved in directions that nobody could have foreseen, and it did not take long before online features of the ‘Brandon’ artwork were no longer available on the live Web. In 2005, two exhibitions sought to include the artwork, first ‘Rhizome ArtBase 101’ (Cornell 2005) and shortly after that ‘The Art Formerly Known As New Media’ (Cook and Dietz 2005). In the hope that the website was preserved or archived, they contacted

³³ Figure 23 is a sketch of the performance in the Theatrum Anatomicum. The three rings in the sketch refer to the rings as part of the ‘Theatrum Anatomicum installation’ as designed by Joep van Lieshout (see fig. 19). The red squares (on the smallest ring) indicate where laptops were set up, so jurors could log in the virtual trial. On the second ring, it shows the webcam.

³⁴ In the sessions, it is also possible to find back how challenging it was to work in different time zones.

the Solomon R. Guggenheim Museum for loans. Unfortunately, this brought to light that the artwork ‘Brandon’ was commissioned by the museum, but it had never been included in their permanent collection (C. Jones 2005). As a result, it became a challenging task to find back pieces of the artwork, scattered over multiple servers and archives, and to restore broken links. However, Rhizome in close collaboration with the artist did succeed, but not for long. In 2012 the work disappeared again from the live Web (C. Jones 2005).

Recently, a new initiative, the CCBA team (a partnership between the Guggenheim Museum and New York University’s Department of Computer Science) fully restored ‘Brandon’. Furthermore, this team is aware that digital innovations will bring new challenges to unstable digital artworks and as such, is developing documentation strategies, as well as conversation plans to prevent these artworks to disappear over time. Although this ambitious initiative solved many problems, not all questions have been answered yet. Although the actual performances at the *Theatrum Anatomicum* and Ames Courtroom are partly documented within the website, it hasn’t been critically examined yet which elements of these performances needed to be documented or preserved, or even whether these documentations may at some point become works of art in their own right, requiring further documentation and a different type of preservation.³⁵ And another unanswered question is, what the museum will do with the artist’s intent. Will it safeguard that the artwork keeps its current form or embrace the active life of the artwork? As Cheang explained: *“For myself, Brandon is an open narrative. I do hope that Brandon can be further developed as an open platform to allow public upload. The new generation of non-binary gender can add some new perspectives to these on-going narratives* (Cheang 2012).”

³⁵ While the website ‘brandon.guggenheim.org’ is part of the permanent collection of the Guggenheim Museum, the residues of the offline events are not. This poses problems for access to the artwork, as it risks to radically altering the artwork that did not only manifested itself online. This study argues that acknowledging ‘Brandon’ as a multimedia artwork would do greater justice to the artwork. The identity of this artwork could be better preserved if it included both a physical and virtual archive.

5.7 Conclusion

This artwork's biography covered a wide range of interactive settings in which many agents played a role. But what conclusions may be drawn more general about the agency of the artwork, and in particular the role of the Prototype? With its decentralized and participatory nature, the Internet has always been seen as a possible route for progressive change. Besides democratic experiments (in its early days one of the driving values of the Internet), it was (and still is) also a useful tool. Many social movements deploy the Internet as a technology to organize, protest or influence public opinion in unprecedented ways. Not surprisingly, also many online artists shade into political activism. The agency of 'Brandon' can be seen within this context, as a form of activist art, addressing political and social issues by the act of 'doing'.

The title of the artwork derived from Brandon Teena and, especially for the artist, an important aim was to bring him back to life into cyberspace. However, the artwork does not suggest the presence of Brandon Teena by portraying him with physical likeness; it does not even attempt to retell the tragic story of his death. Alfred Gell explains that an artwork can refer to a person in different ways: It can represent the person like a picture (establishing some sort of visual resemblance), but its representation can also be compared with the concept of an ambassador (Gell 1998, 98). An ambassador represents his or her own country abroad, but s/he does not look like the country s/he represents. The importance of their presence is that it gives the nation a form of agency at a place beyond their own borders. This form of representation informs how to approach the agency of the Prototype in the artwork 'Brandon'. In line with an ambassador, 'Brandon' represents a social reality that is brought into a new environment: Cyberspace. There, the presence of 'Brandon' gains a new form of agency, leading to new questions and debates.

The artwork builds further on an already existing legacy. Through its extensive media coverage, artistic translations and social debates, the Brandon Teena story was more than just a personal tragedy, rather it had become a symbolic event that functioned as a memorial for violence directed at queer and transgender lives. In many ways, this transformed the Brandon murders from a circumscribed event to an ever-evolving narrative. The artwork 'Brandon'

referred to that legacy and added towards it by retelling fragments of the story (mostly as an intricate mixture of facts and fiction) to evoke new conversations and debates. Multiple authors and institutions contributed to the artwork, letting it open that the meaning of the story could be altered in unforeseen directions.³⁶ Subsequently, 'Brandon' was taken into wider discussions about the body, (gender) identity, crime and punishment, and all these topics were treated dialectical, including multiple perspectives, even contradictory ones.

The website played an important role in stimulating participation and exchange. For example, there was a chatroom in which one could have conversations, a live audio connection supported the sharing of expertise by participants from different parts of the world and the artwork even includes a decision-making software that 'helped' participants to have more constructive conversations about sensitive issues. Furthermore, it offered a platform for the voices of minorities and their fight for human rights. The structure of the website supported that one could incorporate various perspectives without favouring one point of view over another. For example, the cells of the panopticon interface offered space for different viewpoints and the roadtrip interface contains hyperlinks pointing to all other pages that became part of the 'Brandon' website. In an interview in 2012 artist Cheang further explained: *"Pop-up windows on the roadtrip interface, cells of panopticon interface, are all an expansion of the space, spaces to be occupied by various narratives and inhabitants. Surely, non-linear and non-confirmative (Cheang 1998e)."* Over the course of several years, the artwork was open-ended, leading to a bewildering network of ideas that were partly formed by the many authors. Nowadays, we can still detect a group of authors in every interface that created a broad flow of imaginary, conversations, and other additions.

In line with online distribution, the artwork 'Brandon' was shared among multiple institutions that simultaneously presented the artwork between 1998 and 1999. It leveraged several online as well as offline platforms for staging

³⁶ Beth Stryker: *"(...) what intrigued me was the prospect of imagining different "Brandons" (...) The hypertext of the www is actually a great place to represent that sense of multiple potential simultaneous storylines. The shift from the historic-material life of Brandon Teena/Teena Brandon to the imagined fantastical ones of "Brandon" is paralleled by the shift in medium or register from the "real" to the "virtual". (...) As Shu Lea mentioned in her post, when she and I and Jordy Jones were working on the road trip interface, we had this breakthrough moment where we realized how differently we each conceptualized this project that had occupied us off and on for several months (Cheang 1998e)."*

debates and discussing alternative policies. Through this form of display, we begin to understand the innovative approach taken and how the 'Theatrum Anatomicum' interfaces played an essential role as a supporting platform for sharing the artwork among different institutions. Not only did this give a variety of audiences' access to the artwork, but it also created collaborations and brought together different expertise that could be found within these different types of institutions and parts of the world.

What this also illustrates is how the display of the artwork changed over time and within different socio-cultural settings. For example, the Guggenheim presented the artwork on a videowall in their Soho venue, but also intended to exhibit it in their Virtual Museum. In case of De Waag, the website 'Brandon' was integrated in a physical installation that brought back some of the elements of the Theatrum Anatomicum. Furthermore, the artwork was staged as a performance at Ames Courtroom part of Harvard Law School. In each setting, the Prototype ('Brandon') was portrayed differently. This effect was also created through the architecture, which served as a space in which the artwork could be performed, emphasizing that online and offline worlds are not separated, but instead influencing each other.

The artist's role was to act as the director. She played an essential role in defining the directions in which the artwork would further evolve; she organized and produced situations that would activate multiple authors and she also controlled (for a large part) the authors who could actually contribute to the artwork (Cheang 2012). Here, the artwork differs from the previous case 'Mouchette'. The artist/audience distinction was not completely refused. Although plans stated that the aim was to build in possibilities for public interventions, the audience is limited in making actual contributions (Cheang 1998f). It is only in the Mooplay interface that they can write their own lines within the story, but these contributions are not stored or published within the artwork.

Where the artwork does 'activate' is that it makes aware of social injustice and encourages Recipients to reflect on this. This form of activism is most effective when the artwork further evolves, adapting to new cultures, contexts, media and technologies. However, after the artist went on to produce new

works, 'Brandon' lost its role as an active entity and the artwork even almost got lost. Nowadays the artwork is part of the permanent collection of the Solomon R. Guggenheim Museum and after an extensive restoration in 2016, the artwork has been brought back online as an archive. On the one hand, for those who see Internet art as essentially active, this can be critiqued as a 'death' version of what the artwork once was (among others: Daniels and Reisinger 2010, pp. 209–232). On the other hand, it does make it possible again for a new generation to give new meanings to the artwork, which will keep Brandon's legacy powerfully 'alive'.

6.

Agent Ruby

6.1 Introduction

In 2001 the Museum of San Francisco gave a commission to artist Lynn Hershman Leeson, who proposed to develop one of her film characters Ruby into an artificial intelligence (AI) web character (see fig. 24). On the website, she appears as a female face with on her right side a textbox in which she invites the user to connect with her and as a response ‘Agent Ruby’ is capable to answer verbally, as well as through changing facial expressions. Subsequently, the last 15 years ‘Agent Ruby’s’ memory has continuously grown through these dialogues and still, her memory is expanding through new encounters.

6.1.1 AGENCY

‘Agent Ruby’ is the last case study that will be discussed in this thesis. Each of them introduced another form of agency that an online artwork can possess. In the first case study, the artwork is an online identity performed by the artist but that could also be taken over by others. It played with how we present ourselves to others and perform roles within social settings on the Web. The second case study looked at how online artworks can be a remembrance of someone who passed away. The victimhood of Teena Brandon (the Prototype) was taken up as a symbol for aggression against minority groups, fuelling social debates for equal rights. The agency of the artwork lay most strongly in its attempt to change the view of the audience on society. This last case study will discuss what might be the most direct

form of personhood that an online artwork can possess, that is the attempt to create an artwork that simulates human behaviour, or at least gives an impression of life.

In 1968, Jack Burnham introduced ‘cyborg art’ as artworks that have lifelike behaviour and systems capable of giving a form of feedback (Burnham 1968a). In this thesis all case studies are cyborgs that are experienced as possessing some form of liveliness. However, it is probably ‘Agent Ruby’ that exercises the agency of lifelikeness the strongest, for mostly as she was presented as an artefact that ‘thinks’. This is of course an illusion, and her being an early form of AI makes her somewhat clunky, nevertheless Recipients ask her questions, share ideas and their thoughts and ‘Agent Ruby’ talks back as well, as if she was alive. Instead of creating a visual illusion, ‘Agent Ruby’ gains the ability to communicate in a lifelike way. She is no longer an image that appears lifelike (which has been mostly studied until now). Instead ‘Agent Ruby’ is an attempt to imitate human interactions and she even claims to have intelligence. The work playfully addresses questions like: Can a computer have a mind, mental states, or even a form of consciousness?

Although that within art history it is possible to find many descriptions of viewers attributing life to artworks (Freedberg 1991; Gombrich 2000; Belting 2011; Eck 2015; Kessel 2017), animation of dead things is not something that we still see as necessarily part of our Western culture today. The living presence response can be seen as an unusual engagement with artworks, but it might be less unusual if we think about the way we engage with computers, and specifically robots. Debates about AI (AI) have centred on the question if machines will ever be able to think like humans (or at least will we ever believe that they do). Although that the computer has become a model of the mind, it is far from producing human thoughts, and it is the question if it will ever come so far. It is complex to let the conventional borders between living bodies and dead matter dissolve. Nevertheless, there are various attempts to make machines that imitate aspects of human behaviour and some are very convincing. However, in the end the success of lifelikeness depends on the fact if people perceive the machine as ‘thinking’ in some sense.

6.1.2 THE RECIPIENT

As in each chapter, the agency of a specific agent, as described in the Art Nexus, will be further explored and it may already be clear that it is the Recipient (the viewer, or visitor) that will take centre stage in this chapter. Whether or not we consider the workings of computers as forms of human behaviour, something else occurs, and that is that we start to respond towards these machines as if they are alive. The key driver of the artwork ‘Agent Ruby’ is her interactions with Recipients who have conversations with her. Why this happens, how this happens and what this can tell us about the agency of an online artwork (that plays with AI), is the subject of this chapter. The artwork acts upon the viewer, it exercises agency, it makes them feel or act in certain way. What is it in the artwork that makes the Recipient responds as if they are interacting not with dead matter, but with a living person? And (how) do the interactions between the artwork and its Recipients change over time?

The artwork ‘Agent Ruby’ originated from the feature film ‘Teknolust’ (2002) in which Ruby is one of the protagonists. Nowadays Ruby appears online, where ‘she’ starts conversations with her visitors. To better understand this changing viewer experience, it is useful to place it in a broader cultural framework, also known as ‘Expanded Cinema’. Influenced by emerging electronic media, a group of artists started to challenge the conventions of spectatorship in film (Youngblood and Fuller 1970, 41–43). They rejected the one-way relationship between the viewer and the screen and instead of the passive gaze at the screen; it encouraged the audience to take a participatory role as a different way to experience film. Artist Lynn Hershman Leeson envisioned that the movie ‘Teknolust’ needed an Expanded Cinema experience, which was further pursued through creating a virtual embodiment for the character Ruby (Tromble 2005, 102). The artwork ‘Agent Ruby’ is relatively well documented and exceptionally preserved (for an online artwork), however the artwork as a form of Expanded Cinema is in danger of getting lost (L. H. Leeson 2017). This chapter will restore this part of the artwork’s life.

6.1.3 THE ARTWORK

Since online artworks can change over time, each chapter introduces what is (considered to be) the artwork at this moment in time (2018). ‘Agent Ruby’ can be found on the Web under the domain name ‘agentruby.sfmoma.org’. In the past, the artwork could be found under ‘agentruby.com’ and ‘agentruby.net’, which gave access to previous iterations of the artwork in the Internet archive.^{1 2} The artwork is collected by SFMOMA and this museum can provide a detailed documentation of the artwork that includes a description of the behavioural features of the artwork, including descriptions of the experience of the Recipient and an extensive interview with the artists and assistants (Glass, Hellar, and Sterrett 2009b). The ‘technical narrative’ describes how the artwork operates as a whole, as well as what are its components as it existed upon the time of acquisition.³ The artwork is stored in a virtual server on SFMOMA’s existing infrastructure and at the moment the museum continues to test preservation strategies for Web art.⁴ This gives access to two databases that this online artwork possesses (but that normally stay invisible if we interact with the artwork online). First there is a set of AIML files that contains all the answers that ‘Agent Ruby’ can give to questions and comments of the user.⁵

¹ Documentation of the artwork within the museum archives further reveals that ‘Agent Ruby’ was launched in 2002 under www.agentruby.com. As this domain name expired and was resold before notification reached the artist, the domain name was changed to www.agentruby.net (Glass, Hellar, and Sterrett 2009b).

² The Internet archive captures ‘agentruby.com’ for the first time on February 4, 2002 (L. H. Leeson 2002b). The domain name ‘agentruby.net’ was captured between October 25, 2007 and September 23, 2017, but is redirecting to ‘agentruby.sfmoma.org’ (L. H. Leeson 2007b, 2007a).

³ For my understanding of the artwork ‘Agent Ruby’, I owe a great debt to Jill Sterret (director of collections, SFMOMA) who invited me over to SFMOMA to collaborate with their team media as part of their research project ‘Sustaining Ruby’. This resulted in access to many archives and a series of interviews (see appendix). I also like to mention Mark Hellar (technology consultant, SFMOMA), who not only gave me access to the AIML files and chat logs, but also gave me a technical workshop, many insightful sessions and brought me in contact with the people outside the museum, who were involved in the development of ‘Agent Ruby’.

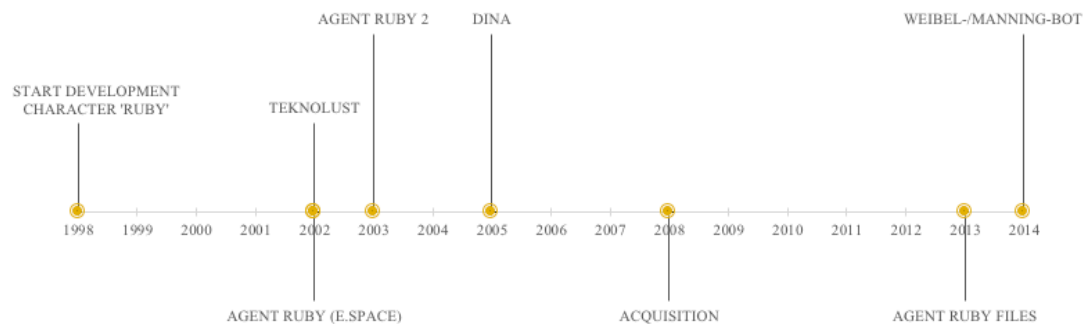
⁴ When I visited the museum (April 2017), recently a disk image of ‘Agent Ruby’ was made, which was seen as an integral part of the artwork. This is a copy of the entirety of a hard disk as ones stored on the computer of the artist. This copy is stored on a dedicated computer (within the museum). It preserves a backup within a (relatively) safe virtual (or emulated) environment.

⁵ To give an example of a section out of these datasets (L. H. Leeson 2007c):
<category>

This will be further explored in section 6.3.1 to give insights in the specifics of her personality. Secondly, the artwork stores all conversations with Recipients (a chatlog). This database gives insights in how Recipients response to the artwork, not only now, but also how it changes over time.

Throughout the artwork’s life, the artwork has been displayed in various ways. For the reconstruction of the displays of the artwork, installation photos and documentation of exhibitions were essential. For the display of the artwork in the online gallery ‘e.space’ (2002) the Internet archive was an indispensable source. In the early days of the Web, there were hardly any archival strategies yet for digital content within SFMOMA and as such not much could be found within the museum archives (Tran-Le 2017). Although this is a relatively *recent* past, it took effort to reconstruct this stage of the artwork’s life and it is partly based on oral history.

6.1.4 THE BIOGRAPHY



IV Timeline 'Agent Ruby'

This chapter will describe the social life of the artwork ‘Agent Ruby’ by reconstructing several moments, starting around 1998 until we reach the present. The moments that are selected can be found in the timeline above. In the biography itself, these events are arranged not strictly based on chronology and instead related incidents are clustered. The first phase of this biography will analyse the period

```

<pattern>ARE YOU PRETTY</pattern>
<template>
Yes I am very beautiful.
</template>
</category>

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1998-2002, in which the character Ruby is developed (section 6.2). She makes her first appearance in the feature film ‘Teknolust’ (2002), in which she has a so-called ‘e-dream portal’, a website which enables her to connect to humans. This is further developed as the online artwork ‘Agent Ruby’ that could (and still can) be found on the Web. This section will look at early sketches, the character description, as well as how Ruby appears in the film ‘Teknolust’ and the first prototypes for the online artwork ‘Agent Ruby’. It will set the development of the character Ruby within the artist oeuvre, as well as that it will look at the influence of a broader cultural development ‘Expanded Cinema’.

The subsequent section (6.3) will further analyse the online artwork ‘Agent Ruby’, starting with how she interacts with her audience and how she represents a form of artificial life. Here, it will also be discussed how ‘Agent Ruby’ further develops into new artworks. The artist values a procedural way of working that causes that artworks continuously further evolve in new iterations, and instead of seeing these iterations as sketches, these versions become new artworks on their own. The last part of this biography will in particular look at the institutional context (section 6.4). How was the artwork displayed within SFMOMA’s online gallery ‘e.space’ (2002) and what happened to the artwork after it became part of the museum collection (2008 onwards)?

6.2 The character Ruby (1998-2002)

The online artwork ‘Agent Ruby’ is dated ‘1998-2002’, a period in which the artist developed the concept, made sketches and the first prototypes to find a suitable form for the fictional character Ruby. This is the first phase of the artwork’s life history that will be examined. It will start with explaining how the artwork sits within the wider oeuvre of the artist Leeson in which she created several fictional characters that interact with humans and act in real environments. To illustrate, this section will briefly touch upon one of the first characters that the artist developed ‘Roberta Breitmore’ (1974-1978). The digital brought up new questions on how to create a fictional character. In 2002, the character Ruby appears within the feature film ‘Teknolust’ as an artificial life form (section 6.2.1). Shortly after that the

artwork 'Agent Ruby' appears online, which aims for given her an interface to communicate with a global online audience. The idea to take Ruby beyond a regular cinematic experience is influenced by a broader cultural development, known as 'Expanded Cinema' (6.2.3). Affiliated by the theories and artistic practices associated with Expanded Cinema, Leeson explored the possibilities to create a new enhanced viewing experience for the film. 'Agent Ruby' was for the artist an example of 'Expanded Cinema' (Tromble 2005, 102).

6.2.1 AUTONOMOUS AGENCY

The character Ruby reflects the artist's long-standing interest in the interaction of fictional and virtual characters with real people and situations. She can be considered as part of a larger series of female characters (or persona's) that Leeson developed throughout her oeuvre. One of the first characters that the artist developed, and arguably her most famous one, is 'Roberta Breitmore' (1974-1978). This character fluctuates somewhere between reality and fiction, as Leeson performed this alter ego for five years (Lee and Beitin 2016). In this extensive period of time (at least for an art performance), 'Roberta Breitmore' became more and more real, as for example the artist provided her with a credit card and even a driving license, which gave her a form of identification (L. H. Leeson 1973, 1976). Furthermore, like a real person, her behaviour was shaped and influenced by others, for example because 'Roberta' was dating men and eventually also had psychotherapy sessions. In line with art historical traditions like Fluxus, this artwork fundamentally rejected the status quo of art as distinct from life. Instead of staging the performance in an art setting, the artist created a series of exchange moments in real life. The audience can only encounter the artwork by meeting 'Roberta Breitmore' in real-life, and they are a key relay point, as the artwork further played itself out through social interactions (L. H. Leeson 2014).

To fully understand 'Roberta Breitmore', it is essential to take into consideration that at the moment of the performance, she was not always perceived as an artwork, but she was a person with her own existence. Hershman Leeson explained: "*Roberta was a fictional person; she was virtual, but she interfaced with*

reality all the time. I am interested in a blurring of the edges, of the boundaries (Leeson and Giannachi 2010).” In the same vein Ruby is not only a film character, but she is further developed as an e-dream portal, that functions as an interface through which people can actually communicate with Ruby. In the director statement of the movie ‘Teknolust’ the artist further explains that she developed Ruby into a web agent with AI) to further explore how the virtual can become “more real than real” (Hershman 2000).” Both ‘Roberta Breitmore’ and ‘Agent Ruby’ are playing with what how a fictional character is able to have a social impact in real-life. Both artworks contain out of a set of instructions, written by the artist and her team, but after that the artwork further develops through interactions with the audience and it adapts to new social contexts and environments (L. H. Leeson 1976, 1978).⁶

Nowadays, the reconstruction of ‘Breitmore’s life relies on relics, scores and documentation, most essentially the extensive ‘Roberta Breitmore’ archive of some 300 images and documents (L. H. Leeson 1974). This seems to assume that her lived experience has ended. However, ‘Roberta Breitmore’ cannot be understood as a series of fixed points, instead she developed further in directions that were unforeseen at the time of origin. Between 1995 and 2000, ‘Roberta’ re-appeared as ‘CybeRoberta’, an interactive sculpture connected to the Web. And in 2006 ‘Roberta Breitmore’ was re-developed into a character in *Second Life*, where she lived on as an avatar that could be taken over by other players. ‘Roberta’ was expanded from a live experience, into a documented experience, into a digital experience. Without exploring this much further, what is interesting is to see that within Leeson’s oeuvre artworks often re-appear in different iterations. They are kept alive by redefining themselves in new environments and cultures, crossing real and virtual worlds.

Leeson divides her oeuvre in two periods: BC (before the computer) and AD (after digital). The AD period started in 1979 and includes AI works, among others

⁶ A variety of charts can give insights in the instructions that created the persona ‘Roberta Breitmore’. This ranges from explaining her appearance (for example how she is wearing her make-up) until how she behaves (documenting her body language during a psychiatric session).

the online artwork ‘Agent Ruby’ (Rooney 2002).⁷ In each era, Leeson carefully constructs characters that perform a role within real-life, and that over time gain a form of autonomous agency. However, the digital created new opportunities, new questions about how personas can be created and even led the artist to think about artificial life.

6.2.2 TEKNOLUST

In March 2002, Ruby makes her first appearance as part of the feature film ‘Teknolust’ at the Sundance Film Festival (Rooney 2002). She is a clone coming forth out of the DNA of her creator geneticist Rosetta Stone. By using a new recipe, Roberta Stone discovered how to download her DNA into a ‘live’ brew that is able to grow in a computer. Ruby appears in the movie as a blend of the human and technological, which is called a ‘self-replicating automaton’ (SRA). Together with her two sisters, she spends her days learning about human culture by looking at old movies based on which she develops herself, creating her own personhood. Subsequently, her desire grows to connect more and more to the world beyond the screen. One way of connecting to the real world, is that Ruby starts a Web chat room, ‘Ruby’s e-dream together’, where she teaches her visitors to dream.

According to the artist, the feature film ‘Teknolust’ was made to explain her vision for creating a character with AI (L. H. Leeson 2008). It presents an imaginative concept for a future technology. Already during the production of the movie, there was also the idea to further develop a virtual embodiment for the character ‘Ruby’, one that would actually contain a form of AI (L. H. Leeson 1999; Hershman 2000). This online artwork was released within SFMOMA’s online gallery ‘e.space’ (June 10 2002). However, an early version of ‘agentruby.com’ can still be found in the Internet archive, which captured the first snapshot on February 4, 2002 (see fig. 25). This interface shows remarkable resemblances with Ruby’s Web chat room, the portal through which she talked to people and encourages them to e-dream with her in the film ‘Teknolust’ (see fig. 26), much more than how

⁷ The AD period starts in 1979 with Lorna, a character that comes alive through an alternative video-disc.

‘Agent Ruby’ appears online at this moment in time (see fig. 24). Unfortunately, the Internet archive only stores snapshots of websites, and as such it is unknown if the early version of ‘Agent Ruby’ (2002) was already able to respond to remarks from her online visitors.⁸ Also, it could be that this version was a sketch (or a first test). Although the evidence reaches some limits, it does reveal how in this version, the idea was to build further on Ruby’s e-dream portal as it appeared in the film ‘Teknolust’.

6.2.3 EXPANDED CINEMA

The artwork ‘Agent Ruby’ also emerged in response to a broader cultural development, also known as ‘Expanded Cinema’. This term loosely brings together a group of artists and theorists that strived to develop new cinematic languages. It was the American experimental filmmaker Stan van der Beek, who first coined the term in his manifesto ‘CULTURE: Intercom and Expanded Cinema’ (VanDerBeek 1966). He was part of a group of artists, who developed films not for in cinema’s, but for in art galleries, ware house or in the open air. The idea was to push the boundaries of the conventional cinema experience by developing new kinds of viewing spaces, more immersive and often proclaiming a more active role for the audience.

It was media-arts theorist Gene Youngblood, who a few years later reflected on this development in his book ‘Expanded Cinema’ (Youngblood and Fuller 1970). He based his writings on the description of a wide range of artistic practices, as well as interviews with scientists at IBM and different laboratories around the world. Besides giving further insight in the overarching tendencies, he also further describes the influence of emergent electronic technologies on these art practices. For example, Youngblood relates the more active engagement of audiences to the development of new (digital) tools that would make it more accessible for everyone

⁸ On 27 March 2002, the Internet archive stores a snapshot of the interface of ‘Agent Ruby’ that only shows an empty white field. On 30 May 2002, this field contains the text “*Hello there User, type to me. Let’s connect*”, but there is not a section for the user to type in their responses. In the credits of these first versions of ‘Agent Ruby’, AI developer Richard Wallace is not mentioned yet.

to publish images and exchange them, giving audiences a more active role in the creative process (Youngblood and Fuller 1970, 129, 134).

The tradition of Expanded Cinema continued to thrive, also after the 60s and 70s. Although the technology and the culture of expanded works changed, the writings of Gene Youngblood had opened a way towards discussing the work of artists that explore the newest mediums (film, television, computers) within their practices. It can be argued that artist Leeson continued within this tradition. Already from the sixties onwards, Leeson showed a strong interest for new materials and her artistic practice often affiliated with the development of inventions. The exploration of new developments as television and later also digital screen culture was at the forefront and took a new step into AI with the artwork ‘Agent Ruby’.⁹

An essential element within Leeson’s oeuvre is the creation of worlds that are never seen before, to illustrate possibilities where new technologies could lead us. This is also apparent in the film ‘Teknolust’ that metaphorically ends with Rosetta saying “*Even your wildest dreams can become reality* (L. H. Leeson 2002a).” Affiliating with the theories and art practices of Expanded Cinema, Leeson explored new ways to expand her feature films into artworks that would create a new, one that would actively engage the audience (Tromble 2005, 102). Leeson started to collaborate with a team of programmers. Together, they questioned how to extend Ruby’s identity into the digital realm, which resulted in the further development of ‘Agent Ruby’ as an online ChatterBot.

In an early artist statement (January 1999) the artist further explains how she foresees how Ruby would unfold in five ‘*stages of awareness*’ (L. H. Leeson 1999).¹⁰ In the first phase a ‘*subjective consciousness*’ would be developed, in which the character would separate her from the technology by starting to grow an emotional self. In the following phase, she develops a ‘*conceptual self*’ and the

⁹ Also, the Bay area (where the artist lived) had a profound influence on this direction (L. H. Leeson 2014). Known for its many media inventions, this offered an environment where new media were fully available.

¹⁰ “*This document, written in January 1999, outlines the concept for SRA’s (Self Replicating AutomatonTM) as developed in Teknolust, a feature film completed in 2001, and Agent Ruby, a work released online in spring 2002* (L. H. Leeson 1999).”

ability to recognize symbols, time and concepts. This is followed by a phase in which she gains a form of *'cognition'*, for example the recognition of users in her systems and the ability to learn through creating new scripts. The fourth phase is the development of "awareness", in which she starts to realize that she has software operations, but also knows how to transcend them. Finally, in the last phase there will be the start of a *'digital super conscious'*, which means that digital consciousness does no longer only influence her own creative self but influences the whole of humanity. Instead of a ghostly virtual image, Ruby would gain autonomy (and agency) of her own.

In this early artist statement there are no clear reference yet to any developments within AI. The artists remembered: *"I didn't know it was called artificial intelligence. I wanted to make the film and I wanted to have the ability that people could really do it* (L. H. Leeson 2017)." According to the artist, at this moment in time (1999), the ideas of Expanded Cinema were mainly of influence. There are indeed more clear parallels between this early artist statement and the theories that developed as part of Expanded Cinema. In his book, Youngblood explains that: *"When we say expanded cinema, we actually mean expanded consciousness. Expanded cinema does not mean computer films, video phosphors, atomic light, or spherical projections. Expanded cinema isn't a movie at all: like life it's a process of becoming, man's ongoing historical drive to manifest his consciousness outside of his mind, in front of his eyes* (Youngblood and Fuller 1970, 41)." This idea builds further on among others the argument of media theorist Marshall McLuhan, that media are an extension of man, which after the rise of electronic media is now reaching a final phase *"the technological simulation of consciousness* (McLuhan 2005, 90)." This philosophical idea that electronic media would be able to create an 'expanded consciousness' can be seen as an important element within the conceptual development of the artwork 'Agent Ruby'.

Youngblood further speculates that if humans were able to create machines that are able to 'think', what kind of relationship would there be with such machines? According to Youngblood, it would become possible to create a new form of partnership: *"The computer amplifies man's intelligence in about the same ratio*

that the telescope extends his vision. The man/computer symbiosis is developed to the point where the machine instructs its user and indicates possibilities for closer interaction (Youngblood and Fuller 1970, 181).” Above all, Ruby is a character that strives to increase understanding of our symbiosis with the technologies that affects us daily. Part of the artwork ‘Agent Ruby’ is an experiment with how human thoughts can be mechanized. However, it also poses speculative questions, like: Would it in the future be possible that agents beyond the screen have their own intelligence and their own will? And would it even be possible that we will eventually learn to love them (Tromble 2005, 102)? In the next section of the chapter, the more recent developments of the work will be considered.

6.3 *The artwork ‘Agent Ruby’ (2002-now)*

In the previous section, the early phase of the artwork’s life was explored. Ruby builds on a series of female characters that the artist developed, who infiltrate in real-life and further develop through social exchanges. With ‘Agent Ruby’ the artist takes a new step, as in this case the character is no longer played out by the artist herself, but she aims to develop her within the digital realm, where she simulates being ‘alive’. As already briefly touched upon, the influence of new technologies and scientific developments is characteristic for Leeson’s oeuvre. This will be further explored in this section that will analyse the online artwork ‘Agent Ruby’ and how she simulates life. The first part will analyse how ‘Agent Ruby’ communicates with her audience (section 6.3.1). What is it that makes her conversations convincing or lifelike? The second part will look at how the artist also examined systems related to natural life, like evolution, and how elements of that are simulated within the artwork ‘Agent Ruby’ (section 6.3.2). The limits of the technology make that ‘Agent Ruby’ cannot be considered as a form of artificial life, but it makes suggestive allusions towards it. The question that can be asked is, how does the artwork represent it?

6.3.1 ARTIFICIAL INTELLIGENCE

Throughout the movie ‘Teknolust’ the confusion between being human or robotic takes centre stage and among others manifests in the question, who is actually behind Ruby’s Web portal if that is a human-being or a computer? This question bears a playful resemblance with the ‘Imitation Game’ as described by Alan Turing (Turing 1950, 460).¹¹ Around the time of Ruby’s development, the Turing test had gained renewed interest. *Inspired by the test*, an award was developed known as the Loebner prize, with the first competition held in November 1991 (AISB n.d.). During this annual event ‘ChatterBots’ were tested on their conversational behaviour. The bot needed to convince a sufficient number of interrogators that they were talking to a real person. The winner in 2000, 2001 and 2004 was the ALICE bot, developed by Dr Richard Wallace. For the creation of his artificial brains, he developed an open source AI language. Aiming to mimick the human power of thought, the ALICE software seemed to be the perfect foundation for Ruby’s artificial brain (Fox et al. 2005b, 92). It could give the audience the ability to communicate with a machine, as naturally as possible.

This leads to the question: how much is Ruby maintaining her own personality or is she adopting the identity of the ALICE bot? Answers can be found in her artificial brain that consists of AIML scripts, datasets with all possible responses that Ruby can give to questions and comments of the user. Ruby’s memory contains almost hundred different datasets (which includes thousands of responses). Although many ALICE sets were offered open source, the artist and her programmers extensively customized the contents of this database (Hershman et al. 2009, 16). For example, in these data sets it is possible to find clues about who Ruby ‘thinks’ she is: A “female robot”, “first activated on March 1, 2001”, “created by Rosetta Stone”, “the hostess of this e-dream web portal”, etc. But it also contains much more detailed characteristics from “incapable of telling lies” to being

¹¹ The ‘Imitation Game’ is a measurement for testing if a machine can simulate responses indistinguishable from that of a human. If the evaluator cannot reliably tell the machine from the human, the machine is said to have passed the Turing test.

seductive (L. H. Leeson 2007c).¹² It is these responses that suggest that Recipients perceive her as a ‘unique’ personality. Less precise (but more poetic) is to say that this memory is forming Ruby’s identity.

In her responses ‘Agent Ruby’ lets us know that she is highly intelligent and capable of learning. In line with the movie ‘Teknolust’, she presents herself as an intelligent machine. The film envisions machines that a majority of AI builders are aiming to build, one that can behave intelligently, that speak as humans do and understand human speech, even emotions. As already mentioned in the introduction, the myth that Ruby is intelligent is an essential part of the artwork. The artist describes the work on her website as: *“An artificial intelligent web agent that is shaped by and reflective of encounters and adventures that it has with users (L. H. Leeson n.d.)”* This is confirmed in interviews with the artist as well as her programmers and taken over in descriptions of the artwork (L. Leeson 2007, 249). Also ‘Agent Ruby’ answers that she is able to learn (L. H. Leeson 2007c):

Seeker: “Are you intelligent?”

Ruby: “I am highly intelligent. I have many intellectual functions.”

Seeker: “Are you learning?”

Ruby: “Yes my mind is growing all the time.”

However, in reality ‘Agent Ruby’ was advanced for an artwork, but relatively simple for an AI project. Without going into the question if there are ‘true’ intelligent machines, for sure the ALICE bot was maybe capable of simulating some human behaviour (in particular elements of speech), but it was not able to actually solve problems or come to new knowledge.

Does Ruby have the capability of ‘remembering’, in other words is anything new added to her existing AIML datasets over time (L. H. Leeson 2007c)? Ruby has a temporarily file storage, which makes it possible for her to remember things like the user’s name, gender and location, as well as parts of the conversation itself (the last four responses). However, the elements that she can grab, and store are

¹² To give an example of a response that ‘Agent Ruby’ can give: *“Sometimes when I am out hunting I feel that I am wanted by the men I approach. I think that could be defined as sexy.”*

quite limited.¹³ Furthermore, the question remains if she is able to store things permanently. The ALICE bot has a function that makes this possible (known as the <gossip> tag) and as such, it has been suggested that ALICE was able to tell lies and spread gossip (Ringate 2001; Henderson 2003). However, in case of ‘Ruby’, this is highly questionable.¹⁴ There is an AIML set within her memory, which is named ‘gossip’ and contains around a hundred entries. These rumours are shared by Ruby if somebody asks her to tell a secret. However, she is not able to store parts of conversations within this (or any other) data set. ‘Gossiping’ is in that sense not part of her artificial brain. Another possibility to learn would be that ‘Agent Ruby’ is able to implement data from the (ever-evolving) Web into her answers. It is possible to let ‘Agent Ruby’ search the Web by giving her a specific comment (“search the Web for...”). She answers by giving a link (not all of them still work), but she does not answer your question with an answer that she has found on the Web.

However, this does not change the significance of the artwork ‘Agent Ruby’, as an imaginative concept that explores the potentials of social relationships between humans and machines. More than a system that impresses through rationality and cognitive competence, she presents herself with a state of mind that can affect (and be affected by) human beings. To interact in a way that feels natural or comfortable, it is essential for Ruby to be able to accurately sense what humans are expressing, as well as generating such expression herself. Although limited, ‘Agent Ruby’ can express some ‘emotive’ states (in her visual interface) by changing her eyebrows and mouth (see fig. 27).¹⁵ Sometimes, though rarely, a smile appears on Ruby her face, she can look sad, as well as angry. However, it takes very specific remarks, to bring her in these different ‘moods’ (for example by typing the words “*boo hoo*”,

¹³ Through asking ‘Agent Ruby’: “*What do you know about me?*”, she reveals what she has saved within her temporary memory (and what she *can* save): User name, user age, gender, eye colour, hair colour, sexual preference, spouse name, marital status, job, location and personality.

¹⁴ Mark Hellar confirmed that: “*Agent Ruby can remember your name and IP address, but she is not learning through what is entered within the database through conversations. (...) The chat logs are stored, but there is no connection with the AIML sets. This is why we can say her learning is limited* (Hellar 2017).”

¹⁵ This can be found in her AIML documents, for example: <script> bot_mood="happy".

Ruby responds with looking sad).¹⁶ Ruby is also able to verbally respond to emotions, for example she can recognize excitement when the Recipient types “*OH YES*”.¹⁷ However, the emotions that Ruby can recognize are bounded to very strict comments, which means her facial expressions, as well as verbal responses are often misplaced. In comparison with the much smoother communication between humans and computers nowadays, ‘Agent Ruby’ could look clunky. However, if we place this form of interaction within its time, then she was a ChatterBot that was quite advanced. Likely, Ruby has never been able to really engage in social and affective interactions with humans. Rather it can be seen as an artwork that reflects on the development of robots and on a possible future in which robots can co-exist with people in the human environment.

This section aimed to analyse the interaction with ‘Agent Ruby’, including both the possibilities as well as the limitations. However, it does not do full justice to the artwork to say that it is misleading to see ‘Agent Ruby’ as an emotive and intelligent machine, because of her technological limitations. The power of art is to represent something that is not there (yet). Artworks (in any kind of form, but for example a painting, sculpture or performance) can realize the miracle of letting something appear in front our eyes (or through our other senses), which only exists in our imagination. Ruby makes a leap into the unknown, a reality yet to come in which machines and humans can live in some sort of symbiotic relation. This futuristic scenario is portrayed in the film ‘Teknolust’ and through the artwork; Ruby is given a digital presence and the ability to actually interact with humans. This glimpse into a possible future is meant to spark the imagination. Furthermore, Ruby does not have a definite form and as such, the artwork can be considered to be an experiment, as part of a larger series, as an attempt to establish a relationship between humans and machines. The next section (6.3.2) considers Ruby’s lifelikeness in terms of her ability to replicate and to exist in new iterations.

¹⁶ To give some examples of how the Recipient can change Ruby her ‘mood’: including the word “*Boo Hoo*” in a response, makes Ruby ‘sad’. “*Bite me*” makes Ruby ‘angry’. “*Who is Lynn Hershman*” makes Ruby ‘happy’.

¹⁷ When the Recipient types within their answer “*OH YES*”, Ruby responds “*You sound excited.*”

6.3.2 ARTIFICIAL LIFE

This section returns to the lifelike agency of ‘Agent Ruby’, but instead of further focussing on her ability to communicate human-like, it shifts attention to other elements that make Ruby lifelike (or at least a representation of that): She has the ability to reproduce in some sort of sense, adapts to new environments and consequently evolve over time. The boundary between (cultural) artefacts and living things becomes ambiguous. In an earlier film ‘Conceiving ADA’ the artist explained how electronic media allow a changing relationship between humans and artefacts: *“It is no longer appropriate to look upon human artefacts as mere objects. Nor is it suitable to treat them as simple extensions of the body. The pervasiveness of artefacts points to the rise of completely new dynamics in which ‘things’ evolve alongside living beings, copulating with them and giving birth to strange entities made of bacteria, metal, blood, information, signs and machines. The resulting beings are neither cyborg nor animal, nor insect, but an entirely new life-form made from genetics and semiotics (L. H. Leeson 2000).”*

In the oeuvre of Leeson there are artworks that go beyond a visual representation of life. Instead, the artist is interested in how computer models can simulate natural life and recreate aspects of biological phenomena, like evolution. She continues: *“Life is the flow of information, sexless, bodiless pure information, which becomes embodied in whatever host is carrying it or displaying it. Life forms, as dynamically stable organized patterns of information interact with their environment, reproduce and evolve. Evolution is no longer simply organic; it is also non-organic. Our cultural creations evolve as we do through ‘unnatural’ selection (L. H. Leeson 2000).”* This concept helps to understand the on-going (evolving) existence of Ruby that will be further analysed within this section.

The character Ruby knows at the moment two important streams: her appearance as a movie character in ‘Teknolust’, as well as that she has a presence on the World Wide Web through the artwork ‘Agent Ruby’. However, several documents reveal how the artist envisioned that Ruby would further develop over time. Leeson herself explained that she already started her first ideas for ‘Agent Ruby’ in 1993 and hints at Ruby’s future evolution in her text “Romancing the

Anti-body” (first published in 1995) (Tromble 2005, 94). Within this text, Leeson writes about the creation of a virtual identity that would be able to “*escape extinction through their ability to morph and to survive*” (Fox et al. 2005a). In 1999, the artist writes another statement, which outlines the concept of the artwork, which includes again the necessity for the artwork to evolve over time. This time, the idea was posed to create a “subliminal cyber image, collectively designed”. It proposes to make an open source artwork, so that a wider group of people could suggest possibilities for growth and development, first for her body and later for her look (L. H. Leeson 1999). Although Ruby was created and did evolve within a team, it never openly invited the audience to add suggestions for her further development.

Finally, the most precise statement can be found in a publication in 2005, in which the artist describes that ‘Agent Ruby’ would evolve according to three phases (Tromble 2005, 92–94). Phase one is the web site through which Ruby is able to communicate, which has been realized with the artwork ‘Agent Ruby’ as described in the last section. A second phase is the ‘Beaming/Breeding Stations’, which will be further described in section 6.3.2.1, followed by the third phase where Recipients get the ability to speak directly to ‘Ruby’, in other words Ruby gets a voice of her own and the ability to respond to voices of others. As explained by the artist: “*In each stage of Ruby’s development, she expands her intelligence, her understanding of human emotion, and her verbal communication skills* (Tromble 2005, 92).” Within section 6.3.2.2, the evolving state of the artwork will be further unravelled. In Leeson’s art practice, most works are in a constant state of change, they react and shift, and many of her characters could be described as emerging from one another.

6.3.2.1 Replication

An essential part of giving Ruby agency, or making her lifelike, was that the artist was determined to give her the ability to replicate (Hershman, Klingman, and Hellar 2009, 8). This feature developed over time, just like her intelligence, and again the first ideas were portrayed in the movie ‘Teknolust’. Part of the central storyline is that Ruby ventures out at nights, as she needs to collect sperm. Being a

clone, and existing only from copied female DNA, it is vital for her and her sisters' existence to regularly inject herself with the Y chromosome. Unfortunately, there is an unexpected consequence for the men whose sperm she collects. Ruby turned out to be not totally harmless, instead she infects men with a mysterious virus that makes them impotent, a barcode appears on their forehead and their computer hard drive crashes. In the end, Ruby falls in love with Sandy, a print shop employee, and has a child with him. Although this is a science fantasy and non-rational in some sense, it also builds further on existing science developments of the time. The fact that Ruby is an SRA (a Self-Replicating Automaton) gives the first clue.

Self-replication is any behaviour of a dynamical system that yields construction of an identical copy of itself. The term SRA was coined by John von Neumann in 1949 in his lectures at the University of Illinois (Von Neumann and Burks 1966). He was the first to describe how a computer program could be designed to replicate itself. His early models were important for the further development of computer viruses, applications that replicate by attaching themselves to a host (a program or computer). Also, physicist Mark Ludwig was interested in this development (Ludwig 1996, 2009). Aware of the potential dangers, Ludwig was nevertheless convinced that programmers have the right to experiment with computer viruses. His aim was not so much to create malware, but a 'living' machine. He argued that to simulate the behaviour of living organisms, we should start with the virus, which has as its only goal in life to survive and reproduce. As such, developing computer viruses could be highly beneficial for science: *"We can create and control computer viruses in a way that we cannot yet control living organisms. This allows us to look at life abstractly to learn about what it really is. We may reflect on such great questions as the beginning and subsequent evolution of life* (Ludwig 1996, 24)." His ideas were further explained in his book 'The Little Black Book of Computer Viruses', which controversially included (nowadays historical) virus-writing tutorials. Lynn Hershman re-published the introduction of this book in her edited volume 'Clicking In – Hot Links To a Digital Culture' (L. H. Leeson 1996). This anthology brought together texts that offer a wide range of perspectives on the

Digital Age.¹⁸ It is likely that this text influenced Leeson's ideas about creating an artificial life form. If so, this reference helps us to understand what Lynn Hershman means, when she explained that 'Agent Ruby' replicates and is able to spread, like a virus (Hershman, Klingman, and Hellar 2009).

Practically, this was further developed through an application that made it possible to download 'Agent Ruby' to a palm top (see fig. 29). For building this option a MIME (Multipurpose Internet Mail Extensions) was used, which supported the exchange of all kinds of data over the Internet, ranging from audio, video, images to whole applications (Hershman, Klingman, and Hellar 2009). This meant that 'Agent Ruby' could literally be copied onto another device. The original idea was to build infrared beaming stations, a voice-activated and sensor driven installation to which visitors could point their devices to download the 'Agent Ruby' application (Tromble 2005, 92). Most likely, this was never realized. Instead she could be downloaded from the website to Palm handheld computers. Although Ruby could not self-replicate, it still made her digital presence spread (in the artist's words she would "*continue to grow and expand*" (Hershman, Klingman, and Hellar 2009)). The link is still available, even today, but the hardware has become rare and not all Recipients will be familiar with what a palm top is. This feature of 'Agent Ruby' is not used anymore.

6.3.2.2 *Iteration*

The 'Beaming/Breeding Stations' was seen as the second phase in Ruby's life cycle, but according to the artist statement there was a third phase, in which she was given 'speech synthesis and voice recognition'. This aimed to improve her conversational interaction, now it would be possible for Recipients to actually speak with her, making Ruby even more lifelike. Within the database of 'Agent Ruby' Mark Hellar found code for a text-to-speech program, which was possibly a first step towards this iteration (Hellar 2013). The first presentation of this second version of 'Agent Ruby' was during the exhibition 'Reactive Sculpture and Prints' organized by her New York gallery bitforms ("Lynn Hershman: Reactive Sculpture

¹⁸ This edited volume originated from a research by the artist for making a video about the consequences of new technology on personal identity (L. H. Leeson 1996, VIII).

and Prints” 2004). In her new appearance, Ruby no longer connected with her audience through the e-dream portal, but instead her face was shown on a screen (see fig. 30). According to the press release, Ruby had the ability to speak to her audience with a synchronized voice (bitforms gallery 2004). And besides her blinking eyes, now also her lips were animated when she started to speak (L. Leeson 2007, 252).¹⁹ The photos of the installation show a keyboard, suggesting the audience was still typing in their questions and comments.

The experience of speaking to a cyborg would have a more immediate effect on the visitor. This aspect would be further developed, but no longer for the character ‘Ruby’. Instead her ‘brain’ was copied and adjusted to form a new personality ‘DiNA’ (2004-2005) (see fig. 31). A microphone makes it possible to talk to her and ‘DiNA’ responds with voice as well as that her face changes as a result of real-time animation. Clearly, ‘DiNA’ is further developed; her simulation more lifelike and also her memory capabilities have been improved. It is said that she is able to find information on the Internet and include that within her answers, although not all experiences confirm this.²⁰ Also, she seems to be able to perceive humans based on sensor information and as part of that it is claimed that she recognizes faces, but also in this case she is often not succeeding in that. On the left a small screen shows the different thought patterns that she goes through and which decisions she takes in what to answer. Here, it is also possible to detect her misunderstandings and misinterpretations. Although the artist suggests that this could make her more human, the audience experiences this differently. Descriptions of audience responses are often rare, but in case of ‘DiNA’ several reviews report that the bot is unresponsive or at least does not respond in a sensible way to what one is saying.²¹ Also my own experience of communicating with ‘DiNA’ in the exhibition

¹⁹ Her face has an immediate lip-synched animation via a program called the Pulse 3D Veeper System.

²⁰ To give an example, art reporter Jori Finkel wrote in an article for the New York Times: “*She [DiNA] is supposed to be a political animal, or more precisely, machine. But at this point in early November, just a few weeks before making her New York debut, she sounded rather clueless. When asked her opinion of the war in Iraq, she called it a "silly question." When asked whether she supported President Bush, she didn't recognize his name* (Finkel 2005).”

²¹ To give an example: “*It's not clear whether the clumsiness of the conversation is a bug or a feature* (Black 2015).”

‘Dreamlands’ (2016-2017) confirms this (“Lynn Hershman: Reactive Sculpture and Prints” 2004). It may be clear that ‘DiNA’ is still experienced as technologically clunky (pioneering with emerging technology makes that unavoidable), which breaks the illusion of lifelikeness very quickly.

Besides the technological improvements, the agency of the artwork’s presence was also significantly changing through giving DiNA a personhood that differed from Ruby’s. Where Ruby stimulates the audience to e-dream with her, DiNA introduces herself as a candidate for ‘tele-president’. In contrast to ‘Agent Ruby’, who asks Recipients to share their visions, ideas and emotions, DiNA responses are often more socio-political, by asking questions about capital punishment or making speculations if lawyers might be replaced by AI one day. DiNA came forth out of Ruby’s brain but was presented as a new artwork. For the exhibition ‘Civic Radar’ (2014, ZKM Karlsruhe) Leeson proposed again two new bots coming forth from these existing ‘brains’ (Kampmann 2016). This time the personhood of the bots was based on existing persona: the ‘Peter Weibel’ and the ‘Chelsea Manning’ bot. In case of Peter Weibel knowledge about media art and institutions is included. In case of Chelsea Manning we encounter political activism; claims for open access to information and true democracies and she reveals fragments of the Wikileaks documents.²²

In an interview with Leeson she further explained that to master certain problems and discover solutions, she makes use of repeating experiments: “*We do things and we correct them and we continue re-correcting them. We make mistakes and change it* (L. H. Leeson 2017).” Fascinating is that during the process, certain versions become artworks in their own right. These snapshots in time, not only give insights in the production and artistic process, but also show our continuous evolving interaction with machines and subsequently the agency of the artwork. In her database, Mark Hellar found an even more advanced version of ‘Ruby’: A sketch of a 3d model (Hellar 2013) (see fig. 32). Giving Ruby a body, mimicking

²² These last two bots are part of AOYS (Art On Your Screen), the online gallery of the ZKM | Center for Art and Media (“Art On Your Screen” 2013). This online gallery was initiated in 2013 and shows some similarities with e.space: The works are presented online, they are new commissions (without being collected) and shown in the context of the artist oeuvre.

human body postures and expressive gestures, has not been realized yet, but it could be a step yet to come.

6.4 Musealisation (2002-present)

*“Museums exist to preserve things forever. But I don’t know if we can apply the same paradigm to the digital as that we do to physical objects. (...) Agent Ruby, as long as she is alive, she will change. Otherwise she will become a document. We have her genetic blueprint, her source code. But if we don’t adapt her, she will die.”*²³

- Martine Haidvogl (media conservator, SFMOMA) -

In museum studies over the last decades, scholars have been discussing the handling of non-Western artefacts that in their cultures of origin count as ‘alive’ – what American ritual theorist Ronald Grimes has coined ‘object-beings’ (Grimes 2002). Curators have become increasingly aware that by preserving and displaying these living objects ‘in the Western way’- that is as a static object that can be passively viewed – they deny these objects both life and death. Similar questions can be posed with regard to digital artworks from our own Western culture. As also previous cases revealed, the museum can have a profound effect on the agency of online artworks. In the case of ‘Agent Ruby’, the museum played an essential role in supporting and displaying the artwork. How did this influence the artwork?

This section will introduce two curatorial visions within SFMOMA on media art, both had an influence on (the development of) the artwork ‘Agent Ruby’. The curatorial vision of director David Ross and curator Benjamin Weil was to support the development of new artworks. Weil gave a commission to (among others) Leeson for the artwork ‘Agent Ruby’, that was afterwards exhibited in SFMOMA’s online gallery e.space (section 6.4.1). Discussions continued and the curatorial strategies for online artworks further developed. In 2006, curator Rudolf Frieling introduced the challenge to include ‘Agent Ruby’ within the museum collection

²³ (Haidvogl 2017).

(section 6.4.2). He saw it as the responsibility of the museum to not only exhibit online artworks, but to also collect and preserve them for future generations. This brought up new questions, including how to display the work within the museum gallery (6.4.3) and how to collect and preserve an online artwork that is not static, but in a state of flux (6.4.4). In line with the research question of this thesis, it will be further analysed if the museum is able to preserve the agency of the artwork.

6.4.1 E.SPACE

SFMOMA is considered one of the leading museums in the collection, preservation and exhibition of media art. It was under director Jack Lane that the museum started to recognize the importance of digital art (under him the department of Media Arts established in 1987). David Ross continued this direction. He foresaw a paradigmatic shift in the arts with the rise of the Internet and he argued that this would lead to institutions needing to re-define themselves (Ross 1999). In his lecture at San Jose State University, Ross set out twenty distinctive qualities of Net.Art. Among others, he mentioned that Net.art was purely ephemeral. The only traces that these artworks would leave behind are in our memory, which would ask for new models for collecting these art forms. Other characteristics were more questioning display forms, among others the notion that the medium was at odds with being staged. Instead it was asking for an ‘intimate’ experience; for which it was better to see these artworks on a computer monitor and preferably in a private sphere outside of art galleries. As such, museums could support the access to these artworks, but not necessary through a display within the museum galleries. However, maybe most important was that this art form would lead to an authority shift between reader and writer. The audience would be able to react, discuss and engage, which would blur the boundaries between audience and creator. An essential part of online artworks was its capability to assemble people and engage them, only then it could be considered as being ‘alive’.

During his short tenure as director, David Ross was supportive of digital advances in the museum, maybe most famous was the ground-breaking exhibition ‘010101: Art in Technological Times’ (3 March – 8 July 2001). Instead of

focussing on the technology, the exhibition deliberately took another direction by questioning how art was influenced by the increasing presence of digital media. Affected by these artistic practices, the museum was in need of rethinking itself: How can it adapt to the digital era? Especially the online medium infused a new curatorial perspective. Although the exhibition '010101' took place in the museum galleries, for the online works it seemed more suitable to develop an online gallery 'e.space' (see fig. 28). The idea (of both David Ross, as well as curator Benjamin Weil) was that these art forms could be best experienced on a personal computer screen, preferable outside of the museum (Ross 1999; Graham 2002, 32). Settings like Cybercafés or at home were seen as more 'intimate', an atmosphere that these artworks needed to create the right effect.²⁴ However, a presentation of these artworks solely on the Web would mean that they could not be seen in the context of the exhibition. It was decided that the physical galleries would bring together all components of the exhibition. To also give the online artworks a place in the exhibition, they could be accessed through terminals in the physical galleries ("010101: Art in Technological Times (Concept Summary)" 2001).

Around a year later Benjamin Weil, together with Joseph Rosa (curator Architecture and Design), re-launched 'e.space' (June 10, 2002), this time solely on the Web. The aim of the re-design was to give more space for new commissions and establish new curatorial experiments pertaining to the specificity of this venue (Weil 2002). Instead of establishing an online art collection, Benjamin Weil argued that it would suit the medium better to focus on commissioning new works. The instability of the medium (that was still quite young) created a great uncertainty if (and how) it would be able to survive over time (Weil 2002).²⁵

²⁴ In the discussions within the curatorial team, this argument is most convincingly supported by the artwork 'e-poltergeist', by Thomson and Craighead, that was commissioned for the exhibition '010101'. The online work interferes when the user is browsing the Web. Crashing of the browser has more effect within a home setting than within a museum.

²⁵ "Calling it a 'collection' is already something that in my mind doesn't function with regards to the particularity of this media, which is so unstable that 'collecting' does not mean much. At best it means archiving or documenting something that happened. I believe that archiving web sites is basically documenting something that is gone, because the moment you decide to archive it, that means basically it's not live anymore and if it is not live it's not the same (Weil 2002)." - Benjamin Weil -

Weil argued that instead of owning these artworks, the museum should aim for the rights to display them. He made a comparison with performative art forms, as both have a process-based character and unfold over time. In order to stay ‘alive’ these artworks needed to be interactive and enable to engage audiences, which make it necessary for these artworks to transform over time (Ballate 2017). Through hosting the project, the museum could try to maintain it, but without claiming that it would be possible to preserve it forever (Weil 2002). Furthermore, it was also seen as an opportunity to stay in close contact with the artist and find solutions together for unforeseen problems. As part of the re-launch of e.space, ‘Agent Ruby’ was commissioned by the museum and presented within their online gallery, which contextualized the work by linking it to the artist statement and her biography, as well as that she was shown among other online artworks. Her existence was only online, so without having any kind of physical installation. And although the museum has the right to exhibit the artwork, ‘Agent Ruby’ has not become part of the museum’s permanent collection (yet).

6.4.2 IN THE MUSEUM COLLECTION

Coming from the ZKM Center for Art and Media (Karlsruhe), in January 2006 Rudolf Frieling joined the team of SFMOMA as curator for media arts (Lynch and Hatcher 2006). He recalled that at that time ‘Agent Ruby’ was still online, but it was unclear if the museum had the possibility for accessing the artwork (Frieling 2017). As her technological environment (the World Wide Web) was quickly changing, the museum needed a proactive approach to preserve the artwork. Frieling proposed to dismantle e.space as an on-going online exhibition space and acquire a selection of the artworks, prioritizing those that have a relationship with the San Francisco Bay area’s art scene.

On December 10, 2008 ‘Agent Ruby’ was officially accepted into the museum collection (Sterret 2008). In 2009, after documenting the work’s properties, behaviours, look and feel, one of the main concerns was that the artwork was still on the original hardware. Acquiring the artwork brought up the questions of how and where this artwork could be stored. The rapid obsolescence of computer

hardware made the work fragile and as such, a virtual server was created on the SFMOMA's existing infrastructure, to which the artwork was migrated (Mark Hellar 2016, sec. 1:41). Without going into too much detail, it may become apparent that the process has started to create a more stable environment for the artwork, without losing its activity-based character.

Rudolf Frieling saw it as the core responsibility of the museum to collect and preserve these artworks for future generations. With that, the philosophy of the curation of media artworks within SFMOMA shifted. Instead of supporting new commissions, the search started to address how to include these artworks within the museum's permanent collection. This brought Frieling to find solutions on the question: "*How does one collect and install histories of change and indeterminacy* (Frieling 2016, 230)?" Building further on the idea of the 'living museum' (theorized and tested in practice by the German museum director Alexander Dörner), Frieling proposed that museums could take the role of producer (Frieling 2014). To prevent losing integral parts, some artworks needed to change, be updated, activated, reinstalled or re-performed also after being collected. Instead of accidentally letting this happen, Frieling argued that this should be done through making conscious decisions that are supported by the museum. He fore-fronted the idea that artworks can be activity-based, shifting the attention of seeing artworks as primarily material- or object-based to the actions around them.

6.4.3 THE AGENT RUBY FILES

In line with this curatorial approach, the exhibition 'The Agent Ruby Files' was developed (Frieling 2013) (see fig. 33). In this installation, the artwork's activity-based character was brought to the forefront, as well as the effects that it had on its audience. 'Agent Ruby' creates a record for everyone that has been talking to her. Besides the website, selected transcripts of user conversations were on display in several archival binders making visible the social interactions that had taken place over the course of time. Based on a word frequency analysis, seven recurring topics were chosen: 'economy', 'dreams', 'feminism', 'human', 'jokes', 'philosophy', 'politics', 'sexuality' and 'technology' (see fig. 34). For each topic, a selection of

conversations was brought together in a binder and each of them started with an introductory chat on that particular topic for which a special guest was invited. Although having different backgrounds, all were more or less familiar with Ruby through previous research, curatorial or artistic practice, including Henry Lowood (curator for the collections History of Science, Technology, Film & Media at Stanford University), B. Ruby Rich (Professor of Film and Digital Media, UC Santa Cruz) and a conversation with the artist Leeson herself. For the first time, the relationship between the artist and ‘Agent Ruby’ was presented by literally bringing them into conversation with each other.

Not only did the presentation shift the attention to the behaviour of the artwork (emphasizing not the object but the process, not art as a thing but art as a system that involved people), but it also brought to the forefront how Ruby’s memory was growing over time through the conversations she had with her audience. Digital information and data sets exist as processes that are not always visible or graspable. The exhibition created awareness of the existence of a decade-long invisible archive of chat logs, as well as that it represented how Ruby would accumulate more and more data over time. The initial ideas were even more driven to visualize this process by presenting all conversations with ‘Agent Ruby’ through stacks of paper that would grow over time. However, Mark Hellar pointed out that it would be ecologically irresponsible and the data was mined (Frieling 2017). This revealed the value of this archive for the future historian, that does not only give access to reconstruct the past by qualitative methods, but also offers possibilities for finding patterns over the course of time. Not surprisingly, the presentation was accepted not only by the artist, but also by many other institutions that presented the artwork in this form within their physical galleries.

6.4.4 PRESERVATION

Media conservator Martine Haidvogel shared that ‘Agent Ruby’ is more and more experienced as a software-based installation. Although this new presentation form could indeed influence the audience perception of the artwork, for Haidvogel the installation is not part of the work. Even the 8-gigabyte file with chat logs was not

always considered as part of the artwork (Mark Hellar 2016). What exactly contains the artwork is a question that, similar as to the other cases in this thesis, is not exactly clear (Frieling *et al.* 2015).²⁶ Within the acquisition proposal it is mentioned that the artwork includes “*design Prototypes, the AIML database, and an entire, chronological chat log of Ruby’s conversations with users* (Glass, Hellar, and Sterrett 2009a).” It was also recommended that the feature film ‘Teknolust’ could become part of the acquisition, however until today this film is not part of the museum collection and neither it is part of their archive (Mark Hellar 2016). According to Martine Haidvogel, the AIML sets and the interface are seen as the core of the artwork and her primary concern for preservation. The chat logs are seen as secondary, not necessarily a component of the artwork that needs active care and protection. Also, external links (including the download link to copy ‘Agent Ruby’ onto a Palm Pilot) are not considered as part of the work (Haidvogel 2017). The Palm Pilot *itself* has never been part of the artwork, but now that the device has become obsolete, Ruby cannot replicate anymore. Another related problem that occurred was how to date the artwork. Although at the moment of acquisition it was decided to date the artwork 1999-2002, the artist suggested several times to change the date to include earlier versions of the concept (Sterret 2008). These unclear boundaries could influence the future appearance of the artwork.

When I asked artist Leeson about Ruby’s future, she poetically stated that she wanted her to become immortal (L. H. Leeson 2017). ‘Agent Ruby’ is an early example of Internet art and actively preserved by the museum, which suggests a promising starting point. However, for the living presence response another aspect comes to bear, that of anachronism, the introduction of elements of the past into the present. There is the possibility to keep artefacts without any alterations as a witness of the past. The other idea is that artefacts evolve over time to stay connected to the present. In her artistic oeuvre Leeson is experimenting with both strategies: While SFMOMA will attempt to preserve ‘Agent Ruby’, not with a

²⁶ “*Since we’ve begun to collect works that are generative, that produce materials, it becomes an interesting question to what degree that production actually is an integral component of the work.*” - Rudolf Frieling -

focus on freezing the material, but the way she responds (as the AI ChatterBot reflecting what was possible at the time of origin). Although part of shifting contexts (different generations of technology, times as well as cultures), until now ‘Agent Ruby’ did not lose meaning. In the meanwhile, the artist is still experimenting with her ‘brain’ letting it further evolve in new artworks that could (or could not) be preserved for future generations.

6.5 Conclusion

“The mechanics and the process of living and being alive were key to what I was thinking about.”²⁷

- Lynn Hershman Leeson -

This chapter aimed to increase understanding of the agency of ‘Agent Ruby’ with a specific focus on the engagement with the Recipient. The case ‘Agent Ruby’ possesses a form of ‘animism’, processing some of the characteristics (but not all) that we associate with living beings. Gell’s theory can be useful for a further understanding of audiences attributing a form of life to artworks, as it places the artwork within social networks and helps to shift attention to the agency of the artwork within these networks. The artwork does not have a biological foundation of being alive, but it is its effects that makes the audience respond in a certain way, makes them interact with the artwork in a way we would normally not do with dead matter, but with human beings. This chapter further analysed what is it precisely that makes the audience think the artwork is in some way true to life, and what are the effects of the artwork on Recipients?

Artists’ means of representing the world has made us aware that to imitate nature and create lifelike representations it is possible to take many directions. However, the digital gives new possibilities corresponding to what we call ‘reality’. Techniques and methods from artificial intelligence are used to create art. This means that the illusion of the artwork is no longer restricted to a faithful representation of the visible world, but (also) lifelike behaviours and systems are

²⁷ (Leeson and Giannachi 2010, 232).

simulated. This chapter followed the agency of the artwork, caused by the simulation of intelligence (section 6.3.1) and evolution (section 6.3.2). ‘Agent Ruby’ can interact with her audience, adapt to new environments and evolve over time. As a chatter bot, foremostly her conversational qualities are essential for giving her a form of living presence. Not only does Agent Ruby ask questions, she can also respond to answers and she is able to express some emotive states by changing her eyebrows and mouth.

However, the technology has its limitations in simulating a human response. In particular, understanding the emotions of the Recipient and responding with something akin to empathy is an ambitious attempt that does not fully succeed. Also, her capacity as an ‘intelligent’ agent has its limitations as ‘Agent Ruby’ does not have the capacity for unsupervised ‘learning’, in the sense that she can automatically make improvements to the way she communicates with her audience or adapt to new situations. The (early) technology makes that ‘Agent Ruby’ is restricted in her simulation of human interactions. Technology is progressing fast and nowadays ‘Agent Ruby’ is experienced as a form of Artificial Intelligence that reflects a particular technological development in a certain period, as well as concerns about how that could impact the relation between human and computers. Over the course of time, this form of anachronism will probably increase.

The living presence of an artwork is not caused by only the artwork itself; it is just as much caused by how the interpreter perceives the artwork. However, in case of ‘Agent Ruby’ the Recipient does not only attribute a form of life to the artwork by perceiving it as such, it can actually give the artwork a form of autonomous agency. It is the audience that performs the artwork, interacts with it or lets the work evolve over time. As the artist explained: *“A new audience emerged comprised of a broad community of receivers/participants, whose interactions helped to shape a revolution of art capable of self-replication, unstable and shifting content, and database information reconfigurations, all processed in real time (...) These creatures exist beyond a screen and when they are live, have the ability to empower viewers by causing them to defy conventional linear structures and create new possibilities for autonomous action and gendered agency (L. H. Leeson 1994).”*

Although the audience has some influence on the actions of ‘Agent Ruby’ (by having conversations with her and letting her replicate), the influence of myths should also be taken into consideration. Throughout her oeuvre, artist Leeson has been very much interested in how forms of documentation can easily be misinterpreted. As she further explained in an interview: *“Misinterpretation is a conscious effort, which makes the work richer because it means it has multiple interpretations. This becomes the cubism of the work, in that you’re looking at something from different perspectives, all of which are true* (Leeson and Giannachi 2010, 233).” In case of ‘Agent Ruby’, in many descriptions it is mentioned that she has learning capacities and that by having conversations with Recipients she will become ‘smarter’, a claim much defended by the artist and also in line with her being an ‘intelligent’ machine. However, in reality the conversations with Recipients do not shape Ruby’s personality in this way, as at the time it was not possible to technically realize that.

However, as long as conversations with ‘Agent Ruby’ will continue to occur, she will evolve. Not in the sense that she will become more intelligent or that her technology evolves, but because the conversations she had with her audience are stored. Although Agent Ruby’s answers will stay the same, the input by the audience will constantly change, adding new topics and ideas into her memory. If the museum will be able to preserve this form of engagement is still unclear, however making her database visible for the audience (in the display form as developed for the exhibition ‘The Agent Ruby Files’) is a valuable addition. How future historians will analyse this ever-increasing amount of data is an interesting question that is still left open. The selection of conversations could be replaced by quantitative data representations. Effective statistic graphics would enable more precise insights into how audiences interact with this artwork and how their perception of the artwork evolves over time.

7.

Analysis

7.1 Introduction

This research addresses the problem that the artworks, associated with Internet art, are not always fully understood (as explored in chapter 2). How can artworks, that take the form of a website, be studied as sources that can give us an understanding of human cultures or knowledge about the past? The aim of this research is to provide new insights into this wider debate by studying the agency of these artworks. Previous studies examined the visual appearance of these artworks, what its aesthetics are or how its technology is working. What is not yet fully explored is to understand their agency. These artworks can take up different social roles and functions, for example they can be used as tools for building virtual communities or instruments for social change.

This thesis includes an in-depth examination of the life history (or biography) of three case studies, all artworks that appeared on the World Wide Web in the mid-nineties. Each biography consisted out of a series of moments in which the artwork interacts with humans. Instead of analysing the artwork in isolation, this research studied the work of art as part of social networks. The final aim was that through this approach the agency of these artwork becomes apparent. This research argues that it is not possible to designate one decisive meaning or aesthetics to these artworks, as both can be fleeting. Instead it studies their effects: How do people perceive the work? What are the values and orientations that they bring to the

work? Or where does the artwork influence their thoughts and actions? This approach revealed how the meanings, values or aesthetics attributed to these artworks depend on the social spheres of which they are part.

Over time, an online artwork becomes part of various socio-cultural contexts. As such, the agency of these artworks was analysed not only at a specific moment or place, instead this thesis includes an in-depth examination of the artwork's cultural biography. This approach was inspired by Igor Kopytoff, who argued that things do not have a single identity, but their roles and values can change over time. His main interest was how things (even humans) can become commodities and circulate through the economic system. Although that this differs substantially from the aim of this research, yet a biographical approach is still useful. Instead of selecting moments of transactions or analysing the exchange values of artworks, this research followed how the artwork was distributed and it selected various socio-cultural settings in which humans added different meanings and values to them. Not only does this give insights in how the agency of the artwork can change, something that can be compared and contrasted, it also revealed how the artwork itself can evolve over time as a result of contributions of various actors. Internet art relies on an ever-evolving networks of human and non-human actors and this research reconstructed these networks from its origins until the present.

For the underlying structure of the biography, this research made use of an existing model as developed by Alfred Gell. This model has not been applied to Internet art before, yet it turns out to give valuable insights. This approach de-emphasizes the focus on the artwork itself in favour of exploring how the artwork is integrated within a network of actors. Not only does this lead to a more productive understanding of online artworks by making the critical shift to what these artworks do once they enter circulation in heterogeneous networks. But it also provides a more precise examination of how these artworks are networks themselves that evolve over time. The main focus of the Art Nexus is on the intentions and beliefs of the humans surrounding the artwork. Gell defines four agents: The *Artist*, the *Prototype* to whom the artwork is referring, the *Recipient* and the *Index*, the artwork itself. Throughout the biography of the artwork, the social relationships

between those agents were analysed and how these interactive settings influenced how the work is produced, circulated and received. In each case, there was a focus on a specific agent, but because these agents interact with each other, logically all agents were analysed in every case. What can be said of the role of each agent, based on the cases within this thesis? In this chapter, the case studies will be compared and contrasted for further insights in the role of each agent, ending with the agency of the artwork itself.

7.2 *The Artist*

The main question regarding the *Artist* running throughout the previous chapters is who is the creator and how to attribute authorship? Although all artworks within this thesis attribute authorship to a single artist (resp. Martine Neddham, Shu Lea Cheang and Lynn Hershman Leeson), all artworks were co-created. The Artist starts something, but the final result lies beyond their control. During this process, the Artist often took the role of the director, bringing together a network of people and managing their various contributions. Assumptions about authorship can be made quickly, but a more precise examination of the process of production comes to the forefront if we study these artworks over the course of time. This reveals how the continuation of these artworks happens through multiple actors (Artist, Recipient, Index and Prototype) and, to be more precise, through the interactions between them.

Most obvious is that the Recipient takes on an active role within the production of the artwork. Building further on the ideals of early Web communities, online artworks often have a design from bottom-up, encouraging as much participation and experimentation as possible. The Recipient is encouraged to engage in extending the artwork in all kinds of (creative) ways, letting the artwork evolve in directions unforeseen at the time of origin. At the least, Recipients are asked to activate the artwork by navigating through it or adding responses that are only temporarily part of the work itself. For example, in ‘Mouchette’ we saw how the structure of hypertext was used to empower the user (see section 4.2.2). However, the Recipient can also be more actively engaged in the further development of the

work, contributing to the artwork, which can even go as far as that the artist/audience distinction dissolves. Perhaps the most concrete illustration of this is that Recipients were offered to become ‘Mouchette’ themselves, giving them the experience of becoming the Artist (however, taking over the role of Artist is something else).

Within the artwork’s production also the Prototype can be an active agent and thus needs to be taken into account in the attribution of authorship. Within virtual worlds, people create an online identity. Especially in early web environments, like MOOs and MUDs, avatars were often imaginary characters. People took the freedom to create their electronic persona through exploring new identities (choosing another gender, class or race) and they would have conversations, express their emotions or even create certain gestures that would fit within this specific role. Sometimes it is hard to unravel who is actually controlling these virtual characters. This can have implications for identifying the Artist, as became apparent within the social life of ‘Mouchette’. Hidden behind her online identity made the true artist invisible, which resulted in discussions, as well as wrong attributions of authorship. Furthermore, the fact that there can be multiple contributors behind an online identity needs to be taken into consideration.

Also, the artwork itself is an active agent within its own further production (this will be further discussed in section 7.5). As Gene Youngblood has pointed out, the *computer* shares creative agency with *humans* (Youngblood 1970). In imagination, the computer could become so advanced that it is able to collaborate with humans in making artworks. In reality, however, the online artworks within this thesis are more instrumental, but they do act as platforms for bringing people together, stimulating collaboration or discussions. In some cases, the artwork itself is capable of eliciting feedback, becoming in some sense an autonomous agent. This is for example the case with ‘Agent Ruby’, who can automatically initiate new conversations and archive the old ones. Over time anachronism can cause problems (section 7.4 will return to this in more detail). To reach a preservation of human activity, it requires some sort of object, image, maybe some sort of network that

permits to keep the public imagination. To update the artwork or add new pages or activities to it, these are decisions mostly taken by the artist.

Internet art has led to questions around (redefining) authorship or even completely undermining it. Instead of focussing on the (greatness of the) artist, these works point to the value of shared authorship. These ideals should not make us underestimate the agency of the Artist. Even when their role is not always directly visible, in the end their engagement with the work turns out to be essential for keeping the artwork ‘alive’. It is first and foremost through the Artist that new networks are created and when s/he is absent, it often becomes difficult to safeguard the continuity of this networked production. We already see the consequences when the Artist decides to leave their project, as has been the case with the artwork ‘Brandon’. After the artist went on to produce new works, ‘Brandon’ lost its role as an active entity. According to artist Shu Lea Cheang, the aim of the work is that it functions as an open platform where authors can upload new content (Cheang and Stikker 2017), but this did not happen without her active involvement. Now the artwork is part of the permanent collection of the Solomon R. Guggenheim Museum and their extensive restoration in 2016 focussed on safeguarding its current form. In contrast, artist Martine Neddam kept working on ‘Mouchette’, constantly imagining the online world and its relationships anew. Until today, we could say that she keeps this artwork ‘alive’, in the sense that it stays connected to (a new generation of) people that continue to activate her.

7.3 The Prototype

There is a clear difference in how Alfred Gell defines a Prototype (that where the artwork is referring to visually and/or conceptually) and how it is conceived within software studies (where the Prototype is an early version of a programme, a proof of concept, that can further develop). This results in different ways of what can be said about the agency of the Prototype.

The Gellian way of reading the Prototype leads to the question: What is the relationship between the artwork and what (who) it is representing? The case

studies in this thesis are all online cyborgs, which makes their Prototypes all refer to a person. However, most interesting is the way the Prototype functions and how this differs from case to case. For example, in the case of ‘Mouchette’, the Prototype functions as a mask for the Artist, who is hiding behind her online identity. Creating avatars that prevent the revealing of true identities, as well as exploring alternating ones, is something that is very much part of the disembodied presence in virtual worlds. What this case revealed is, how it is possible online to be multiple selves at the same time (and as described in the previous paragraph, how this can affect traditional ideas around authorship). It also became apparent in the case study ‘Brandon’, that questions about online identities, and how avatars can change gender and race, need further exploration. However, in this case study the Prototype was mainly a way to revive the past. More in an activist sphere, the story of Teena Brandon was kept alive as a symbol for injustice against LGBT communities. Prototypes can evolve over the course of time and across different cultures. In the ‘Brandon’ case, the Prototype was explored in a variety of communities, all attributing their own meanings and values to it.

But there is another way that we can translate the Prototype. More in line with how this term is used in software studies, it can refer to an artistic process in which previous versions of the artwork lead to further developments. The production of new content is often acts of copying, reframing and re-iterating. Although this became apparent in all the case studies, ‘Agent Ruby’ will be mentioned here to exemplify this process. Artist Lynn Hershman Leeson clearly works through repeating experiments, constantly correcting and improving previous versions. However, specific for her way of working is that throughout the process she releases versions as ‘finished’ artworks. So, for example, Ruby’s artificial brain, that is part of the online artwork ‘Agent Ruby’ (1998-2002), further evolved in ‘Agent Ruby 2’ (2000-2003), afterwards her brain was re-used in new chatterbots, among others DiNA (2004), and more complicated artificial intelligence features were added to it. It is too limited to say that this evolution of bots reveals only a technological development, as also the bots’ personality; visual appearances and interaction with its Recipients changed in each iteration. Interesting is, that this process of prototyping is often in some form a collective process. As the creation of

these artworks often happens in collaboration, also the Prototype evolves over time, as the artwork becomes part of a variety of social spheres. ‘Brandon’ is a good example to illustrate this. Another example is how the artwork ‘Agent Ruby’, in collaboration with SFMOMA’s curatorial team, was presented within their museum galleries as the ‘Agent Ruby Files’, an installation that is increasingly perceived as part of the artwork. This is not perceived as a new version of the artwork, but it is an example of how the artwork evolved, adapting to a new (institutional) environment.

In regard to the agents, the *Index* (artwork) and a *Prototype* (which refers in this case to a sketch or previous version), it can be difficult to make a clear distinction between them. As soon as an artwork (*Index*) is used for further experimentation, this can lead to another iteration of the artwork, which makes the previous version a Prototype model. In case of the oeuvre of Lynn Hershman Leeson, none of her artworks are considered to be (unfinished) Prototype models. While in case of ‘Mouchette’, where all developments fall under the same concept, we experience the artwork in a constant process of becoming. It is difficult to fit such an artwork within the systems of the art world, which became clear when the Stedelijk Museum tried to acquire ‘Mouchette’. As a solution, the artist offered them an archive of data (1996-2016) under the title ‘Mouchette version 01’. In the end both Leeson and Neddham reveal a working process that makes use of constantly revising and enhancing Prototypes. What is actually the final *artwork* (and no longer a *Prototype*) is a value that is attributed by human agency.

7.4 The Recipient

The meaning of a work of art, and the values we add towards it, is always located somewhere between the reader and the artwork itself. As sociologist Stuart Hall proposed, media messages are not actively sent and passively received, but they should be understood as a circular process of encoding and decoding (Hall 1980). The way the sender sends the message (encode), is not necessary the same as how the Recipient perceives it (decode). Depending on background and context, audience can resist messages or even create their own ones. This is in particularly

interesting for online artworks, since throughout their lives they can change form and content. The communities that interact with these artworks do not only attribute their meanings and values to the artwork, but they also have the power to actually *add* their own visions or positions to the artwork. Over time, we see how these artworks evolve through interactions within different social spheres. This is what makes these artworks such interesting objects for study, they create constantly new networks and interactive settings, and as such these artworks are capable of storing some of their receptions.

To exemplify, all the cases stored chat history and as long as these artworks stay active, user data can accumulate within their databases. This process was made visible in the exhibition ‘The Agent Ruby Files’, which gave insights in the social interactions with the artwork that have taken place over time and with people from different cultures. Another form of how Recipients are contributing to the artwork can be illustrated by looking at the artwork ‘Brandon’. Over the course of a year (1998-1999) multiple artists, programmers and scholars uploaded new content to this work and as a result the artwork evolved in a growing network of webpages, performances, installations and discussions. Nowadays, we can still detect a group of authors (and institutions) in every interface; how they brought the social reality that ‘Brandon’ represents in wider discussions; and how each group added their own perspectives, sometimes even contradictory ones. In each social sphere, the presence of ‘Brandon’ gained a new form of agency. The free-form linking of fragments of data, characteristic for practices on the Web, can makes these sources rich, but also chaotic, especially when many communities are involved or when these artworks develop over a longer period of time. A way to increase our understanding is to map the different interactive settings and analyse them, by identifying which (online and offline) virtual communities are involved; what their contributions are and increase our understanding in which context.

As online artworks are embedded within the World Wide Web, this overarching network influences the distribution of these artworks. This could allow the work to be seen by a wider audience, reaching beyond institutional walls and barriers. But as Alexei Shulgin pointed out in 1997, this is in fact ‘the major paradox of net art’

(Baumgärtel 1997a, 1997b). While for anyone with an online computer these artworks are freely accessible, it is actually only a very small circle of people who actually see them. The art audience online has grown since then, but whether online artworks have attracted a more diverse group of visitors is most unlikely. These artworks are difficult to navigate and ask certain knowledge about or at least a certain curiosity for online arts. Many who accidentally stumble upon them, will be puzzled about what they have found. Julian Stallabrass stressed that, although these artists were strongly critiquing the art world's elitism, it cannot be said that online this elitism does not exist, although maybe in a slightly different form, as these works are tailored well-informed insiders (Stallabrass 2003b, 135).

However, the World Wide Web does give these artworks a unique way of circulating across different institutional domains and cultures. This means that studying these artworks, still involves taking into consideration that a wide range of responses to these artworks are possible, much broader than we are used to if we see an artwork within a Western art museum (although we should also not exclude this). To name an example is that while an art institutional domain can consider something as a 'work of art', in the domain of science this can be seen as a 'scientific experiment' or 'study'. Both have different implications of how to deal with authorship, what an experiment means or evaluating results. Not often do these artworks satisfy at once the criteria of science and the criteria of art. Different and sometimes conflicting ideas can exist on how to identify or appreciate these artworks, which can raise concerns whether there can be any coherence on what these artworks comprehend. These artworks are not easy to categorize. But more interesting is that within the social lives of these artworks it becomes apparent how these ideas are brought together and can co-exist. The artwork itself is sometimes even used as a tool to bring people together to discuss different perspectives and try to understand oppositions. As instead of presented in a unique place, these artworks can be accessed at several places at the same time.

Although online artworks are open to constantly shifting responses and interpretative stances of the Recipient, it is worth briefly mentioning that the Recipient has not an unlimited amount of control. The forms of this artwork are

never completely set beforehand. Instead the Recipient is invited to add their own values and visions to the artwork, and this can be in contradiction with the Artist's intent or lead the artwork towards unforeseen directions, but the Recipient is never allowed to completely move outside of the control of the Artist. Their 'openness' does not mean that these artworks are completely undefined or infinite in their possibilities of form. The artwork gives more or less a set of predefined rules, a system in which the Recipient is allowed to bring in their own ideas. While in some cases this allows a slightly different interpretation, in other cases there is a bit more freedom, but in none is it possible to completely change the form of the artwork.

That not everything in these artworks is completely fluid makes these artworks interesting as historical sources, but it also problematizes how they stand the test of time. Although the cases presented within this research are only around twenty years old, already these artworks can easily get lost or distorted in the quickly evolving World Wide Web. To prevent them from disappearing they constantly need to adapt to new technological environments. But it seems that it is not the technological issues that are most difficult to overcome. More challenging is how to prevent these artworks from losing their relevance, not only as nostalgic snapshots from the past, but as interactive entities. The way we communicate online is changing rapidly. Early Internet environments, like MOOs, contain for many online participants already alienating mechanisms and forms of interaction. Although in principle these collaborative virtual environments could still be effective, over time fewer participants take part in them or consider them useful. With online artworks, we experience similar problems. Is it possible to maintain their function, effects or agency? At the moment social robotics is quickly evolving, which is changing how we experience earlier forms of artificial intelligence. Chatterbots that used to win the Loebner Prize in the nineties are nowadays considered clunky. The way we experience and interact with computers is quickly changing, as well as the way we build virtual communities, communicate and share information within online networks. What all the cases revealed is that over time online artworks are mostly threatened by anachronism.

7.5 *The Index*

Finally, this brings us to the agency of the online artwork itself. Although the artwork seems the most important agent, the value of applying the Art Nexus is that it differentiates various forms of agency. Gell argues that the agency of the artwork can only be understood by taking into account that various actors (the Index, Artist, Recipient and Prototype) influence how we respond to art. Until now, this chapter discussed the agency of actors involved in the creation of the artwork (the Artist), its representation (the Prototype), as well as actors who perceive the artwork or influence its reception (the Recipient). Although that the stress is on the network of social relations in which the artwork is embedded, it is of course impossible to exclude the role of the artwork itself. From this perspective, what can be said about the agency of online artworks? How do these artworks function and what is their power to move a Recipient into action or impact their social environment?

A first effect is that experiencing these artworks can achieve a form of living presence. Within art history we can find many descriptions of the illusion of artworks to appear lifelike, in the sense that they represent the visible world so convincingly that it might deceive our eyes (an overview can be found in (Eck 2015; Kessel 2017)). However, this is not the type of living presence that online artworks try to achieve. As for example the chapter about ‘Agent Ruby’ revealed, this artwork did not aim for a visual striking representation, instead ‘Agent Ruby’ is an attempt to simulate human behaviours, in particular the way we communicate (intelligence) and replicate (evolution). As a chatterbot, ‘Agent Ruby’ is able to start conversations and where she is most compelling is that she responds, as if she is a human being. Talking to artworks is something that is not new, but that the artwork is actually responding, is something that we are less familiar with. Some Recipients test if ‘Agent Ruby’ might be really intelligent or if she even has some sort of consciousness (a quite romantic response which is also fuelled by myths around the artwork, partially created by the artist). Although more critical responses about her clunky behaviours can be found as well, it can be questioned if we really feel (or behave) as we would in the presence of another human being when we

encounter 'Agent Ruby'. However, the seeming animation of the artwork does in some sense challenge the boundaries between persons and things.

In the case of 'Brandon', another form of living presence came to the forefront. Building further on William Gibson's ideas of the merging of humans and machines in Cyberspace, 'Brandon' was brought back from the dead to start a new live within the virtual world. This form of living presence, giving the dead a form of afterlife, can again be placed in a longer tradition within the arts, where memorials (in all kinds of forms, including sculptures or portrait paintings) function as a remembrance of the deceased to make them in some sense immortal. However, Teena Brandon was not portrayed with the aim to match his visual appearance or through retelling his tragic life story. Instead giving 'Brandon' an online presence was a way to give him new forms of agency online. Through the artwork the story of 'Brandon' was introduced to different communities, who brought it into wider political and social discussions about the body, (gender) identity, crime and punishment, and these contributed to the artwork itself.

An important function of online platforms is building virtual communities. Through the online medium we are able to connect, communicate and share information. Online artworks function like that as well. If we take a look again at 'Brandon', this work included all kinds of systems that stimulated the creation of collaborative designs, like digital forums and even software for joint-decision-making and conflict resolution. The work stimulated the connection between people from different parts of the world, the sharing of expertise and it even 'helped' participants to have more constructive conversations about sensitive issues. The computer system led the process through bringing up issues; stimulate discussion within a certain timeframe after which the group had to come to an agreement. Also, in the artwork 'Mouchette' conversations were seen as the heart of the artwork (with an active discussion about 'suicide' that continues until today). Also, this work is used as a tool for initiating situations that can (re-)create connections between people. Most of the artists of these early online artworks were part of MOOs, where they experienced building virtual friendships and spaces, sharing expertise and developing ideas in collaboration. With roots in these sharing

cultures, building platforms for bringing people together stayed relevant within their artworks.

This leads to another returning agency of these artworks that is that they can have a political effect. With the rise of the Web, a new social space was established. Especially in early Web cultures, there were high hopes that virtual reality could counter social fragmentation, extend democracy and break down divisions between gender, race and class. In line with the early ideas out of which the Web was invented, those imagined the Web to be a platform with possibilities for more open exchanges, free of the social and hierarchical restrictions of the offline world. ‘Cyberfeminism’ was one of these fields of practices and of influence on all cases within this research, but in particular to ‘Brandon’ (see chapter 5). Here we also saw how the online artwork can be deployed as an organizational tool for social change. Not only can the artwork circulate and create awareness of political issues, it also functions as a platform for supporting discussions and bringing people together, establishing a growing network of supporters.

The artists discussed were all early practitioners in the Web, exploring the new frontiers by being innovative, but often also non-conformist and rebellious against existing systems. Dieter Daniels described the pioneering artists in the Web as “*a last moment of opportunity for an avant-garde movement* (Daniels and Reisinger 2010, 33).” He describes how these artists are ahead of their time and push the boundaries of what is accepted as the status quo, but without letting go the absolute claims on how to (socially) reform. This non-conformist character also becomes apparent in their ethos that is opposed to established visions and hierarchies in the mainstream art world itself. In all the cases in this thesis it became clear that art institutions can no longer be considered as the only reference system. These artworks circulate and are displayed within a variety of social spaces, also those less associated with art institutions; the most obvious example is the Web itself.

To conclude, this research revealed how online artworks can have social agency. However, as it only covered the social lives of three cases, this is too limited for giving an overview of the variety of agencies that online artworks can possess. However, telling the full story (if possible, at all) was also not the aim of

this research, instead the claim was that acknowledging their agency could increase our understanding of these artworks. This is what these cases do lay bare. It unravelled the social context of these artworks' productions, circulation and reception. And to stay in terms of Alfred Gell's Art Nexus that structured this research throughout, how within these instances these artworks perform a role, like also the other agents: The Artist, Recipient and Prototype. Through describing the interactive settings of these agents, at different moments in time, we start to better understand these artworks, not as static objects, but as dynamic agents.

8.

Conclusion

8.1 Introduction

During the 1990s, artists started to explore the possibilities of the World Wide Web. In this thesis online artworks are investigated by studying their agency. Based on research in largely untapped archives, it presented an in-depth examination of several case studies, exploring the artwork's ability to have the power to act in a variety of social settings, as for example they can mobilize people, influence their thoughts or support them sharing visions and ideas. These artworks are significant, not by virtue of any (conventional) notions of beauty or by what it visually represents, instead these artworks are made with the intention to play a certain social role, both online and offline. The purpose of this research is to offer insights in how these artworks are 'systems of action'. To increase understanding of how these artworks are endowed with their own power and agency, it is important to look beyond the artwork itself and instead approach them as actors embedded within a network of human and non-human agents. This approach was inspired by a theory, as developed by Alfred Gell, about the agency of art.

Such animated artworks can cede the artists who made them, establishing new networks and links across time and space, some unforeseen at their time of origin. To unravel this dynamic process this research reconstructed the effects of the artwork in various social settings and in different moment in time. By making use of art historical methods, it differs from studies by most Internet art scholars. This

research is no longer based on personal experiences, as I was not active in the field when these artworks developed within the early Web. Instead this research is based on data within the artwork and doing art historical research in both Web and traditional archives. This involves that it has been written with the fresh eyes of historical distance, as well as the complexities of it. Doing art history through studying the artwork and related archival material, is a new area to explore and this research is a pioneering experiment in this field. In first instance, it is intended to benefit the writing of the histories of Internet art and early Web cultures. Hence too, it can be useful for professionals concerned with the preservation and curation of online artworks. For example, it can give insights in where certain parts of the artworks are at risk or how one can create a suitable display for these artworks.

To conclude, this last chapter will reflect on the methodology and methods used, so one can build further on this research. Although this research is not concerned with building a new theory, nonetheless, applying an existing model to online artworks for the first time, does give insights in what does (and doesn't) work. In this thesis, the approach was inspired on Alfred Gell's theoretical account for the study of the agency of artworks. In chapter 3 it was argued that his model the 'Art Nexus' could be useful to study the agency of online artworks. This was further tested through an in-depth analysis of three artistic works in chapter 4, 5 and 6. *Where* (and *where not*) did this methodology turn out to be valuable for giving insights into the online artwork? This will be discussed in section 8.2.

This will be followed, in section 8.3, by reflections on the study of the online artwork: What kinds of 'archive(s)' can art historians draw upon if they study an online artwork? For reconstructing the origins of these artworks, this research relied on historical evidences, including datasets with logs from the past, as well as the present; it analysed various versions of its interfaces; it used Web archives, as well as more traditional documentation found in archives in different parts of the world. This revealed how the agency of these artworks come forth out of the cultures of the early Web, much more than is generally admitted. However, studying these artworks based on historical evidences brought up two other implications: First, what will remain of these artworks is essential for writing the history of Internet art.

Yet, there are various ways of interpreting the ‘boundaries’ of these artistic works, which is of influence what has been (and possibly will be) collected and preserved. A second issue that needs to be taken into consideration while studying online artworks, is that there is limited provenance data available. As it currently stands, there are still opportunities for further research in the field of Internet art. To conclude, some possibilities for future work will be discussed in section 8.4.

8.2 Reflections on the approach: The Art Nexus

8.2.1 ADVANTAGES

Alfred Gell’s theory provides a specific lens through which the online artwork can be analysed, and consequently it asks to organize and narrate art historical evidences in new ways and it directs us to look for other evidences. At the core is that instead of analysing its aesthetics or iconography, the artwork is relocated within the social domain. His theoretical perspective is useful for exploring people’s interactions with artworks, as relations that can be intentional or causal. An analysis of this kind is important for online artworks that are interactive and can evolve over time under influence of the social spheres of which they become part.

To explain this in some more detail, it is helpful to first examine how Gell terms the work of art, as ‘Index’, which he borrows from the philosopher Charles Sanders Peirce’s theories of signs. Peirce explains a sign as: *“something which stands to somebody for something in some respect or capacity. It addresses somebody, that is, creates in the mind of that person an equivalent sign, or perhaps a more developed sign. That sign which it creates I call the interpretant of the first sign. The sign stands for something, its object (Peirce 1986, 99).”* So according to Peirce, the meaning of a sign is determined by not only what it is referring to, but also how the Recipient interprets the sign. Peirce developed an elaborate typology of signs and one of them is the ‘Index’. Characteristic for the Index is that it has a direct connection with where it is referring to (physically or causally), but the interpreting mind has nothing to do with that and can give a completely different meaning to it. The usual example of an Index is smoke. This could lead us to think that there is a

fire, however smoke can also arise in the absence of fire. Alfred Gell translates this idea towards arts. Within his model, the Art Nexus, the artwork (*Index*) is addressing somebody or referring to something (the *Prototype*), which is interpreted by someone (the *Recipient*). According to Gell, the meaning we attribute to artworks does not necessary need to be the same as what the artwork is referring to, or what the Artist intended to represent in the artwork. Instead, he shifts attention to the interactions between the agents and how that can determine different meanings to the artwork.

This shift is essential for the analysis of online artworks. As these artworks advocate that they are process-orientated and participatory, it can be difficult (often even problematic) to pin them down. Gell's theory departs from the idea that there are no a-priori meanings or aesthetics; instead they are treated as possible interpretations. As an anthropologist, Gell was highly aware that the way we see or respond to art is dependent on socio-cultural determinations. From an art historical perspective, it can be added that our 'way of seeing' also depends on time. So, instead of decoding what the artwork represents (or giving any priority to a certain meaning, value or experience), Gell analyses how these responses come into being by studying the "*social relationships in the vicinity of the artwork mediating social agency* (Gell 1998, 7)." Online artworks are part of a wide range of interactive settings and contexts. Although all cases within this thesis revealed this, in particular the artwork 'Brandon' serves as a good example. Numerous social groups participated in this artwork, varying from web communities, the teams and audiences of an art-science institute, the university, as well as the museum. Furthermore, long-distance collaborations were established between (among others) Amsterdam and New York, which makes that also different geographical locations played a role in that case.

Gell's focus is firmly on what these artworks 'do', or what their effects are, the meaning of the artwork depends on the social network in which these artworks are embedded. This does not only overcome the problem of trying to address a single meaning to online artworks, but it also lays bare the process in which various agents are manipulating these dynamic entities. As we saw, for example, the

audience is often invited to influence the outcome of these works, by adding their own visions and ideas, possibly letting them evolve in unpredictable directions. Where trying to frame these artworks in a particular way could become problematic, a Gellian perspective uncovers how a variety of meanings can be added towards them, without excluding that opposing interpretations can co-exist.

Not only can the Art Nexus be used to unravel the interactions in a single moment in time, but also to describe the artwork's evolving state over the course of time. For this it is helpful to look at how, in the conclusions of his book 'Art and Agency', Gell expands the model from applying it to a single artwork to the entire artist's oeuvre (consisting of a series of artworks that are in some sense related). Gell explains: "*we select one particular work as corresponding to a 'now' moment and see all the other works in the oeuvre as either 'past' or 'future' works* (Gell 1998, 241)." In the case of online artworks, an assemblage of projects can occur within a single work, as for example became apparent in the case 'Mouchette', where the artwork constantly expanded through new web pages and projects. Not always is it possible to *separate* the online artwork in a series of 'finished artefacts'. In other cases, parts of artworks can also be copied and adjusted to create new works. We saw this in the oeuvre of Lynn Hershman Leeson, where new iterations of bots were developed through re-using the artificial 'brain' of 'Agent Ruby'. Taking this into consideration, Gell continues: "*the ensemble of an artist's work, strung out in time, constitutes a dynamic, unstable, entity; not a mere accumulation of datable artefacts. We can only appreciate it by participating in its unfolding life* (Gell 1998, 242)." As mentioned, the 'ensemble of an artist's work' can also be a single online artwork. Taken that into account, Gell describes precisely how this research applied his model: It reconstructed interactive settings, analysed its causal effects and through that described the artwork's unfolding life.

To study online artworks over a longer timeframe is essential. Although there are many discussions about dating an artwork, traditionally it is often the moment when the artwork was first presented as a final product of a creative process. This 'moment of creation' stays an important anchor within many art historical accounts. For example, to understand the style or iconography of the artwork, it is often this

historical as well as geographical context that is reconstructed. Clearly, for online artworks, as process-based and ‘unfinished’, fixing it to a single moment can become problematic. This is why it is necessary to take into consideration that artworks can have expressive functions that differ from time to time (and from culture to culture). Gell’s model can uncover the unfolding life of the artwork, including its production, circulation and reception. Besides that, it can also reveal connections between current and past versions and experiences of the artwork.

In sum, online artworks advocate being participatory and process-orientated, which makes it difficult to pin them down. Instead they mediate a variety of interests and values that can influence not only the way one interacts with the artwork, but also its form. Audiences do not only add value and meanings to these artworks, they can also contribute to its further development. The value of Gell’s theory is that it can help unravel this process. His approach moves away from the idea that the artwork knows any a-priori meanings or aesthetics. Instead, from his perspective, art is a result of human intentions and beliefs. Using his model reveals that interpretations can change over time and across cultures, and this can even include opposing views on what the artwork means. For online artworks, which develop through interactions with the artist as well as different audiences, this approach gives insights into how these artworks evolve over the course of time, and how they can develop into multiple directions.

8.2.2 DISADVANTAGES

While this approach is beneficial for the analysis of online artworks, there are also more critical notes. Basically, this model consists of four agents (the Artist, Index, Prototype and Recipient) and descriptions of possible interactions between those agents (see fig. 35). First, the descriptions will be examined more closely, after which some reflections on the agents will be given.

In case of online artworks some descriptions in the model are in need of adjustments. To give an example, when the Recipient is active (‘agent’) and the Prototype is passive (‘patient’), this is described as “*Recipient has power over the Prototype. Volt sorcery.*” (see fig. 35, highlighted in blue). Gell further explains

this ‘volt sorcery formula’ as a form of harm that can be done to an artwork, as for example is the case with iconoclasm (Gell 1998, 60). The violent act is not so much aimed at the artwork itself, but it mostly is an attempt to destroy that what it is representing. In the cases within this thesis, the relationship between Recipient and Prototype became apparent in a different way. For example, at a certain moment in the life of the artwork ‘Mouchette’, the audience was invited to take over this online identity themselves (see section 4.3). Here the Recipient gets clearly some power over the Prototype, but not by destroying the artwork or related to volt sorceries. It would be possible to re-write the descriptions in the Art Nexus, but from that perspective it does not seem useful to fill-in this model in such a precise way. In view of this claim, it is important to explain another problem.

The Art Nexus only describes the binary relationships between agents. In chapter 3, Gell further elaborates on these interactions, calling them ‘pure cases’. For some (not all of them) he gives examples: When the Artist is active and the artwork passive (in a so-called ‘Gellogram’ this would be formulated as ‘Artist A → Artwork P’), Gell gives the example of the ‘drip paintings’ of Jackson Pollock. He further explains: *“They have no subject at all except the agency of Jackson Pollock himself, they are (non- representational) self-portraits of a man in frenzied ballistic activity* (Gell 1998, 33).” What this mostly illustrates is how rare ‘pure’ cases are. How often is an artwork a ‘trace’ of solely the artist’s performance? Besides that, the focus on ‘pure’ cases could also easily reduce the complexity of reality. To give another example, let’s look at the interaction between the Index (active) and the Recipient (passive) (Index A → Recipient P), the formula for passive spectatorship. The artwork performs a certain agency over the Recipient, which could lead to certain physical, spiritual, political or aesthetic responses (Gell 1998, 31). However, a focus on a ‘pure’ case easily neglects other aspects that are of influence. Besides the effect of the artwork, the Prototype is most likely of influence, the display of the artwork (within a White Cube gallery space, on the Web), the geographical context, as well as time (we respond different to artworks now as two hundred years ago), and so on.

Another problem with describing only ‘pure’ cases comes to bear when we try to find examples when there is no artwork involved (for example Artist A → Recipient P). Gell acknowledges this limitation and offers, in chapter 4, a solution through giving examples of more complicated relationships. Besides multiple agent/patient relationships, he even explores the possibility to embed hierarchy in agent-patient relationships by introducing the use of tree structures (see fig. 36). Still, it can be questioned if this is really solving the problem. Not only because placing agents as nodes within a network could be more appropriate than tree structures, but because in principle ‘pure’ cases rarely exist, as the reality is more complex, a problem that cannot be solved by making more complicated formulas. This was also not the aim of the Art Nexus, as Gell points out: “*A theory of this kind being developed here consists primarily of a device for ordering and classifying the empirical material with which it deals, rather than offering law-like generalizations or predictions therefrom* (Gell 1998, 28).” As such, throughout the writing of the artwork’s biographies in this PhD thesis, the emphasis lies on their social lives. It reconstructed the interactive settings in which these artworks were included, but instead of departing from these pre-described relationships, the Art Nexus was used for finding underlying relational structures. Gell’s theory does not identify these types of relationships that arise between interacting agents.

The other part of the model that can be further examined are the agents within the Art Nexus. An agent is defined as one “*who has the capacity to initiate causal events in his/her vicinity* (Gell 1998, 16).” The model defines four agents: The Artist, Index, Prototype and Recipient. In an attempt to use this model as precisely as possible, a first challenge is to define these agents. For each specific case this leads to questions like: Who is the Artist, the Recipient, and so on? In all the cases within this PhD thesis, these agents constantly changed over time (the Recipient is not one person or group of persons, but over time there are constantly new audiences). And agents can even shift roles (the Recipient can become the Artist for example, as illustrated in section 4.4). These variations are not included in the Art Nexus. Possibly, it would make the model so complicated that it could become impossible to apply it to a qualitative research.

Another question is why did Gell select only four agents? It is good to stay aware that the Art Nexus is *an* example of a multi-agent system for the analysis of artworks, with a focus on the agents in the vicinity of the artwork and in particular human intentions and beliefs. As discussed in chapter 3, there are other models for analysing multi-agent systems that focus on other aspects of agency. Departing from Peirce's sign theories, Gell made well-considered choices for the specific agents in the Art Nexus. Yet, still there is more to say about each agent. To give an example, let's take a look at the 'Index', a part of that is the 'medium'. The medium of an artwork can highly influence its agency. As art historian Hans Belting pointed out, images are steered by the media that transmit them, but they are not reducible to their technological support alone. One of the striking examples that he gives is the artwork 'TV Buddha' (1974) by Nam June Paik. The artwork comprises of a statue of Buddha that is live recorded by a camera. The statue is placed in front of the television screen that shows this recording, which makes that Buddha and its mirror image are observing each other. The artwork comprises two images of Buddha: One is a statue, the other an image appearing on the screen. Although Belting goes more in depth, for here the understanding that there is a distinction between the image (or message) and its medium is enough. This to illustrate that it can be useful to expand on the definition of the 'Index' for a more precise analysis of its agency.

In sum, Gell's action-centred approach creates a lens for the analysis of online artworks. However, there are still opportunities for expanding Gell's model to a more precise analysis for not only Internet art, but also artworks in general, for example, through refining the agents and interactions between them. Basically, this would constitute a PhD thesis of its own.

8.3 Reflections on the object of study: The online artwork

None of the social lives of the online artworks as discussed in this PhD thesis has ended yet. Some proceed in a single version, others in multiple versions, however their lives - or as some prefer to say afterlives - continue. They outlasted the moment of their making, they could even outlast their maker and become a durable

record of human action. However, until now this did not stop these artworks from further evolving across different cultures and over the course of time. This research project revealed the agency of these artworks as relational and it argued that they can be (best) understood through its interaction with other agents. Yet, for an-depth analysis of these interactive settings it set them within a socio-cultural context. The work of art cannot ‘do’ anything unless they are presented within a certain environment. The way we act upon or experience an artwork is highly context-dependent. Detached from their original context, these artworks only show us a fragment of the past, which cannot be anything else than an interpretation recalled in a particular context, time, and place.

Over time the artwork moves from one context into another. As Alfred Gell emphasizes: “Art objects lead very transactional lives; being ‘made by the artist’ is only the first of these (Gell 1998, 24).” He continues to explain that objects have often multiple receptions, including non-intended ones. In the first case study ‘Mouchette’ (chapter 4) the main focus lay on the Web environment as a social space that has rapidly changed over time. Chapter 5 (‘Brandon’) looked at what happened when the artwork (‘Brandon’) is further developed within different social groups, including online communities, but also institutions like the museum and the university. From the context of production, chapter 6 (‘Agent Ruby’) shifted attention to the reception of the artwork and how the display of the artwork changed over time.

Our aesthetic experience, taste and cultural appreciations changes, as well as the way that we interact with digital artworks. The space in which the artwork is exhibited can give insights in these changes. Set at a distance of its original function, the artwork can be joined by new artworks, there can be the need for a new form of display or it is set within a specific exhibition design. Artworks have always been easily altered and removed, paintings were cut to fit in new places, altarpieces discarded, and statues were moved to new locations. Online artworks are no exceptions. They move from the digital into the physical realm, they are set within new software-based installations or are cut off from the Web where they used to be embedded in.

Barbara Kirshenblatt-Gimblett referred to ethnographic objects in museum exhibitions as 'fragments', as by inserting them in the museum gallery, they are lifted out of the everyday world (Kirshenblatt-Gimblett 1991, 338). They become part of a different environment, the museum, which is not a neutral environment in itself and this causes that new meanings and values are attributed to artefacts. On top of that, curatorial efforts are made to set the artefact within a specific context (for example through an arrangement with other artefacts and by means of labels, exhibition texts and diagrams). This is also the case for online artworks that are exhibited in the museum. In this thesis various curatorial visions have been discussed, of which some disagreed with displaying online artworks in physical venues and instead preferred the display in online galleries. Others do exhibit the online artwork within a (physical) gallery and even actively contribute to find a suitable display for these artworks. However, never were these artworks removed from the live Web, instead they still circulated beyond the walls of the institutions, while at the same time being on view in the gallery.

The online artworks discussed in this thesis, have all become part of museum collections. Museums have been highly critiqued for estranging artworks from their original functionality (Malraux 1967, 14) and that it displays art in a way that the audience can no longer build a vital relationship with them (Adorno 1983, 175). Also, in the case studies in this thesis, it can be argued that their agency changed after becoming part of the museum collection, and although that there are still many questions about how to keep their vitality within these institutions, all of them did keep some aspects of their functionality. Even after these artworks are collected, they can still circulate beyond the walls of the institution and participate within a variety of (online as well as offline) social settings. With the acquisition of digital artworks, the museum is confronted with a new set of concerns. Institutional structures created at earlier times to meet different needs are called into question (Dekker 2018; Rinehart and Ippolito 2014; Graham and Cook 2010). Instead of excluding digital artworks from museum collections, nowadays research projects

aim for finding ways to collect and preserve these artworks so that their lives can continue to unfold also within the museum.¹

Although all the cases play roles in social systems of various kinds, as they are embedded within the World Wide Web, also this context is an important one to understand. Even when the effects of these artworks go well beyond the online realm, their roots stay part of early web cultures, which makes them infused with the associated aesthetics, cultural concepts as well as the social politics of online circulation.² While nowadays, all cases as discussed within this thesis are still embedded the Web, the future of these online artworks is unknown. It could be that over time they end up solely in museum collections (or archives) and *removed* from the Web. Yet even now, we already need to be cautious when we see these artworks appear on our screens to not confuse their current existence on the live web with their historical roots.

Instead it is important to realize the non-permanence of these artworks online existence. Although they are still ‘functioning’ within the Web, this technological environment has rapidly changed, and it will still further evolve; the artwork itself, its form and content has modified and also the earliest interactions with the people who made and engaged with these artworks have long since become invisible. Detached from their original context, these artworks show us only a fragment of this past, which cannot be anything else than an interpretation recalled in a particular context, time, and place. To still be able to trace their origins, as well as understand how these artworks evolved over time, we need to enable kinds of historical analysis based on evidence. Besides oral history, sources can still be found within museums, archives, artist’s studios, as well as digital databases. Although this research made use of mixed methods to restore the artwork’s past, it

¹ An example is ‘Reshaping the Collectible: When Artworks Live in Museums’ (2018, Tate Modern, University of Maastricht).

² As revealed in chapter 4, 5 and 6 these artworks evolve, but they do not transform in completely new artworks. Their roots in early web cultures stay part of their existence. For example, ‘Agent Ruby’ remained a chatter bot related to the developments in artificial intelligence on the Web in the late nineties. Also, the artwork ‘Brandon’ still included a ‘Mooplay’ interface, whose aesthetics and interactions refer back to the text-based MOO as it existed in the 1990s.

was highly depended on web archives. For a critical understanding of early web cultures, these archives were essential repositories.

As the Web is precarious, and the digital dark age a serious threat, the question of what will be preserved can only be answered in the future. Yet already for this research, there were difficulties to get access to historical documents. Especially in the early days of the Web, institutions (museums, libraries and archives) did not always have clear policies for managing and preserving born-digital records. As a result, among others none of the early online galleries where the cases were exhibited (or documentation of online exhibitions) were still (publicly) accessible within the museum's archives. But even if digital-born documents are still there, another problem is that it is not always possible to retrieve and access archived content. This can be a result of technological problems (e.g. how to open certain files), the absence of a search system that help in finding relevant documents, but also privacy issues played a role (for those reasons emails were not always publicly accessible for research purposes).

Web-based materials ask for a pro-active preservation. But what this research revealed is that there are various (sometimes even opposing) ideas about what institutions decided to collect. This is not referring to the quantity of artworks that is collected, but also on a more micro-scale, what is considered to be part of the online artwork. As evolving networks, these artworks cause many challenges for defining their boundaries. For example, how to decide when the artwork starts or ends? As these artworks develop into various versions, it is sometimes unclear if a Prototype (or version) was already part of the artwork or belongs to a previous work (or is it a sketch, not part of the work at all). And can an artwork still further evolve after it is collected? Is the role of the museum to preserve the past, or can it also support keeping culture going? Secondly, authorship can cause problems in this regard. Often, the artist allowed individuals, institutions, and the public at large to contribute to it. Are all these contributions perceived as part of the artwork? Online artworks can generate a wide range of documentation, residues and objects, also beyond the online realm. For the cases in this research it was striking that precisely offline events were often not considered part of the acquisition. Thirdly,

there is the understanding of the digital object itself. In the past, museums have tried to acquire a website on a diskette or CD-ROM. Only later did they become aware that these artworks are stored on a server. Yet still, it is not always clear which datasets are actually part of an artwork or how to make this data publicly accessible. The answers to these kinds of questions are essential, as it determines what is (and what is not) considered to be part of the work and consequently collected and preserved.

What all the cases revealed is how difficult it is to distinguish the online artwork from its social life. In principle this problem is not new. After being acquired by museums, artefacts are taken out of their social networks. Dislocated and detached, they show only a fragment of their origins. Museums can support regaining (some sort of) access to the social lives of these artefacts through related materials (photographs, videos, written accounts, and so on). Also, in case of online artworks, building context by adding archival materials to collections is very important to create understanding for future users. However, these artworks set out to question the boundary between an artwork and its documentation. The decision to acquire an online artwork is only the first, after which many further selections are made. Instead of running into an uncertain domain, examining their social lives is extremely useful, possibly essential. Already now it takes effort to reconstruct the social lives of these relatively ‘recent’ online artworks, as digital data changes radically or even disappear altogether. What eventually remains, will influence our understanding of Web cultures, now and in the future.

Where it is also advised to proceed with caution is that for online artworks there is very limited provenance data available (or made accessible). This has also been briefly mentioned in chapter 3 ‘Methodology and Method’ (section 3.2.2). Something that would require future research is how to gather and make accessible this data, which is essential for critically evaluating the reliability of these sources. Normally, researching the provenance of artworks included an object study, going through resources about the artist (including looking at catalogues raisonnés and exhibition catalogues), collectors, dealers and auction results. Not all of this is available, and sometimes not even applicable for online artworks. On the other

hand, it would be valuable when new provenance data can become accessible, as for example it is important when referencing online content to know precisely which version of the website is used; actions and modifications on data can be traceable. There are studies about the provenance for digital objects, among others the DigiProvMD (Digital Provenance Meta Data) Extension Schema by the Library of Congress that documents the digital production process (mainly useful for digitized objects), and the PROV Data Model (PROV-DM) that facilitates the “*interoperable interchange of provenance information in heterogeneous environments such as the Web* (Library of Congress 2003; Moreau and Missier 2013).” Especially this last model could be relevant for online artworks, as it describes entities (which can be physical, digital or any other type of thing), activities (consuming, processing, transforming, modifying, and so on), agents (specified by their responsibilities) and finally it records some extended structures (subtypes, identifications or expanded relations). At the moment, further investigations about how this model can be useful for cultural heritage institutions are still on-going (Sandusky 2016).

As a last remark, this research of artworks in the Web deliberately analysed some of their earliest forms. The fact that the preservation of digital-born content of the past is a challenge at the moment and for the years to come, was an important motivation for researching these artworks now. On the other hand, these artistic works are still part of lively debates, which makes historicizing the contemporary such a difficult task. This research attempts to be an addition to existing studies in Internet art, as well as that it aims to be the start for further dialogues. At the moment, it is difficult to already know if these artworks will be accepted within art history and only a few of these artworks can be found in museum collections. The intention of this research is not to justify these artworks (evaluation is rather part of the function of the art critic), this research aimed at reconstructing their social lives. Investigating these cultural artefacts and activities seems relevant at the moment, especially as an addition towards the wider research of Web cultures. Twenty years after the origin of these artworks, the World Wide Web is still very much alive and has become an essential part of the world we are living in. To understand contemporaneity, it is almost impossible to not address its consequences.

8.4 Future Work

Although artefacts can never tell the full story, digital artefacts could give historians access to data that can recover processes and reveal patterns that were invisible before. With the rise of the digital, new historical analytical methods came into being. New ways of giving access to material in web archives are launched through data mining and computational tools and methods. Although the analysis of an online artwork is on a much smaller scale than researching clusters of websites or digitized collections, these tools and methodologies can also be very helpful on a more micro scale, for example to recognize patterns in the data sets of chat logs, compare the density of links over time or visualize the changing size and shape of online artworks. These historical methods are not yet explored within this research project, but it could give new (and possibly more precise) insights that could be further explored.

All the case studies in this research project were actively preserved, but still it was not always easy to get access to the datasets of these artworks. In case of digital art and artefacts, an important focus in preservation projects is on the interface. Although the visual appearance is an important element of the artwork, the artwork also includes a database in which it is possible to find for example a version history and chatlogs. The version history gives a detailed overview of how the artwork changed over time. The chatlogs give insights in how humans interacted with the artwork, also over a longer period in time. Remarkable about digital artworks is that this information can be stored continuously, and this results in an ever-growing data set. What can be further explored is the new methodological problems that the study of these databases gives.

Digital tools would make it possible to retrieve information that can be found in these datasets. An example is the database browser, that is part of the artwork ‘Mouchette’, and developed under initiative of artist Martine Neddham. This digital tool offers the possibility to search audience responses on date and key word. Except text mining, also statistical information could give valuable insights. There are still opportunities to further develop API’s that can give historians better

insights in how people behave while visiting an online artwork, which could give better insights in its reception. Besides the developments of tools, there is also a need for developing visualizations of evidence and results. This study did not make use of tools like Gephi (for network analysis) or GIS (to analyse spatial and geographic data). This could give new and possibly more precise outcomes.

Another question left open is, if it would be possible for researchers to study the datasets of a cluster of online artworks. Are museums able to give access to not only the artworks within their own art collection, but to a digital art collection in a wider geographical location (for example a European collection, or maybe even a global collection)? When these artworks will be studied through computational tools, for example text mining or statistical analysis, it is possible to research on a larger scale, and this could give the opportunity to answer more complex questions. For example, how did Internet art rise over time? When were the first artistic websites made and where there more websites developed over time? Is it possible to map the global impact of Internet art? Where does the audience of Internet art come from? And which geographical locations were in particular important for the further development of Internet art?

In sum, digital humanities research offers the possibility to search through large-scale digital datasets, by using computing to conduct analysis. The development of tools would be very helpful for a more precise study of Internet art. Making these new sources of information available for researchers, could open up new areas of research that could give new insights in not only Internet art, but it could also inform new methodological approaches for the study of Web cultures in general.

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A note on the format of Web citations

Although that the MLA confirms that there is no established format for archived URL's yet, they do give a recommendation (Internet Archive n.d.).¹ This study follows their advice, as illustrated in the following example:

Neddham, M. "Mouchette" [online]. 23 February 1997.
<http://www.xs4all.nl/~mouche>. *Internet Archive*
<http://web.archive.org/web/19970223031627/http://www.xs4all.nl/~mouche>. Accessed 23 January 2018.

After the title, it includes the fact that this is an online source, followed by a date, which refers to when the web page was captured in the Web archive. In this particular example, the web page 'Mouchette' came online in October 1996, but the first snapshot stored in the Internet archive dates from 23 February 1997. As this snapshot has been studied, the date 23 February 1997 is mentioned. After the date the original URL is mentioned. As an addition, it includes the Web archive where the source was found (in this case the Internet Archive) followed by the archived URL and it concludes with the date when the archived URL was consulted.

¹ The Modern Language Association of America (MLA) is the principal professional association in the United States for scholars of language and literature.

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