Masteroppgave

Liminal Machines

Cyborg Identity in Digital Literature

Cassandra Ophelia Norheim

Allmenn litteraturvitenskap

60 studiepoeng

Institutt for litteratur, områdestudier og europeiske språk

Humanistisk fakultet

Abstract

In this thesis, I analyze a selection of works of hypertext fiction, created in various software, published through different avenues, and under different labels, published between 1995 and 2015. A common theme among the chosen works is the matter of queer identity. The goal is to investigate the overall structure and literary qualities unique to digital interactive works, and to apply this towards understanding in what ways this can inform the subject matter of such works.

Interactivity is the core feature of digital media. A computer is capable of responding to human interaction instantaneously and directly, opening possibilities for forms of media that in a pre-digital age were only possible through much more significant effort on the part of the reader. By building texts that provide the reader with direct influence, new stories can be told, which are open to multiplicity, self-contradiction, and unsettled identities.

Through my thesis, I work towards a theoretical framework that combines prior writing on cybertext with object-oriented ontology and rhizome theory. This theoretical framework is developed through an ongoing conversation with and analysis of the chosen works of hypertext fiction. I find that there is a potential for expressing complex personal identities and changing selves in this form of literature that naturally opens itself to writing about these topics. There is an ongoing conversation in these works between their content and their form, with each providing structure and potential for expression to the other.

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Introduction

Imagine yourself on a trip to cyberspace. What does this cyberspace look like? One early vision of a digital world is found in the 1982 film *Tron*. In the film, a computer programmer is sent into cyberspace, wherein software is personified as human entities. The film makes use of early computer-generated imagery, showing a vision of cyberspace as a near-endless expanse of glowing, neon lines and polygons suspended in an otherwise featureless void. The surfaces of this realm are smooth, flat, and largely featureless, and their boundaries are marked by neon lights and grids. Everything here is rendered with as few polygons as possible, producing a sense of unreality and simplicity even greater than if you were to be suspended in a world of plastic toys and dollhouses. Texture is nearly nonexistent.

Or maybe you would end up in the world of *The Matrix* from 1999. Here, cyberspace is imagined as something much more sophisticated. Science fiction has graduated from imagining simple polygons suspended in a digital grid to imagining a perfect simulation of reality, so believable that even those within the simulation do not know they are trapped in it. The streets and buildings appear exactly like real ones, and discrepancies only begin to show once one has awakened to the truth of the world they are in.

Or, perhaps you would find yourself wearing a virtual reality headset, moving around in Meta Platforms' virtual world Facebook Metaverse. Here, you find yourself immersed (literally) in a world of clean, sharp lines and clear, bright colors. It resembles a cartoon, and each person within this virtual space is represented by a human cartoon character customizable to resemble (or not resemble) oneself. Notably, the humans in this simulation lack legs, and they move by aiming at the ground and teleporting forward. The limitations of equipment that requires the participant to remain mostly still has forced certain restrictions on the translation of motion from physical into virtual space.

For me, cyberspace is a familiar place and it looks like many things. First of all, it looks like the software Steam, a video game storefront, library, and launcher collecting all your video games in one place. Steam tells me I own 122 games on the platform, and it tells me that I have 4010 hours logged in my most played game (Bungie's multiplayer game *Destiny 2*). Steam also tells me I have unlocked five out of seventy-two possible achievements (trophies a player can display on their profile page) for the game *Choice of Robots*.

Choice of Robots is a curious little oddity to find in the pages upon pages of video games listed on Steam's storefront, because in many ways it is not a video game at all. In fact, there is no "video" to the game. *Choice of Robots* is a so-called text game, in the "choose your

own adventure" genre. In practice, these take the form of text, presented to the reader in a plain format reminiscent of an e-book, but which ask the reader to take on the role of the protagonist and resolve their choices by picking from a list of options at regular intervals. Each time a choice is made, the text continues by branching off into a new direction depending on the choice made. These texts can have a massive number of potential routes, as each new choice can introduce a new direction for the narrative. I grew up playing these games, and they have always been central to my understanding of literature.

With this, I want to study more closely a selection of interactive digital works. The genre, or rather, medium, has always been of special interest to me, as someone who engages regularly and to great extent with digital media and video games in particular. I have an interest in the potential that exists here through interactivity and choice-based reading to express things that would not be possible to convey the same way through traditional literature. I am also fascinated by the digital evolution that takes place around us. It would be extreme to say that all theory must be revised to account for our new digital reality, but I believe there are aspects of this world that reveal failings, or rather new potentials in our existing theoretical frameworks across all of academia. It's not long ago that such a reality we live in today was unimaginable, and new unimaginables emerge all the time. Understanding cyberspace is necessary if we want to keep up, and I think comparative literature as a field has much to gain from expanding into the liminal spaces where literature brushes up against and blurs into other forms.

My approach to the selection of literary works is two-pronged. The first half of my approach is to study the interactive digital form structurally, to examine its potential and abilities. I believe every medium has its own distinct abilities, and I am curious what the abilities of digital interactive literature are. To find this, I must build a robust theory of literature capable of unproblematically encompassing these works as well as traditional literary works, and through this put them in conversation with the existing base of literary theory. Luckily, while digital literary studies are still somewhat niche, and appear on few curriculums, there is also a solid collection of academic work in existence which deals with relevant subjects for my work here. Early theorists, like Stuart Moulthrop (who also is a writer of digital literature), N. Katherine Hayles, and Janet H. Murray established foundations upon which the field of electronic literature was able to grow. Several compendiums of electronic literary theory have been published, such as *The Bloomsbury Handbook of Electronic Literature*, which I myself have found useful. The most significant contribution to the field for the purposes of my engagement with it here comes in the form of Espen Aarseth's

Cybertext: Perspectives on Ergodic Literature wherein he creates some important foundational structures for the understanding of what he terms ergodic literature, that is, literature that requires more than "trivial work" to traverse. Aarseth's contribution is important in that it starts to bridge the gap between digital and non-digital media, being applicable to a variety of texts both print and digital.

The second part of my approach has to do with the shared subject matter of my selected works. They have in common the fact that they deal with matters of queer identity. This may seem an arbitrary selection criterion on my part, but I am in fact interested in the relationship between interactive literature and narratives of shifting, particularly queer, identity. Since I believe every medium has its own abilities, I also believe that certain subject matters have an affinity for certain mediums, and this is something I perceive as such a case. Through the course of my analysis, I hope to come to a point where I am able to unite these two perspectives on the selected works such that each sheds light on the other.

My four primary works of literature are Shelley Jackson's *Patchwork Girl*, Porpentine Charity Heartscape's *With Those We Love Alive*, Caitlin Fisher's *These Waves of Girls*, and Aevee Bee's *We Know the Devil*. One major complication for my work with these texts is the relative dearth of prior analytical work done on them. *Patchwork Girl* has gained a fair amount of recognition within the albeit narrow field of electronic literature, and prior writing on the work exists, and the same is true for *These Waves of Girls*, but both of the remaining works exist entirely outside the scope and recognition of academic studies, for now. This means I am at the outset equipped with much less writing to reference when it comes to my interpretation, and I must to a greater extent lean on broader theory and on my own analytical ability. This also means my literature list will end up somewhat short.

On this journey into cyberspace, my goal is to develop a theory of interactive literature that retroactively brings traditional print literature into conversation with them. I want to find out what makes them different, but more than that, I want to find out what makes them the same, and if we can gain any insights into print literature from engaging with digital literature. Can our reading of *Hamlet* be enriched by reading *Choice of Robots*? Ultimately, I want to take the insights I gain through this process and apply them to my chosen works and bring this understanding into conversation with the subject matter of queer identity. In the end, I hope to answer for myself, and hopefully for others as well, whether there is a special relationship between the form of these texts and their subject matter.

In narrowing down the field, the questions I ask, and the material for my study, I have first and foremost chosen works that I know and which speak to me. Honesty does not look

bad, and it is fully honest to admit that I have chosen works that in some way caused a strong emotional reaction in me. For this reason, the selected literature, these four primary works, are also works that I find myself in some way relating to. In a sense, this could be dangerous. If I relate too strongly, I run the risk of being blind to the text itself, reading my own projection instead of what is actually there. At the same time, this is a strong motivating factor, something that drives me to continue to study and try to understand. In a sense, I am also seeking to understand myself.

The subject matter is of particular importance. Dealing with queer, especially trans, identity throughout, I am specifically trying to find out what unique potential, if any, exists in the digital interactive form for exploring matters of changing identity and identity that exists in opposition to an established norm. This is the nucleus of my study, the recurring question of what this specific form can do with this specific subject. I have no illusions of definitively answering this question once and for all, but I hope that by using a selection of works from diverse origins, created in different software, published through different avenues, I can point to some meaningful overarching commonalities. And maybe, in drawing these lines, I'll be able to glimpse the outline of an answer and share this silhouette with you.

In the first chapter, I am going to engage directly with *Patchwork Girl* as it is the most analyzed and canonized of my chosen works. Here, I hope to use *Patchwork Girl* as a filter, as a testing grounds for theoretical propositions. This is where I develop the basics of my theory of digital literature. To do so, I will first set some basic premises for how I work with digital interactive literature, and define the terms and limits of the study. In many areas, I am left to choose between a wide variety of terminologies, and it becomes necessary to decide on what I am saying when I use each term. I hope to be able to use a relatively consistent terminology for the texts I work with and their features. I will use Espen Aarseth's *Cybertext* as it is an unavoidable work in the field and provides an excellent structuring framework for understanding the reading of ergodic texts, a definition which my chosen literature all falls under. Further, it has become necessary to utilize writing on philosophy in order to construct a more thorough understanding of the reading process itself. Normally, this might not be necessary, but the digital and interactive literature draws special attention to the very act of reading in such a way that we are forced to pay attention to it, at the same time as complex computer technologies obscure and make inaccessible many of the physical facts of the reading. To achieve this, I am engaging with writing on object-oriented ontology, which provides a particularly promising framework for the following discussion.

From there, my path will be delving into *Patchwork Girl* specifically, looking at its structure, its narrative, and its main subject through analysis and close reading of select parts of the work. Along the way, I will introduce Haraway's cyborg as well as relevant theory to connect it to Jackson's monster. This is also where I hope to broach the subject of transfeminism as a concept that can be related to the monster and the cyborg in a productive way, in order to foreshadow the themes of queer and especially trans identity that are the focus of much of my engagement with the selected literature.

In my second chapter, I will examine interactive literature through narratology. Here, I hope to gain a deeper understanding of how time is structured differently in such texts than in the linear print text. I will use this discussion of narratology to perform a comparative analysis of *These Waves of Girls* and *With Those We Love Alive*. The discussion in this chapter opens with the pressing matter of where the distinction runs between games and literature. For the most part, we are able to separate the two; no one would be in any doubt of where to sort, say, *Space Invaders* versus *The Lord of the Rings*, but in other cases, the distinction can be harder to draw. It gets even more complicated when two out of my four literary works are published under the label of games. I outline some perspectives on games, and attempt to find a definition that is useful to me, primarily to show how I can treat these things that tell me they are games as also literature.

Here is also where I introduce the remaining literary works in short terms, something that will be necessary, seeing as I work with relatively unknown material. Having presented these, the next order of business will be to construct a useful narratology that can be applied to interactive fiction. I will ground my work in Genette's foundational writing and expand to bring in writing on digital narratology specifically, while attempting to find an angle useful for my analysis in particular. What interests me here is the matter of time, how a text can manipulate order and duration between the different narrative layers, and what new potentials for working with time emerge when interactivity takes the center stage.

In my third chapter, I will study the matter of change. Change can mean many things, and it is precisely this multitude of meanings I want to engage with as I look closer at how change manifests both structurally and narratively in *With Those We Love Alive* and *We Know the Devil*. The special feature of interactively written texts, but also video games, is the ability for a reader or player to change what is happening on the screen. The player's desire is translated through a controller into actions in the digital space, and the player character, their avatar in cyberspace, defeats an enemy, or they run to hide behind a pillar, or they jump off a cliff to certain death and a "game over" screen. All of these are changes caused by the

interaction with a piece that is constructed so that it can be very explicitly, visibly changed by the player.

The majority of this chapter will be dedicated to the analysis of *With Those We Love Alive* and *We Know the Devil* with special attention to the transformations that take place within their stories. It is my hope that in doing so, I will be able to return to the structural level and the reading situation with material for a deeper understanding of how change manifests on this level as well. In other words, I want to show how, or if, these works use narratives about change to reflect a changeable text structure, and vice versa. Another subject that interests me and comes into the discussion here in the third chapter is that of the body and its role in reading. By focusing on bodily transformations within the texts, I hope to also be able to elucidate on the role and function of the body as part of a reading system.

Finally, in the fourth chapter, I want to return to the theoretical foundations I established in my first chapter, to see what has changed, what has deepened. Here, I also hope to be able to unify the two prongs of my attack, by asking some questions about the structural qualities of interactive literature, and how these can be applied to an understanding of identity. I will ask many questions here and hopefully answer some. The matter of essence and identity concerns me in particular, and this chapter is dedicated to navigating this. What really is identity, and how can we understand the identity of a work that changes as it is read and exists as multiple contradictory things when it is not? How can we understand the identity of characters that change to respond to what the reader does to the text? Is there any way to account for such slippery figures? Coming a little bit closer to the answers to these questions will be the goal of the fourth chapter. I will return to Timothy Morton and object-oriented ontology, and bring Deleuze and Guattari's rhizome into the discussion, using them as entry points for examining more closely the visions of identity presented by *We Know the Devil* and *These Waves of Girls*. This feels like a sort of culmination to the work I'll do throughout the text, and fittingly so for a final chapter. If I am able to do what I want to, this chapter will attempt to trace a path through my previous discussions and arrive, if not at a definitive conclusion, then at least at some slightly increased understanding.

There is little more to say. I have held off long enough on the real work. So put on your virtual reality headset, boot into the Matrix, or just scroll down to the next page. That too is a way to interact with cyberspace, after all.

I. Of Cyborgs, Patchwork Girls, and Reading-Machines

What is it that fundamentally separates hypertext fiction from traditional print literature? What can it do? What possibilities exist in this field that could not exist outside of it? These questions seem to be the first things that come up, both in my mind as I sit down to write about hypertext fiction, and said to me by those I attempt to explain my field of study to. The answer, which I will of course go into in further detail later on, is that there is no fundamental difference, and that hypertext fiction can do much the same as what print literature can. This answer has the unintended effect of leaving a lot of people dissatisfied. If it is the same, they ask, then why study it specifically? Because there are *invitations* within this format, ways in which it invites writers and readers to do things differently and reflect differently. The hypertext format reveals potentials for literature that were always there, but which could only be brought to the surface with the advent of interactive, digital technology.

In this first chapter I will answer some possible questions but hopefully raise many more. It's necessary to define the type of literature that I am going to deal with, beyond the basics of its shape and outward appearance. To this end, this chapter will primarily deal with Shelley Jackson's *Patchwork Girl*, a landmark work in the field of hypertext fiction. In addition, I will make attempts to contextualize both *Patchwork Girl* and the hypertext fiction format more generally with theory that can create an ontology for understanding these texts. I'm not satisfied with a theory or methodology of literature that leaves out any part (real or potential) of the literary field, and therefore I will not be attempting to define a theory of hypertext fiction, or "interactive literature" specifically. Rather, I will show how we can understand this form of literature as something that doesn't essentially differ from traditional print literature.

In order to do this, I will apply concepts from Espen Aarseth's foundational work *Cybertext*, which does great work to define and outline what digital literature is and can be, and how it has been foreshadowed throughout the history of the written word. I will also apply object-oriented ontology, with a basis in Timothy Morton's *Realist Magic* as well as Graham Harman's *Object-Oriented Ontology*. Much like how the proponents of object-oriented ontology proclaim it a "theory of everything," I wish here to create a theory of all literature. Ambitious, perhaps. Impossible, for certain. But it's still something I must do, or attempt to do, because the literature I intend to examine is one that so frequently falls outside of the presumed range of "literature" or ends up in a liminal zone where it can't be said to be

either one thing or the other. It's my goal to firmly and definitively place the worlds of digital literature, interactive literature, hypertext fiction, and cybertext within the realm of literature.

Joining me in ambitions of universal applicability is Donna Haraway's "A Manifesto for Cyborgs". The cyborg as a figure and as a frame of mind is an attempt to do away with competing essentialisms and instead unify otherwise separate causes through the idea of affinity. In a sense, as the cyborg's potential is to break down separations between dualities of nature and technology, the task of this chapter will be to break down the separation between print literature and digital literature. Or rather: between print-first literature and digital-only literature. In this age, reading *Hamlet* on a Kindle tablet is far from an unlikely prospect, and many books following the traditional print format are published in digital form first. Independent online publishing platforms have made it possible for writers to entirely avoid the complications of physical print and beam their writing to screens all over the world with a single button press. Print-first literature is that which, though it may not literally always be printed before its digital appearance, follows the standards of being *printable*. A work of print-first literature, even if it only exists as a document on a website, could be printed and read without any more complication than if you decided to read it on your Kindle instead. By digital-only literature, I mean then to refer to that literature which cannot be printed, because some important mechanism of its presentation would be lost in doing so. Printing a work of digital-only literature would require serious adaptation, and even then, reading it would involve additional work on part of the reader, which would not exist in its digital form. This is the boundary that terms like "hypertext fiction," which I reluctantly employ (if only because I'm in need of terminology), uphold. This is a boundary between print and digital, a boundary between literature and game, a boundary between art and entertainment. And it must fall.

Objects in Cybertext

First, we must understand cybertext and its connection to this analysis. The principal difference between cybertext and those texts that for lack of a better term are "non-cyber" is that of machine-ness. The source of this particular neologism, Espen Aarseth, describes cybertext as a kind of text that is "a machine for the production of a variety of expression" (Aarseth 1997, 3). This is, as he makes clear, not to be confused with texts that are ambiguous, nonlinear, or otherwise disrupt the flows of time, meaning, and narrative. These are familiar features of literature, but by no means cybertextual. The cybertext, as it is derived from the term cybernetics, is all about the feedback process. A cybernetic system works by

the mechanism of circular causality, by which an action is performed by the system, which then in turn detects the outcome of the action and uses this as input for future action.

The cybertext then, is the text that performs these same cybernetic operations. Understood as such, a cybertext functions through a principle of interactivity. It requires what Aarseth describes as "non-trivial work" to parse. One example can be a text with two separate endings, with both printed such that the reader is able to choose which one to read. Another example would be a video game wherein text appears in response to player actions. The most obvious example, and the one my analysis revolves around, is that of hypertext fiction.

What we can tell from this is that cybertext as a descriptor is not about the content of the text, but rather about its mechanisms, structure, and organization. However, and I must wonder if Aarseth himself ever intended to clarify this seeming discrepancy in his use of the term cybertext, the concept is later elaborated on as a framework which can be applied to any suitable text rather than a type of text itself. "Cybertext is a *perspective* on all forms of textuality, a way to expand the scope of literary studies to include phenomena that today are perceived as outside of, or marginalized by, the field of literature" (Aarseth 1997, 18). Perhaps we should understand Aarseth here to be saying that introducing the concept of cybertext, as a label for these particular texts, and as a perspective we can apply to them, would expand the scope of literary scholarship. It would certainly be the kind reading. But I think it would be more useful to throw out that entire initial concept of *a* cybertext in favor of *the* cybertext, the conceptual framework, not the type of text.

This is not necessarily to argue that Aarseth is wrong in identifying that there are some types of texts that function like cybernetic systems, but rather that it's less useful to label them and more useful to expand our methodology so that literature is capable of accounting for the particularities of such variety-machines. Aarseth's sharpest insight comes in the identification of the text-machine as consisting of a trinity of objects. "Just as a film is useless without a projector and a screen, so a text must consist of a material medium as well as a collection of words. The machine, of course, is not complete without a third party, the (human) operator, and it is within this triad that the text takes place" (Aarseth 1997, 21). The three parts of the text: a medium, a collection of words, and an operator. The text takes place, rather than being something that already exists. It is taking place thanks to the objects that make up the machine which produces it. However, I am going to change Aarseth's labels somewhat. What he terms "text" I instead term "a reading" for reasons that hopefully will become clear later. The trinity, I am going to refer to as the medium, the text itself, and the reader. While Aarseth's terms make perfect sense within the context of his machine metaphor, and the term "operator"

underlines the cybernetic nature of the systems he refers to, I am placing myself closer to other literary theory in referring instead to a reading, and to the text itself and a reader, all concepts which are more familiar and more widely understood than that of the operator.

At this point, it's necessary to elaborate a little on object-oriented ontology (OOO) and why it matters to cybertext. Within this school of thought, the *object* is understood more broadly than within many others, and it is such I am using the term object here as well. "An object is anything that cannot be entirely reduced either to the components of which it is made or to the effects that it has on other things" (Harman 2018, 43). It will not be the task of this chapter to fully explain OOO, for that would be a task way beyond its scope. Suffice to say, OOO is concerned with what Kant termed the thing-in-itself, *Ding an sich*. The thing is not known itself, but rather, it is known through its appearances, which are perceptible to us even as the thing itself is not.

As an ontological framework, OOO is about everything, a theory of everything, that attempts to speak as broadly as possible. For this reason, it does not begin with some supposition of fundamental difference between different things. Through object-orientation, it discards the idea that distinctions like mind-body and object-idea should stand at the base of any ontology.

Now, directing attention back to Aarseth's cybertextual triad – the text, the reader, the medium – I hope to explain how OOO contributes to the functional value of this framework, and in fact transforms it into a potent tool for the analysis of literary works capable of bridging the gap between "traditional" literary theory and interactive, hypertextual forms of literature. Viewing this triad specifically as three *objects* operating together, or rather, in the *aesthetic dimension*, we can shift our perspective on the idea of reading. Presuming, as OOO does, that every object within this system cannot be reduced, neither to its components nor to its function, means consequently that there is no primary object, no hierarchy of functions or unipolar extraction of value. Without a primary object acting upon other objects, but rather a system of objects that come together to act upon each other and produce what I've chosen to term the "reading," the "reader" is no longer in a unique position. In fact, the term "reader" may even seem somewhat misleading, though I will continue to use it for the sake of convention. An alternative term could just be "human" though the idea of a non-human reader is not entirely unimaginable, at least in the eternity of time. I could borrow a somewhat poetic phrasing from Shelley Jackson speaking on what a book is. "We read with our body. With our eyes, ears, brain, with minute sympathetic responses in our vocal and aural apparatus and throughout our nervous system, and with our hands: unscrolling scrolls, turning pages,

clicking buttons, swiping screens." (Jackson 2018, 15). As such, I could term the object "body".

Any whichever way you choose to label it, there is a reader for sure, and the network would be entirely incomplete without it, but the reader does not benefit from any sort of primacy over the other objects within Aarseth's machine. The reading produced is experienced from the perspective of the human reader, but it's equally dependent on the contributions, the acts, of the text and the medium.

The observable qualities of any object are merely aesthetic qualities. By observable, I must specify that I mean anything that can possibly be sensed, inferred, calculated, understood through some means or other. The observable qualities of any object are aesthetic because the object itself is entirely inaccessible, and consequently anything that can be observed "floats in front of" the actual object as a dimension of aesthetics (Morton 2013, 19). This means that the reading is an interaction of aesthetics, a display of causality. The reading is being *caused* by the objects involved, it's the *effect* of a particular set of objects acting on each other in a triangle.

Indeed, the concept of causality within OOO is essential for the understanding of any work that is explicitly interactive. To some extent, I would argue that every single work of art that has ever been created, is interactive in the sense that it can be interacted with. You can cross out lines in a book or you can inappropriately fondle a bronze statue or you can steal the Mona Lisa. All of these things are interactions with a work. The difference between this inherent interactivity that is part of everything we perceive and the interactivity of the "interactive literature" is that the latter is built with interactivity as its default mode of experience.

Perhaps this distinction is somewhat artificial, and I myself regret having to define it. There's a reason my method involves creating an analytical and ontological framework that applies very broadly rather than one specific to hypertext fiction. That reason is that the more we convince ourselves that this interactive literature has unique features that cannot be reconciled with "traditional" literature, the more we lose sight of the actual qualities of the work at hand and how they relate to the tradition as a whole. The problem in studying interactive literature and hypertext fiction is not that the format itself is too different from the literature we are used to reading in traditional books, it's that past theoretical approaches to literature didn't foresee these digital forms. The task here is therefore not to create a new theory of literature, but to open up what already exists.

This all said, interactivity as the primary mode of engagement can be described as a commonly shared feature among these works. It's not the essence, but it's a very commonly shared feature, and I define the distinction because in every work I will deal with, interactivity is the primary way in which the work conveys its themes and stories.

Writing on the aesthetic nature of causality in OOO, using the example of a frog's croak being recorded on an MP3 device, Timothy Morton says: "Each packet of air molecules translates the wave from itself to the next packet: trans-late means "carry across," which is also what *meta-phor* means." (Morton 2013, 112). Using the model of translation, we can say that the role of each object in the text-medium-reader triad is to translate. The medium receives instructions from the text itself, which as in any digital format, includes not just literary text, but also code which determines such varied things as text color, font choice, animation, which words can be clicked through or hovered over with the cursor to reveal new text fragments, when and how and how loud background music will play, and so on and so on. All this information is translated by the medium, which in this case is often a computer, into something that can be parsed and experienced by the reader. The same relationship exists between the text itself of a novel and the physical medium of the book, but the book's ability to translate the text itself into something readable comes through its physicality where the computer's equivalent ability comes from its intricate network of chips and boards that have been imprinted with the ability to comprehend code. Next, the reader reads and translates this into a reading, an experience of the text. Finally, the text translates the reading through the reader's reaction to it. It's hardly a controversial statement at this point that a text responds to its reading by opening itself to what the reader seeks in it, even if it's somewhat subtle. In an interactive work though, an explicitly interactive work, this relationship is strengthened and the text is allowed to respond in much more direct ways, even changing what information it conveys to the medium as it translates the reader's reading. In hypertext fiction, reading means acting, reading means choosing, and any given reading will contain within it the choices made during the process.

So when I say that interactivity is the primary mode of engagement for these works, what I am actually saying is that these are works whose causal – therefore, aesthetic – dimensions are the primary subject of the work itself. Again, perhaps a platitude, one could easily claim that every work reveals something about its medium, and I would certainly not be one to argue. The digital medium allows for a form of sudden change that physical mediums can only approximate with great difficulty. It is not however impossible, as demonstrated both by Aarseth's use of the *I Ching* as an example, and by the abundance of gamebooks that were

made during the 1970s and 1980s. The computer is in this sense not really capable of anything that was impossible before, but it is capable of performing these same operations with a fluidity and speed that cannot be matched. So what this digital-only literature expresses then is a fluidity and ease of change. These texts change willingly because the medium they are created for is one that is defined by being able to process change and response efficiently. If the computer reveals the workings of causality, then the hypertext work is about this causality that has been brought to the surface when previously it was in a sort of hiding. And ultimately, hypertext fiction highlights qualities of literature in general.

With these definitions in place, it's necessary to ask the question of change. If none of the objects are able to access any other objects, then what potential is there for change? And what should the word change even mean in an object-oriented cybertext analysis? "Every object is a marvelous archeological record of everything that ever happened to it. This is not to say that the object is only everything that ever happened to it—an inscribable surface such as a hard drive or a piece of paper is precisely *not* the information it records" (Morton 2013, 112). The object itself is withdrawn, but through the process of translating information from one aesthetic form into another, as is the function of causality, it becomes inscribed with what has happened to it. When I later talk about change, it is this process of translation I am talking about. Translation does not just leave its mark on the information changing forms, but on the thing doing the translation as well. As the medium, the reader, the text, all participate in this cycle of translation and reinscription, each becomes inscribed in turn. The texts that I focus on, the interactive digital literature of hypertext fiction, contain within them *invitations to change*. This will be further elaborated on at a later point, but for now, it should suffice to say that the invitation to change is when the text asks you to make a choice that would change the course of the reading, as well as your own role as the reader. It employs the ambiguity of the verb change as to whether it points at the actor or at something else. Are you being invited to change yourself or to cause change to happen in another object? And as I hope I have shown, that is precisely the point, that because the reader is locked in this translating-machine, the two are the same.

As a final note for this part, I want to point to the terminology of reading and playing. Aarseth uses both of these terms, somewhat interchangeably when it comes to game-texts and interactive literature, but seems to opt for "playing" when talking about the act of engaging with such a text. While there is certainly value to this term, especially when thinking of the text as a game-world rather than as a story or a narrative, I will be using "reading" exclusively in my analyses. This is because I want to connect myself to the literary tradition, and because

I believe that there is no significant, essential difference between reading a traditional novel versus reading a work of hypertext fiction. The emphasis on choice and interactivity is there, but it is merely a shifting of focus from the traditional book, which still contains within it these same qualities, just more hidden.

Patchwork Girl

Next, I will direct my attention to the work *Patchwork Girl*. This work is of particular interest because it is an older work that deals with themes relevant to my further analysis, and understanding especially the application of Haraway's cyborg to the analysis of *Patchwork Girl* is important groundwork. I will go through the key points about the work itself, its format and publication, including its roots in gothic horror as a retelling of the Frankenstein story. Further, I will show how the work uses a nonlinear (understood on Aarseth's terms as a text that truly has no single "line" to follow through and not in the traditional sense of employing nonlinear time within a text that is itself fully linear) structure to elaborate (structurally) on a theme of multifaceted identity. I'll be using Heather Latimer's analysis of *Patchwork Girl*, as well as my own reading of Haraway's "A Manifesto for Cyborgs". The goal here is to show through analysis and review of writing on the text, how the potential for expression (or rather, what the medium can *do* in conjunction with the text) is different than for non-interactive literature. I want to elaborate a little on what this means especially for themes of time and identity in such a text.

Shelley Jackson's *Patchwork Girl* is a defining work of hypertext fiction. The text, built/written in the hypertext interface Storyspace, is a multimodal work incorporating fragments of Mary Shelley's *Frankenstein*, the Storyspace user manual, and L. Frank Baum's *The Patchwork Girl of Oz*, alongside original text. It's a transformative work in the sense that it transforms preexisting works through interconnecting them and adding to them with new writing.

The first thing the reader of *Patchwork Girl* is met with is a title screen, showing a header followed by a list of what seems like chapter headings, an index of sorts. Each of these index entries can be clicked through as a link. In a sense, this is not unlike an index of any book, which does give the reader the choice to skip forward to any given entry even if the presumed mode of reading is to proceed linearly from cover to cover. However, the link structure makes this process instantaneous, and communicates that this is an explicitly given choice; the work is telling the reader that it would be easy to go read any entry they want right

now regardless of the order they're listed in, and that the creator of the work has placed such a shortcut right there for you.

Upon clicking an index entry, the reader is shown a drawing of a woman's body, the drawing itself cut up and reassembled as a collage of body parts. Clicking through the image leads to the text segment itself. Already here, the text shows an image of its own structure, using the figure of the woman-creature as a mirror for the text itself, constructed as it is of bits and pieces sewn together. This motif recurs on three such layers. First, the subject herself, the female creation based on the man created by Victor Frankenstein (but this one created by Mary Shelley). Second, the origin of the text. Bits and pieces are lifted directly from *Frankenstein*, other parts are written by Jackson herself, others from various disparate sources, patched together into a quilt (a word Jackson uses directly in the text) of words. Third, the hypertext structure. The text does not privilege any one path through it and instead encourages the reader to see it as one organic whole composed of many smaller parts. These parts then, interlinked, mimic the structure of the creature stitched together. There's no chronology or correct order to identity, to being.

Let us take a step back from these broad structural claims, and simultaneously a step closer to the text itself. Or rather, what we can perceive of the text itself, its aesthetic dimension. Beginning at the index, the reader is faced with the five aforementioned links, reading respectively "a graveyard", "a journal", "a quilt", "a story", "& broken accents". These links each lead to a portion of the text separated from the rest, such that after following one, the reader must return to the index in order to choose another and continue their reading. Following the chapter marked "a story" to where one clicks the link reading "birth" produces a bit of text containing the words "My birth takes place more than once. In the plea of a bygone monster, from a muddy hole by corpse-light, under the needle, and under the pen" (Jackson 1995). This is the monster speaking, the female counterpart to Frankenstein's monster, and she speaks of her creation. The first is the plea of a bygone monster, which constitutes a link that when clicked takes the reader to a fragment of Mary Shelley's Frankenstein wherein the monster asks for Frankenstein to create a female monster to be with him. Already in the idea, the conceptualization of her existence, is the female monster born. The second, from a muddy hole by corpse-light, is the collection of pieces within the narrative. She is created in the selecting of pieces, she was created before she was whole, because she consists not of anything that is uniquely or essentially her, but of pieces of other women. The importance of selection then, of disentombment of these already formed pieces, is massive. Creation happens in the selection, because selecting pieces creates the whole.

Once again, the format of the text reflects this, particularly in the “a body” chapter, wherein the reader can select different body parts to read about their particular histories and to whom they once belonged. The third creation is under the needle. The monster is stitched together. These are the threads that bind fragments together and cause them to make sense, to produce meaning. Without the stitches, the monster is no monster, merely an eclectic selection of body parts from dead women, bits and pieces of those that have passed. With them, she is organized and structured, organs given a body. She is whole and can be interpreted and understood. The same counts for the hypertext, which prior to organization is merely a collection of textual fragments. Through the stitch-work of clicking links, the text gains structure and becomes a reading. The raw matter is given order and becomes interpretable. Finally, the fourth creation, though perhaps really the first: the pen. She is born in the writing about her. She exists because her story has been written. I say perhaps the first because her other creations are different in that they too are written, and could not have taken place but in the realm of writing itself.

So who is this creature, four times created? Following the link “a graveyard” from the title page leads to a scrambled image of the patchwork girl, her body parts laying strewn about like a sliding puzzle waiting to be solved, where clicking the image leads through a short text to a page reading “Here Lies a Head, Trunk, Arms (Right and Left), and Legs (Right and Left) as well as divers Organs appropriately Disposed” (Jackson 1995). Seven links are embedded within this text, from head, trunk, each arm, each leg, and organs. Each of these links will take the reader to a string of text talking about where the various bits and pieces came from, the people they were taken from and who they were and what they did. In this sense, the creature is assembled from many women, but also some men, literally being composed of pieces taken from them. She is not an original being with anything that is essentially hers, but is rather a reformulation – a remix – of what had already existed before. Her womanly essence too, the thing that makes her definitively a woman, if such a thing can be said to exist, is therefore not something of her own, but a consequence of her having been constructed out of other women. She is a woman because she is built from women, she is gendered by heritage and connection, though this matter too becomes muddled and complicated, self-contradictory, when there are pieces of men as well that make up her body.

The patchwork girl is many things at once, capable of such self-fragmentation that even her fingers have their own identities.

> My hands are a cabal. A twitching finger, and I suspect my hands of thievery (Dominique, ambidextrous pickpocket, had already lost her right hand to punitive justice but later extracted a silk purse from the judge with her left.) The callous on the middle finger of my right bespeaks scholarship (a renowned essayist had an unknown collaborator: Livia, his wife, who wrote his books as well as dusted them.) One of my fingers is comfortable enough with a needle, another seems easier on the handle of a knife. (Jackson 1995).

She is so acutely aware of every piece of her body that she is capable of perceiving the unique identity of each of them. Importantly, the reason she can do this is not necessarily because she is any more complex than any given human produced through "natural" means, but rather because the technologies that have produced her – that is: Frankenstein's horrible experiments and Mary Shelley's pen – have made it so.

Within this same section, however, in the aforementioned short bit of text, we find this: "I am buried here. You can resurrect me, but only piecemeal. If you want to see the whole, you will have to sew me together yourself." (Jackson 1995). This reflects the role of a reader quite accurately. As readers, especially of hypertext fiction, we encounter bodies that exist only piecemeal. Sure, a text such as *Patchwork Girl* exists very explicitly only as pieces, but also other texts, more traditional texts. J. R. R. Tolkien's enormous *The Lord of the Rings* as an example may appear as a single work with a single reader's path, but it is only by bridging the gap between descriptive narration, dialogue, recited poetry and verse, family tree appendices, glossaries, and explanatory notes on world and language that the whole can be seen. Even in a text such as Christa Wolf's *Kassandra*, where the entirety of the text, description and dialogue, is bound together in a single first-person narrator's recitation of them, the reader must sew. To bridge one word with another, to construct meaning from sentences, place sentences next to each other into paragraphs, chapters, is a task that the reader performs upon the text and so transforms it from piecemeal into a whole. Jackson's monster is like a text, and the shape of her text is the same as the shape of the monster.

It's also worth noting the position of sewing as a woman's work. Throughout many histories in many cultures, the working of fabrics has been a task that has fallen to women, and

The chapter marked "a journal" is written from the point of view of Mary Shelley, coming upon the monster in her own real life after having cast her out of the fiction through Frankenstein's desperate abortion. "It was my monster, stark naked, standing as still as if I had not yet breathed life into her massive frame, and waiting for me." (Jackson 1995). Writing is itself a form of creation. Not just creation of the written word, but creation of

something equally material and real to the writer themselves. In OOO terms, we could think of the written creation as an object rather than thinking of it in dualistic terms as an idea, opposed to matter. When Mary Shelley encounters her own written creation on a walk, she has written something into the world that is so real that it is capable of existing fully, independently. It is a fully formed, independent object that is capable of affecting the aesthetic dimension the same way she herself or any other object is. That is the crucial message of this section. Jackson is showing a way of understanding the act of writing wherein the text is freed from its traditional submission to the creator. The text must be valued as equally important a real object as the author themselves is. This also sets the stage for, as I will elaborate on later, the two-way road of invitations to change. That is, the reader does not just change the text, the text also changes the reader. Especially when talking about texts where invitations to change are part of the very structure of the format, such as hypertext fiction, it's necessary that we view the reader and the text as equal actors equally capable of affecting the other through the reading-machine. This is something Jackson's text seems to be conscious of, not only as a consciously interactive work, but as a work where writing is creating and the creation stands on equal grounds with the creator.

The patchwork girl herself is a fragmented entity whose decoding requires a non-trivial work on the part of the person observing her. In Jackson's text, sewing and reading are parallel actions, both forms of creation. The real masterful move of *Patchwork Girl* is the choice to structure the text and the character it concerns such that they are reflections of each other. The patchwork girl is a human incarnation of the hypertext work, in that she consists of pieces bound together by strings of relation, and the text follows these relations that tie her to the past of her body/bodies, and the root of her identity. She is not a fully formed human in her own right, much as the hypertext work is not a fully formed text until it is read and takes shape in the reader's hands.

To further explore and provide material for this point, I turn to Donna Haraway's "A Manifesto for Cyborgs". I will show how the cyborg as a figure and a perspective provides a not only useful, but necessary perspective on interactive fiction, though I do believe that in doing so I will be confronting some problems with Haraway's cyborg and reading her against the grain in places. In doing so, I will also bring the cyborg together with OOO in order to produce a more general theory of reading that is applicable to the particularities of hypertext fiction. It's my belief that *Patchwork Girl* serves as a very useful entry point to the format of interactive literature because its subject matter is conscious of its format, and produces some very valuable insights about such literature.

The Cyborg

Haraway's cyborg is "a cybernetic organism, a hybrid of machine and organism, a social reality as well as a creature of fiction" (Haraway 1985, 65). Haraway locates the identity of this figure in its inherent contradiction, its ability and necessity to be that which is the opposite of itself, being both machine and organism, both fiction and reality. "From another perspective, a cyborg world might be about lived social and bodily realities in which people are not afraid of their joint kinship with animals and machines, not afraid of permanently partial identities and contradictory standpoints." (Haraway 1985, 72). The cyborg is an entity, an object if you will, with a dangerous destabilizing effect upon the boundaries between the natural and artificial. She, for Haraway does humanize the cyborg in giving her this pronoun, is a paradox-object that is simultaneously a thing and its opposite, and which inspires us to think in simultaneous contradictions. More broadly, we can think of the cyborg as existing not merely in the boundary between nature and technology, but as Haraway also shows, in other boundaries such as the material and spiritual. We can define the cyborg then, not as one object, but rather as an interplay between multiple objects. The traditional science-fiction cyborg is the interaction between a human and a machine that has been inserted into the human body. The cyborg is a product of two objects bound together in an aesthetic interplay, and this is how the cyborg is capable of being a thing and its opposite simultaneously. By not being a single thing, by not being a single object. The cyborg as such is nothing more than an aesthetic overlaying the union of contradictory objects. Haraway describes her cyborg in a way that reveals it is not just an entity, a hypothetical and real being, but also a perspective one can use to view the world with, as she speaks of "cyborg worlds" and "cyborg unities." The cyborg transcends another boundary here, the boundary between matter and thought, being not just a simultaneous human and machine but also a simultaneous entity and mindset. The cyborg is a situation, and as a situation the cyborg can relate to and understand the book, who is also a situation. I am here using an understanding of the term situation that I borrow from Shelley Jackson herself, in her essay "I Hold It Toward You: A Show of Hands."

> What is a book? [...] for now let us simply say a book is a situation. [...] If a book is a situation, only a small part of this situation is controlled by the writer, though certainly without her there would be no book. What part? What some would call the text "itself," particular words in a particular order? [...] We certainly did not invent the words we use, nor most of the principles of their arrangement [...]. Ideas, too, do not leap, fully formed, from the void. [...] It could be a book without being printed or

> bound, [...] but the typical book you find in stores [...] requires a printing press, which requires wood pulp, which requires a lumber industry [...]. (Jackson 2018, 14)

Jackson goes on to propose that perhaps a book is only a book when it is in the hands of a reader, but that the existence of the reader also relies on the context of knowing the language, knowing what books are, having read book reviews, and so on. The *situation* in this case has to be understood as a term meant to refer to a somewhat nebulous context that is hard to clearly delineate. So when I say that the cyborg is a situation, what I mean is: the cyborg is a phenomenon that isn't a thing in itself, but rather a thing of its context, in the same way that Jackson describes the term *book*. Let us, with this in mind, return to the framework of objects and aesthetics I previously laid out to explain the reading of a text. The three objects; reader, text, and medium; form the machine which produces meaning. That is, it produces a reading. In accordance with Jackson, this is the book. This triad of objects taking part in an aesthetic interplay is the situation that is the book. It is also a cyborg. By being made up of objects that contradict each other, and not being reducible to either of them, this machine/book that is taking place when a reader uses a medium to access a text, the machine/book is itself a cyborg. Reading doesn't make us become a cyborg, but it makes us take part in one. The cyborg is the process of aesthetic causality that plays out in this meeting across the boundaries of nature-technology.

The cyborg and the patchwork girl both defy chronology. It is not only because they exist as a product of objects coming together outside of their chronological relationship to each other – the creature's harvested parts and the cybertextual reading-machine's three parts, objects that originate in separate times and contexts but which are brought into simultaneity with each other – but also because she, to paraphrase from Morton, is a manifestation of non-temporal causality. "Causality floats in front of objects, figuratively speaking. It doesn't lie underneath them like some gray machinery. Another way of saying this is that causality must belong to the aesthetic dimension." (Morton 2013, 30-31). Causality is part of aesthetics, that is, the sensual dimension of an object, that which can be sensed (by any other object, not just by our human senses). Non-temporal, because as Morton explains, time itself is a dimension of any object, where any object can be imagined as a "tube" in a four-dimensional space that includes time (Morton 2013, 51), and this new simultaneity created by the assembling of parts draws from the history of objects, not just their present. And on a deeper level, the hypertext defies chronology in a structural manner. One can open a book to any page, and read its pages and paragraphs in any order one would so wish, but this is not something most authors or

editors or publishing houses would expect (with the fascinating and notable exceptions of the dictionary and the encyclopedia). With hypertext (both fiction and non-fiction) this mode of reading is an implicit expectation. The links serve not as shortcuts but as fully valid paths through a text that forms a curious web rather than a winding path. As such, while there may be some temporary or conditional order between specific text fragments, there is no singular overarching order in which each bit of text, each chapter, is supposed to be read. In this way, the hypertext is not structurally unique to the digital realm, for one can certainly imagine a print book that employs such a structure – the adventure game book is a prominent example – but it is more easily achieved through digital means. We are talking therefore not about a form that exists because of the digital, but one that has been made more convenient by click-through links. The essence of hypertext fiction is something that has been foreshadowed throughout the history of literature and throughout all its many mediums. Not unlike how the cyborg (as a collapse of the boundaries between natural and artificial) has been haunting the system since its very inception but has been allowed to emerge in full force through the development of some particular modes of production and technological encroachment on the formerly "natural". It is not that these ways of thinking are dependent on a particular technology but rather that the technologies expose the need for them.

In reading hypertext fiction and interactive fiction generally, I want to emphasize my specific mode of engagement. Interactive fiction is not, in itself, narrative and it would be a mistake to take a reading (that is: a single path through the work produced by reading from start until a conclusion has been reached) to be the text itself. The text itself is something more like a web, in that if we were to imagine a birds-eye view of the text, it would appear to us like a patchwork of fragments connected by crisscrossing threads. In this image, each thread represents a hyperlink or connection from one piece of text to another. Herein lies the fundamental contradiction of interactive literature: the text itself is simultaneously multiple, mutually exclusive things. Fragment A comes before fragment B, but also after it, and fragment C takes any position before, after, or in between the two. This inherent multiplicity, this inherent self-contradiction makes the interactive work kin to the cyborg and to the patchwork girl, who are also contradictions unto themselves. Therefore, in engaging with these works, I am turning my attention to this imagined text itself, to the potential contained within the work before reading produces order and meaning. I am, because it is absolutely necessary, considering every version (every reading) an equally valid and true version of the text, contained within it simultaneously with other contradictory ones. This is especially important for the discussion of identity and narrative which I will go into in regards to some

of the texts in later chapters, where the truth of both depends on the specific reading, and multiple stories and multiple identities that are fundamentally incompatible with each other can still exist together in the text in itself. The text in itself, or as a whole, is a slippery, formless thing that hides in the dark loch of code and only reveals itself in blurry photographs of serpentine coils breaking the water's surface.

However, unlike Haraway, I do not choose to treat the cyborg as a union of opposites. Sure, there is a multiplicity of contradictions that goes into the formation of any cyborg, but a true opposite should be impossible unless the nature of the two poles has somehow been significantly altered. Also unlike Haraway, I do not believe the recent development of technology marks in any way a distinct departure from the rest of human history, but rather constitutes a fairly predictable continuation of it. To resolve these issues, I treat the cyborg instead as a liminal construction. Our ontology is built on oppositions, where the meaning of concepts such as "nature" and "technology" derive their meaning from being constructed in opposition to each other. That does not mean they are actually incompatible. Instead, by seeing them come together, we are forced to confront the artifice of the opposition. The cyborg is liminal because it becomes apparent at the extreme development of a cultural or definitional contradiction, and reveals a path beyond this opposition. In other words, the hypertext cyborg is not a wholly new form of literature, but it exposes features of literature that have been invisible, indiscernible, until this point.

Transfeminism and Female Monsters

Heather Latimer, in her analysis of *Patchwork Girl*, refers both to the *Cyborg Manifesto* and to criticism of Haraway's text in order to set the foundations for a discussion of reproductive technology and its relationship to both the cyborg and the patchwork girl. Foregrounding this discussion is the image of the fetus as a cyborg. Latimer shows how ultrasound technology produces images of fetuses and consequently the idea of a fetus as a subject, as an individual or a thing-in-itself that has interests and rights in regards to debates over abortion (Latimer 2011, 320-321). This discussion of reproductive technologies, and the extension of it into an analysis of the circumstances of Jackson's female monster's conception as well as the fears connected to her in Mary Shelley's original material, will be my foundation for a turn towards trans womanhood and how it connects to all these things. What I will establish here may be called a sort of transfeminism, though I don't believe such labels are necessary to determine its value. It's also not primarily for the sake of feminism as such that I am establishing my transfeminism, but rather to reveal some connections between identity, technology, and the

reading-cyborg. This will be important for later chapters, where I will deal with works that employ hypertext structure to tell stories about transsexuality and identity change.

Latimer begins by showing that thus far, the fetus (as a product of fetal imaging with ultrasound) acts as a limit to the cyborg's disruptive potential.

> If Haraway's cyborg is important precisely because it resists categorization as either technological or natural, then through the use of fetal imaging the sonographic fetus has become a boundary to this theory. As these examples show, the potential the fetus has to disrupt the digital/organic border as a cyborg is contained through the erasure of the technology that makes it visible in the first place. (Latimer 2011, 323).

If the fetus itself is a cyborg, which it must be because it is not a thing that can be perceived to be a thing in itself without the technology that makes it visible, then it should have the disruptive potential that Haraway describes in the cyborg, but instead it upholds ideas of the natural and traditional oppressive structures in the case of anti-abortion arguments. However, I must question Latimer's argument in this case and ask if this is not true for every cyborg, especially in the case of ones that have to do with medicine, gender, and reproduction. Haraway describes a disruptive *potential*, one which comes not from the cyborg itself being innately disruptive, but from it being a site of resistance. While her discussion of the patchwork girl's relationship to reproductive technologies is useful, I think the fetus rather than being a limit to the cyborg's disruptive potential, is an example of unrealized potential, or potential that has yet to be reappropriated towards a disruptive purpose. The distinction matters here because I further argue that the cyborg transsexual has a similarly disruptive potential, despite the ways in which medical transition seem to (and in certain cases do) reinscribe traditional ideas about the genderedness of body and the delineation of sexes.

Returning to the matter of the fetus though, Latimer uses this specific subject in order to connect Haraway's cyborg with reproductive technologies and show how that looks in practice, and to then look at Jackson's patchwork girl through that same lens. As she points out, the titular figure of Jackson's work has been connected to reproductive technologies from the very beginning of its existence within the pages of Mary Shelley's *Frankenstein*. Specifically, what we want to talk about here is the fear of reproduction, the fear that causes Victor to tear his second creation apart, and the fear which Mary Shelley in the metaphorical pages of *Patchwork Girl* overcomes in order to love the forgotten creature and give her a life, become her mother and her lover as Latimer describes it. This fear of reproduction is central

to Victor Frankenstein's anxieties as well as the world's fear of Frankenstein himself, and it is central to why both creations are deemed monsters.

Going further, the fear of "unnatural" reproduction and the construction of the normative female body as a vessel for "natural" reproduction creates a particular double bind for trans women. Nature itself is socially constructed as the cyborg shows by breaking down its boundary against the unnatural, and within this construction we find many of the expectations for what makes a woman. Getting pregnant, giving birth; the most fundamental labor involved in the idea of what makes a woman's natural role. And when looking at the world of industrial and post-industrial labor, we see that women's "natural" role has become fundamental, as labor re-production through the labor of reproduction. This is an insight feminists have reached long ago. However, I am here going to break with most traditional feminist understandings of this socially determined role as well as of trans womanhood. My claim is that trans women are subject to this same expectation of participating in the reproduction of labor, despite being physically incapable of doing so in the way determined for women. This leads to the construction of the trans woman as an unnatural woman. Not as "not a woman" mind you, though those may be the cries that are heard the loudest. In the same way as Frankenstein's monster was understood as human and feared for this fact (that he was human and yet monstrous and irreconcilable with traditional ideas of humanity) trans women are subject to a rhetoric of misogyny that mirrors those used against other women who fail to live up to their "natural" role.

Furthermore, on the matter of unnatural reproduction and reproductive technologies as Latimer speaks of, if the "natural" role of a woman is primarily defined through her role in the reproduction of labor, then the construction of trans womanhood (which involves the use of medical technologies such as hormone replacement therapy and sex reassignment surgery) is an encroachment upon a territory of reproduction. It is the creation of a monster that calls into question the boundaries of natural and unnatural. The fear of reproductive technologies and artificial reproduction also manifests in the fear of women constructed as such through medical technologies. Ultimately, it is a fear of a medical cyborg that causes the collapse of the distinction between natural and artificial, but also between woman and man. And what then of the titular monster of *Patchwork Girl*? She is much the same, an artificial woman constructed through technologies of medicine and writing (the latter a very powerful one), with parts that originate in women as well as in men. The patchwork girl is not literally a transsexual, but she may as well be one, for she has so much in common with them.

The texts I work with in later chapters deal with themes of sexual and gender identity, and specifically with trans woman characters. In defining the trans woman as a cyborg of womanhood, a liminal figure that exposes the artificial contradictions upon which our idea of womanhood has been built, I intend to draw a line between this specific identity and the function of hypertext fiction within literature. It's hardly coincidental, as Jackson shows with the structure and shape of *Patchwork Girl*, when a work's form informs the content it tackles. Whether consciously or not, this liminal form of literature is employed to explore other liminal subjects of technology, nature, and artificial oppositions.

Of Terms and Endings

Then, if we are to return to Aarseth's machine, what is hypertext fiction? The important terms to remember are the reading, the reader, the medium, and the text itself. These are terms I will continue using in later chapters, with the meanings given them here. The reading is what is produced when the three objects of the reading-machine come into contact with each other and engage in their aesthetic exchange. The reading is a single path through a text. The reading is equivalent to the process of producing meaning from a raw matter. From this, it must be understood that there is no meaning inherent in the raw matter itself, just as there is no reading inherent in the text itself. It's the filtering of the raw matter through a medium (senses, vibrations through air, reflected photons) and subsequent structuring of impressions by a reader that produces a meaning. The text itself must be filtered through a medium and then read in order to produce a reading, and it is in this reading that Hamlet plots revenge on his uncle, it's in this reading that Ophelia drowns, not in the text itself. The distinction matters because it gives us a tool to understand texts where the medium's relative complexity allows it possibilities that couldn't exist on paper or on parchment.

A computer is an incredibly complex medium, and one whose complexity and possibilities grow with each passing year. The development of ever smaller chips allowing for more and more processing power and memory packed within a personal-sized shell opens ever new opportunities for more advanced simulations. And advances in coding are made all the time, coding itself as much a creative art as writing is, leading to new software capable of doing different, new things. When it comes to text, a computer can be a medium that mimics in some ways the experience of reading a print book. It can even incorporate animations to show pages turning to help reinforce the fantasy of simply reading a book. But you are interfacing not with your hands on paper, but rather with your hands on keys and buttons, pressing commands that correspond to turning this page or that page. Taken further, the

computer can be used to link bits of text in a web that would require a four-dimensional book in order to read. Instead of flipping the page to read further, you go any one of two, three, four, or many more different directions in order to continue the text. But this is not an impossibility in print, where one could for example hang a multitude of notes across a wall and connect them with string, or print a book where every paragraph is numbered and contains choices that refer the reader to which paragraph comes next. The largest difference is complexity, and therefore, how much of the operation is done by the medium rather than the reader. In a computer, these operations can be done instantly, seamlessly connecting pieces of a text that in print would require time and work on the reader's part to connect.

Therefore, it is the development of particular technologies that has led to the appearance of hypertext fiction as a form of literature that exposes a potential that was always already in literature even before computer systems were able to perform the operations involved in the form. Furthermore, the ability to center interactivity and utilize awareness of interactivity lets the hypertext format expose the ways in which literature has always been interactive. Though literary theory has already worked to show the reader's role as a participant in the text, the necessity for a system that can fully account for the reader role in hypertext and interactive fiction forces us to think in new terms. These new terms not only increase our understanding of hypertext fiction, but of literature in general.

II. Hypertext and Hyper-Narrative

In 2009, a piece of software called Twine released its first public version. It wasn't the first software for the creation of hypertext fiction – *Patchwork Girl* was written using the Storyspace software over a decade earlier – but what made Twine stand out was its relative accessibility. Where Storyspace had been expensive, proprietary software, Twine was a stripped-down, open source editor that allowed the user to create interactive stories. Although some amount of coding language is needed to create the links, the code a writer needs to use is minimal and easy to understand. Additionally, rather than publishing as files that need to be downloaded and run on a computer, Twine allows for the work to be exported in HTML format and uploaded as a website to any host the user wishes. This means a Twine story when uploaded can be linked to from any website and run in the web browser without the need for any additional software, downloads, or interfaces beyond that of the web browser itself.

Twine effectively made the tools to create, share, and read hypertext fiction much more accessible than they previously had been. Though it lacked some of the sophistication of tools like Storyspace, it more than made up for it by being free to download and use, and making the sharing of work very easy. The Twine community that arose in the early 2010s was therefore heavily characterized by digital self-publishing and the lack of paywalls. The works were shared freely and openly, an exercise primarily in the creation of experimental art rather than potential profitability. Additionally, most Twine creators saw themselves as creators of *games*. Inspired by the early text-based computer games, they set out to redefine what digital games could be, in an age where the 3D-rendered worlds of video games were rapidly becoming the very definition of what makes a computer game. Eschewing video and returning to text, these creators were interested in exploring what digital interactivity can do when it has nothing but text to work with, and what kinds of experiences can be created by applying the principles of video game storytelling to something purely (hyper)textual. Effectively, they were creating hypertext literature.

It may be important to say a few words on what game means in this context. Though there are many definitions of what exactly makes a game, we can say, conservatively, that a game involves a challenge which the player is tasked to overcome using restricted tools. In chess, the player's challenge is to beat the opponent, using pieces that only move in specific ways. Using this definition, we can see that the majority of hypertext literature, including Twine works such as *With Those We Love Alive* which I will be delving further into in this

chapter, are not games despite the fact that many of them are published and talked about under labels such as “story game.”

Game designer Mark Rosewater outlines his definition of a game as somewhat different than mine, stating that there are four basic elements that make a game. According to Rosewater, a game must have a goal, restrictions, agency, and a lack of real world relevance (Rosewater 2018). Using the example of chess, the goal would be to beat the other player, the restrictions would be the limited ways in which each piece can move, and the agency is the freedom the player has to choose which piece to move where. The lack of real world relevance, according to Rosewater, does not imply a complete irrelevance to the life of the person playing the game, but rather that playing the game is a voluntary action done for personal benefit, usually for fun. Under Rosewater’s definition, works of hypertext fiction perfectly fit under the label “games” as they are typically called. I would argue, however, that this definition is not necessarily useful. Outlining examples of what happens when a thing fails to meet one of these four criteria, Rosewater gives the example of what he calls an *event*. This is something that fails to have the element of agency, but which contains all the other three. His example is watching a movie, and he argues that no decision he makes is going to affect how the movie plays out. However, this framework presupposes the audience, or the reader since this would be applicable to reading a book as well, as a passive receptor rather than an agent actively involved in the meaning-machine. In fact there is no such thing as a passive participant in a system; as Morton would surely remind us, when two objects interact, they each act on the other. The audience affects the work as much as the work affects the audience, and there are many actions one can take during a film viewing or a book reading which can alter the experience. One may wish to close their eyes during a particularly scary scene, or in a cinema, leave for the bathroom during what appears to be a slow moment. The viewer can scream or laugh, expressing and releasing emotions brought on by the piece. The viewer can take 3D glasses on or off, adjust their seat, take a sip of a drink. All of these actions are *inter*actions and demonstrate the presence of agency in something like watching a film or reading a book. If we follow Mark Rosewater’s definition, every work of art across all forms and mediums and traditions would be a game. This is obviously untrue, and more importantly not useful.

Instead, I argue that in many of its uses outside of the very strict definition I set forward, the definition of “game” relies more on aesthetics, subculture, and publishing path, than on a strict separation from other arts. The term “story game” is applied to Twine works because aesthetically, they often resemble games, calling the reader a “player,” narrating in

second person, and forcing an identification between reader and main character through the application of the “player character” concept. Furthermore, these works are often created by and published within communities of people with an interest in video games, and circulated as experimental video games rather than experimental literature, perhaps more out of convenience and familiarity than anything else.

Defining to what extent Twine works, and hypertext works in general, are games matters both because it’s important to us that we can look at them as literature and also because it’s important to understand in what ways they are modeled after video games. Especially in the matter of the player character, this is important. Digital role-playing games (RPGs) have established a very firm tradition of referring to the player in second person and identifying the player with the character they control inside the game world. As an example, the computer role-playing game *The Elder Scrolls II: Daggerfall* released in 1996, a landmark work in its genre, asks the player questions at the opening of the game to define who the character you are to control will be. The text “Select thy character’s gender” displays above two clickable buttons labeled respectively “male” and “female”. The function of this language is to portray the character as an empty vessel or as an extension of the player themselves. A question such as “What god, if any, do you worship?” also from the character creation process of *Daggerfall*, is not aimed at the player and their actual star sign, but instead at the implied player character. That the player is referred to as though they were literally the character is a way to reinforce this connection, the extension of the player into the game world. It’s part of the RPG’s fantasy of being able to temporarily exist within a fictitious reality and live out adventures within it. The syntax of player characters is utilized very often in hypertext “story game” literature. Importantly, the text of *With Those We Love Alive* uses it, but intentionally breaks with it at certain points by giving the main character a degree of selfhood separate from being a reader extension, and at important junctures calling attention to the player and their body as an entity separate from the realm of the text.

Starting from this point about syntax, the goal in this chapter is to employ narratological theory in conjunction with foundational theory on interactive texts, such as Aarseth's *Cybertext*, and some specific perspectives on video games and narrative, to develop an understanding of what, if anything, can be defined as the narrative in hypertext fiction. To begin with this short discussion of what makes a game matters because this will give us the guidelines for the field in which we are trying to create a working theory. Although the publishing label "video game" persists as an ontological category in the general consciousness, we must take care not to immediately believe it does not also encompass

things that would be better understood as literature, much as the label "book" often gets applied to literary works that are not in fact physical books.

Through this effort, I also aim to uncover some points about the difference between a player and a player character, the modalities of character in hypertext fiction, and where player and character overlap. This chapter will also serve as an entry to my ongoing analysis of my selected works, focusing primarily on *With Those We Love Alive*, but introducing each of the texts and doing some basic thematic and affective analysis.

A Selection Is Made

So let me begin by introducing the texts that I am going to focus my work on here. There are three of them. Porpentine Charity Heartscape's *With Those We Love Alive*, Caitlin Fisher's *These Waves of Girls*, and Aevee Bee and Max Schwartz' *We Know the Devil*. Out of these, two were published as "games" although in very different contexts, and one was published as an experimental work of text art.

With Those We Love Alive is a product of the aforementioned Twine boom. It is an interactive text work published for free online. Its primary medium is text, but it also makes use of some sparse electronic background music, and utilizes mechanisms such as timed interactions and animated text. Unlike *Patchwork Girl* which was structured largely as a patchwork of text fragments to explore much like one would explore an abandoned house, *With Those We Love Alive* turns its text-links into choices that directly affect the journey of the main character, taking rather the form of something like a labyrinth. In *With Those We Love Alive*, the goal is not to read all the text, but rather to read a specific selection of it, based on the choices made.

The story unfolds in a fantastical world whose specific workings are not elaborated on to the reader, wherein the main character carves magic runes for a monstrous, insectile queen. She is transgender, and to reflect this, a major theme in this story is that of change. Taking place over an extended period of time, narrating important events in between time skips, the text shows a world changing with the seasons and festivals, and how these changes express different things about the world and its people. Another central theme is violence, which tends to be connected back to the queen. As an exploration of trauma, the text ties the concept of interpersonal violence and the justifications that lie behind, to this enormous monstrosity.

At the turning point of the story, the main character is reunited with someone from her past. Their exact history is not made clear, which fits with the story's tendency to leave

traumatic events vague and nebulous. From this point on, the story takes a new direction, focusing on the two trying to escape their life at the court to find a new, better life together.

These Waves of Girls is a work created and published in the now obsolete Flash software, and takes on a structure more like that of *Patchwork Girl*, where instead of telling a story built around player choices, it recounts many separate events, connected by links that are primarily associative. That is to say, the text segments are connected by the association of one word or phrase in one with the overarching theme of another. There is no causative link, nor a direct chronological narrative. Instead, the text's form is that of recollection, of a conglomerate of memories. It tells the story from a first person perspective of a girl discovering her sexuality and her attraction to other girls. Many of the events are directly connected to the spaces where children gather, such as school and summer camp. The shape of these memories deftly delineates the narrow spaces in which children are allowed to live their lives, and shows how individual identity and sexuality emerge in cramped social spaces, expressing itself with the means available. One such example would be the way the main character comes across a Playboy magazine at a young age, and the object becomes imbued with desires that cannot be expressed otherwise. Uniquely among the selection here, this work does not present itself as a game, and does not explicitly draw upon game culture, which makes it in many ways a counterpoint to the works presented as games.

We Know the Devil is another work published as a game. In this case, the format mimics the Japanese "visual novel" genre, which is a style of computer game driven primarily by narration and dialogue, with accompanying images of backgrounds and characters. Typically, the screen will show a background scene of the location where the current events are taking place, along with an artwork of the character who is currently speaking. Everything else is communicated through text that appears in a box near the bottom of the screen. The player, or reader, will take on the role of a first-person main character, and will be asked to make choices, often choosing between two or more different dialogue options, which will cause the conversation to diverge in different directions and affect the narrative. In such a text, there is not strictly speaking one single narrative, but rather several narratives contained within one text, with the choices along the way determining which narrative gets to be presented. The genre therefore tends to have multiple possible endings, and will require several playthroughs (or read-throughs) to fully experience.

In *We Know the Devil,* written by Aevee Bee with illustrations by Max Scwartz, the reader does not take on the role of a player character, but instead acts as a passive outside observer to the interactions of the three characters; Venus, Neptune, and Jupiter. The three of

them have been forcibly sent to a Christian summer camp, where their parents hope they will be "cured" of their queerness. The story utilizes elements of magical realism, and does not outright state the place is a conversion camp, but rather says that the kids who are bad are sent there to meet the Devil. Most of the narrative takes place in a cabin, where the three characters hear both God and the Devil speaking over a radio. The reader's choices take the form of deciding who the next scene will involve, having to choose which of the two others will come along with the one the scene focuses on.

At the end of the game, the ending will be determined by which two characters spent the most time together. The third of them will transform into a monstrous being, the Devil, as an allegory for both their queerness and their despair and loneliness. If the reader ensures they all spend the same amount of time together, a fourth ending appears, where the three of them choose to become the Devil together, as an act of rebellion. The characters are all girls who experience attraction to other girls, but notably, Venus is transgender and is referred to with masculine pronouns throughout the text, until the switch is made to feminine pronouns the moment she becomes a monster in the ending, symbolically embracing her truer self.

Narratology in Cyberspace

To lay the grounds for the discussion of narrative in hypertext fiction, I will start at the beginning. That is, with Gerard Genette, and his foundational principles for defining what constitutes a narrative, and how to understand its time. Already in the introduction, he proposes three distinct meanings of the word *narrative* which bears repeating for the purposes of the analysis here. The first meaning, and the one Genette chooses to focus on, is that of the discourse, that is, the text that recounts the events. The second meaning is that of the events themselves that the discourse concerns, which Genette calls *story*. The third meaning is that of the act of recounting, which acts as the bridge between the first and the second, what Genette calls the *narrating* (Genette 1983, 25-27).

This tripartite structure is important to keep in mind, because Genette's *narrative* refers specifically to a voice that contains within it, implicitly, both the *story* and the *narrating*, and as I investigate the progression – and manipulation – of time within my chosen texts, it will be necessary to distinguish these aspects from each other. It will be particularly important because as I will show later, the conscious interactivity of these texts produces an additional layer, a hyper-narrative, that the narrative itself is filtered through thanks to the reading-machine.

Genette outlines two different aspects of time in a given work, the story time and the narrative time, where according to the previously given definition of narrative, the narrative time is the time of the actualization of the work (Genette 1983, 33-34). For a film, this is obviously the time in which the film is watched, and can be clearly measured, as film moves forward at a predetermined pace. For books, narrative time is reading time, which is harder to clearly define, and which Genette calls a pseudo-time. In other words, we cannot clearly measure the narrative time of a written work except in its spatial form and as it relates to the story time. The narrative time is somewhat mysterious, because it depends on a process that is highly individual and situational.

However, interactivity further complicates this time relationship. What happens when the sequence of events, the relationship between the order of the story and the order of the narrative, is dependent on choices made by a reader? And not just in the way which Genette alludes to, wherein a reader may very well choose to skip lines and read chapters out of order, but in a way that is encouraged and facilitated by the text itself? I believe Genette is wrong to argue that a text has this rigidity of order to it, because as I have previously shown, every work has an infinity of interactive potential. Much of this interactive potential is unintended, to be sure, but that is a far cry from saying it does not exist. What interactive literature does, as a cyborg of text, a liminal construction, is reveal this potential.

So I ask again, what happens when order, frequency, even duration, depend on the reader's interaction? What I will argue is that we have revealed a hyper-narrative time, one that, obviously, belongs to the hyper-narrative.

So what is the difference between the narrative and the hyper-narrative? In a traditional text, nothing at all. They are one and the same, only occasionally rustling against each other barely enough to reveal their difference. That is to say, in the absence of intentional interactivity, the two are in absolute harmony. They display the same duration, same order, same frequency. The hyper-narrative I propose here could be described as the events of the reading. The hyper-narrative is the sequence of events that make up the reading, and the text *as read*. By as read, what I mean is that we are not concerned with the text as written, but as it is actually read. This means that if the reader were to skip forward two pages, read a single paragraph, then return to their previous point and continue the reading from there, this would be reflected in the structure of the hyper-narrative.

However, we must take care not to let the infinite possibilities of free, unbound engagement with literature run away with us. For the purposes of creating a meaningful analysis, we must follow the grain of the work and assume with some good faith that a reader

will read a text the way the text intends them to read it. Luckily, the interactive text, exemplified by hypertext fiction, intends for the reader to perform just this kind of reorganizing and skipping. The narrative in a hypertext work is fragmented. It has no definite structure that orders and organizes the discourse into a coherent retelling, because it has been split into fragments that can be read in multiple orders, and one reading will often exclude parts of the narrative discourse in favor of others.

Synchronicity and Simultaneity

So let us take a closer look at hyper-narrative time. In traditional literature, this dimension exists, but it is rarely if ever made explicit and consciously employed, because the print book has few ways to directly manipulate the reader's progress through a text. Hyper-narrative and narrative time tend to overlap with each other so neither can be distinguished from the other precisely for this reason. When the most convenient tool print media has available for the manipulation of reading is distortion of the story through the discourse, that is, the narrative voice breaking order and duration with the story, anachronism between reader and story is caused by employing anachronism between story and narrative, and there is very little space available for anachronism between reader and narrative. In hypertext fiction however, and more generally in digital media, there is space to employ timed intervals in a completely different way from print media.

The passage of time in *With Those We Love Alive* requires some special attention. Especially so because, as we have established, the manipulation of time is itself a feature of interactive fiction. We must also pay attention to the different layers of time, at the different narratological levels of the text. The reader keeps returning to the palace courtyard, where links lead to different places, such as the garden, the workshop, and the city. The order in which a character may choose to visit these places – or forgo visiting them altogether – would normally be predetermined, but here the reader gets to choose. This is a distortion of time because the continuity of events isn't predetermined, but rather determined by the player's actions upon the text. In other words, time is also subject to change. And so, it is worth looking at the ways in which the text uses time specifically as a literary device. By this I mean both time within the text, the narrative time, and the physical time, the hyper-narrative time.

As an example of what I am talking about, after a sequence in which the empress hunts humans, the reader is faced with an unusual page. This page has no link to progress, rather it says "Ideate:" with a piece of changer-text (a Twine function that creates a link that does not move the reader to a new page, but instead changes the text of the link) that cycles

through a series of phrases as the reader clicks the text (Letting go, Falling into the sky, Into the jungle, Into the sea, Shredded by gravel, Crashing, Breaking apart, Screaming). After a while, independently of reader action, guided solely by an unseen timer, the link "Break the loop" shows up to progress further, and the reader is asked to "Draw a thought loop". The use of a timer in order to make text appear, and in this case, specifically the link that progresses to the next segment, showcases an ability that digital literature has which print literature lacks. We may often think of literature as asynchronous, as text that moves at the speed we choose for it to move. In contrast, film for example is fully synchronous, moving and taking place regardless of how much attention the audience is paying. This little moment is a breaking point, by which I mean that it is one of the places where *With Those We Love Alive* breaks its own illusion by drawing attention to its format, to its presentation, to the reading-situation.

But furthermore, it is not simply a switch of modes from literary to cinematic that takes place. We could imagine a hypothetical work where after reading a piece of text, the reader clicks a button, which produces a video for the reader to watch. This too is a potential effect for digital literature, but it is different from what goes on in this specific instance. What is happening is that the reader is made to experience time itself as an aspect of the work before them. The duration, the actual physical duration, and therefore hyper-narrative duration, of the event unfolding is something you, the reader, are made to feel, by sustaining a moment wherein the reader is capable of interacting. Their interaction is limited to cycling through a loop of thoughts, one that the reader gradually realizes there is no way out of! As the reader comes to understand that their path is blocked, they become conscious of the passage of time, that they are trapped in a thought loop in real time. And just as this awareness sets in, the link to proceed forward, out of this moment, reveals itself.

Another example of this sort of timer use happens when the reader visits the lake during any of the sequences where they are free to explore the castle and surrounding areas. Here, a link gives the option to "do your meditations." Following it leads to a page saying "take a deep breath" followed by a link with the text "I am holding my breath." All text then disappears from the screen for several seconds, before a prompt to exhale shows up alongside links to repeat the process, change the timer, or return to the lake. In this example, the text uses both its established paradigm of reader participation and its ability to manipulate synchronicity to give specific timed instructions manipulating the reader's breath. It's a form of breathing exercise, a form of meditation, and rather than having a descriptive paragraph detailing how the main character is meditating, the text opts to make the reader act it out, and importantly, feel it themselves. The "you" of the main character and the "you" of the reader

here become one, as the reader in order to read faithfully must participate and perform the action the main character is performing.

Lingering here means existing exactly in the same moment as the story, and moving exactly with it. The reader is also allowed to stop this exercise at any point, but is never told that they need to do so. You are allowed to remain in this situation for however long you need to, or want to, and the main character remains there with you. By breaking with the asynchronous nature of written word and temporarily entering the synchronous world of recorded media such as film or music, the text is able to enter the moment of reading and directly affect the reader's own time and time perception. It is able to causally align with the reader.

As I have hopefully shown here, the digital text can force a pause, set a predetermined timed interval before the next part of the text can appear. This means that the reader's progress through the text has been intentionally impeded or manipulated in a way that does not affect the discourse level. In other words, an anachronism between the reader and the narrative has been created. The exact function of this interval can be many things depending on the specific text, but generally speaking, it is a sensory appeal to our sense of time. It could be considered a form of multimodality, in that it activates and affects senses outside of those associated with text alone, and conveys in a direct manner feelings that text cannot do so easily. In these cases, a sense of waiting, anticipation, rhythm, perhaps boredom, or any other feelings associated with the passage of time over a set interval.

Having defined this, however, there is another aspect of hypertext fiction which influences the hyper-narrative time, and that is the branching structure of such texts. If we were to lay the text out as a map (an option that interestingly exists for some early works such as *Patchwork Girl*), it would appear as a collection of notes, perhaps contained within boxes or sticky notes, connected by lines, or strings, which represent the pathways taken by clicking hypertext links embedded in the text. If we were to lay out a traditional work of print literature as a map, it would look like a single, very big box, perhaps in the shape of the book itself. Or, if we wish to show its similarity to rather than difference from hypertext fiction, we could imagine the print book as containing one box of text for each of its chapters, with a single thread connecting each to the next, in an unbroken line from start to finish. The difference, as I have discussed previously, is the centering of reader choice. Choice and interactivity are fundamental features of our material reality, but hypertext fiction employs choice as a literary device in and of itself. So, here arises the largest anachronism, and the most apparent and intentional disconnect between reader-time and discourse-time: the

discourse itself is fragmented and disorganized. Instead of being a structured recounting of a narrative, the discourse consists of several smaller such recountings, fragmented into a multitude of smaller stories with no set path which can take us from start to finish. The task that falls to the reader is that of putting the pieces back together, but unlike a puzzle, there is no correct way to do so. The reader is elevated from the passive position of receptacle into an active position of participant in the reading-machine.

As readers of hypertext works, we therefore engage with these temporal dimensions differently. We weave the discourse together from single strings, and participate in the text more actively, making our own, simultaneous, actual, real-world time also become a greater part of the reading the machine produces. The story of Tracey follows a pattern of remembering, as discussed previously, but the actual order in which these memories are strung together into a discourse-chronology depends on the reader's choices throughout. It's worth noting here the distinction between the character instance, the narrator instance, and the reader (or player) instance. It should be nothing new to distinguish between a main character and a first person narrator identified as that same character, as being separate instances. The character exists within the story level, the abstract events as they unfold underneath, within, or beyond the telling of them. The narrator exists on the discourse level, and is the voice that tells the story, the events as they are told. So why do I include the reader in this? Well, it should be clear by now that the reader takes a special place of participation in "interactive" literature. Although, as I have made it clear and will keep making it clear, audience participation and interactivity fundamentally exist in all forms of media and all forms of art, hypertext fiction and similar forms consciously employ interactivity and place it front and center. The way the reader makes choices can often cause a sort of identification between reader and character, or reader and narrator, similar to the way a character and a first person narrator may be identified with each other. One common and easy example would be the usage of second person narration in many interactive works, especially those which are rooted in the tradition of text-based video games. Recall the questions asked by *Daggerfall* to its player, and how the game would speak to the player, but ask questions about the character, blurred together into a second person voice, so that the player automatically takes on the role of the character. These texts, or games, seem to speak directly to the reader, saying "you" and often going so far as to ask what "you" will do next. We saw this in *With Those We Love Alive*, where the text seemed to speak to the reader, while simultaneously identifying "you" as a specific character on the story level. This isn't a device unknown to traditional literature, but in such interactive literature it gains the additional potential to assign the power of choice to

the reader and then allow that to influence the story. We see a similar multi-layered identification pattern appearing in *These Waves of Girls*, where the first person narrator is identified with the main character Tracey, but the reader gets to be the one undertaking the process of recollection, delving in and out and fluttering between memories. Therefore, we get to be not just inside narrator-Tracey's head, we get to be our own guide, sifting through these moments as though they were our own. The reader becomes identified with both narrator and character.

For the reasons I've now laid out, it should make sense why it's important to keep these instances distinguished from each other. The reader doesn't actually become one with a narrator or main character, but the form possesses potent tools with which to obscure the division between them. For the purpose of understanding time in particular, keeping the different instances apart allows us to look more closely at how time is manipulated between them. Recalling one specific section from *With Those We Love Alive*, discussed previously, let us once again, with this in mind, take a look at the part where the reader is asked to synchronize their breathing with a programmed timer. The text here intentionally obscures the relationship between reader and character, by making it unclear whether the second-person voice refers to one or the other. The reason why I choose to return to this now is to highlight a specific device used in interactive fiction, which I will call the "interface voice." The interface voice refers to the parts of the text which are not holistically integrated into the discourse, but rather exist as guides, pointers, or signs to the reader. They often take the form of instructions or explanations of how to interact with the text. We can see it clearly at the very beginning of *With Those We Love Alive*, on the very first page. "Before living this life, have a pen or sharpie nearby, something that can write on skin", the text instructs, following with the explanation that "Purple links change. Pink links move forward." and an option to turn on colorblind mode. This is the interface voice. Its function is to enlighten the reader on the mechanics of the work. We can imagine written instructions at the front of a book on how to use a book; what order to read the lines in, and how to turn the pages. Perhaps we can compare it to the index and pagination of a book, which work similarly to provide information to the reader outside of the discourse. The difference is that books typically do not instruct the reader within the body of the text to turn to a specific page, but in digital interactive literature, this interface voice is ever present.

Highlighting this voice by employing the distinction between the narrative audience and authorial audience as defined by Peter J. Rabinowitz in his 1987 work *Before Reading: Narrative Conventions and the Politics of Interpretation*, Daniel Punday uses an example

from Michael Joyce's *afternoon, a story* (1987), where it seems like the author addresses the reader directly, in order to convey information about the interface of the work.

> Closure is, as in any fiction, a suspect quality, although here it is made manifest. When the story no longer progresses, or when it cycles, or when you tire of the paths, the experience of reading it ends. Even so, there are likely to be more opportunities than you think there are at first. A word which doesn't yield the first time you read a section may take you elsewhere if you choose it when you encounter the section again; and sometimes what seems a loop, like memory, heads off again in another direction. There is no simple way to say this. (Joyce, 1987)

Commenting on this, Punday writes:

> The voice in this passage appears to be less a narrator speaking to a narrative audience, as in other parts of the story, and something closer to Joyce himself addressing the authorial audience directly. The speaking agent refers explicitly to generic expectations about the story and knowledge of conventional reading practices [...]. On closer examination, however, we find that this passage withholds information about navigating this text that the reader needs to grasp, suggesting a mismatch between rhetorical theorists' conception of the authorial audience and the knowledge that readers/users need to have to make sense of the work's overall design. [...] [I]n this passage, Joyce wants to maintain the illusion of being a storyteller rather than the constructor of the artifact with which the reader is presently interacting. This is why his description is more euphemistic than direct, and why he seems unable to make precise references to the brute facts of the interface. (Punday, 2012, 33-34)

The important insight here, as it relates to Joyce's text and to these similar functions in interactive literature more generally, is that there is a need for a type of communication directly with the authorial audience, that is, the "real" readers defined by their awareness of the constructedness of the work with which they are engaging, as opposed to the narrative audience who is entirely ideal, and serves as the implicit audience for the narration. Going back to my distinction between reader and character, Punday employs the terms "characterized audience" and "intriguee," and aligns the former with narration and the latter with intrigue, a concept borrowed from Aarseth's *Cybertext*. Punday lines out a difference between the structure of the narrative, the realm of the characterized audience, and "the actions that we must take as the agent responsible for moving the player through the game—that is, the structure of *intrigue* and our role as *intriguee*." (Punday 2012, 37). In other words, the actions that must be taken by the reader in order to navigate the text relate directly to the reader themselves and their engagement with the intrigue of the work. This could be compared to a puzzle.

In fact, I'd argue a traditional puzzle makes a surprisingly apt comparison. There is a picture to be discovered, once all the pieces have been put in their appropriate places, and the path to that end goal is largely up to the person laying the puzzle, but the picture itself is the same in the end, no matter what. Similarly, interactive fiction does allow the reader to make choices and in a sense perform actions, or rather guide a character to perform actions, but the way in which those actions happen, their results, and their descriptors are already written and created by the author. The primary reason for a person to engage with a puzzle, that is to say, to attempt to solve it, is the tension of the problem-solving itself. Or we could call this the intrigue. We are as readers, puzzle solvers, or players of a game, asked by these interactive forms to solve some sort of problem. In *These Waves of Girls*, if we are to understand the act of reading as parallel and analogous to the character's act of remembering, we the audience are not in the same position as the character. Tracey has all knowledge of what has happened, and her mind is simply wandering through these interconnected links, whereas for us, it becomes a puzzle where the task is to piece together a sort of story. A narrative of the whole.

Kissing Girls

Turning our attention to Fisher's *These Waves of Girls*, let us begin with the first link, titled "kissing girls." Opening on a low-quality photo of two people kissing, this section details several short episodes wherein the main character, Tracey, has intimate encounters with other girls during her childhood. The story initially focuses on Vanessa, another girl, who grows up alongside Tracey. The first entry on the sidebar menu, titled "Vanessa" describes Vanessa at different ages, from they are three until they are ten and share a kiss. During this section, they are also shown to be chasing boys around and bullying them, and the first-person narrator expresses "I swallow hard and I am sorry, I would say something spell-breaking but I can't feel what running boys feel, only this wave of girls." (Fisher 2001, vanessa.htm)

Already, the text is interspersed with links. Many of the sentences in the text link to other pieces of the text, primarily ones which relate through thematic and emotional association. This means that reading as I am doing here, each section by itself, in order, is a choice that must be actively maintained. One could just as easily follow a link halfway through the section named "Vanessa" and continue the reading somewhere else.

The image of the wave is significant here because it displays a very specific understanding of time and of memory. If the actual events of one's life form a story, then memory must be a sort of narrative, and just like narrative, it breaks with story in both duration and order. In the case of Tracey's memories, we get the image of a wave, a wave of

girls. A wave rises from the sea, like a wrinkle in a tapestry, and it crashes against its boundaries. As such, the many events throughout Tracey's adolescence involving romantic and sexual experiences with girls come together across, and in spite of, their temporal location, to form a wave. I take this to mean, they become a single entity and form a sort of collective feeling.

This is also an interesting case of speech that exists in two temporal locations at once, as much of Tracey's narration does. Her feelings being expressed here are both what she felt at the moment which is being recollected, and what she feels in the moment of recollecting. This tendency runs throughout the text, making past and present blend into each other, such that the line of causality could be seen to run either direction.

It's also here we first start to see some ideas of gender forming. A core theme of *These Waves of Girls* is the matter of identity, and the work itself can be read as a structural examination of the relationship between identity and lived experience, as it links together fragments of stories into something resembling an inner view of a person. Here, however, in the beginning, gender is a matter of antipathy. Tracey runs with girls and they chase around and bully boys, force them to take their pants down, and kick sand on them. Tracey herself expresses that she "can't feel what running boys feel" in relation to what she has been part of, and it's an expression of her inability to relate to these boys, her sense of fundamental difference from them. In that sense, her "wave of girls" that draws her to Vanessa and to kissing her at age ten, is an expression of sameness and community. Tracey's attraction to other girls is here, at this early point, shown to grow from a sense of belonging and sympathy.

The relationship between experience and identity becomes that of a transformation of chronological facts, actual events, into an overarching, time-unbound understanding of the self. The entire story is told in retrospect, and the collective feelings such as the wave are transhistorical facts of the self that can only exist from the perspective of the future self, in hindsight. This reinterpretation of self, looking back and seeing things that happened in a new light, is central to the text because it informs the selection of memories. The fact that all memories in some way concern romance, sexuality, and connections with other girls points to a narrator who for some reason is concerned with these subjects specifically. Because there is no single coherent story running through the text, we are left to solve a sort of puzzle, and the first and most important piece is to understand who the Tracey looking back and remembering is.

Presenting an alternative vision of a relationship between identity and time, *With Those We Love Alive* early in the work, after a sequence in which the reader is asked to

answer questions about the protagonist's eye color, birth month, and element, explains how the protagonist's parents used this information to choose a name from a book. “But in the morning when they were gone to work, you found the other book, and you held a different name inside.” (Heartscape 2014). Below this text is a name that I cannot reproduce, because the name depends on the three previous choices made. The name is divided into three segments, each of which is determined by the choices made respectively for birth month, element, and eye color. Following this, a link reading "And ten years disappeared" (Heartscape 2014).

The significance of the name is something that also here is elaborated only in retrospective. There are two books, one that the parents chose a name from, and another that the protagonist found their *actual* name in, the only one that is given in the text. These books must correspond to gender, and the implication is that the protagonist ends up choosing her own name in accordance not with the gender she was assigned, but with the one she chose. However, it doesn't say she chose this name, only that she found it, and the ten years disappeared. The identity cannot be realized in the present of this story. The years disappear when the reader clicks the link, leading to the post-timeskip part of the narrative, so it is the reader who facilitates the passage through time, even though they have no choice but to click the link, it is an action they are made conscious of more than simply turning a page. You are forced to interact directly with the text in order to facilitate the progression of time.

The disappearance of years alludes then to a time lived as something other than what the protagonist is in the now. These years disappear perhaps because they cannot be reconciled with a narrative of identity that in retrospect is superimposed upon history. In a sense, this is the same as what we see with Tracey's identity, but it's more dramatic in that this superimposition demands the wholesale removal of an entire period of personal history. However, this understanding can bring us back to *These Waves of Girls* with the question of what has been removed. Much is revealed about Tracey's adolescence and coming of age, but the stories recounted all center around some specific core themes, and we could imagine that there are many life events in the actual full history that may not serve these ideas and may even contradict them. If this is the case, as it almost certainly must be, then the process Tracey goes through in selecting memories and stringing them together metaphorically into a web that forms an identity, is very similar in nature to what the protagonist of *With Those We Love Alive* does when it is said that ten years disappeared. In both cases, a present self is constructed from selectively reading a personal history and leaving out certain parts.

The intrigue in *These Waves of Girls* centers on the question of what is to discover in the web of memories. The structure of the work is not easy to follow, and this appears intentional. Though main entries are plotted out on a list for each main section, the text of each entry is interspersed with links that lead to other entries, often in different sections, sometimes ones that are not listed at all. The reader's task, as the recipient and target for the text's intrigue, becomes to unravel the web and figure out who Tracey is, what she has experienced, and why these events are connected through association the way they are. This is where we enter the hyper-narrative level.

These Waves of Girls allows for reader choice to fully determine the path through this web, but it does not allow reader interaction to change the word of the text. The reader is, in other words, in control of the hyper-narrative, but not in control of the story, which remains set and the same regardless. The reader also does not fully align with the protagonist, whose desires and goals are different, and more importantly about different things, than those of the reader. Thus, intrigue does not concern the fate of the protagonist, and the reader is distinctly placed in the role of an observer looking in, attempting to unravel a mystery that they do not themselves get to take part in.

Something worth noting when it comes to the other work, *With Those We Love Alive*, is that this work very rarely allows for the type of free exploration that *These Waves of Girls* is built upon. There is usually a straight path forward, and reader interaction usually takes the form of setting in motion, or changing details that concern the story. This is made possible by having the software present text based on different variables, so that the text being shown first checks to see what choices have been made earlier, and displays as one of several options depending on the outcomes of those. Interestingly, the point where *With Those We Love Alive* does allow the reader to explore a web freely is during the "downtime" where the protagonist has nothing special to do except pass the days. This too illustrates a consciousness of the passage of time, forcing the reader to engage with uneventful days by being presented the same text as the previous day, and having to interact in order to proceed to the next. By intentionally making the reader engage with non-events, the text forces an awareness of time's passage and makes the reader complicit in the unfolding of the narrative.

During this downtime, the reader is able to explore the areas surrounding the protagonist's living space. In practice, this means clicking links designating which of the surrounding areas to go to, each producing a short text describing the environment, and a link leading back to the living space. Nothing of significance is discovered here or can be done

here, and after the first visit, the text will be the same each time. But it is only here that the reader is given agency over where to go next.

With Those We Love Alive aligns the reader closely with the protagonist, so closely in fact that they are referred to collectively with the second-person "you" throughout the text. In practice, this means intrigue and narrative are closely aligned as well. The reader is encouraged to desire the same things the protagonist does, and the reader's choices directly alter the story itself by affecting the protagonist's choices. If the downtime is the only place where the reader can affect where to go next then, and to make choices beyond altering details and facts, this is also where the protagonist has the most agency. She is the most free to be herself and perform tasks to her own desire when she has nothing to do. Paradoxically, the reader may be tempted to quickly skip through this downtime as there is nothing new to be discovered or done for each new day, and consequently, no intrigue. But at the same time, this is when the protagonist actually experiences the freedom to live life on her own terms.

The second entry on the first list in *These Waves of Girls* is titled "butterflies." In this part, after some elaboration on the main character's fascination with Playboy magazines, a short encounter is described wherein Vanessa gives Tracey butterfly kisses all over her body. The girls are 11 years old here. There is an exchange of interest here. Vanessa asks Tracey who she wants to be. "Lately, Vanessa likes us to pretend we're someone else. I get to be the boy. I like to pretend Vanessa's Vanessa." (Fisher 2001, butterfly.htm). The image of playing pretend is mixed with the paradoxical image of pretending someone is herself, and establishes the two girls' separate engagements with the acts of intimacy; Vanessa engages through a layer of pretend, while Tracey seems to want to take the act of play and manifest it as more real than what Vanessa is making it out to be. Previously in the same section, in regards to the Playboy magazines, it is said that Tracey liked the humorous comic strips in them, but that she preferred the bits that told stories from reality. This echoes the situation between her and Vanessa later on, where the fundamental conflict is one between reality and fiction.

Drawing on Haraway's cyborg, we can see similarities between Vanessa's role in the situation and that of the digital cyborg existing online. The cyborg introduces a layer wherein the person can embody something different than what they are. As such, the digital world as it figures into the cyborg-machine is not all that different from the power of imagination, especially in children. Both introduce a layer of transmutation which when overlaid upon a person, allows that person to figure as something that doesn't match their usual identity, therefore drawing into question the essential nature of identity altogether. Vanessa becomes other than herself in order to give Tracey butterfly kisses, and it's not insignificant that Tracey

gets to be the boy. By having Tracey be the boy, Vanessa somehow preserves the integrity of social norms surrounding the intimacy they play at, preserves a kind of heterosexuality and gender duality. Tracey, meanwhile, challenges the same exact norms, both by being the boy, and by imagining that Vanessa is just Vanessa.

The sentence "I get to be the boy" also is a hypertext link, leading to another connected experience. Following this link "away" from the rest of the text, we end up with a section talking about the different traditions at Christian girls' camp. One tradition in particular connects these two parts.

> There are other traditions, too, of course – the square dance, where half the girls dress up as boys and some have their suitcases packed with fake facial hair and spirit gum and even though we've all been wearing shorts and jeans all week, wearing shorts or jeans becomes instantly, magically, masculine and the rest of the girls switch over to gingham skirts, perfume and lipstick. You enter the dining hall with your date, arm in arm. (Fisher 2001, patricia_the_stripper.htm)

The tradition that's established here is of note because it once again brings up the idea of playing at a different gender, but also because of how the described experience relates to the person telling the story. It is perhaps banal to talk about how each part of a literary work has significance in context of the larger whole, but it's also something that holds particular importance for hypertext works. The context of the story presents us with Tracey as a lesbian woman whose life has been marked by experiences of intimacy and interest in other girls and women, although with some notable exceptions. But that is hardly true for the other girls involved in this play. Half the girls dressing up as boys is not something that happens to create a space for the expression of homosexuality, but rather because of the perceived impossibility of it. The tradition of a dance demands heterosexual pairings, but the camp is girls only, which too is an expression of presumed universal heterosexuality. So, they play. A recurring theme in these experiences is that Tracey remembers them because they left an impression on her that they did not leave on the other girls involved. These experiences are events that made her feel different from others, maybe different from what she was supposed to. And although there is no explanation of what Tracey herself felt about this tradition, we can assume that because it is part of the recollection-structure of the story, it left a deeper mark than it did on anyone else. As such, we can read this story as employing a circular notion of identity and experience. The experience was different because it was coded through Tracey's particular identity, yet Tracey's identity too is the way it is because it was marked in some way by this and other experiences like it.

Leaving this list and returning to the main page, we can instead follow the next main entry, entitled "school tales." This section contains a longer list of entries in the sidebar, all revolving around experiences in school, or with other people from school. There is no direct chronology, making the list appear more like a collection of separate events. In the text fragments on this list, we are introduced to Jennie, Tracey's girlfriend when she is in grade 11. Jennie is in grade 12. There are mentions of Jennie driving Tracey to school, Tracey coming over to her place, and the two having sex. The latter part is also expanded on in another camp fragment. This time, they are older, and instead of the focus being on camp rituals, it is on how Tracey and Jennie zip together their sleeping bags and have sex at night when they think no one is awake to notice them. Camp then recurs as a space where desire can play out in perhaps a different way than it could otherwise. In that regard, it's notable that Tracey's thoughts surround her not minding if the two girls are discovered, reveling in exhibitionist fantasies of being seen. This could be a desire that the daily life doesn't have space for, and gives us a small glimpse at who Tracey is, what she actually wants.

On that same note, one encounter in particular is different. In the entry labeled “Mr. Anderson” we read a description of Tracey’s feelings about one of her teachers, an awkward man who is often made fun of by the children.

> I like his writing, and his hands. I like the way looking at him sends me into making up his whole life. [...] I imagine him at ten, at twelve at fifteen, at thirty. Wonder why of all places he’s decided to come back to this theater of high cruelty. I wonder what he does on his days off. I find myself speculating – does he live alone? Does he date? Who does he sleep with? This takes me by surprise – I only care about women’s lives, never men’s. (Fisher 2001, mr_anderson.htm)

Tracey is only ever interested in girls, and yet something about her middle-aged teacher has ignited some kind of attraction in her. She receives a Christmas card from her teacher, and imagines herself as special in his eyes. The text goes on to describe how she attempts to look provocative for this teacher, and how she imagines he is noticing, that he is attracted to her as well, but cannot act on it. Finally, the section closes on a telling of how he came to visit her after she graduated, but didn’t say much, and that today, as an adult, she still sometimes fantasizes about him. This is the only man Tracey has ever been attracted to, and he is by all means an unattractive man. I believe this is indicative that it is not necessarily the man himself she is attracted to, but the idea of him. Not only is there the allure of something taboo, a teacher and an underage student, but at the same time he is a victim of ridicule, someone no one likes, and that itself is something Tracey finds herself drawn to. Perhaps there is a

reflection of her lesbian desire here, the desire for something “wrong” and for someone who is seen as unfit to be a partner.

The sexual is further elaborated by the next main section, or chapter, "I want her," which contains only a short list of eight entries, several of which have appeared in the preceding sections' lists as well. This part recounts sexual or sexualized encounters with other girls, marked by Tracey's desire. Following this, the next two main sections are "city" and "country," which tell place-bound stories. Notably, both of the previous camp stories appear under the "country" section. Here, the opposing locations of city and country are used to organize experiences into different boxes, separated by the different rules that work within each sphere. Next, we arrive at the section titled "she was warned." This marks a departure from some of the previous stories, though it does recall – notably, without listing it – the previous story about the teacher who Tracey imagined as being attracted to her. In this section, the stories center on uncomfortable, potentially traumatic experiences, in several cases involving older men at an inappropriately young age. We see how Tracey's experience of sexuality is not just colored by attraction to other girls, but also by older men taking advantage of her, and by her own justifications and attempts to reframe these experiences in a way where she is in control, where she desires the encounter.

> Grade two. Seven, I guess. The man next to me at the movie theatre is brushing my knee with his finger tips. It could be accidental. I don’t move. I even, I suppose, say what the hell. And soon his whole hand is resting on my knee. And I can tell his hand is shaking when he starts moving toward the top of my shorts [...]. I liked his warm, slow, tentative hand. I move my legs, just slightly, and he gets up and leaves very quickly. (Fisher 2001, hand_travels2.htm)

An older man touches the young girl in a way she has no way to process or comprehend. The memory is inscribed as a sort of trauma at falling victim to this sexualized treatment at such a young age, but it is complicated by the sensation that there is something enjoyable about being touched. Just like in her interactions with the teacher that may have had some inappropriate feelings towards her, Tracey reinterprets her experiences through a lens of having wanted some aspect of it all along; a perspective in which she is winning, in which she is invulnerable and always comes out on top, despite this not being the reality of the situations.

The final section of the text is under the header “her collections.” The tone is different here, although some of the entries are recurring from previous sections. This final section highlights the function of what has been happening throughout the text, that is: the reframing

of moments into different contexts and the different tones they take on depending on what is around them. One particularly interesting entry is the one labeled “theories”.

> At eight, I realize all of these things happen at once. 79 on the math test? No problem. One Tracey has 92, another 40. [...] All the possibilities like a thick web, a giant layer cake all around me make the decisions less difficult. If everything’s going to happen anyway, why bother? (Fisher 2001, parallel.htm)

Tracey finds herself conceptualizing the world as an infinitely layered reality of every possibility that could ever exist. It brings her comfort to think this way, that no matter the outcome, every other outcome is happening somewhere else. This entry is worth attention because Tracey’s alternate reality concept here in many ways mirrors what the text is doing, and how the reader must approach it. Tracey imagines a moment where every possible version of that very moment exists simultaneously. *These Waves of Girls* imagines a space where a life history exists as one, simultaneous thing.

Both *With Those We Love Alive* and *These Waves of Girls* play with time as a function of story, narrative, and hyper-narrative. In the case of story, the former connects the passage of time within the story to reader interaction, making the reader carry responsibility for the progress to an extent that they perhaps would carry equally in a traditional book, but not as consciously. The latter work allows narration to isolate small events from a larger story into a selection, a *collection,* that forms a sort of treasury of self, a vault wherein the histories that define the present day come to be interpreted through the lens of the present day, flattened from a timeline into a tapestry. The narrative structure of *These Waves of Girls* is a branched one, and does not offer a single direct telling of the story. It exists as something impossible, a narrative told by someone with the capacity to tell in multiple overlapping directions simultaneously. There is no human narrator that can tell a story in the way this work's narrator does, and the task of untangling the web and choosing a coherent narration, putting together a text that can be followed from one end to the other, falls to the reader, the hyper-narrative agent. As for *With Those We Love Alive*, its interactions with the reader on the hyper-narrative level mostly take place in the form of manipulating actual time, creating moments wherein the reader has to synchronize or wait, and pay special attention to the actual real passage of time in their reality.

These time warps, flattenings of history, timelost narratives, and real-time synchronizations, are employed in both works to convey some aspect of the relationship between identity, self, and time. Tracey has her collection of memories, which form a core of

who she is, while being selected and interpreted from the lens of an identity that has formed only later. The protagonist of *With Those We Love Alive* exists in a space halfway between the text and the reader, being a fictional entity but also being gradually identified with the reader, and drawn close to them through the manipulation of time and agency, and the game-style second person referential form. The reader plays the role of the protagonist, a relationship that will be explored further in the next chapter, about the role of the body in reading.

A pair of recurring images throughout the "school tales" chapter of *These Waves of Girls* are those of hands and of mouths. The alternations of discomfort and desire display hands and mouths as inherently intimate in some meaningful way. With the sexual overtones of many of the entries, the idea of hands and mouths as sexual organs emerges, and ties itself in particular to Tracey's experience of lesbian attraction, her desire for sex that inherently involves these body parts. At the same time, this is a young Tracey, once again returning us to the aforementioned discomfort, with the closeness with which we view her developing sexuality.

I note this emphasis on body here to foreground the discussion I will attempt to open in the next chapter, which will explore the relationship between the body, the machine, and the text. I find attention to the body to be special when it comes to digital works specifically because they are in a sense disembodied, and yet, even more embodied than anything else. The digital removes us from the physicality of the text, gives us what would be a book as merely pixels on a screen, and yet we must engage with it through interfaces that involve our body to a greater extent than turning the pages of a book might. Furthermore, the interactive text forces the reader to be more aware of themselves, including, potentially their own body. So I end this by imploring you, the reader, to think of hands and mouths and computers, and perhaps by doing so, you are interacting with this text as well.

III. Changing Bodies

What is the form of a digital work? The question is only part rhetorical, for while I purport to have one potential answer, the question will perhaps always remain. We know what the form of a book is, we know the smell and texture of paper, we know its weight, we know the general mechanics of its printing process. When it comes to the digital text, to most of us, even its mechanics of creation, the computer code that renders it, are wholly mysterious. I ask this question because the form of the work matters. The medium is, after all, the *body* of the work. In the words of Shelley Jackson:

> Paper, for instance, is thin and light, but a pile of it has considerable weight and mass. Take the 545 pages of *Moby Dick*. That is a whale of a book. It is heavy, it is long, its massiveness a concrete correlative of the time it will take to read it. Holding it, you know in your *body* that you have days of travel ahead of you, mountains of blubber to slice into the thin sheets that Melville informs us, knowingly, are called "bible-leaves" and render into the clear oil of understanding. (Jackson 2018, 24)

The text has a body, and the body can (and will) shed light on its content. The digital text is contained within the computer, so we might ask whether it is the computer currently displaying it that is its physical form.

> Imagine reading *Moby Dick* on an iPhone. We gain a sense of the sleekness of water, of the depths concealed beneath its bright and changing surface, and above all its reflectivity, so important to Melville that he positioned the story of Narcissus in his first paragraph. (Jackson 2018, 25)

This certainly is an option, it is one possible way of perceiving the physicality of the digital book, the hypertext work, the web page. Another option would be to perceive the electrical signals of ones and zeros that make up the base code the computer interprets to display the text as its physical form, which may feel more accurate in some ways. A text saved as a PDF file, say for example, the academic paper I downloaded for my research, can be transferred between different devices because it at its core is a set of signals for a computer to decode. I can take the "same" file (which is really not the same at all, is never the same, for it is reproduced, re-decoded, every time I open it) and copy it to my smartphone, where I can choose to read it through a completely different interface. Instead of feeling the slow clicks of the scroll wheel on my mouse, I use my finger to pull the virtual page up. The interface has changed, but the text is, should be, still the same. So maybe the text's physical form is this set

of electrical signals that I can teach to different devices so that they each gain the ability to display it.

My answer is that none of these adequately prepare us for studying the physicality of digital text. My answer is that we have to look back to the form of the reading-machine. It has three components, the text itself, the medium, and the reader. And is the reader not part of the physical form of the book. Is it not the reader that perceives the weight of *Moby Dick*, the reader that turns the pages, the reader that feels the texture and thinness of the paper? Sure, we could treat the reader as merely a recipient for these impressions, and not an active participant in their being, but I have argued at length that there is no passive reader and there is no action that is also interaction. Two objects meet, and they each act upon each other. In that case, the body of the text is the reading-machine, or as Jackson says, "a book is a situation" (Jackson 2018, 14).

I mean to say here that the body of the reader is a part of the reading, and therefore a part of the physical form of the text being read. Digital works withdraw from the physical world, but it is the body of the reader which draws it out again and entangles itself with it.

Invitations to Change

Hypertext works are changeable. Indeed, it is the special power of any digital work that they are able to portray immediate change and respond to the reader in a much more immediately apparent way than other literature. Though, as we have established, all works regardless of format are changed by a reader's engagement with them, and reading is itself a form of interaction. It is therefore not the quality of being interactive or even being changeable that makes these works unique, it is the ease with which they do it and the immediacy and obviousness of the change. Hypertext works are capable of changing their words right before your eyes. Though this form of structural reorganization marks a distinct difference from traditional print, it's not something that is impossible to itself replicate in print. An academic paper filled with references and footnotes could be an example of a text where segments are linked in ways that force the reader to structure a path through the text themselves, and we've all read plenty of those in print. One could even make the argument that a traditional encyclopedia is itself a work with this same quality of segments ordered according to reader choice, though it does not present the tools to facilitate the specific pathfinding that links, references, and footnotes do. Indeed, every text is changeable. So it is not merely change I am interested in when studying these texts in particular, but how the texts at hand reveal

something about the nature of change itself. For this purpose, I am talking about these texts' *invitations to change*.

The possibility for changing of the text itself goes beyond simply the structural segmentation, and the distinction between narrative and hyper-narrative time. Instead, a form of irrevocable change is enabled in hypertext fiction, where the words of the text themselves are altered. Within a text that is simply segmented, one can hypothetically read through all text segments and derive any number of meanings through the mental re-organizing of them, and as such theoretically – though not truly – experience every possible pathway that leads through them. The invitation to change is different, however. Here, the change is textual rather than structural. Choosing where to go at a crossroads might significantly alter future passages rather than simply granting access to passages in different orders.

Porpentine Charity Heartscape's *With Those We Love Alive* makes use of a previously mentioned feature of the Twine software, which it has been written and programmed in, called changer-text. These links function in such a way that when clicked, rather than direct the reader to a new text segment or reveal hidden text, the text of the link itself changes, so that the word or phrase clicked becomes a different one. In the early part of *With Those We Love Alive*, what could be called the introduction, where the basics of the text are established, this sort of link is used to present the reader with several options to describe the second-person main character.

Here, some grounds must be laid, recalling the discussion of the potential distinction between game and literature previously. First, the digital game trope of referring to the player and the player character collectively in second person, so that both are in effect instructed to perform the same action, usually something that only the character can do within the fiction, but which the player can enact through the game controls. By employing this common game device, the text appeals to the role of the player not merely as a passive audience, but as an active participant in the story. This also establishes the expectation that the choices the player will be presented with are those made by the main character, that the player will take control of a character's actions and guide the story through this avatar. In order to effectively portray this relationship, the text is required to blur the line between player and character, and effectively convey the illusion of the character being a projection of the reader's will into the text. This is a feature employed by *With Those We Love Alive*, as shown in the matter of the passage of time within the text.

The second feature, related to and as an extension of the former, is that of the structuring interface text, or the *interface voice*. Hypertext works and video games require a

higher degree of competency in their audience than a traditional book. In a book, the typical operations are intuitive, and importantly, taught to us from a young age. We know how to open a book, turn the page, and read line by line. To navigate a work of hypertext or a video game can be more involved, especially because while there are trends, there is no single cohesive standard for the interface of these works. Therefore, they will typically explain to the reader or the player how to navigate. A video game will instruct the player to press the X button to interact with an object, or to press the spacebar to jump. *With Those We Love Alive* opens with a few such instructions, telling the reader what links to click in order to navigate the text, and what links to click in order to change the text.

The reader is explicitly invited to change the text directly, by replacing the words there with others, through an interesting example of precisely this type of interface text. After reading the basic instructions, the text "Please remember, nothing you can do is wrong" appears. Here, the text is both interface and narrative, and speaks simultaneously to the reader and the second person main character. The idea that none of the reader's choices are wrong is established here to encourage the reader to engage with the text on their own terms and bring themselves into it, but it is also a statement on the moral nature of the character's actions and how they cannot be judged for what they are later shown to do out of necessity.

As the first example of change, the reader is presented with the text “Which month were you born in” followed by a list of months. Each month is marked by its number, twelve in total, with the spelled-out number being a link leading further into the text. For each month, there is a strange, evocative name giving a hint of what the month represents, such as "the Angel's Egg" and "the Salt Key" but no further explanation given. The choice fundamentally changes aspects of the character and therefore of the story. The text that follows depends on the choice made by the reader, and therefore represents not a single authoritative text, but multiple equally real yet contradictory versions of the text coexisting in a single work. In the case of *With Those We Love Alive*, the specific effect of this change is to determine the components that make up the name of the protagonist.

This can be juxtaposed against the previously discussed texts, *Patchwork Girl* and *These Waves of Girls*, where the reader does not in fact cause irreversible change to the text's meaning, but instead weaves their own path through a textual web. Rather than allow for change, they merely manipulate the difference narrative and hyper-narrative. Interestingly, *With Those We Love Alive* to a very small extent allows for the reordering of text segments. The limit of it is that at certain points, the reader is allowed to choose which of several areas the character explores first, and even then, this could be read as different in nature than the

reordering that takes place in the other works, because here, the reordering is not actually presented as such. Instead, it is presented as a true, chronological account of the protagonist's actions, as the reader causes her to make these choices.

In this format, reader participation becomes a structural dogma. It actually makes some sense to compare this to the activity book for children, or the school-book with exercises at the end of every chapter. The reader's role is not a passive one, and the writing itself must account for this and reflect it.

So, what is change? What does it mean to be someone who is changing? I want to examine the duality of the term "changing" itself. Indeed, it may mean "to cause to be different" or, alternatively "to become different" according to the fifth edition of the *American Heritage Dictionary of the English Language*. Both the reader and the text are changing, though with different subtleties of the word. However, if the reader and the text are equal participants in the reading, does not also a change in the text necessitate a change in the reader? Does not the text also cause the reader to be different? Here, *With Those We Love Alive* demonstrates an awareness of this change-interplay, with its use of sigils. At several points in the text, namely at the end of each natural "chapter" of the narrative, the reader is instructed to draw a sigil. Specifically, the reader is told, as they were asked to prepare a pen by the introduction from the interface voice, to draw this sigil on their own skin, making explicit the participation of the body in the process of reading.

Of course, a reader is free to ignore the commands to draw sigils, but to do so would not be to engage with the text on its terms; it would not be reading. I draw this distinction somewhat banally because in order to read a text we must engage with it on its intended terms. To rip pages haphazardly out of a book is not to engage on the terms of whichever novel may be written within it, just as with this text, to refuse to participate in the intended activity becomes a failure to actually read. So what actually happens in this process? Drawing the sigil upon yourself means not only to become a conscious, explicit part of the meaning-machine, but also to inscribe meaning onto yourself. The reader is always already part of the machine, whether they are aware of it or not, but the drawing of the sigil is a tool *With Those We Love Alive* employs to make this relationship visible.

The first instance of this asks the reader to draw a "sigil of new beginnings" after a scene depicting a ceremony, where the protagonist's gift to the empress is presented, the new year begins, and the reader is confronted with the first of many commands. "Draw a sigil of new beginnings on your skin." There are no instructions as to what the sigil should look like, even as to what the term sigil might mean in this context. It's something as strange and

unexpected within a literary text as a command to perform a physical action entirely outside of the written text itself. This also draws our attention towards the reader as not just a mind, but a body, a physical presence. There is perhaps a sort of shifting of physicality inherent in the digital text (regardless of whether it is a digital original or merely a digital version of a print classic) where as the work itself loses its tangible independent form, the reader's physicality grows to fill the void. *With Those We Love Alive* is a digital work, no pages to turn, no paper texture to feel, and it is one where the reader is asked to become unusually aware of their own body. There is something more within these texts than what we think of as the function of the implicit reader. Indeed, there is a reader-shaped hole that we must fill by becoming part of the text. The text is not merely interpreted by a reader, but is a component of the meaning-machine alongside the reader, not content to be something as simple as a passive object.

A sigil of new beginnings as demanded by the text, is something that you, the reader, must design. And in doing so, you will, must, believe in its power, because its symbolic meaning has been created by the reader. Rather than rely on preexisting intertext and recognized symbology, the text presents an interpretation and asks for a symbol to represent this. Recalling the opening line of the text, "nothing you can do here is wrong," this sentiment extends here as well. There is no wrong way to draw the sigil on yourself, because this part of the text has been left to be filled out by you, on you. By drawing a sigil of new beginnings, you will believe that this sigil represents new beginnings, because its meaning precedes its form. You are letting the text embody itself on you, using you as a proxy for its embodiment, and you are being made aware of your own participation in the reading process. The idea of a new beginning then becomes part of you. And, undeniably, the text is changing you, turning you into a person with symbols that evoke concepts drawn on your body, a person who embodies concepts. Sure, you could wash those symbols off afterwards, but the very fact that such an action is required means that the text has changed you in some way. Not an irreversible change, but a change nonetheless. An embodied change. And while reading, this act of self-inscription ties the reader and text together. The sigils are part of the text, but only through the reader do they come to be at all.

Furthermore, this action of bringing attention to the body of the reader and indeed to the very visual changing of one's own body relates both to the character creation format attached to the player character archetype, wherein the player changes a character's physical appearance to become as they please, and to an awareness of bodies. Both the body as an integral part of reading (hands turning the page, fingers clicking buttons on a keyboard, eyes

decoding photons into images, the physical sensations of emotions evoked by the work), and themes of bodily alteration tied explicitly to trans identity.

With Those We Love Alive is a work that is conscious of its own incomplete nature, of the part the reader must play in completing a text so that it becomes a thing that is not a mere sequence of symbols. This would be true for every text, and certainly, a traditional book, the codex book, could perform this same type of play, but it is the interactivity that makes this potential apparent and obvious. The screen shows an instruction, and a link to proceed that must be clicked in order to produce the next bit of text, and they both parse more as instructions than as a mere selfsame fact of the form the way turning a page might feel. The very structure of the work makes the demand more important, more of something the reader must do in order to proceed, even if they are perfectly free to choose not to do so. The idea of something incomplete that takes work, constant, simultaneous work to complete and maintain as complete further underlines the trans narrative of the work, treating the trans body as something that is constructed as incomplete in the world it exists within, and must undergo various continuous treatments in order to be made complete.

Decay and Transformation

Early in the text, the protagonist encounters the empress, an alien creature, who leaves a lot of questions unanswered and invites the reader to answer others. “The Empress rises from the water, dragging her train of leaves and ichor. Her larval skin floats across the lake like the carcass of a pale leviathan. Her aides pick wet plant matter from her skull.” (Heartscape 2014). Her appearance is clearly not that of a human, and we might be left to wonder if the main character herself is not human either. The term “larval skin” may reflect something insectile about the empress, an association towards perhaps the queen of a hive, but also signifying that she has left behind the larval stage and fully entered maturity. Further, we see clear themes of decay surrounding the empress as in the mention of her former skin being like a carcass, and her being covered in dead leaves. Upon later entering the throne room, the throne is also described as “Glossy white wood swarming with termites” (Heartscape 2014). Insects form an important part of the process of decay of organic material, and being the hive queen, the empress would be the embodiment of this decay. Decay is itself a form of change. The empress, perhaps, would then be the embodiment of change. Most poignantly, we see this when the main character enters the throne room of the empress and looks at her portrait. Changer-text links are used to describe features of the empress. “Her majestic [changer-text] horns / Her mantle of [changer-text] / Her eyes [changer-text].” (Heartscape 2014). At the

bottom of the page, a link leads back to the throne room. By clicking these links, the reader is allowed to quite literally change what the text reads, change the empress' appearance. The reader is invited to change the empress, the most powerful being in the text, perhaps except for the gods, although their power is left to mystery. And the changes are dramatic, describing striking features that are entirely different from each other. The first link cycles between "atlas beetle", "ram", and "stag". The second cycles between "moth fur", "anemone tendrils", and "fleshrags". The third cycles between "burning with cold fire", "drooling with soulsludge", and "crawling with snakes". These features further underline the inhuman qualities of the empress, and also open up new questions. Her biology is chimeric, being constructed of creatures from across different clades altogether. The specific words chosen to describe her are also at times unfamiliar, utterly strange. I do not know what "soulsludge" is and I don't expect any reader to know, but it evokes an otherworldliness about the being. You are only allowed this power once, though. Once you decide to leave the portrait, the empress retains her appearance as you left it, and the changer-text links are gone, leaving only plaintext that cannot be clicked.

I draw special attention to this because this empress is a figure of special regard in the text. The entire narrative revolves around the relationship of the protagonist with the empress, despite few direct interactions. At different points, the empress is associated with violence, power, control, and seemingly inescapable cycles. It is no coincidence that the central figure of the text is also directly associated with change. She has features of an insect, having emerged from a larval form into a fully formed adult shape radically different from her initial shape, and her adult form itself is something the reader can alter.

This aspect of physical transformation is echoed in the protagonist in some minor way. Let us for a moment return to the very first part of the text, where the reader is asked to fill in the details of who the main character is. Clicking the link of any one month presented under the question of when they were born leads to the next segment, the same segment regardless of which month the reader chooses. The choice will only show its effect later, once all choices have been made. Here, a changer-text link is used. The question: "What is your element?" The answer: a changer-text link that changes in order between six different options when clicked. At the bottom of the page: a link that progresses to the next page, simply labeled "Yes". The elements available to the reader are petal, tears, mud, machine, fur, and feather. Though the concept of a personal element might seem familiar if somewhat archaic – each zodiac sign is traditionally associated with one of the four classical elements – none of the elements listed here are familiar as such. They are all physical things, which fits with the idea

of what an element is; a component of the world. As such, it is not unreasonable, I judge, to interpret these as the building-blocks of the world the text takes place in. It is a world built from petals, tears, mud, machines, fur, and feathers. Significantly, this is a world without either fire or air, elements associated with respectively anger and enthusiasm. They are representatives of strong emotion that spurs action. Mud is naturally the mixture of earth and water, which are traditionally associated with respectively apathy and melancholy. Here, in this world, the two are inseparable. Apathy and melancholy are represented as one and the same, a dirty mixture, a mud. Traditionally, one should think of apathy and melancholy as distinct from each other, melancholy being both active and emotional, while apathy is the absence of both action and emotion.

It could be interesting then, to speculate on what the other elements might entail, symbolically. Petals are of nature, but specifically delicate and fragile, an image of vulnerability. Tears are a complicated choice, because beyond just the obvious representation of sorrow, they are caused by all sorts of emotions, and are more akin to a physicalization of emotion that overwhelms. We cry because sadness is an overwhelming feeling, but any feeling has the potential to become overwhelming. Is this element then related not to any specific emotion, but to the sensation of something being too great for a single person?

Machines are artificial, predictable, and rule-bound. Here, I opt to interpret the word machine in a colloquial sense rather than going with my own definition of them through the meaning-machine. They are manmade and would not normally be an element (if by normally, we mean the traditional Greek concept of elements as the building blocks of the world), but it begs the question of whether machines have become so essential to the way of the world that they have become part of its systems as an element. Fur belongs to nature, but evokes associations with beasts, wild animals. Feathers are of the natural world as well, but this time birds. Both fur and feather are living, in the sense that they grow off of a living creature, but dead in that they live on beyond the death of the creature. They could be seen as representing separate aspects of animal life, different ways of existing in the natural world.

Ultimately, I spend time on this because this is an instance where the reader (or, if we are to use the language of games, player) is allowed to “create” the character that the text revolves around. And though this choice doesn’t impact the text further, with one small exception, it would be dismissive to say that the choice is irrelevant. We do not read a novel and decide to discard certain sentences, loaded with meaning, as irrelevant to the larger themes, to the characters, to what the novel *does*. Therefore, we can no more discard the choice the reader makes. It’s a choice in characterization, a choice that impacts how we are to

understand and interpret the main character of the story. By showing that each element has potential symbolic interpretations which are then connected to the character, I hope to also have shown that the character in the text itself (the raw text, that is, the unread text), contains self-contradictory multiplicities that can only be turned into something cohesive and comprehensible through the process of reading, through the meaning-machine.

Moving on to the next segment, the reader is asked for the color of their eyes and given another changer-text link that when clicked cycles through different options for eye color. Here, the process seems to resemble even more closely the process of creating a character in a video game, getting to customize their appearance before you set out on an adventure. But it is only the eyes we get to design, and even then only the eye color. The physical appearance of the main character still evades us, defined only by eye color. The emphasis on body, bodiliness, embodiment, further in the text seems to contrast with this bit, where everything but eye color is left obscured.

Finally, after having chosen these three facts about the character, and moving on, the narration begins. “When you came of age, your parents used this information to give you a name, running their fingers along the indexes of a book, as by custom.” (Heartscape 2014) The word “name” is a link that moves on to the next segment of text, which reads as follows: “But in the morning when they were gone to work, you found the other book, and you held a different name inside.” Below this text, we see a name. I cannot reproduce the name here, because the name depends on the three previous choices made. The name is divided into three segments, each of which is determined by the choices made respectively for birth month, element, and eye color. This is the one and only instance where these character creation choices affect the word and letter of the text. As the text says, the character’s parents found the name in a book, by looking up the appropriate bit for each of these facts about their child, just as the text now has done for you through a simple bit of code and calculation. The name of the character is therefore not simply a name, but a manifestation of these three core aspects of their identity.

But, as mentioned in my previous chapter, the name given was wrong. At first, it is merely “a book” the lack of a definite “the” implying the existence of other books. And sure enough, “the other book” gives an answer to the question, definitely showing the existence of exactly two such books. It may seem obvious, even banal, to point out that these are gendered books. The most near-universal and near-dualistic line of division by which we organize names is gender. The character “you” finding the other book, and finding another name within it could be just a simple bit of exploration, but this is the only name we ever see. We don’t

know what name the parents chose, we only know the one the character found in the other book, meaning this new name gains a higher reality, more importance. The implication of the character choosing a new name from the other book is of course that they are transsexual, that their chosen, or embodied gender is a different one than the one assigned to them at birth.

The theme is further elaborated on in a later link, opening the main character's chest hidden under the bed. "Estroglyphs. Spiroglyphs. Identical to the ones on your body." (Heartscape 2014). This foreshadows in a sense the way the text is going to use glyphs as a form of physicalization on the reader's body, but the names of these perhaps strange, underexplained objects also establish some important facts about the character. The name "estroglyph" references estrogen, and the name "spiroglyph" references spironolactone, a commonly used anti-androgen medication in feminizing hormone replacement therapy (HRT) for trans women. The main character is a trans woman, and though she has access to some sort of magic or mysticism as shown by the use of glyphs as a vector, she is going through a sort of HRT. And by doing so, she is changing. Though the changes are not nearly as radical as the changes the reader facilitates by clicking a cycling-link while trying to decide on an eye color option, HRT does cause the body to change over time as it changes the balance of sex hormones. The context of the main character's trans status matters because *With Those We Love Alive* is a text about changes, about changing.

I would make the argument that one could conceptualize being trans itself as an act of changing, transsexuality being not a condition of the mind or the body, but the inevitable result of fully comprehending and internalizing the impossibility of static existence. That is: transsexual identity as presented in *With Those We Love Alive* rests much more strongly on the process of change, of moving between one state and its socially constructed opposite, than on any given gender. The very act of identifying as a trans woman or a trans man rather than simply a woman or a man is to give importance to the process of change. In a sense, we see here the simultaneous existence of contradictory stances that Haraway's cyborg seeks to embody.

This is where the protagonist shows herself to be like the empress. Just like the empress is emerging from a larval form and is embodied through choices, the protagonist must inscribe glyphs on her body in order to change as well. By showing how the protagonist has glyphs on her body, the text also again merges the reader and the protagonist, perhaps implying that when the reader draws sigils on themselves, the protagonist is doing the same, and their bodies are in that moment the same body. You are, as the reader, taking on the role of body for a character whose body is defined by change, and you do this by explicitly

changing your own body and inscribing meaning into it. But this is something we all do. That is, inscribe meaning into our bodies. We wear makeup, pick out clothes, get our hair cut, get tattoos, wear jewelry, and all of these things carry with them the intent to communicate something to the world around us. A suit communicates that we are fit for the job we are interviewing for better than a hoodie and sweatpants. Eyeliner and mascara communicate a relationship to feminine beauty norms. Jewelry can communicate family relationships, marriage status, religious affiliation, or merely aesthetic sensibilities. The transsexual body is not unique in being inscribed with meaning, but it is the inscription of meaning taken to an extreme that challenges ingrained ideas about the boundaries of bodily change. This is the cyborg, the progression of something to a liminal point where it reveals the artifice inherent in our constructions.

Monsters and Angels

Let me then show an alternative vision of transformation in a trans context. *We Know the Devil* is a game. It calls itself a game, and fits into a genre that is distributed and presented in the realm of games. It is also a multimodal literary work, consisting of text, music, and images. It can be described as a particularly sophisticated form of an illustrated literary work. The text is presented on the bottom of the screen, mostly in the form of dialogue, with the occasional narrative voice, while the rest of the screen shows a drawing of the character speaking, superimposed over a photograph background. This form can be likened to a digital comic book, or as the genre is usually referred to, "visual novel."

In *We Know the Devil*, three girls are sent to a summer camp by their parents because they are evil. At this camp, the girls hear the voices of God and the Devil speaking to them over a radio as they spend a night in a cabin, navigating conflicts with the other teenagers at the camp, performing necessary tasks, and bonding with each other. The camp they are staying at is a conversion camp, though this is never explicitly stated, merely left for the reader to discover, and the girls have been sent there by their parents to be forced out of their queerness. For all of the girls, this has to do with attraction to other girls, but for one of them, Venus, there's an added complication.

The three girls are named Venus, Neptune, and Jupiter, in what is likely intended to be a reference to the anime series *Sailor Moon*, where the main characters are named after the planets of the solar system. This naming scheme allows the text to do some interesting things. First of all, the characters are each associated with a symbol, which appears before their name in their dialogue. These are the alchemical symbols associated with each of their planets.

Choice in *We Know the Devil* takes the form of tasks the girls have to do, such as repair a charm outside the cabin, where the narrative is structured such that one girl has an idea of what to do, and another comes along with her. Who this second girl is though, depends in each instance on who the reader chooses out of the remaining two. In these instances, the screen shows two buttons, each showing a combination of two symbols: the symbol for the girl taking the initiative for the task, and the symbol for each of the other two, respectively. The text is able to use the symbols as shorthand for the characters, but more significantly, is able to imbue a symbol with the idea of the entire character. Similar to the glyphs and sigils of *With Those We Love Alive*, broad meaning is condensed into something very simple.

The other utility of this convention concerns Venus. She is a trans girl. Throughout the text, she is referred to with masculine pronouns, and her character illustration is vaguely masculine, portraying her in a plain button-up shirt and with short hair. At the same time, since her name is Venus, the symbol that represents her throughout the text is also the symbol used commonly to refer to women. This presents the reader with an immediate insight into a sort of contradiction concerning the character; they read masculine pronouns and see a character that appears to be a boy, but he is also associated with a symbol that directly contradicts this. It's also interesting that at no point is there a name change associated with Venus, and even those that refer to her as a boy still refer to her as Venus. Names in this text in other words seem to exist more on a narrative level than merely a story level; they are narrative signifiers and symbols and not necessarily a direct representation of an internal story-reality.

The overall structure of the text can be described as a straight line that at certain points splits into two separate paths, which then converge again into a single line, before this line diverges anew into a new two paths, which once again converge. The text continues like this, through six such splits, before it finally ends on one of four ending sequences. Each divergence represents the two choices given the reader for which two girls will perform the task given. The text then focuses on the interactions of these two girls during their task, while the third is left alone to listen to the radio. At the end of the text, whoever has been left out the most, that is, the one girl that got chosen by the reader the least often, transforms into a monster and the others escape. However, if the reader manages to balance all three throughout the six choices so that each is chosen the same number of times, the fourth ending will be revealed, wherein all three girls transform into monsters together.

In the ending where Venus is the only girl to transform, she expresses her desire to transform.

> The lights in the edge of my eyes. I want to see them so much. They're horrible, I can't look away. I want them within and without me. All through and about me. I want feathers in my lungs and eyes on my skin. I want my heart to see and my lungs to fly. I want to cast light over the city and shine shadows where the streetlights used to be. (Bee 2015)

The other girls attempt to calm her down, and the screen fades to black, before fading back in on a drawing of Venus, now an angel with wings covered in eyes.

> Venus reaches out to us. She has eyes to fly with and wings to see. As terrible as an angel, be afraid. That wing to see the truth and that eye to lay it bare. (Bee 2015)

This is the first and only point where Venus is referred to in the text with feminine pronouns. The two other girls attack her with their radios, to keep back the Devil. The morning arrives, and Venus is back to normal, and once again referred to with masculine pronouns. The girls succeeded in holding the Devil back, and succeeded in preventing the transformation of one of them.

The description of Venus' form interestingly parallels the descriptions of the empress in *With Those We Love Alive*. In both cases, there is a certain blending of features, blending of concepts, happening without a clear explanation as to what this is supposed to mean. The empress is “burning with cold fire” and wears a mantle of “anemone tendrils” and Venus has “eyes to fly with and wings to see”. In both works, monstrosity is conveyed through absurdity, by describing features that are hard to comprehend, features that do not make sense according to the way we believe the world works.

In *We Know the Devil*, monstrosity is used as an allegorical depiction of queer identity. Each of the girls transforms and is defeated by the others in each of their endings. The ones that form the closest bond are able to prevent their own transformation, leaning on each other to keep their identity concealed and suppressed, while the one that is left alone to despair ends up failing this task. However, by forming a bond between all three of them, they are able to realize their identities and become monsters without anyone destroying them for it. They are still monstrous, as this is the framework their conservative, homophobic, transphobic surroundings have provided for such things, but there is empowerment in monstrosity.

Contrast this then, with what monstrosity represents in *With Those We Love Alive*. The protagonist does not herself become monstrous, but the presence of it is all-encompassing. The protagonist is an artificer, and she has been tasked with creating a gift for the empress.

The form of this gift is given up to the player in the form of another set of changer-text links. It is an item (diadem/gauntlet/mask) made of a material (heretic bone/dronesteel/lake crystal), engraved with three glyphs (indomitable/angel-breeder/beloved tyranny) (power over death/bat-mother/life-ruiner) (rich with souls/burning waterfalls/loyal to eternity) wrapped in something (white cloth/snakeskin/human skin leather/funeral shroud). The inhumanity of the item is immediately apparent. Each choice of material has a strangeness to it, being something that either doesn't exist in the real world, or something that one would not specifically seek out for material. The glyphs are in stark contrast to the sigils the reader is asked to create, which express personal feelings, being associated instead with power, violence, and hierarchy.

Monstrosity intrudes on the life of the protagonist, as she is asked to put her craft to the task of creating objects that themselves are monstrous. The empress looms over the protagonist's life, infecting her with strangeness and inhumanity.

After this event, once the reader progresses to the next day by choosing to sleep, something happens. The text tells us “The empress is hunting humans today” (Heartscape 2014). The background music, which has until this point mostly been calm and ambient, rises to a forceful drone, overlaid with the sound of imposing war drums. The text continues “A custom.” with the word custom being a link, which when clicked, changes and expands the text into “A custom that persists because people are scared that if they question the custom they will fall victim to the intense cruelty of the custom, which persists because they fail to question it.” (Heartscape 2014). The empress hunts humans because she is a monster, but she is allowed to continue to do so because there is a fear of being the next target if you do anything to prevent it. A cycle of abuse, a cycle of cruelty, quiet acceptance of horrible violence against others because questioning it might make you the next in line. It’s apparent that the protagonist’s servitude to the empress is not an idyllic escape from her family, but rather that the necessity for escape, any escape, has brought her into a deeply abusive environment, and monstrosity is a manifestation of this. However, monstrosity is also associated with transformation, and though the protagonist is forced to put her craft towards creating monstrous things, she is also engaging in a process of transformation and creation even if it is on the terms of monstrosity.

This is further elaborated on later on in the text. “The princess spores have burst from the empress. Everyone is running around laughing and crushing the spores as they drift to the ground.” (Heartscape 2014). The text presents the choice “Are you part of the world, one with others, a person, or are you alone and apart?” Clicking either option within the text will progress to the next segment, but the actual text depends on the choice made. Making the

choice to be part of the world will have the main character crushing the little princess spore creatures, while choosing to be alone and apart will have her ignoring them as she walks. Finally, regardless of choice, you are asked to draw the sigil of what you feel. You don't get to make your own direct choice of what the protagonist does, but rather she acts depending on how she sees herself and depending on your choice to fit in with others or reject them. But, finally, you are given the freedom to feel however you like, and in fact to inscribe this feeling into your body and the story. How you feel about what happened, no matter which side you were on, is all up to you. Maybe something is being said about how you can't always choose how you act, how your actions are often guided by your relationship to others around you, but your feelings are always yours, and you are even free to be horrified with yourself even as you know you had no choice but to do what you did.

With Those We Love Alive presents a vision of a world where being part of the world means participating in unending cycles of violence and abuse. Living in the world means using your skills and knowledge ultimately in service of this violence, and it means being warped into a monster yourself. It shows a character who wants to be free, wants to realize herself away from those who would control her, but finds herself entangled in new webs of control instead. It's a bleak vision, but not an entirely unrealistic one. What I will argue here is that the empress is not only a symbol of abuse, but also a trans symbol. Connected to transformations, multiplicity of form, and to the very same monstrosity that *We Know the Devil* uses to convey queer identity trouble, the empress is easily associated with transsexuality.

At the turning point of *With Those We Love Alive*, a new character is introduced, named Sedina, who is someone from the protagonist's past. They're stated to have parted on bad terms, and the protagonist is at first concerned with this, but they appear to both have been able to put it behind them. Sedina is also a trans woman, and she has a plan to kill the empress. The plan fails, but the two women are able to escape together, and the final sequence of the text takes place in a hotel far away, where the two of them are staying. Here, we get what I would consider the answer to the question posed by the empress' introduction in the beginning. "A dead person is curled up inside your hamper. "I am sorry, dead person, but you must leave"" (Heartscape 2014). The dead person responds by asking why they must leave, and the reader is given two choices, "because I am alive" and "because you are dead". In these final moments of the text, the protagonist goes through the same transformation that the empress did at the beginning, letting go of an old self. The empress' larval skin was floating on the water of the lake, and the dead person, the person the protagonist used to be, is curled

up in the hamper. The empress is not merely a symbol of the abuse the protagonist has gone through, but is associated specifically with the things that have happened to both her and Sedina as a consequence of them being trans. These aren't details that are given in the text itself, but we are given some insight into their relationship to trauma, and they are both strongly tied to the empress in particular. We could read the empress then as a manifestation of the horror of being trans, of being confronted with a transphobic reality, of changing yourself and being suddenly confronted with a reality that wants to destroy you for it.

Reaching a Hand

In her essay "I hold It Toward You: A Show of Hands" Shelley Jackson engages in a discussion over what a book is, and what its physical form is. In talking about the Google Library Project and its preservation of books through scanning, drawing their ghostly essence out of the matter and into the internet, she points to how the body, the physical form, returns in the moments of imperfection.

> When a page is turned too slowly or too soon, is crumpled or folded when it should be flat, when the texture or the color of the paper registers as visual data, when the irregular shape of the paper does not match the rectangle of the frame, but above all, when the scanner's hand gets in the way. (Jackson 2018)

Throughout the essay are images from the Google Library Project showing the aforementioned hands, ghostly remnants of the workers scanning the books, hands immortalized now as part of the book they touched. I would be remiss not to mention that I am reading Jackson's essay through a series of photos I myself took when the book had to be returned to the library, and in most of these photos, my own thumb can be seen holding down the page. The hand remains, persistently bringing even these intangible artifacts into a relationship with the body, reminding us that we do not read with our mind, we read with our bodies. Or perhaps that there is no meaningful distinction between the thinking mind and the body that holds it, the finger that follows the lines of a text as we read it itself a structuring figure for thought.

Digital fiction makes us at once less and more conscious of the physicality of the text. The text withdraws from tangible reality, but the body grows to fill its space, dancing across buttons, swiping a touch screen, and reaching all the way into the digital realm through the mouse cursor that mimics, in a (nearly) one-to-one relationship, the motions of the hand that drags its physical counterpart. *With Those We Love Alive* explicitly involves the body of the

reader as a canvas for the story to unfold in part upon, and presupposes a willingness to change. Perhaps all literature presupposes a willingness to change; I would argue that one who emerges totally unchanged after reading Proust's *À la recherche du temps perdu* has failed to truly take in the work. Even something of a more pop-fiction bent ultimately seeks to provide experiences the reader has not previously had, experiences that necessarily change the reader.

If that is the case, then *With Those We Love Alive* merely asks the question out loud, of whether the reader is prepared to change, both the text and their own selves. And the text, conscious of what it is saying, follows this question with themes of change, bodily autonomy, and a lingering sense of how we are inextricably entangled with all we come in touch with. The reader is entangled with the text through written sigils on their skin, but also through the experience of reading, the memories formed. And all across the Google Library Project's collection of books, as well as in a folder on my own computer, there are hands, forever entangled with the text they were touching at that moment.

IV. Identity in the Mesh

As we near the end of my work, I return to questions of identity. I could ask: who am I? Or, I might just as well ask: who is Hamlet? Or let us maybe ask instead: who is the Creature, Frankenstein's monster? And who is the female monster of Shelley Jackson's *Patchwork Girl*? And who are Venus, Neptune, and Jupiter, the girls in *We Know the Devil*? Ultimately, the question I want to ask is who are we, what does it mean to be someone who *is*, and who really is the cyborg?

Let me show you I mean business. I will go through each of these in order. Hamlet is the prince of Denmark. He is the son of a father, a father who left an imposing hole for the son to fill. Perhaps this would be true of any son of a king, or perhaps it would be true of any son of a father. The father looms larger than life in the mind of the son, impossibly grandiose. Hamlet struggles for identity, and he does so by attempting to embody his father. In order to realize himself and become a free, whole man, Hamlet needs to become his own father, become that which he admired and looked up to, but to do so he must claim the throne back from his uncle that has stolen it. He is ultimately incapable of doing so, as we all know how that tragic story ends. In an attempt at setting a trap for his uncle, Hamlet dons a guise of madness, but the line between pretend and reality becomes ever more blurred, culminating in the duel that causes the death of most of the characters. Is Hamlet truly mad? He does seem aware that his madness is pretend, but at the same time, his actions are those of a madman, and he plays his part until it kills him and many others with him. Perhaps it doesn't matter whether Hamlet is truly mad, for he has played the part perfectly regardless.

Who is Frankenstein's monster? The villagers that behold him call him monster, and the Creature himself declares to Frankenstein that he should be his Adam. Frankenstein's monster is built in a laboratory through uncertain methodology. He is an imitation of a human, perhaps he even truly is human, but he is shunned and feared for his monstrous appearance, which stems from Frankenstein's own difficulty in perfectly replicating the proportion and detail of human bodies. The monster is built with the intention of creating life from dead matter, and even with aspirations of classical aesthetic beauty, but it is Frankenstein's own shortcomings that produce a failure to create this. The Creature is abandoned by a creator that wants nothing to do with it, and has no familial connections, no legacy by which to define itself. The only thing the Creature *is* is that which the world interprets him as; a monster. He is denied relationships, denied existence in the world, most significantly when Frankenstein himself refuses to create a female companion.

The female monster of *Patchwork Girl* is many things that Frankenstein's monster is not. Throughout the text, she is defined by her connections, her ties to the world. In fact, the very structure of the text is that of a web of connections, neatly personified in the "quilt" section of it. She is a conglomerate identity of multiple dead women. Every part of her body has lived a past life and takes on a character of its own through this history. Her personal identity is perhaps no less troublesome than that of Mary Shelley's monster, but for the inverse reason. Where Frankenstein's creation struggles to define himself because he has been abandoned by his creator and placed in a world he has no ties to that rejects him at every turn, the female monster is many things at once, and cannot be understood except as the sum of a multiplicity of histories and contradictions. She can only be read as an interactive network of hypertext links, because her very existence defies definitive narrative ordering.

Venus, Neptune, and Jupiter are teenagers at a summer camp. They carry little personal radios, on which they hear the voices of God and the Devil, one condemning them, the other tempting them. They are troubled by aspects of personal identity that come into conflict with the religious culture around them. However, we the readers are also troubled, by the lack of a definitive answer to who they are beyond these facts. There are four potential endings to the story. In each of three endings, one girl realizes her identity and becomes monstrous. In the fourth, all three of them do so together.

There is a tradition in such multi-branched text games of endings being defined by whether the outcome is positive or not. Players of such games will often speak of the "good ending" or "bad ending" and in many cases, there is also talk of a "true ending". The good ending is obvious, it entails some form of success, wherein the characters achieve their goals and the player is left satisfied that their investment paid off. The bad ending typically entails characters not achieving their goals, and the game withholds the emotional payoff. These can often be more interesting endings because they are more complicated. The "true ending" is usually harder to find, and many games require all other endings to have been experienced first, or to perform some obscure sequence of actions in order to unlock this story path. Typically, these games are read with the assumption that the true ending represents the *actual* version of the story, and the others are merely imaginative alternate possibilities. However convenient this convention may be, it is a touch banal for our purposes. The text for each separate ending exists on equal terms within the work. They are parallel, contradictory yes, but parallel for certain. So instead of falling into the trap of designating one single path through a branching narrative as the true version, I want to look at every path as equally true, equally real to the story. The consequence of this is that we must treat branching stories as

self-contradictory. While in the process of a single reading, there is no contradiction to be found, but when we overlay all possible paths, we see that there are several simultaneous truths that cannot coexist. In other words, interactive stories are unsettled, they are multidimensional.

So when it comes to the question of who Venus, Neptune, and Jupiter are, we cannot give a single cohesive answer to this. Who each of the girls is depends on the reading, because whether they change at all depends on the path taken. So in practice, they too are like the story, multidimensional and unsettled. They exist as several contradictory things simultaneously, and can only be decoded into one coherent identity through the process of reading. And once the reading is done, they return to this state once again, existing in a text that cannot decide on its own what they are.

Rhizome Tangles

It becomes increasingly necessary to seek out some sort of understanding of this seemingly contradictory multiplicity that these texts are built on. I look to Gilles Deleuze and Félix Guattari's concept of the rhizome.

> The rhizome is reducible neither to the One nor the multiple. [...] It is composed not of units but of dimensions, or rather directions in motion. It has neither beginning nor end, but always a middle (*milieu*) from which it grows and which it overspills. [...] Unlike a structure, which is defined by a set of points and positions, with binary relations between the points and biunivocal relationships between the positions, the rhizome is made only of lines: lines of segmentarity and stratification as its dimensions, and the line of flight or deterritorialization as the maximum dimension after which the multiplicity undergoes metamorphosis, changes in nature. (Deleuze 2008, 21)

If we then are to read hypertext fiction works as rhizomes, what would this mean for our understanding of them? First of all, there is a certain promise to the idea of the text being reducible neither to the One nor the multiple; the text is multiplicitous because it exists as several potential realities until it is decoded, but it also cannot merely be reduced to a number of potential readings. Even with the texts where one could more easily map the number of permutations, such as *We Know the Devil*, the text is not something as simple as a collection of this number of broadly similar texts with overlapping content.

But even more interesting is the concept of the rhizome being made only of lines, not of points or positions. To this point, I have spoken of the segments of a hypertext work, to speak of the specific positions within it where the reader gets to read a piece of text with links

leading to others. I could also term these the pages. But if we shift our attention away from the pages, away from the positions and points, we could instead look at the lines. In this case, at the links themselves. The links function as lines, vectors of motion through the space of the text. We can analyze the hypertext work by reading the text in each of these delineated spaces and applying our understanding of literary devices, but is there a hidden potential here for analyzing primarily through attention to the direction, the motion, of links? If we treat the hypertext work as a web of lines instead of as a set of positions with paths in between them, does this unlock a potential for reading literature in general as a set of motions?

In one of the foundational works in the study of digital narratives, Janet H. Murray broaches the idea of the rhizome's relationship to digital forms similarly.

> The second kind of digital labyrinth, which has arisen from the academic literary community, is the postmodern hypertext narrative [...]. Like a set of index cards that have been scattered on the floor and then connected with multiple segments of tangled twine, they offer no end point and no way out. [...] Walking through a rhizome one enacts a story of wandering, of being enticed in conflicting directions, of remaining always open to surprise, of feeling helpless to orient oneself or find an exit, but the story is also oddly reassuring. In the rhizome, one is constantly threatened, but also continuously enclosed. (Murray 2001, 132-133)

Murray speaks in particular to the early hypertext works, which at the time of her book's original publishing in 1997 were primarily taken with a labyrinthine structure of narrative with no promise of resolution. 1995's *Patchwork Girl* itself adheres to a version of this pattern, where the text has no clear beginning or end, and the reader is empowered to move freely along the vectors, the segments of twine. Michael Joyce's *afternoon, a story* forces the reader to return to the same text segments over and over again, before finally offering a way out after multiple passages through them. In comparison, the mostly linear (if branching) narratives of *With Those We Love Alive* and *We Know the Devil* may seem to be more traditional, less labyrinthine in structure. However, I take Murray's meaning here to be not that the work itself must necessarily produce a disorientation and confusion about the possibility of a conclusion to the narrative, but rather that this style of interactivity produces texts that leave the reader with a sense of something unfinished even after completing them. *We Know the Devil* is created to make the reader return to the beginning, go through the text again, making different choices so as to cause different outcomes, but also to see each of the divergent-convergent paths along the way. The reader is helpless to orient themselves because every choice precludes another, and finding one path means losing another.

There are other rhizomes at work. One that is particularly relevant when discussing *With Those We Love Alive* is fandom culture. At the end of the text, the reader is finally presented with a credits screen, with links that lead to external sites for those involved in the creation. The interesting part here is the final link, reading “sigils”, which leads to a page on Porpentine Charity Heartscape’s now deleted account on the social media network Tumblr, where the reader would be able to see photo posts from various people of the resulting collection of sigils. The text and its author would encourage readers to share their flesh-writing with the world, and become part of a living collection through social media.

Fandom is a broad term that can be applied to a variety of audience activities. What they have in common is that they represent an engagement with a work outside of, and at times, almost independent of the work itself. In the case of *With Those We Love Alive*, it manifests primarily in the form of photos posted online to personal blogs and social media accounts of each person’s interpretation and inscription of meaning, shared by other fans of the work, and at a certain point in time also by its author. If fandom is a rhizome, then the work, or rather, the common interest in it, must be the *milieu*, from which a decentralized, non-hierarchical network of interaction grows. I mention this because I am speaking of a genre which in the current day has largely been subsumed into the realm of video games, and whose reception unfolds primarily in social media spaces and through the lens of fandom. A search for *We Know the Devil* on Tumblr returns copious amounts of fanart (art of characters from the work created by and for fans) and posts discussing the themes and narrative of the work. The current genre of interactive digital literature is deeply tied to these interactive online networks. In practice, this means the identity of a work unfolds in real time as a collective egregore understood and interpreted collectively through a decentralized web. The work becomes less a solid thing and more a shared understanding, that through contradictions in individual interpretations again becomes multiplicitous and irreducible.

The intermeshed text of hypertext linkage is a unique kind of object in that it is not wholly itself. When I talk of hypertext linkage here, I am intentionally expanding my subject so as to cover not merely hypertext fiction and text games, but also online encyclopedias like Wikipedia, and even the emergent, endlessly growing webs of social media follower lists, likes and shares, and links to other sites, to other contents. Imagine a Twitter user, Caroline, makes a tweet sharing her opinion on an ongoing news event. In her tweet, she inserts a link to a blog post by an independent author providing an anarchist analysis of the news event in question to back up and elaborate her argument. Imagine now that another user, Clark, retweets Caroline’s tweet onto his own timeline. A follower of Clark’s chooses to look at

Caroline's Twitter page, and is greeted with fanart that Caroline has retweeted of *Star Trek* characters from various independent artists who use Twitter as their platform for sharing this content. The question I want to ask then, is who is Caroline? Not the actual real person behind the account, but who is Caroline, the cyberspace entity, the digital projection of the person running the account? There is no clear beginning or end to Caroline, for her tweets are drawn into other cyberspace entities, entangled with them, and she in turn draws other entities into herself as she retweets their content.

> Emergence appears unified and smooth, but this holistic event is always for-another-entity. It would be wrong to say that the water has emergent properties of boiling that somehow "come out" at the right point. It's less mysterious to say that when the heating element on my stove interacts with the water, it boils. Its emergence-as-boiling is a sensual object, produced in an interaction between kettle and stove. Likewise, on this view, mind is not to be found "in" neurons, but in sensual interactions between neurons and other objects. There is some truth, then, in the esoteric Buddhist idea that mind is not to be found "in" your body—nor is it to be found "outside" it, nor "somewhere in between," as the saying goes. There is far less mystery in this view, but perhaps there is a lot of magic. The ordinary world in which kettles boil and minds think about tea is an entangled mesh where it becomes impossible to say where one (sensual) object starts and another (sensual) object stops. (Morton 2013, 140)

In this case, identity is emergent. Online projections, accounts, users, avatars, whatever one may choose to call them and however one may choose to delineate them, are sensual objects entangled in a mesh wherein they collectively cause the identity of each to emerge through their interaction. If we are to read hypertext fiction the same way, then we could treat each isolated segment of text as an object in itself, not separate from the text as a whole (nothing is ever truly separate) but still fully an object. The links, that is, not the text that forms links, nor the code behind them, but the motion that proceeds when a link is clicked – the pathways from one object to the other – are the real object of attention, for these are the interactions between the objects. As Morton says, when objects are entangled this way, there is no way to say where one starts and another stops. To speak in terms of the rhizome, there are no points, only lines.

Essence or Identity?

In *We Know the Devil*, personal identity is a central theme to both the narrative and the hyper-narrative. But, as I previously pointed out, the text itself does not give us a non-contradictory answer to what this identity actually is. We could be friendly to the text and assume that since the narrative is about the suppression and forced hiding of identity, that it does not in fact

change between readings but remains the same, merely hidden. But I am more interested in reading the literal, structural features of the text, and as such, we should be less eager to read suppressed identity and more so to look at what is actually being told to us.

So the whole of who each of the girls is, the entirety when studying the entire text, who is that? The answer is that each of them is every potential version of themselves. This echoes Morton's sentiment about the difference between past and future.

> Startlingly, we are beginning to see that *the past just is appearance*. Contrary to the commonly held belief that appearance is "now," the formal and material cause of a thing just is its pastness. That must mean that *the future is the essence of a thing*. (Morton 2013, 213)

What he argues is that the past is appearance, because the formal qualities of a thing are that which have to do with its history and its existence throughout every moment before this one. The future is essence, because the future is always ahead and therefore always contains every possible eventuality. This means that to imagine a thing into the future, we must imagine every simultaneous possibility regarding it, and that this is the essence of a thing, the sum of all the things it can be.

But there is a complication here, the identity of the girls within a single reading precisely does not consist of every potential possibility, so does that mean there is a distinction between *essence* and *identity*? Let us return to our example of the Twitter users. Caroline is defined by the interactions, the lines that exist between her and other users, and she emerges in that interaction. In her profile text, Caroline has written some information about who she is. This information guides those that see her profile in their interpretation of her, and aligns their reading with an identity she herself is choosing to project. Clark did not look at her profile until later that day, and was surprised to learn she is a published author. Until that point, Caroline had been a nebulous entity in his mind, someone with few features and many empty spaces full of potential. Learning this fact by reading her profile text narrowed down this potential, and gave the idea of her a little bit more of a distinct shape in his mind.

What I am getting at here is that it is through the process of reading that essence transforms into identity. Identity does not as such exist within the individual. *Desire* for identity does, and this desire drives us to curate our presentations, to inscribe meaning into flesh in order to embody something specific, but identity itself must belong to the realm outside the individual. In this, hypertext works are remarkable figures. They are shattered,

fragmented entities, yet inextricably bound together so that one object cannot be clearly separated from the next. If the identity of a literary work is its narrative, then hypertext works have no settled identity. They are a mesh open to exploration, but it is precisely in this invitation to the reader that they begin to change. Transforming from future-objects (links waiting for a reader to make a choice that has been planned for them) into past-objects, they crystallize and form an identity. And just as the reader finishes and closes the software, they return to being future-objects full of every potential.

What this means for the identity of individuals in the real world is that what is commonly referred to as identity, the internal self-perception of a person is actually the desire for identity. The significant difference is that this transforms perceived identity, internal self, into a vector for agency rather than a static truth. Consequently, identity as a form, identity as a label, is something that exists in the outside world. It is built on perception, but it would be too easy to say that is all of it. How a person is perceived is part of the way their identity is built in the world around them, but there is more to it. Another aspect would be the actions a person takes, the ways they interact with other objects, and a third would be the performative statements they use to navigate their reality. In practice, this means identity emerges through the aesthetic interactions between one object and all other objects it comes in touch with. In literary terms, identity emerges through reading. If we are all just living books, and we may very well be, if we are constantly inscribing meaning on our bodies, then it is only when this book is actually read that its actual identity comes into being.

Girls and Time-Waves

These Waves of Girls concerns a lesbian main character. The word lesbian itself is used at several points, establishing a specific label through which we then come to interpret the character. But the text does not read as merely a justification or elaboration on the assigned label. No, in contrast, it reads at times as a complication and questioning of this label.

One way of reading *These Waves of Girls* is as a postmodern bildungsroman. The titular waves of girls are echoed in the waves of experiences that each come together with the individual, Tracey, to shape her and over time produce the adult she is growing into. In this reading, the structure becomes not irrelevant, but of lesser regard. The structure exists to convey the idea of reminiscence through association, but does not majorly affect the ultimate meaning of the text: the shaping of an individual through their adolescent experiences.

So what if we read it as something else altogether? Or perhaps rather take the idea of a postmodern bildungsroman more seriously? We could instead read *These Waves of Girls* as an

expression of totality, of the complete history of a person removed from the shackles of chronology and personal development. In this reading, the text holds no pretense to answer the questions of why Tracey is a lesbian, or how her formative experiences have shaped her, it merely states that she is, and recounts what her experiences were. Interestingly, we are talking here about something almost the opposite of what *We Know the Devil* is, for if *We Know the Devil* is a text that contains multiple potential futures, *These Waves of Girls* contains only a single past. This would mean that the subject matter of *These Waves of Girls* is that of appearance, of formal qualities, and sure enough, that is what the text is built up of; descriptions of events that happened and shaped the present, a present that sits before us in the form of an anti-chronistic retelling of what may or may not have been a coming of age. This also means that the potential futures, the essence of Tracey, eludes us. It does not exist in the words written, but perhaps it exists somewhere between them. *These Waves of Girls* is a work that looks only backwards, and puts on blinders against the possibilities of the future.

So what does identity look like in *These Waves of Girls*? It looks like something contemporaneous. It looks like the present manifestation of the object's past. "When we hold a glass, we are holding the past, in a "formal" and "material" sense." (Morton 2013, 212). We are holding Tracey, in our hands or in our minds or on our computer screens, and so we are holding the past. This is neither anachronous nor asynchronous. Identity becomes the time-bound expression of something that is greater than time. In other words: the self is an object that stretches through all four dimensions of spacetime, but identity is an emergent expression of the continuous unfolding of this object in the present moment. Tracey is a past, a complete and total past that does not have to adhere to any chronological structure whatsoever.

Who Is the Cyborg?

I asked a question at the beginning of this short chapter that I did not answer along with the others. My question was: who is the cyborg? The cyborg is a hybrid of machine and human, it is a creature of fiction, it is a possibility for a world where people are open to kinship with all sorts of non-human entities and hybridity. But who is she? I have approached the concept of the cyborg with the idea in mind that the cyborg should be seen as a shorthand for liminal interactions, in other words the interactions that reveal an artifice in our oppositional structuring of the world. This cyborg is not necessarily defiant of power structures as much as it is defiant of linguistic structures, though the argument is easy to make that linguistics forms the basis of power. However, what I mean to say by this is that the cyborg does not break down the boundaries of real contradictions. It does not bridge nature and technology. Instead,

it defies the labels that have separated these things in the first place. The cyborg reveals that our definitions of “nature” and “technology” fail to account for certain extreme cases and therefore can no longer be treated as truths.

The cyborg is also the product of multiple objects interacting. The cyborg is a mesh, emerging in the form of a Twitter account, or a reading-machine. These are relatively mundane things, as all things would necessarily be bound together in such a system, but the cyborg is the part of this mesh where contradictory impulses contribute productively to each other. The cyborg is the hand caught in the scanning of a book. The cyborg is the text that lingers on the skin in the form of sigils.

If identity then is the product of reading and not of a static internal sense or belief, the cyborg is the inscription of contradictory meaning upon a body. We are walking books. The final cyborg must be the transsexual, who forcefully carves an identity into the world through the continuous inscription of the opposite of that which they have been assigned. This too reveals a false opposition, for if male and female truly were opposites, it should not be possible to bridge the gap, and yet the transsexual reinscription of meaning upon the body merges the body that is with aspects of that which should be its opposite, creating a cyborg of gender that itself reveals the artifice of gender.

In the case of Venus in *We Know the Devil*, this reinscription of meaning takes the form of mutating into a terrifying angelic being, glowing with light, covered in feathers, covered in eyes. The biblical angel is itself a liminal figure, representing the highest limit of God that a human could perceive. Their descriptions stretch the imagination, as if to say: you cannot comprehend this, here is an approximation. At the climax of her self-realization, Venus becomes an entity at the very limit of human understanding, and those that see her are the prophets who may, if they are lucky, carry the message back: there is more to this. More is possible in this world than what exists within the boundaries we have imposed upon it.

Self-realization then becomes for her a form of willing liminality. She cannot truly transcend the boundaries of this world, but she reinterprets herself so that she can exist close to it and call into question the way they are drawn in the first place. This is who the cyborg is. She is a figure of failure and yet of promise. Failure, because she is not truly transcendent, failure because she is still *human* and *machine* and not a third thing that encompasses both in a flattened totality. The cyborg adopts multiple histories as her own; she is the convergence of branching paths into a self that does not seek to resolve contradiction but rather to exist alongside it, to derive meaning from it. Indeed, it is the contradiction that gives the cyborg her meaningful identity; if she had succeeded in shattering the boundary between human and

machine, there would be no need for a term like “cyborg” and no need to define her difference from any other human, any other machine.

She is a figure of promise because she reveals a way out of binary oppositions and into a realm of boundless connections and affinities. Like an asymptote, she approaches the line, infinitely closing in on it by halving the distance between her and it, but never truly able to pass it because she is defined by the very codification of these opposites to begin with. The cyborg reveals to us that we are not merely acting upon matter, that the matter also acts upon us. In the form of the hypertext fiction work, she reveals that when we read, the text also reads us, and we both come out altered. This is an affirmation of agency, of the ability to change (both *cause to be different* and *become different*), but it is also an acknowledgement that we are not elevated actors able to touch the world but not to be touched by it. We exist on an equal plane with the objects we touch, and interaction goes both ways.

Conclusion

Imagine yourself returning from cyberspace. Do you rematerialize in front of your computer like Kevin Flynn in *Tron*? Do you gasp for air as you escape from the stasis pod that keeps you in a digital slumber, like in *The Matrix*? Do you shut down your computer, stand up, stretch your legs, and think about what to make for dinner? The potential of digital worlds is perhaps much less dramatic than what science fiction media has made it out to be. And this should be an obvious fact to us, should it not? We are, after all, surrounded by digital worlds in our everyday lives, and hardly a day goes by when our lives do not intersect with the digital. What was once a frontier of wonder and terror has become absolutely mundane. We look up recipes on our smartphones, work remotely through Zoom, and, yes, play massively multiplayer online role-playing games.

In truth, this framing device I have chosen seems overly dramatic. The world we live in is not one where the concept of a grand adventure in a digital otherworld, like a hypermodern Oisín entering a virtual Tír na nÓg, carries the allure of possibility any more. Though we hear discussions of the "metaverse" quite frequently, this too has become something mundane. The digital worlds available to us are here, and they are, all things considered, relatively unimpressive.

In the matter of my chosen literature, this should be even more obvious. Did I give false promises in my introduction? Perhaps so, but if I did, it was all for a reason. Everything is for a reason. In thinking about the possibilities of digital literature, this distant, alluring figure of futuristic potential, one can, like Janet H. Murray, think of a *Hamlet* on the Holodeck. In *Star Trek: The Next Generation*, the Holodeck is a technology that appears as a large empty room, which when activated, produces a hologram reality for the human viewer (or player?) to interact with. The Holodeck can be programmed to tell stories, loaded up with virtual scenarios that display in three dimensions, as if the viewer is truly there. In some simulations, the viewer is simply a passive observer, like the audience at an immersive theater performance. In others, the viewer takes on the role of a character themselves, interacting with the holograms, which respond in turn.

This is an extreme vision of digital narratives, and while I doubt it will come to pass, I won't say it is impossible. It is also the kind of vision of cyberspace that I opened with in my introduction. Why did I do this? Well, most importantly, I wanted to get the illusions out of the way. We don't live in an illusory world, and digital literature is not radically different from any other literature. If anything, I think I have managed to show that literature is so

robust a form that its features persist, no matter what comes to pass. The texts I have focused my work on in these pages have been relatively plain in comparison to the Holodeck vision. They communicate a story, through a narrative, through the basic symbol system of writing. We probably would not call them texts at all if they did not consist of written text. And though they are structured and presented in a way quite distinct from the traditional codex book, with no pages to turn, no physical object to turn over in our hands and visually confirm our progress through, they employ the same basic mechanisms in order to tell the reader a story. This feels both empowering and disappointing. Is the radical, fully interactive virtual-reality narrative just a dream? But at the same time, writing is such a universal system of communication that the literary remains even when removed entirely from ink and paper.

My point here is that there is perhaps a need for the vision of cyberspace to be anchored in a more realistic imagination. The cyberspace in which hypertext fiction unfolds is the same cyberspace in which I type these words, the same cyberspace in which I upload a photo from my weekend trip to share with my friends, and the same cyberspace in which this text will likely be read (by you!): the personal computer. There is no need for full immersion into a Matrix or a Holodeck for us to engage with cyberspace and project our will and actions into it. Interfaces in the form of keyboards, mice, and touch screens connect us to an interconnected web of data reaching all across the world. We are already in cyberspace.

I set out on this journey with the goal of developing a deeper understanding of the special features of hypertext fiction, and find a way of showing if and how this informs the medium's treatment of matters of queer identity. To me, it was personal. I am a queer, trans woman myself, and I have spent large parts of my life in digital spaces. It has been these spaces that have enabled me to explore my own identity, whether through the constantly mutating self-representations of social media, or the roleplaying action of video games. I seek to understand myself, as we all do.

Using Aarseth's model of the cybertext machine, I developed an object-oriented understanding of the interplay between text, reader, and medium. Reading the interaction between objects as aesthetic, and causal, produced the ability to perceive the reading process as a mechanism, a machine that produces, causes to exist, the reading. This also forces us to become even more aware than ever of the equal roles of all participants in the creative process that is a reading. By maintaining this perspective, we reveal that interactive literature is not special in nature, it is not distinct from other literature through any significant means, but it is instead defined by an emergent awareness of the interactivity of all objects, the two-way road

that runs between all things that come into contact with each other and let their aesthetic dimensions brush together.

Applying this to *Patchwork Girl* I found the ways in which the titular character embodied the text, being herself a patchwork of fragments of bodies, bodies which are not unlike books, both inscribed with meaning. The text forms a quilt from a variety of sources, including fragments from the manual for the very software that the work was created in, drawing our attention back to the mechanical facts of its creation the way a visible stitch along the creature's arm would draw our attention back to the hands, the nail, the string that stitched disparate pieces together.

In the chapter focusing on narratology, my goal was to discover narratological devices capable of tackling the additional complication introduced by the branching paths and interactive change that digital environments enable, and through their enabling, encourage. For is it not the nature of paths of possibility to force the journey? Just like how the multi-branched narratives of works like *We Know the Devil* push the reader to restart in order to explore another possibility, the openings for deeper levels of interaction enabled by digital media cause works utilizing this to spring into being. In order to account for the reader's role, I speculated about a potential "higher" layer to the narrative, a hyper-narrative which in most literature is invisible to the reader because it aligns almost (but not entirely) perfectly with the narrative. I am left somewhat dissatisfied with the amount of work I was able to do in this short space on the matter of hyper-narrative, and if I were to repeat this entire process all over again, I might make the hyper-narrative itself the primary subject of my entire study. This also, however, carries promise. If I shall continue my work here in any direction, it must almost certainly be in the direction of further investigating this hypothetical hyper-narrative. I would also like to do what I did not get the opportunity to do here; study how an awareness of hyper-narrative can shape our readings of traditional books. Is there a nuance, an opening, however small, through which we can break into these texts in a new way? I don't know, but finding out would be my goal if this thesis were five times as big.

Next, I investigated bodies and change. In keeping with my established tradition of magic (from Morton), I performed a little piece of word magic through Shelley Jackson's "I Hold It Toward You: A Show of Hands". You see, I can admit now to feeling somewhat conflicted about this, but one of the strengths of Morton's writing on object-oriented ontology, as alluded to in the title of his book *Realist Magic* is that it enables us to perform little pieces of magic by saying that X is also Y. Aesthetics are causality. The past is appearance. The future is essence. Similarly, Shelley Jackson says that books are bodies.

Perhaps she does not say so as directly as Morton makes his claims, but she shows how books themselves are modelled on our bodies in such a way that the body never quite stops haunting the book. And from this insight, I investigated how bodies transform within my chosen literature and how this reflects a bodily transformation in the text itself. I found that in both *With Those We Love Alive* and *We Know the Devil*, monstrosity and monstrous transformations are associated with transsexuality as a way of reckoning with a world that responds to trans people with violence and abuse. Monsters are used to make sense of an experience that extends far beyond the individual subject, experiences that are a manifestation of larger social structures.

Finally, I attempted to bring all of what I had done together into some final questions about where identity comes from, and who really is the cyborg? I've moved beyond Haraway's figure and this is intentional, for my goal was not merely to apply the cyborg, but to find out if she can function as a stepping stone to understanding hypertext fiction. In doing so, she had to change. There is something strangely fitting about this, that the cyborg too had to be transformed in meeting works that are defined by exactly this; change. I found a connection between the structure of the rhizome, the entangled objects of object-oriented ontology, and the pathways that run through hypertexts, even non-fictional ones like Wikipedia. Here, another direction for further study emerges, one that I am sad I have not yet had the chance to follow. If we take the rhizome-object entanglement seriously, we could potentially perform a study of entangled works, such as hypertext fiction, where attention is paid first and foremost to the *pathways* and not to the text itself. This would require a rigorous study of a kind I do not have the time for, but if I could go back and do it all over, I also wish I could write an extensive analysis working only on these strings. This also could hold some potential for the study of intertextuality in a way that focuses on neither work but rather the connections formed between them.

So we come here to the close, standing on the precipice, at the limit. Do I know more than when I began? I believe I have found some entries into hypertext fiction that could prove promising for future study, and I believe I have shown why they are promising through the application of them to specific works. I have found many more questions than I found answers, and I am left with the sensation that though I have done a great work here, I have no more than cursorily touched on many important subjects. Even the literary works I chose to use feel like they could stand up to much further study than what I have been able to do here. Perhaps my work has been somewhat limited by being forced into a split focus, not just on four separate texts, but also on having to build an entire theoretical framework at the same

time as I perform my analysis. If I had more space to analyze a single work, I believe I could find much more and learn much more. And have I learned more about myself? I don't know. Ultimately, I think the answer to that question is that what I have found is a whole lot of new ways to ask questions to which there are no definite answers. And maybe that is where I will continue to go, down the path towards answers to these questions, towards the limit, like an asymptote, or an ever-changing cyborg. I can't say for sure.

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