

Performing Fictions: Interaction and Depiction

Jill Walker

Dept of Humanistic Informatics

University of Bergen, Norway

E-mail: jill.walker@uib.no

Website: <http://huminf.uib.no/~jill>

ABSTRACT

This paper presents a method for analysing an aspect of interaction that can help us understand how users can feel that they are part of a work. I argue that interaction can be a form of *depiction*, causing the user to imagine both her perceptual actions and her manipulation of the work as being fictional as well as actual. This produces an ontological fusion between the actual and the fictional. In brief analyses of three interactive works, I suggest how this framework can enable a better understanding of some aspects of interactive art and literature.

KEYWORDS

Fiction, interaction, representation, narrative, cybertext, digital art, hypertext, ontological fusion, depiction, simulation.

INTRODUCTION

When we engage with an interactive narrative, a hoax web site, a computer game or a digital installation art work, we *do* something more than we usually do when we watch a movie or read a book or look at pictures in an art gallery. All representational art, including digital art, requires perception and some degree of interpretation from its users, but the kinds of works listed above require more than this: they require what is usually called *interaction*. Interaction is a term that is often used fairly vaguely, so let me be more specific here: I'm interested in how users must perform physical actions beyond perceptual actions (such as looking and listening) in order to access digital works. These actions may be no more arduous than clicking a mouse, or they may include walking around a space in a particular way, pulling a plastic trigger, jumping on a dance mat and so on.

There have been many different analyses of interactivity [19]. Some writers reject the term interaction as too vague and too often misused [4]. Yet the basic concept is the same whether one chooses to call it interaction or not: there is a feedback loop between user and machine where the user has some influence on the machine and the machine has some influence on the user. Some formal definitions distinguish between two or more kinds of interactivity based on the exact nature of the user's possible actions [3, 17]. Other definitions focus instead on whether or not the user is or feels *part* of the work [21], or experiences immersion [25, 28] and agency [25]. The formal definitions and the second kind, which can be called ontological, have also been combined in a single model [27].

To me, all these analyses of what actually happens when a user encounters an interactive work point to this: the user performs. Jay David Bolter pointed this out as early as 1991, and reiterated it in the second edition of *Writing*

Space [9]: "The reader performs the text, perhaps only for herself, perhaps for another reader, who may then choose to perform the first reader's text for others" (173). Bolter compares this performance to that of actors or musicians, who are bound to the possibilities of their instruments or scripts as we are bound to what our computers and software will allow us to do. But musicians and actors perform for an audience, and most interactive works do not require an audience. They only require users.

I think that it is the performance inherent in interaction that makes us feel part of the work. This paper, then, is an exploration of the second understanding of interactivity: interaction not as a formal quality of a work but as a perceived inclusion in the work. The way in which the user performs is the theme of this paper.

The performance that occurs in accessing digital works has been discussed in terms of speech act theory and linguistic performatives, notably by Adrian Miles [23], who theorises links as performatives, and by Ragnhild Tronstad [31], who has analysed quests in games as performatives. Tronstad's analysis has later been extended by Espen Aarseth [2]. Alternatively, interactive art has been compared to performance arts [30]. Several other perspectives might be chosen to understand how the user feels part of the work. For instance, one could use phenomenology to try to understand the feeling of participation and co-creation. One might scour the writings of those theorists who have written on interactivity to find patterns and explanations. Or one could conduct empirical studies and interview users to analyse their actual experiences.

I have chosen a different angle in this paper: I will look at what Thomas Pavel describes as the *ontological fusion* between our actual selves and our fictional selves when we engage with a fictional work [26] and at Kendall Walton's theorisation of how we use fictional representations in our own games of make-believe [35]. I will discuss these theories in relation to interactive works and present brief applications of this to particular works: the digital installation *Bino & Cool's Masterclass* [7], Michael Joyce's hypertext fiction *afternoon, a story* [16] and the text adventure game *Zork I* [8].

Though literary theory has often been used to understand digital art and fiction, the theories of fiction and fictional worlds I draw upon appear to be largely unknown both to mainstream literary criticism and among critics of digital arts and culture. Marie-Laure Ryan's work is a clear exception, and it is her work that drew these perspectives to my attention [28, 29]. Because Pavel and Walton's ways of thinking about fiction and fictional worlds are not well known I will devote the first section of the paper to summarising and integrating the elements of Pavel's and Walton's theories that I find useful in understanding interaction. Before that, let me explain the notion of fiction I am using.

WHAT IS FICTION?

Sometimes, when I'm sweating away at the gym, I imagine that I'm an Olympic weight lifter. The crowd is cheering me on, Mum and Dad are close to the podium holding banners with "You're brilliant, Jillikin!" emblazoned on them in huge letters, and if I can just lift those gigantic weights above my head I'll win the gold

medal I've been working towards for a decade. Actually, of course, I'm pulling handles fastened to pulleys and weights on a contraption that looks nothing like a dumbbell, and 5 kilos is a significant load for me. Just as all of us do every single day, I am imagining a situation that isn't real.

Though my daydream was prompted by my being in a gym, my imaginings were not prescribed by the gym or the apparatuses. I could have imagined completely otherwise (that I was skiing or lying on the beach in the sun), or not imagined anything at all. Indeed, my daydream may have been prompted as much by things internal to myself as to the machines around me. The process of completing a PhD makes daydreams of lifting impossible weights come easily.

Let's leave the weight apparatuses in the gym and move over to the rowing machines, or as they're often called, the rowing simulators. While the contraptions in the gym are non-figurative devices simply designed to exercise particular muscles, a rowing simulator models an actual boat. You sit in it, grip the "oars" with your hands, and row. Of course, the simulator doesn't move as an actual boat would, and there is no water other than in your drink bottle. Some rowing machines (and these are the ones I like best) have computers attached to them, too. The computer tracks your movements, interprets them according to the system it is modelling and represents the results continuously in a screen in front of you. As you row you see your representation on the screen move down the pixelated river. Each time you move your oars, your avatar makes the same move. You can even race the computer or the person in the simulator beside you.

Sitting in this machine, moving levers as I would move oars in an actual boat, and watching an avatar on the screen move as I move, I imagine myself rowing a boat on a river. It would be almost impossible to imagine myself being an Olympic weight lifter about to win gold while in the rowing simulator. Perhaps you could do it, if you really tried, but it would be a very conscious effort and you would know that you were breaking the rules. You are intended to imagine that you are rowing a boat, perhaps in a race. In Walton's terms, the rowing machine generates *fiction* and fictional truths:

A fictional truth consists in there being a prescription or mandate in some context to imagine something. Fictional propositions are propositions that are *to be* imagined – whether or not they are in fact imagined. [35]

Fiction, as Kendall Walton defines it, and as I will be using the concept, comes from the combination of imagination *and* rules. My daydream of being an Olympic weight-lifter had plenty of imagination, but it wasn't governed by any rules, and was not dependent on my interaction with the gym equipment. The rowing simulator, on the other hand, clearly sets up rules: These levers are to be imagined to be oars. You are to imagine yourself rowing a boat. It is *fictional* that I am rowing a boat when I use the rowing simulator.

The rowing simulator is not itself a fiction. In fact, I won't be using the term fiction as a noun that refers to a work or genre at all. The rowing machine *generates* fiction. Fiction in this view is more a process or an event

than an object.

Interactive works of art tend to have a lot in common with the rowing simulator. The user must perform actions in order to activate the work. Certain actions are permitted and fairly specific imaginings are mandated. According to Walton's theory (though he never mentions interactive works himself), these are attributes interactive works would share with all representational art, including images, cinema and literature.

FICTION, REPRESENTATION AND SIMULATION

Walton developed his theory of fictionality through a series of essays in the seventies and eighties, and in 1990 he published a cohesive presentation in a book titled *Mimesis as Make-Believe: On the Foundations of the Representative Arts*. Our use of representational works is central to Walton: the user *pretends*, and the work of art is a prop in this pretence.

Walton builds his understanding of our relationship with representational works on an analysis of the way we play games of make-believe as children. A doll is a prop in a child's game of make-believe. The doll prescribes certain imaginings. Fictionally, the child is a parent, giving her baby a bath or putting her to bed. Walton argues that representational works of art like novels, paintings and even some music are props that we use in similar games of make-believe. It is worth noting that Walton's (and hence my) use of the word games is here broader than that common in game studies, being closer to play than to a formal rule-based game.

The rowing simulator is not a representational work of art, but it is a simulation, and simulations are a special kind of representation. Gonzalo Frasca defines a simulation thus:

Simulation is [the] act of modeling a system A by a less complex system B, which retains some of A's original behavior. [14]

While literature can describe a boat and describe the feeling of rowing, and images can show what a boat and rower look like, a simulation models the behaviour of rowing: the machine is built and programmed so that a tug at the oars will produce the same sensation of resistance as is produced by actual oars in actual water. In a way, representations are one-dimensional simulations. A painting of a boat models one aspect of an actual boat, namely the way it looks to an observer.

The rowing simulator may also be a game. When you race against the computer or against an opponent beside you, the rowing simulator is like any other racing game. If you've bought the right accessories for your game console you can play car racing games where you control the car with a plastic foot pedal and steering wheel. Similarly, the rowing simulator provides you with levers that behave more or less like oars and a seat that slides back and forwards as in a real single scull. There are clear rules, and a situation where you either win or lose.

Dolls can also be said to be simple simulations. A baby doll looks like the object it represents, as a drawing does, but a baby doll also models certain behaviours of an actual baby. Some dolls cry, shut their eyes when

they're held horizontally, wet their nappies when fed a bottle of water or laugh when you tickle them. Even rag dolls can be cuddled, put to bed or dressed. Obviously not all aspects of a real baby are simulated, and the simulation is often approximate or imperfect, but it is still a simulation. A theory of fictionality and representation that bases itself on simulation rather than on the aesthetics of narrative or visual art is well suited to help us understand digital works, because these works often use simulation and the modelling of systems in at least a minimal way. Though Walton doesn't discuss simulations as such, he bases his understanding of representational art on the way in which we use and play with simple simulations such as dolls.

Walton's theory is useful in studying interactive works because it discusses fictionality rather than genres and structures. It is a cross-medial theory and so suits the many genres of interactive works well. Works as disparate as installation artworks, interactive narratives and computer games can all mandate imaginings and be used as props in games of make-believe. There are also, of course, many examples of non-representational works of interactive art and games that *don't* generate fictional worlds, or that only barely do so: *Tetris* is a classic example of a game with neither story nor fictionality, and a net.art project like *jodi.org* probably doesn't mandate imaginings either. It is always *possible* to use a work as a prop, but it is not always mandated or intended. For instance, in *Hamlet on the Holodeck* [25], Janet Murray interprets *Tetris* as the embodiment of an American academic's hectic life. For her each block of pixels that falls down her screen is a prop that stands for another item in her to-do list, needing instant attention (143-4). Presumably most players do not imagine this, and not doing so does not constitute a breach of rules or expectations in the game. However, the basic assumption that *one* important function of works *can* be to allow make-believe and the generation of fictional worlds lets us think productively about the relationship between user and work.

The user *pretends*. For Walton, this pretence or game of make-believe is far more fundamental than we usually would accept. He argues that even the emotions we feel when appreciating fictional works are fictional. Watching a horror movie where some disgusting, animate, green slime appears to be coming out of the screen, the viewer may feel terrified and exhibit all normal signs of fear: screaming, cringing, a rapid pulse and so on. In everyday conversation we would say that this person was frightened of the slime. Walton argues that in fact, the person was *fictionally* frightened. The fear was not actual but pretended, part of a game of make-believe. A parallel example that may be easier to accept is that of a child playing a game with his father where the father pretends to be a monster. The father jumps up from behind a chair and roars, and the child screams and runs away – and comes right back for more. This child is not actually afraid, Walton argues, but is fictionally afraid, just as the viewer of the horror movie is fictionally afraid of the slime monster. Another way of saying this is that we *pretend* to be afraid. It is a performance.

BINO & COOL'S MASTERCLASS

Walton builds his theory of fictionality on simulations like toys and games, and then uses this framework to show how we play with art. Works of digital art that are

primarily simulations are thus very easy to read through the lens of Walton's theory, however this also means that little new knowledge is gained of the works by applying the theory. Looking at a digital art installation, *Bino & Cool's Masterclass*, will however provide a foundation for analysing digital art works in which the user's make-believe is less explicit.

I experienced *Bino & Cool's Masterclass* [7] at an exhibition of electronic art at the *Nordic Interactive Conference 2001*. The installation explores control and the complementary positions of dominance and submission. The system interprets user movements as either dominant or submissive, and presents dominant users with images of a slave on screen and submissive users with images of a dominatrix. When I saw *Masterclass*, the artists who had created it were present. Bino was dressed as a dominatrix, in a leather corset, net stockings and stiletto heels. She held a whip in one hand, casually fingering its tail with the other. Cool stood beside her: blond, obedient and silent. They stood near an enclosure of about four by ten metres which was empty apart from a large screen at one of its short ends. A narrow gap in the fencing allowed a single member of the audience to enter the enclosure and stand or walk in front of the screen. When it was my turn to enter, Bino handed me a whip, and told me to try myself against the machine. So I stepped into the enclosure and looked uncertainly at the screen, where an image of Bino loomed over me, cracking her whip and telling me to obey her. I hesitantly stepped backwards, and on the screen Bino kept ordering me to behave. "You have to move more aggressively", the actual Bino coached me, "try to dominate the machine!". So I tried to move quickly and decisively. With fast, determined steps crossing the whole floor space, and an occasional crack of the whip, I managed to dominate the machine for an instant, and was rewarded with images of Cool on the screen, kneeling in front of me.

The *Masterclass* models a system: it replicates certain potential behaviours in a relationship between two people, or perhaps also between a person and a machine. Of course this simulation is very simplistic: one element of a possible relationship is modelled and all others are ignored. To model a system is to interpret it, to emphasise certain aspects above others. Simulation is as selective and potentially subjective as any other representation. As a simulation, *Masterclass* can be understood as a toy, much like the baby doll that I can pretend to feed, burp and sing to sleep.

Just as the rowing simulator, *Masterclass* is a simulation that places the user inside the model. When I enter the motion-sensitive area in front of the screen, I become part of the system. Cracking the whip in front of the screen, I use the artwork as a prop (or as a system of props) in a game of make-believe. Fictionally, I am a would-be dominatrix, perhaps a dominatrix-in-training, attending a master class to learn how to dominate the machine. The fictional world is not absolutely determined, but my imaginings are definitely guided by props: the images on the screen and the whip in my hand. In addition my movements position me in relation to this representation: it is a representation that includes me. In becoming part of the system, I myself become more clearly a prop than when I look at a painting. (Though I will show, in a page or two, how looking at a

painting is also to imagine yourself as within the fiction.)

Walton would say that it is *fictional* that I dominate – or fail to dominate – the *Masterclass*. I pretend to be aggressive or submissive, I am not actually being aggressive or submissive. This parallels the child who is not *actually* afraid of the parent who jumps up and says boo, or the cinema viewer who is fictionally afraid of the slime. This pretence is a form of performance, whether mostly or completely for ourselves, or also for the benefit of onlookers.

ONTOLOGICAL FUSION

One way of understanding my position in relation to the fiction is through Thomas Pavel's theorisation of *dual structures* and *ontological fusions* [26], where a fictional world is overlaid the actual world. If the *Masterclass* generates a fiction of a master class in domination, then that fictional world and the actual world of the art gallery join in an ontological fusion between worlds. Each element of the work is double. Bino and Cool are both the artists showing their work and the fictional teachers of a master class. When I enter the area in front of the screen, I too become the site of a fusion between actual and fictional: I am an appreciator of art at an exhibition, at the same time as I am fictionally a pupil in a master class. These points of ontological fusion occur in the elements of the art work that are props in Walton's sense, and in a work like *Masterclass*, I become a prop when I engage with the work. In wielding the whip I accept a role in the fiction. I'll return to this in a few pages, in relation to the mode of representation that Walton calls *depiction*.

The point of ontological fusion, of articulation between worlds, can be in objects or places, but also in a person. This is more evident in the sacred than in most fiction, and the dual structure between the actual and the sacred in many religions has many similarities to the dual structure between the actual and fictional. Pavel [26] writes:

Sacred beings and objects, miraculous or prophetic grottos, holy mountains, places of worship, all these provide for the points of articulation at which the two worlds meet in what can be called a series of *ontological fusions*. (138)

The Nepalese Living Goddess [1] is an example of an actual person who is a point of fusion between the profane and the sacred: she is a little girl in actuality, but she is simultaneously the Goddess herself in the sacred sphere. Though the fictional and the sacred are different, they have parallel relationships with the actual. For the believers in Nepal it is not fictional that the small adorned girl is the Goddess; for them her being a Goddess is just as real as her being a little girl. The fusion is less absolute in the fictional than in the sacred. The actual world has an ontological priority in relation to fictional worlds that it does not always have in relation to the sacred.

When I crack my whip at the screen in the *Masterclass*, I use the whip and the images I see on the screen as props in my game of make-believe, where I imagine myself working to be stronger than the master dominatrix. Unlike the four year old girl who is chosen to be a goddess, I do not enter the secondary world completely.

She *is* the goddess to her fellow believers, and presumably to herself. I am the trainee dominatrix for myself, in my imagination – but I am always aware that I am pretending. I know that my actual self remains in the actual world. Any onlookers only see the actual Jill cracking a whip and laughing, though they may in turn use me as a prop in their own games of make-believe, perhaps generating different fictional truths to those I generate. The people surrounding the Living Goddess, on the other hand, see the girl simultaneously as the Goddess and as a four year old child.

In effect this separation of actual and fictional self is the same as the narratologists' insistence on the difference between the historical (actual) reader and the textual positions of implied reader and narratee [10]. However, Pavel and Walton give us a different understanding of the relationship between these selves. As Pavel [26] writes:

We send our fictional egos as scouts into the territory, with orders to report back; *they* are moved, not us, they fear Godzilla and cry with Juliet, we only lend our bodies and emotions for a while to these fictional egos, just as in participatory rites the faithful lend their bodies to the possessing spirits. (85)

Pavel continues to suggest that our projected fictional selves may be more “apt to feel and express emotions than are dry, hardened egos”, and relates this to Schiller's hopes for humanity's improvement through art, which Pavel sees as a hope that “after their return from travel in the realms of art, fictional egos would effectively melt back into the actual egos, sharing with them their fictional growth.” (85) The same assumption seems to be made by those who would ban video games or role-playing games because they are thought to cause violence and insanity in the actual world.

When the Nepalese girl menstruates for the first time she will abruptly stop being the goddess and become just a girl again. Even as complete an identification as hers with the goddess can cease, just as I cease to be the dominatrix when I step away from the *Masterclass* and leave the exhibition.

DOING AND IMAGINING ARE BOUND TOGETHER

When we play games of make-believe, “we lend our bodies and our emotions” (85) to the fiction [26]. This loan is a bodily, perceptual and often emotional fusion with the fictional world, and it can take many different forms. Kendall Walton [35] discusses two main modes of representation: the *description* that is common in verbal representations like literature, and *depiction*, which is frequent in images though not limited to the visual. Walton's analysis of depiction emphasises the way in which we imagine ourselves being part of fictions that are represented in this way. I will argue that interactivity is frequently depictive. I find Walton's analysis of what happens when we engage with a depictive representation is very helpful in understanding how we position ourselves when engaging with interactive works.

In depictions, the act of perceiving or accessing the work is “part of the imaginings it occasions” (294). This is what causes the user to feel part of the story, or to feel

present in both the fictional and the actual world.

If I go to an art gallery and look at a painting of a ship in stormy seas, I *imagine seeing* a real ship. I might well point at the painting and say to a companion: "Look at those waves!" While a fictional worlds logician might argue that this is shorthand for my saying something like "In the fictional world of the painting there are waves", Walton focuses on the make-believe in the statement: at the same time as I am aware that I am looking at strokes of paint on canvas, I am *pretending to see* real waves. This is what Walton describes as playing a game of make-believe. Now, when I play this game, I include my own action in the fiction. I could imagine a fictional position for myself: my son is on that ship and I'm standing on a cliff, watching the ship tossing on the waves so close to home yet so unsafe. Or I could just as well leave my own position blank and open. In either case, my act of looking is part of the fiction.

Walton explains this using a Hobbema painting as an example:

The viewer of Meindert Hobbema's *Water Mill with the Great Red Roof* plays a game in which it is fictional that he sees a red-roofed mill. As a participant in this game, he imagines that this is so. And this self-imagining is done in a first-person manner: he imagines seeing a mill, not just that he sees one, and he imagines this from the inside. Moreover, his actual act of looking at the painting is what makes it fictional that he looks at a mill. And this act is such that fictionally it itself is his looking at a mill; he imagines of his looking that its object is a mill. (294)

Two layers of existence coincide, one actual and one fictional. In actuality, the viewer is looking at a canvas with marks that represent a mill. Fictionally, the viewer is looking at a mill. The same act of perception – in this case, looking – is both actual and fictional. The perception of the work is also the fictional perception of the fictional world. Walton writes:

One does not first perceive [the] picture and then, in a separate act, imagine that perception to be of a mill. The phenomenal character of the perception is inseparable from the imagining that takes it as an object. (...) The seeing and the imagining are inseparably bound together, integrated into a single complex phenomenological whole. (295)

My act of looking is the site of an ontological fusion between actual and fictional world, as I discussed a few pages ago using Pavel [26].

Having developed his theory prior to 1990, Walton does not mention interactive works at all. However, he defines depiction as covering all "perceptual games of make-believe", and not merely visual games (333-4). He discusses depiction in music at some length, writing that "representational music is depictive, typically, when it represents auditory phenomena" (335). Drums in Tchaikovsky's *1812 Overture* represent the firing of cannons, for instance, and hearing the drums, I fictionally hear cannons. Listening as well as touch can be a perceptual action:

When one listens to Haydn's String Quartet, opus 32 (*The Bird*), it is fictional that one hears the chirping of birds. Touching a teddy bear counts as fictionally touching a bear. Theater and film audiences fictionally hear as well as see. (296)

The imagined presence of the user in the fiction, fictionally perceiving the represented events, defines Walton's notion of depiction.

In interactive works our participation is not limited to perception and private or communal games of make-believe as it is in the representational works Walton discusses. In *Bino & Cool's Masterclass*, for example, I both perceive and act. My perception of the dominatrix on the screen is just the same as my perception of the ship in a storm on the canvas: my perception is both actual and fictional. While perception is sufficient to appreciate the painting, to fully engage with *Masterclass* I must perform actions. These actions are more than perceptual: I crack a whip, and I walk up and down in front of the screen. When I crack the whip, my action is both actual and fictional. To rewrite Walton: "The doing and the imagining are inseparably bound together, integrated into a single complex phenomenological whole."

This way of thinking about interaction becomes more immediately useful if we think about specific works, and particularly if we think about works in which the user's performance and make-believe is not as obvious as in *Masterclass*.

DEPICTION IN HYPERTEXT

Hypertext fiction in the late eighties and nineties was a predominantly verbal art, although images and visualisations of the structure of the work were important in several hypertext fictions, notably Shelley Jackson's *Patchwork Girl* [15], John McDaid's *Uncle Buddy's Funhouse* [22] and Stuart Moulthrop's *Victory Garden* [24]. In addition, of course, these works are linked, and links are neither a verbal nor visual form of representation, but something else altogether. In the last five or ten years, electronic literature has to some extent merged with visual and concept arts, and these non-verbal elements are often quite easily analysed as depictions. However, links and words alone can also be depictions that bind the reader's "doing and imagining" together inseparably, as I will show in an examination of the first few nodes of Michael Joyce's *afternoon, a story* [16]. I have chosen this work because it appears to have little in common with a simulation like *Masterclass*, and yet, as I will show, it uses depiction in a way that is similar.

Verbal representations can be depictions, as Walton notes, but this is rare, and usually occurs when the work as a whole represents a specific object:

Reading *Gulliver's Travels* is, fictionally, reading a ship's logbook. The representation of epistles by epistolary novels such as Samuel Richardson's *Pamela*, of an autobiography by *Tristram Shandy*, and of journals, diaries, and notes by other literary works approaches depiction. But the games in which these works serve are only minimally perceptual; reading is about the only perceptual action that, fictionally, one performs.

If one examines the printed text of *Gulliver's Travels*, it will not be fictional that one examines the handwriting of the logbook or observes the formation of the letters beyond recognizing what letters they are. (354)

Uncle Buddy's Funhouse [22] is a depiction in the same sense as *Gulliver's Travels* is one. *Uncle Buddy* consists of a box containing a computer disk, two audio cassettes, proofread sheets of a short story and a letter from a lawyer. The letter states that these are papers and data left by your Uncle Buddy, whom you may not remember, but who has left them to you in his will. Reading through the assorted material on the disk and listening to the cassettes almost perfectly equates the user's actual perception and investigation of the material with a fictional perception of the fictional object. *Masterclass* is a depiction in this way too, in that it models a complete situation. *Masterclass* is also saturated with visual and aural depictions: looking at the image of Bino on screen is perfectly equivalent to looking at the mill in the Hobbema painting.

AFTERNOON, A STORY

Joyce's *afternoon* is not a depiction as a whole, as are *Uncle Buddy* and *Gulliver's Travels*, but it contains elements of depiction that depend on the links. Here is the first screenful of text you see after the title screen:

I try to recall winter. <As if it were yesterday?> she says, but I do not signify one way or another.

By five the sun sets and the afternoon melt freezes again across the blacktop into crystal octopi and palms of ice—rivers and continents beset by fear, and we walk out to the car, the snow moaning beneath our boots and the oaks exploding in series along the fenceline on the horizon, the shrapnel settling like relics, the echoing thundering off far ice. This was the essence of wood, these fragments say. And this darkness is air.

<Poetry> she says, without emotion, one way or another.

Do you want to hear about it?

The first three paragraphs describe the situation, the characters and the events and they present the dialogue. When I read these paragraphs, my act of reading is not also a part of the fiction. I am outside of the fiction. Reading, I imagine the fictional scene: I imagine the woman who speaks, what her voice would be like and what she would look like, and I imagine the narrator. I imagine the cold winter afternoon, already dark, and I imagine hearing the sounds of the ice underneath boots, the slam of a car door. I imagine all these things, using the words and the narration as a prop in a game of make-believe where I construct a fictional world based on what I read. Perhaps I fictionally hear the sounds of the ice exploding in the distance as I read the text. But I do not imagine *my viewing of the words of the text* to be a viewing of this scene, nor, if someone reads it to me, do I imagine my hearing of the words to be a hearing of the snow moaning beneath boots. As Walton writes:

[The reader's] actual visual activity is only the occasion for his imaginings. It prompts and

prescribes them but is not their object. (294)

Perhaps the words "snow moaning" can be said to have an auditory quality that is similar to the sound they refer to, as the word "shrapnel" does sound a little like an explosion. If we agree upon that, and we might not, but let us say we do, we could perhaps describe these words as possessing depictive qualities. I would then imagine the sound of the word shrapnel (as I pronounce the sentences to myself) to be the sound of the real explosion. My act of perception (of hearing) would correspond exactly to the represented act of perception. The main mode of this descriptive paragraph is not depiction in this sense, though. Had the words been designed to be played by the computer as a sound file rather than read as words on a screen, their depictive quality may have been heightened.

The last sentence of this first node is different from the previous paragraphs. It is a question, apparently directly addressed to the reader, or at least to a narratee: "Do you want to hear about it?" It demands an answer. By answering the question, the reader accepts the role of narratee, and gains a double existence, both actual and fictional. A contract is established between reader and text, rather like the click-and-accept contracts you "sign" when you open a freshly purchased program for the first time or use your net bank [32]. At this point in the reading of *afternoon* the user must respond to the text in some way, or keep this node on her screen indefinitely.

The reader can respond in several different ways. *Afternoon* is read on a computer, one node appearing on the screen at a time. A new node is displayed when

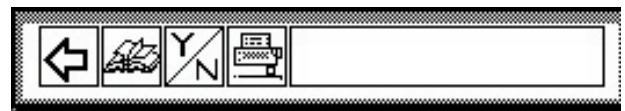


Figure 1: The control strip in Michael Joyce's hypertext fiction *afternoon, a story*. Image courtesy of Eastgate Systems.

the reader clicks upon words in the text to follow links, presses the return key to follow a default path between nodes, or uses the control strip (see Figure 1).

The control strip has four buttons. The back arrow allows the reader to return to the previous node that was viewed. The open book activates a window displaying the titles of all the links that lead out of the node, allowing the reader to choose between all the links. The Y/N button is for answering Yes or No. There is a printer icon for printing out a node. Finally, there is an open space for typing into. In the directions that are accessible from the cover screen, the author explains:

Respond to questions using the Yes/No buttons below or by typing. Note that you can also type some words—and occasional one-word questions—in the text entry box to the right of the buttons below.

When presented with the question "Do you want to hear about it?" the reader thus has three choices, besides sitting and waiting indefinitely or quitting the program and abandoning the story. She may answer the question directly by clicking Y or N for yes or no or by typing yes

or no into the text box, she may press return and follow the default path or she may choose a different path by clicking on a word in the text or browsing the available links.

If the reader types “yes”, or click the Y, a node titled “Yes” appears, starting with the following sentence: “She had been a client of Wert’s wife for some time. Nothing serious, nothing awful, merely general unhappiness and the need of a woman so strong to have friends.” Type “no” or click N, and the computer responds with a node titled “no”: “I understand how you feel. Nothing is more empty than heat. Seen so starkly the world holds wonder only in the expanses of clover where the bees work.” The node continues in similar style: descriptive, poetic and dreaming. No events are narrated for several nodes. The narrator doesn’t tell the story but instead offers general reflections. If the reader answers yes or no, then, the work appears to listen to the reader’s answer and responds appropriately.

In *afternoon* linked words are not marked. Most nodes have a default link to another node that is activated if the reader presses return or clicks a word or phrase that is not linked. Following the default link is equivalent to ignoring the question posed by the narrator. Most of the words and phrases in this first node are not linked, and will lead to the same default node as the return key: a node with a sole line: “I want to say I may have seen my son die this morning.”

As these strings of narration continue, they wind away from their depictive power and become pure description in Walton’s sense, because there is no correspondence between my actions (looking at the screen, reading the text, clicking to move to another node) and the actions represented. Or perhaps, if we stretch Walton a little, there is a correspondence. The narrator is reluctant to tell his story and yet clearly needs to speak. The single question posed directly to the reader can be seen to set up an imagined conversation. Just as when a friend wants to tell us something, but needs constant assurance that we really want to hear it to be able to divulge her secret worry, the narrator of *afternoon* must be continually coaxed into speaking by our repeated clicks of the mouse or presses of the return button. This is not as immediate and complete a merging of actions as those Walton describes as occurring when we engage with a depiction, though. Remember, Walton wrote of the viewer of Hobbema’s painting that “his actual act of looking at the painting is what makes it fictional that he looks at a mill” (295). Though I can imagine that my act of clicking makes my listening to a friend’s story fictional, this imagining is not prescribed by most of the work. In fact, many nodes are hard to incorporate in such an analysis, as they are told in the present tense and ignore the narratee completely, as though they were thought at the time of the event rather than told to a listener or reader.

The question in the first node, “Do you want to hear about it?” *does* require me to imagine myself being directly addressed by the narrator. In that question, the narrator directly addresses me. Perhaps I imagine Peter, the narrator of the story (though I do not yet know his name as I read this node for the first time), turning directly towards me and speaking to me. Fictionally, Peter asks me a question. In the actual world, words

on a screen pose a question. Fictionally, I respond by answering yes, or no, or by remaining silent. In the actual world, I answer the question by clicking Y or N or by simply clicking at random. I imagine my actual answer to be a fictional answer. This question and my answer are an example of a depiction. In this depiction there is also a brief moment of what Pavel calls ontological fusion. “Do you want to hear about it?” is asked both of the fictional narratee and of me, the actual reader, and in my acts of reading and answering the question I fuse with the fictional narratee for an instant.

Walton uses depiction to refer to representations in which the actual act of viewing, reading or listening is part of the game of make-believe. This has some similarity with Kacandes’s involuntary performatives, where by reading the words you enact what they say [18, 32]. A sentence like “You’ve read me this far then? Even this far?” [5] is, according to Kacandes, an involuntary performative. We could also call it a depiction. Reading the sentence, I imagine myself in the position of the “you”, and I imagine myself reading and being spoken to by the text. Walton’s notion of depiction doesn’t cover all the aspects of Kacandes’s involuntary performative, but it does describe the way in which I imagine my actual reading as being fictional, or as being part of the fiction.

Earlier, I said that *afternoon* is not depictive as a whole, as *Gulliver’s Travels* or *Uncle Buddy’s Funhouse* are. Though the work as a whole does not depict something else, it does have an element of depiction in its broader structure. In *afternoon*, the reader’s confused wandering between nodes has often been interpreted as mirroring Peter the protagonist’s wandering between thoughts and memories [13, 34]. Both Peter and the reader search blindly (with no map or guidelines) for an answer to the question of what really happened that morning, perhaps suspecting the truth, perhaps avoiding something, but never being certain. Reading the text, the reader enacts a parallel to Peter’s search for truth. The structure of the nodes and the links sets up a way of reading that depicts Peter’s own journey.

Examining this question in *afternoon* indicates that depiction in interactive works can be not only visual, auditory or conceptual, but can also occur in the links and in the act of interaction.

ZORK

Another primarily verbal form of interactive work is the text adventure game, or interactive fictions as they are also known. These games were popular in the late seventies and the eighties, and though no longer mainstream, fans of the genre still play the old games and create new variants of the form. The bestselling *Zork* trilogy from Infocom is a close descendant of the original *Adventure* [12], and is set in intricately booby-trapped dungeons and caves where the player must grapple with monsters and puzzles, gaining points meticulously until finally finding and securing a glorious treasure.

Afternoon poses one single question to the user: “Do you want to hear about it?” The player of *Zork 1: The Great Underground Empire* [8], on the other hand, is constantly required to give input in the form of simple sentences. Playing *Zork* is a constant dialogue between

game and player. The game briefly describes an event, situation or object, and then blinks its cursor until the player responds.

Here is a transcript of a typical scene in *Zork*: a fight with a troll. The words I typed in are after the > marks, and the rest was provided by the program.

A nasty-looking troll, brandishing a bloody axe, blocks all passages out of the room.

Your sword has begun to glow very brightly.

>kill troll with sword

Clang! Crash! The troll parries.

The axe sweeps past as you jump aside.

>kill troll with sword

A quick stroke, but the troll is on guard.

The troll hits you with a glancing blow, and you are momentarily stunned.

>kill troll with sword

You are still recovering from that last blow, so your attack is ineffective.

The axe sweeps past as you jump aside.

Reading the transcript like this, the act of viewing the text does not correspond to the fictional act of viewing what they represent, which would be required for them to be what Walton calls depictive. When you play the game, though, the experience is very different. The words scroll by on the screen as fast as you can type your responses.

In *Zork* there are two main kinds of actions performed by the player (in addition to the interpretation that always occurs): the perceptual action of reading the words presented by the text, and the typing of commands.

When I type “kill troll with sword”, that act corresponds to me fictionally trying to kill the troll with my sword. The correspondence is not as direct as the depictions Walton discusses, because I actually type but I fictionally fight. Walton wrote that the viewer’s “actual act of looking at the painting is what makes it fictional that he looks at a mill.” (294) In *Zork*, it is the player’s actual act of typing “kill troll with sword” that makes it fictional that she attacks a troll. However, it does seem that Walton thinks of the actual action as being the same as the fictional action: it is the action is the point of articulation between worlds. In *Zork*, the actions are different: typing becomes fighting. But the player’s action still makes something fictional.

The rowing simulator I described early in this paper is much more unequivocally depictive than *Zork*, though the actions performed are not merely perceptual as they are in the examples Walton gives. Pulling an oar on the simulator is fictionally pulling an oar in a rowing boat. In an arcade game, pulling the trigger of a plastic gun may make it fictional that I pull the trigger of a (fictionally) real gun, fictionally shooting a bad guy dead. In these examples the correspondence is a lot more obvious than in *Zork*, but the principle is the same.

CONCLUSION

In this paper I have outlined a method for analysing an aspect of interaction that can help us understand how

users can feel that they are part of a work. I have argued that interaction can be a form of *depiction*, causing the user to imagine both her perceptual actions and her manipulation of the work as being fictional as well as actual. This produces an ontological fusion between the actual and the fictional. In brief analyses of three interactive works, I have aimed to suggest how this framework can enable a better understanding of some aspects of interactive art and literature.

I looked at *Zork* and *afternoon* because they are classics of their genres, and because they in their lack of obvious visual depiction have allowed me to explore more subtle forms of depiction that are essentially to do with interaction rather than with perception. In contrast, *Bino & Cool’s Masterclass* made the performance and the make-believe very apparent, and it is easy to see how the user imagines herself into the fiction.

To explore the more general viability of this method of analysis it will be necessary to apply it to other works. Many recent interactive works use depiction heavily, and often in the indirect way that *Zork* uses it, where the user’s actual action corresponds to but is not identical to the fictional action. For instance, in Leon Cmielewski and Josephine Starr’s *Dream Kitchen* [11] the user drags, drops and clicks using a mouse, but each of these movements is directly connected to fictional actions, such as torturing bugs and burning a pencil at the stake. In Rik Lander’s web narrative *Magic-Tree.com* [20], the user’s actions at some points precisely double the actions performed by the fictional characters. In Rob Bevan and Tim Wright’s web serial *Online Caroline* [6] the user is staged as Caroline’s friend, and constantly gives advice and answers questions by clicking and typing [33]. I believe that an understanding of ontological fusion, fictionality as make-believe and depiction can help us understand how we engage with works such as these.

ACKNOWLEDGMENTS

This paper is based on a section of my *dr. art.* thesis, which has been funded by the Norwegian Research Council. Espen Aarseth has been a priceless advisor, mentor, and sparring partner to me in this research, even when he disagrees with me. I’m also grateful to Marie-Laure Ryan for valuable feedback on an early draft of the paper, and to the IT University in Copenhagen for hosting a seminar led by Ryan, at which I was able to discuss seeds of the ideas presented here.

REFERENCES

1. “Nepal Chooses New Living Goddess”. *BBC News*, 15 July 2001. <http://news.bbc.co.uk/1/hi/world/south_asia/1439384.stm>
2. Aarseth, Espen. “Beyond the Frontier: Quest Games as Post-Narrative Discourse”. In Wardrip-Fruin, N. and Harrigan, P. eds. *First Person: New Media as Story, Performance, and Game*, MIT Press, Cambridge, MA, Forthcoming.
3. Aarseth, Espen. *Cybertext: Perspectives on Ergodic Literature*. Johns Hopkins UP, Baltimore and London, 1997.
4. Aarseth, Espen. “We All Want to Change the World: The Ideology of Innovation in Digital Media”. In Liestøl, G., Morrison, A. and Rasmussen, T. eds. *Digital Media Revisited: Theoretical and Conceptual Innovations in Digital*

- Domains*, MIT Press, Cambridge, MA, 2003.
5. Barth, John. *Lost in the Funhouse: Fiction for Print, Tape, Live Voice*. Anchor Books, NY, 1988.
 6. Bevan, Rob and Wright, Tim. *Online Caroline*. 2000. <<http://www.onlinecaroline.com>>
 7. Bino and Cool. *Bino & Cool's Masterclass*, 2002. <<http://www.nordic-interactive.org/nic2001/artgallery/bios/bino-cool.shtml>>
 8. Blank, Marc and Lebling, David. *Zork I: The Great Underground Empire*. Computer game. Infocom, Cambridge MA, 1981.
 9. Bolter, Jay David. *Writing Space: Computers, Hypertext, and the Remediation of Print*. Second Lawrence Erlbaum Associates, Mahwah, NJ and London, 2001.
 10. Chatman, Seymour. *Story and Discourse. Narrative Structure in Fiction and Film*. Cornell UP, New York, 1978.
 11. Cmielewski, Leon and Starrs, Josephine. *Dream Kitchen*. CD-ROM. Sydney, 2000.
 12. Crowther, William and Woods, Don. *Adventure*. Computer game. 1976.
 13. Douglas, J. Yellowlees. *The End of Books or Books without End? Reading Interactive Narratives*. University of Michigan Press, Ann Arbor, 2000.
 14. Frasca, Gonzalo. *Simulation vs Representation Ludology.org: Videogame Theory*, 2001. <<http://ludology.org>>
 15. Jackson, Shelley. *Patchwork Girl*. Eastgate Systems, Cambridge, MA, 1995.
 16. Joyce, Michael. *afternoon, a story*. Eastgate Systems, Watertown, MA, 1990.
 17. Joyce, Michael. *Of Two Minds: Hypertext Pedagogy and Poetics*. The University of Michigan Press, Ann Arbor, 1995.
 18. Kacandes, Irene. "Are You In the Text?: The "Literary Performative" in Postmodernist Fiction". *Text and Performance Quarterly*, 13. 139-153.
 19. Klastrup, Lisbeth. *Interactivity Definitions*. IT University, Copenhagen, 2003. <<http://www.itu.dk/people/klastrup/ianet.doc>>
 20. Lander, Rik. *Magic-tree*. Web narrative. 2002. <<http://magic-tree.com>>
 21. Laurel, Brenda. *Computers as Theater*. Addison-Wesley, Reading, MA, 1991.
 22. McDaid, John. *Uncle Buddy's Phantom Funhouse*. Eastgate Systems, Watertown, MA, 1992.
 23. Miles, Adrian. "Hypertext Structure as the Event of Connection". Proceedings of *Hypertext 2001*, (Århus, Denmark, 2001), ACM Press, 61-68. <<http://jodi.ecs.soton.ac.uk/Articles/v02/i03/Miles/>>
 24. Moulthrop, Stuart. *Victory Garden*. Eastgate Systems, Watertown, 1991.
 25. Murray, Janet H. *Hamlet on the Holodeck. The Future of Narrative in Cyberspace*. MIT Press, Cambridge, MA, 1997.
 26. Pavel, Thomas. *Fictional Worlds*. Harvard UP, Cambridge MA and London, 1986.
 27. Ryan, Marie-Laure. *Beyond Myth and Metaphor: The Case of Narrative in Digital Media Game Studies*, 2001. <<http://gamestudies.org>>
 28. Ryan, Marie-Laure. *Narrative as Virtual Reality: Immersion and Interactivity in Literature and Electronic Media*. Johns Hopkins UP, Baltimore, 2001.
 29. Ryan, Marie-Laure. *Possible Worlds, Artificial Intelligence, and Narrative Theory*. Indiana UP, Bloomington and Indianapolis, 1991.
 30. Saltz, David Z. "The Art of Interaction: Interactivity, Performativity, and Computers". *The Journal of Aesthetics and Art Criticism*, 55 (2). 117-127.
 31. Tronstad, Ragnhild. "Semiotic and Nonsemiotic MUD Performance". Proceedings of *COSIGN*, (2001). <<http://www.kinonet.com/conferences/cosign2001/pdfs/Tronstad.pdf>>
 32. Walker, Jill. "Do You Think You're Part of This?" In Eskelinen, M. and Koskimaa, R. eds. *Cybertext Yearbook 2000*, Jyväskylä, 2001. <<http://cmc.uib.no/jill/txt/doyouthink.html>>
 33. Walker, Jill. "How I was Played by Online Caroline". In Wardrip-Fruin, N. and Harrigan, P. eds. *First Person: New Media as Story, Performance, and Game*, MIT Press, Cambridge MA, Forthcoming. <<http://huminf.uib.no/~jill/txt/onlinecaroline.html>>
 34. Walker, Jill. "Piecing Together and Tearing Apart: Finding the Story in 'afternoon'." Proceedings of *Hypertext '99*, (Darmstadt, Germany, 1999), ACM Press, 111-117.
 35. Walton, Kendall. *Mimesis as Make-Believe: On the Foundations of the Representational Arts*. Harvard UP, Cambridge, MA and London, 1990.