

WRITING YOURSELF INTO THE WORLD: FANTASIES OF HANDWRITING AND
COMPUTER GRAPHICS

By

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To my grandfather, Lionel Finkelstein, who once asked me why I bothered studying
comics.

Now I know the answer.

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LIST OF ABBREVIATIONS

HUD	Heads-up display
IF	Interactive fiction
TWEWY	<i>The World Ends with You</i>

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WRITING YOURSELF INTO THE WORLD: FANTASIES OF HANDWRITING AND
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By

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This dissertation argues that within contemporary North American culture, fantasies of handwriting function as an important means of negotiating the transition from digital to print culture. Traditionally, handwriting is understood as a privileged means of access to the essential “self” or “identity” of the writer: when we write by hand, we write ourselves into the world. The apotheosis of this view of handwriting is the *fantasy of handwriting*, a magical scenario in which handwritten letters or drawings take on independent existence and interact with the world. This scenario is a *fantasy* both because of its unrealistic nature – it does not correspond to the way in which handwriting actually works – and because it expresses a desire: the desire to have a stable, idiosyncratic self, and to write that self into the world.

The fantasy of handwriting takes on particular importance at times – such as the present cultural moment -- when handwriting is threatened with supplantation by newer writing technologies, raising the additional threat that the model of self that underlies handwriting might also disappear. At such times, the fantasy of handwriting is deployed in two ways. *Restorative* fantasies of handwriting imagine new writing technologies (e.g.

digital animation or the Nintendo DS) in terms of handwriting and claim that these newer technologies can still be used to write oneself into the world, despite differing from traditional handwriting. Such fantasies ignore that writing oneself into the world was never possible in the first place, and erase the differences between traditional handwriting and its remediated versions. *Reflective* fantasies of handwriting facilitate a more mature response to technological transitions. Such fantasies acknowledge their own fantastic nature, recognizing that writing oneself into the world is impossible and that gaps always exist between handwriting and newer writing technologies. However, reflective fantasies of handwriting also acknowledge the *desire* for handwriting and its associated model of the self.

The first body chapter of this dissertation defines fantasies of handwriting through an analysis of silent animation. Subsequent chapters explore the operation of fantasies of handwriting in four contemporary media: interactive fiction video games, alternative comics, digital animation, and handwriting-interface video games.

CHAPTER 1
INTRODUCTION: FANTASIES OF HANDWRITING

He used to write with his thumb in the air.

–César Vallejo, “Pedro Rojas”

She had the curious sensation that the pictographs and ideograms that covered the walls with bold black and dark-blue shapes were moving, not jumpily like half-seen print but evenly, regularly, expanding and shrinking very gently, as if they were breathing.

–Ursula K. Le Guin, *The Telling*

Preamble: Transparency, Privacy and Media Transitions

In Tolkien’s *Silmarillion*, the elven king Finrod Felagund and the human Beren – on a quest to recover the Silmaril, a priceless jewel stolen by the Dark Lord, Morgoth – are captured and taken before Sauron, Morgoth’s lieutenant. However, Sauron does not know who they are or what they seek to accomplish, and so he challenges Finrod to a contest of magical songs. Sauron goes first:

He chanted a song of wizardry,
Of piercing, opening, of treachery,
Revealing, uncovering, betraying.
Then sudden Felagund there swaying
Sang in answer a song of staying,
Resisting, battling against power,
Of secrets kept, strength like a tower,
And trust unbroken, freedom, escape;
Of changing and of shifting shape
Of snares eluded, broken traps,
The prison opening, the chain that snaps (Tolkien n.p.)

Sauron sings of revealing, of transparency, complete knowledge, unimpeded vision. In response, Finrod sings of privacy, of secrecy, of keeping his idiosyncratic essence to himself. And Finrod almost wins. According to one common interpretation, Finrod loses only because he starts singing of Valinor, the homeland of the Elves; this reminds him of the tragic history of his people, causing him to despair (“Finrod and the Kinslaying”).

Although Finrod loses the singing contest and is ultimately killed, Sauron never does learn his name or mission, and Beren eventually succeeds in recovering the Silmaril.

I will read this story as a parable of a more generalized contemporary polemic in North American culture: a debate between transparency and privacy. Or more generally, between one complex or package of values that includes transparency, verisimilitude and realism and that is often associated with digital technology and new media, and another complex or package of values that includes privacy, selfhood, and embodiment and that is often associated with analog technology and older media. Digital technologies and new media promise to offer us fluid, continuous visual experiences which have no gaps, are barely distinguishable from real life, and succeed as far as possible in concealing their own fictional and artifactual nature. A film such as *Avatar* or a video game such as *Call of Duty: Modern Warfare* promises us a visual experience which equals or even surpasses visual experiences we encounter in real life. In watching such a film or playing such a game, we supposedly forget who we are, becoming absorbed in the narrative or game situation to such an extent as to lose ourselves. And we forget who made the text we are consuming; we think we are having an actual experience, instead of a mediated one which was crafted by a particular group of people in a particular rhetorical situation. This view of digital technology is clearly quite reductive, and I hope to show how digital technology doesn't and can't actually work this way. Nonetheless, this account does represent a commonplace understanding of digital transparency, which is often encountered both in commercial discourses and in digital texts such as the film *Avatar* (James Cameron, 2009). This account of digital technology is complemented by an equally reductive, but also equally common, account

of analog technology. This latter account holds that when we read a graphic novel or a lyric poem, we remain conscious of ourselves as separate entities from the author and the text; we never become absorbed to the point of self-abandonment. And we remain conscious of the crafted, scriptural nature of the text, never forgetting that one or more human beings made it. Both author and reader retain an idiosyncrasy specific to each.

Again, here I'm describing two idealized reading situations; probably any actual reading situation lies somewhere between these two extremes. (We could also draw an analogous binary opposition between the *writing* situations entailed in old and new media, and this binary opposition would be equally false.) Nonetheless, comparisons between old and new media are often expressed in precisely these terms, not only in polemical writings about media studies but also in media texts themselves; over the course of this dissertation we will see numerous examples of this. A cultural imaginary exists in which new media represent the visible, the transparent, the spectacular, while old media represent the private, the invisible, the idiosyncratic. Old media has become identified with those personal, irreducible traits of character that seem to be stripped out, in various ways, by new media.

Theories of Handwriting

In this dissertation I propose *handwriting* as a figure for what appears to be lost in the transition from old to new media. This figure or image of handwriting encapsulates, in a compact and precise form, all or at least many of the cherished values that are typically aligned on the side of new media and against old media. Handwriting is associated in contemporary Western culture with personality, idiosyncrasy and authenticity.

I define handwriting as a process involving four basic material components: a *writing tool* (e.g., a pen, a pencil, or a stylus), which is typically longer than wide and held in the writer's dominant hand; a *writing surface* (e.g., paper, celluloid, or a resistive touchscreen), which is typically two-dimensional and originally blank; a *writing medium* (e.g., ink or paint)

¹; and a *writing hand*, which holds the writing tool. In handwriting, the writing hand uses the writing tool to make inscriptions upon the writing surface, possibly by applying the writing medium thereto. That is to say, the writing hand interacts physically with the writing surface through the mediation of the writing medium and the writing tool. The action of the writing hand is therefore the direct cause of the appearance of inscriptions upon the writing surface. Finally, and crucially, these inscriptions are *readable*. They are not meant simply to be appreciated on the basis of their graphic qualities; instead, they *refer* to something other than themselves. In other words, handwritten inscriptions function as elements of a *writing system*, a mapping of signifiers to signifieds.

A classical example of handwriting, involving the four material components plus the writing system, would be the use of an ink brush to compose Chinese characters in ink on writing paper.² However, we can also define handwriting more broadly. Some of the four material components of handwriting are optional. Cuneiform is still handwriting in the sense in which I use this term, even though the same object (a wet clay tablet) serves as both writing medium and writing surface. Indeed, cuneiform even seems like

¹ "Medium" is here used in the limited sense of an artistic medium, i.e., a physical material used to produce art. I use it in this way to avoid an awkward locution such as "material substrate of writing." Elsewhere, I use "medium" in Bolter and Grusin's sense of "that which remediates" (65).

² Three of the material components of writing correspond to the items known in Chinese calligraphy as the "Four Treasures of the Study": the brush (writing tool), the inkstick and inkstone (writing medium), and paper (writing surface).

a purer and more originary form of handwriting, due to the lack of mediation between the writing tool (the stylus) and the writing surface. Again, we can conceive of handwriting processes where the writing tool is subsumed into the writing hand, such as fingerpainting, or cutting one's finger and writing with the blood. Finally, the writing system may not be an actual alphabet; there is considerable overlap between letters and pictures, and cartoon drawings often signify in the same way as alphabetic letters.³ The two key elements, however, are the writing hand and the writing surface, although these can be metaphorical rather than actual. For example, I will argue in Chapter 3 that interactive fiction (IF) is *metaphorically* similar to handwriting. In interactive fiction, the writing tool (keyboard) and writing surface (screen) do not correspond to the classical versions of these items, and the causal link between them is not clear. However, the medium works in such a way as to enforce a metaphorical connection between the keyboard and screen, and to suggest that this connection is analogous to the connection between a hand-held writing tool and paper. Specifically, as I will explain, IF is made to seem like a process of making inscriptions on a surface. This is the essence of handwriting: the act of making signifying marks on a surface.

When we define handwriting in this way, it becomes easy to understand why handwriting functions, at least in Western culture, as a privileged sign of interiority, subjectivity and embodiment. In the first place, this is because handwriting is irreducibly material. The existence of a handwritten trace is conclusive proof of the prior presence of the writer at the moment of writing. In handwriting, the writing hand physically engages with the writing tool, the writing surface and the writing medium. The written

³ On this point see McCloud, *Understanding Comics*, and Andreas Huyssen, "Of Mice and Mimesis: Reading Spiegelman with Adorno."

signs thereby produced are causally linked to the writer's act of physical movement. This is why signatures can be used to authenticate documents. The appearance of a signature on a document indicates that that signature was executed by the person it names. Handwriting therefore serves as the material trace of the *existence* of the writer.

In the second place, handwriting is absolutely specific to the writer. The appearance of one's handwriting is determined by one's idiosyncratic way of holding and manipulating the writing tool. Handwriting therefore records traits of the writer's physiology of which even the writer himself or herself may be unaware. This is the principle behind the use of handwriting for questioned document examination: if the handwriting on a questioned document is sufficiently similar to the handwriting on another document of known authorship, then it may be assumed that the two documents were written by the same person, and by no one else. Some characteristics of handwriting therefore record the *uniqueness* of the writer.

These two properties – existence and uniqueness – are unique to handwriting and seem to vanish when handwriting is replaced with mechanical or digital writing processes. Writing produced with a device such as a printing press, a typewriter, or a Leroy lettering device (see Chapter 5) still testifies to the writer's existence. Such devices don't meet the above definition of a writing tool, because they are not controlled by a single writing hand (or by the hand alone) and/or because they don't function via direct physical contact with the writing surface. However, such devices still function by direct manual engagement. The letter is produced as a result of the physical engagement of the writing hand with the writing device; there is a clear, unambiguous causal relation between the writer's act of pressing a button, filling in a stencil, etc., and

the appearance of a letter on the page. Such devices, however, lack uniqueness; a document written on a typewriter, for example, looks the same no matter who was using the machine. Based on the appearance of the letters on the document, we cannot determine who wrote it. We may be able to determine which typewriter it was written with, – because the typewriter has unique attributes (cf. Gitelman 215), but the unique attributes of the user are unlikely to be communicated to the writing surface via the mediation of the typewriter. Mechanical writing processes such as typewriting involve a form of transcribing evidence of existence without evidence of uniqueness. *Digital* writing processes, such as computerized word processing, may involve neither:

I press the keys, I see glyphs corresponding to them imprinted on the screen, I imagine that they will eventually be imprinted on a page. But between the keystroke, pixels, and the page it is harder to imagine intermediate processes that join them; those seem of a different order altogether, one composed of magnetic valences, electrical discharges, and more virtual things that exist only in the logic of a program; they are effected beneath or outside thresholds of my perception. (Harpold 2009 28)

Using a computer keyboard is in some respects just as much of a manual process as using a pen or a typewriter keyboard. It appears to be a myth that excessive keyboard use is the cause of carpal tunnel syndrome (Stone 439), but the popularity of this myth is evident that in the contemporary cultural imaginary, keyboarding is still understood to be an embodied process. What happens in word processing is that the relationship of material causality between my keystrokes and the appearance of the corresponding letters on the screen becomes invisible. I know my keyboard works by “electrical discharges” and “magnetic valences,” but it might as well work by magic; the phenomenology of the typing experience would be the same in either case. There *is* a causal connection between the production of a digital document and my presence at the moment of its production, but this causal connection is not evident, because it takes

place below the threshold of human perception. In this sense it seems as though word processing and similar processes fail to record either the presence or the uniqueness of the writer. Alternately, we could also express this claim in terms of disembodiment: the letters I write on the screen don't seem to have anything, immediately, to do with my body, nor do they seem to have a physical body in the same sense as the letters I write by hand or on a typewriter.⁴

These (apparent) differences between handwriting and mechanical or digital writing are not value-neutral. The properties of existence and uniqueness are often seen as inherently valuable. Because of these two properties (which are not entirely separable – it's only because handwriting is unique that it can be used to prove the prior presence of a given writer), handwriting is frequently understood as a particularly authentic, personal or idiosyncratic mode of writing. Handwriting is or historically has been considered appropriate for signatures, personal letters, and other types of writing which seem to have a close connection to the writer. The handwritten-ness of a document connotes its personal nature. In juxtaposition to handwriting, mechanical or digital writing technologies seem comparatively lifeless, machinic, or artificial. A paradigmatic example here is the scandal that erupted in 2004 when then-Secretary of Defense Donald Rumsfeld was found to have been using a mechanical signing machine to sign letters addressed to relatives of fallen soldiers (Glaister n.p.). Where a personal, individual touch and an investment of time were required, Rumsfeld substituted the heartless touch and cold repetitiveness of a machine – indicating that the government

⁴ On the question of embodiment in digital writing, see Drucker 2002 *passim*.

he represented held a similarly heartless attitude to the soldiers who died in their service, or that he felt his time was better spent otherwise.

But discourses associated with the imaginary of handwriting often go even further. Handwriting is sometimes understood as being connected to its writer in a deep, even mystical sense, as revealing more about its writer than simply the quirks of his or her physical movements. The pseudoscience of graphology, which flourished in the early 20th century and still enjoys limited popularity today, claimed to be able to predict a person's character traits from the attributes of his or her handwriting. Graphologists held that particular irregularities in handwriting corresponded to particular personality traits. Empirical studies have consistently found that personality traits cannot be accurately predicted based on graphological analyses, and graphology is now generally considered a pseudoscience.⁵ Nonetheless, the premise behind graphology seems clear and compelling, even if it doesn't actually work as its proponents claim. Given the close physical connection of handwriting with the body, it makes a certain kind of sense to believe that in our handwriting, we inadvertently reveal ourselves – that handwriting contains some interior, hidden kernel of a psychic unity we associate with the body. Handwriting, according to this logic, is literally the trace of the self (a term which is of course highly problematic but which is often employed uncritically in this sort of discourse). A handwritten letter or word is literally the extension of the person who wrote it. I'm going to suggest below that this understanding of handwriting – what we might call the *graphological fantasy of handwriting* – is often implicitly at work in claims that handwriting is more embodied, personal, etc., than other media.

⁵ For a detailed account of the history of graphology, see Thornton 1995.

There are, however, two constitutive tensions in handwriting that work against its claims to be a maximally embodied, personal medium of writing. In the first place, even according to the graphological view of handwriting, letters are merely traces of the *former* presence of the self. “By definition, a written signature implies the actual or empirical nonpresence of the sender” (Derrida 1977 20). Handwriting testifies only to the author’s “having-been present in a past *now* or present” (20,), and therefore cannot serve as a memento of the writer’s actual, living presence; for example, the autograph of a dead person does not bring him or her back from the grave, but merely serves as a ghostly reminder of his or her former presence.⁶ For Derrida, handwriting is therefore an example of how writing necessarily depends on iterability, i.e. on the possibility of separation from the author’s original intentions.

Moreover, even if handwriting did have some privileged link to the author’s body or “self,” it would be useless without being readable, and readability requires the use of a linguistic code, which neither originates with nor is specific to the writer. Handwriting consists of letters, which are elements in a differential system of signification. A letter is not an inherent essence but merely a trace of its difference from other letters. As Johanna Drucker reminds us, a model of the materiality of language must be hybrid. “Such a model includes two major intertwined strands: that of a relational, insubstantial, and nontranscendent difference and that of a phenomenological, apprehendable, immanent substance” (Drucker 1993 43). A similar logic of differentiability operates in cartooning, where images are not mimetic representations of the things they stand for,

⁶ Speaking of the phonograph, which depends on a similarly uncanny combination of absence and presence, Frederick Garbit wrote in 1878: “We shall be enabled *literally* to assert of Mr. Edison that, ‘He, being dead, yet *speaketh*, through his inventions” (Gitelman 21).

but conventionalized signs; the difference between an alphabetic letter and a cartoony representation of a cat or mouse, for example, may be one of degree rather than kind. The graphological concept of handwriting concentrates on the first of these two strands, ignoring that handwriting is a medium of intersubjective communication as well as pure subjective revelation. As such, it consists of a string of signifiers which are never pure, immutable essences. Signifiers operate on a differential basis: “in a language there are only differences, *and no positive terms*” (Saussure 118). Therefore, in writing: “The values of the letters are purely negative and differential. So the same individual might write *t* in such variant forms as: [illustration omitted] The one essential thing is that his *t* should be distinct from his *l*, his *d*, etc.” (118), and the same argument can be extended to words. The semantic value of a letter or word is separable from its materiality in the sense of its sensuous physical appearance. Moreover, even the physical appearance of a letter or word is iterable: “For I imitate and reproduce my ‘own’ signature incessantly. This signature is imitable in its essence” (Derrida 1977 34). Even if a particular individual writes *t* in a way which is specific to him or her, any two instances of the letter *t* written by that individual will be only minimally distinguishable. The only thing that is absolutely specific and unrepeatable in any handwritten sign is the fact of its origin in a particular act of inscription – and even then, as we just saw, the handwritten sign must be separated from that originary moment of inscription in order to be readable.

Finally, the arbitrariness of language also implies that a gap necessarily exists between sign and referent: nouns, for example, are not the things they name. I am not the words “Aaron Kashtan”; I am sitting on a chair, not the word “chair.” Even a cartoon drawing, despite its more mimetic nature, also partakes of this logic of arbitrariness and

differentiality (*différance*): we know that Mickey Mouse is a mouse only because we've been told as much.

Fantasies of Handwriting

However, one might imagine a way of getting around both these constitutive tensions or gaps. What if letters were not immobile and bound to the writing surface? What if letters (or handwritten drawings) could move independently? What if handwriting, instead of just sitting there, could *do stuff*?⁷ What if letters were *alive*? This idea, while obviously fantastic in nature, is surprisingly common in 20th-century American culture. It represents a recurring theme or unifying trope that cuts across many of the texts I'll discuss in this dissertation. The most representative example of this trope is Otto Messmer's cartoon series *Felix the Cat*, but it comes up in a variety of media, although not always in such a literal way as in *Felix*. I will use the term *fantasy of handwriting* to refer primarily to this scenario, although my uses of this term will embrace also other fantastic scenarios which are closely related.

The fantasy of handwriting represents the apotheosis of handwriting and the overcoming of its constitutive gaps. When handwriting comes alive, it ceases to be a mere record of former presence; it becomes a living, breathing entity. And a letter (or schematic drawing) which is alive is, in some mysterious sense, a hybrid of differentiality and materiality. It promises to overcome the logic of *différance*, to make things identical to their names – and this promise is all the more seductive because one knows it to be unfulfillable. Creatures like Joey Ellis's letter monsters (Figure 1-1) or the

⁷ I will use the verb "to do stuff" as a convenient shorthand term. Within the context of a diegetic storyworld, something "does stuff" if it interacts with other objects in that storyworld, has physical presence, causes permanent changes to other objects, etc.

characters from the PBS children's show *WordWorld* (Figure 1-2) are appealing, but in an uncanny, eerie way, precisely because they straddle the notional border between signs and things.⁸ Their appeal comes from the fact that they appear to have come to life without ceasing to be recognizable as letters, as elements in a preexisting sign system. Otherwise, the frog in Figure 2 would be no different from any other computer-graphical frog. This animal is funny, charming, etc. because it's *both* an actual frog and the word "frog"; it's as if the thing literally *is* its name. It's as though this frog comes from Ursula K. Le Guin's fantasy world of Earthsea, where things actually do have unique, inalienable "true names" that are literally identical with the things themselves. To change the name of a thing is to change the thing, and vice versa, and magic can be performed only by invoking things by their true names (Le Guin 50-52). This fantasy of things being identical to their names is surprisingly common. I'm also reminded of Mazzucchelli and Karasik's adaptation of *Paul Auster's City of Glass*, in which a character proposes that in the garden of Eden, language and its referent were identical; the constitutive arbitrariness of language is a consequence of the fall of Man (Figure 1-3). Or, in a less literal sense, of an exchange from Confucius's *Analects*. When asked by a disciple what would be his first priority if he were in charge of the government of a country, the Master replied:

It would certainly be to rectify the names [...] If the names are not correct, language is without an object. When the language is without an object, no affair can be effected. When no affair can be effected, rites and music wither. When rites and music wither, punishments and penalties miss their target. When punishments and penalties miss their target, the people do not know where they stand. Therefore, whatever a gentleman conceives of, he

⁸ Both of these examples were designed as tools for teaching literacy to children. This is probably no coincidence; there seems to be something childlike about the fantasy of animated letters.

must be able to say, and whatever he says, he must be able to do. In the matter of language, a gentleman leaves nothing to chance (60–61).

The fantasy of handwriting offers a mystical means of enforcing this connection between names and the things they represent, and thereby heals the constitutive void at the heart of language, the gap between the signifier and its referent.

When defined in these terms, the fantasy of handwriting is clearly understood as a fantasy. The term “fantasy” of course has many different meanings within different context, but definitions of fantasy commonly characterize it as a process of imagining things which are not present, or of pretending that things are otherwise than they in fact are. For example, one of the *Oxford English Dictionary’s* definitions of fantasy are “Imagination; the process or the faculty of forming mental representations of things not actually present” and “A product of imagination, fiction, figment.” Moreover, fantasy commonly serves the purpose of satisfying unfulfilled desires. The *OED* also defines fantasy as “A day-dream arising from conscious or unconscious wishes or attitudes,” and quotes G. Coster: “A phantasy [*sic*] is a day-dream in which desire, unfulfilled in the world of reality, finds an imaginary fulfilment or satisfaction.” Slavoj Žižek, however, elaborates:

Fantasy is usually conceived as a scenario that realizes the subject’s desire. This elementary definition is quite adequate, on condition that we take it *literally*: what the fantasy stages is not a scene in which our desire is fulfilled, fully satisfied, but on the contrary, a scene that realizes, stages, the desire as such ... desire is not something given in advance, but something that has to be constructed – and it is precisely the role of fantasy to give the coordinates of the subject’s desire, to specify its object, to locate the position the subject assumes in it. It is only through fantasy that the subject is constituted as desiring: *through fantasy, we learn how to desire* (6).

In other words, fantasy is not just an imaginary realization of desire; it is also a process by which desire is clarified and elaborated. Its purpose, as Žižek goes on to elaborate,

is not to satisfy desire and therefore eliminate it, but to allow desire to continue: “the realization of desire does not consist in its being ‘fulfilled,’ ‘fully satisfied,’ it coincides rather with the reproduction of desire as such, with its circular movement” (7).

The fantasy of handwriting, then, depends on a certain desire – namely, a desire to return to some archaic state of language, some Edenic time when materiality, semantic value and selfhood were not yet separated from each other. At the same time, however, it does not claim to satisfy this desire – or rather, when it does make such a claim, it loses much of its productive potential. The fantasy of handwriting is most interesting when it acknowledges its role in producing and perpetuating the same desire that motivates its creation.

Fantasies of Handwriting and Nostalgia

In the cases I am examining in this dissertation, the fantasy of handwriting is invoked at moments of technological change, when handwriting is challenged by newer writing technologies. At such moments, the fantasy of handwriting becomes nostalgic, and it is therefore useful to discuss the fantasy of handwriting here in connection with nostalgia.

In a certain sense, the fantasy of handwriting is necessarily nostalgic. It entails a desire to return to some lost homeland of language, some Edenic or antediluvian condition where language was not yet sundered and “to tell was to show and to show was to tell” (McCloud 1993 161). In *Paul Auster’s City of Glass*, this is the explicit objective of Peter Stillman the elder: he wants to return language to its Edenic condition. Nostalgia, of course, is always revisionary: it never simply remembers a lost object but also, to some extent, *creates* that object, by investing it with positive qualities that were not perceived until after it was (already) lost. There never actually was an antediluvian

period when language was identical to its object and when handwriting recorded the living (rather than the past) presence of the author. The fantasy of handwriting retroactively constitutes this lost condition of language at the same time that it laments the loss thereof.

The fantasy of handwriting is therefore always nostalgic in an abstract sense, in that it expresses a desire for a condition which is (falsely) supposed to have existed at some past time. However, I now want to claim that fantasies of handwriting can also be affected by nostalgia in a more specific, concrete way. When an old writing technology – e.g., handwriting or typewriting – is supplanted by a newer one – e.g., respectively, typewriting or word processing – the old writing technology may become identified as more completely fulfilling the fantasy of handwriting than the newer one does. The older writing technology comes to seem more embodied or personal, more effective at recording the existence and uniqueness of the writer. In her book *Handwriting in America: A Cultural History*, Tamara Plakins Thornton demonstrates that the graphological concept of handwriting is actually a fairly recent invention (at least in North America). In earlier times when handwriting was the primary or only means of communication available, its significance was often fantasized very differently, if at all. In colonial America, for example, handwriting was supposed to identify the writer as a member of a particular social class; there was one prescribed script for gentlemen, another for ladies, another for merchants, etc. The idiosyncratic traits of a person's handwriting were read as marks, not of the person's individuality, but of the person's membership in a particular stratum of society. Similarly, in Victorian times, handwriting was understood as a sign of "character", but in the sense of honesty and uprightness,

not idiosyncrasy. By writing properly – that is, according to conventions that identified one’s class and level of education – one identified oneself as a proper person. Idiosyncratic variations in handwriting would therefore have been read as evidence of sloppiness and lack of character, not distinctive individuality. For Thornton, the modern view of handwriting as revelatory of personality is largely a product of the encounter of handwriting with print and typewriting. When handwriting encountered competition from these newer, more mechanical technologies – which could more efficiently reproduce a regularity of writing than could handwriting – it came to be reimagined in terms of individuality and selfhood rather than correctness and uniformity. Irregular handwriting became a positive sign of distinctive character, rather than a negative sign of carelessness.

Some handwriting pedagogues responded to the encounter with the machine by trying to make handwriting *more* machinic – for example, Austin Norman Palmer’s method of handwriting instruction focused on controlling the movements of the writer’s body, so as to produce handwriting that had the correctness and consistency of typewritten text. Arts and Crafts calligraphers, on the other hand (no pun intended), responded to the challenge of typing and printing by reevaluating handwriting in terms of self-expression, art and craftspersonship. For Edward Johnston, the leader of the Arts and Crafts calligraphy revival, handwriting was a labor of love which therefore stood in opposition to the soullessness of the machine:

The essential qualities of Lettering are *legibility*, *beauty* and *character*, and these are to be found in numberless inscriptions and writings of the last two thousand years. But since the traditions of the early scribes and printers and carvers have decayed, we have become so used to inferior forms and arrangements that we hardly realize how poor the bulk of modern lettering really is. (xviii)

For Johnston, one of the nine “qualities of good writing” was personality, the quality of “having the characteristics which distinguish one person’s hand from another’s” (239). He continues that “the penman – or indeed any other letter-maker – is advised to allow the pen to train his hand to make the proper strokes automatically; then he may begin to master and control the pen, making it conform to his hand and so produce Letters which have every possible virtue of penmanship and are as much his own as his common handwriting” (278, 280). And, “*personal quality* is essential to perfect workmanship, [although] that is the natural and gradual – sometimes scarcely visible – departure from a model that comes of practice and time” (323–24). Thornton summarizes: “To affirm the value of human individuality, then, Johnston reasserted the dominance of the hand over the pen and the human over the machine” (181). In cases such as this, the fantasy of handwriting is explicitly nostalgic. Faced with other writing technologies that seem to strip writing of its capacity to signal the writer’s existence and uniqueness, advocates of handwriting seek to understand handwriting (or media which are equated to handwriting) as *having been* characterized by personality, character, and embodiment. Any such understanding of handwriting is necessarily retroactive, simply because we can’t tell that handwriting was a more personal, embodied or idiosyncratic writing technology, until we have some other writing technology to compare it with. Otherwise, there’s no answer to the question “More personal or embodied *than what?*”

We can therefore distinguish between one variety of the fantasy of handwriting which is nostalgic in a more broad, generic sense, and another variety which is nostalgic for a specific past technology or media ecology. I will describe the fantasy of handwriting as “nostalgic” in reference only to the latter. *Originary* fantasies of

handwriting are enacted within handwritten (or handwriting-like) media, prior to the creation of surrogates for handwriting. They are nostalgic in an abstract sense, without being able to appeal to a specific medial object of nostalgia. At the same time, however, originary fantasies of handwriting may sometimes be enacted within a relatively new medium (e.g., animation), if users of this new medium perceive it as being similar to handwriting or as having qualities in common with handwriting. *Nostalgic* fantasies of handwriting, in contrast, are enacted in response to a specific media transition. Such fantasies express longing or desire for a preexisting state of media. This preexisting state of media development is identified with, or becomes a surrogate for, the generalized condition of perfect handwriting that serves as the object of nostalgia in the originary fantasy of handwriting.

This opposition – originary and nostalgic – intersects with a second opposition which may be used to classify fantasies of handwriting. Such fantasies can be either *uncritical* or *critical*. The *uncritical* fantasy of handwriting simply expresses the longing for a prior state of perfect handwriting (originary) or of more embodied writing (nostalgic). It naïvely wishes that this prior state could be brought back. The *critical* fantasy of handwriting, however, recognizes that the object of nostalgia can never return – not only because time is irreversible, but also (and more specifically) because the object of nostalgia never existed to begin with. As I explained above, handwriting is always predicated on constitutive gaps. Handwriting always represents an absent rather than a living presence, and it always signifies by difference as well as substance. The uncritical fantasy of handwriting seeks to forget these gaps; the critical fantasy of handwriting acknowledges them. However, the critical fantasy of handwriting is not a

simple debunking or deconstruction of the uncritical fantasy. At the same time that the critical fantasy acknowledges the unsatisfiability of the desire for handwriting, it also admits the powerful, compelling nature of that desire. It is simultaneously aware that we can never have perfectly embodied handwriting, and that even knowing this, we still *want* to have perfectly embodied handwriting. This combination of desire and the knowledge of the unsatisfiability of desire is what gives the critical fantasy of handwriting its poignancy.

When we combine these two axes – uncritical and critical, ordinary and nostalgic – we obtain four different types of fantasies of handwriting (Table 1). These four fantasies correspond to four different concepts of the type of selfhood that handwriting embodies. A text that invokes the *naïve* fantasy of handwriting is enacted within a medium which uses or resembles handwriting. It is created prior to the arrival of media which compete with this handwriting-based medium, and which are perceived as technologically superior in one way or another, but as having less in common with handwriting. It expresses the naïve desire that handwriting could be brought to life, that a handwritten medium (often a relatively new one) can be manipulated in such a way as to overcome the constitutive gaps involved in handwriting. For example, the Fleischer brothers' *Out of the Inkwell* features characters who are drawn with ink on paper, then come to life, or appear to do so thanks to the magic of the then-new technology of animation. It was created before the arrival of Disney's technology of full animation, which superseded ink-on-paper animation but also made the imprint of the animator's hand much less visible. Alternately, however, a naïve fantasy of handwriting can even be created after the arrival of media that are more transparent, mimetic, etc. than

handwriting, and that are perceived as fundamentally dissimilar to handwriting. This can be done by simply ignoring the existence of these newer media. For example, David Piel's *Harold and the Purple Crayon*, a cartoon adaptation of Crockett Johnson's children's book of the same title, is similar to *Out of the Inkwell* in that it features a character whose drawings literally become real. Piel's film was made in 1969, long after Disneyesque full animation had become the state of the art, but it does not acknowledge the fact that it employs a style of animation which is no longer the current state of the art. (Such a work is close to expressing a restorative fantasy of handwriting, but doesn't quite do so, inasmuch as it does not explicitly involve nostalgia for older media.) The naïve fantasy of handwriting encodes an equally naïve concept of the self. It assumes that selfhood is a unitary, self-identical entity and that it can be completely encoded or manifested in physical form. Such a model of the self is a classically humanistic one, associated with traditional humanist concepts such as authenticity and truth.

A text that expresses the *self-aware* fantasy of handwriting is also created in handwritten media prior to the arrival of more advanced alternatives. (I have my doubts as to whether a text expressing a self-aware fantasy of handwriting can be created *after* the transition to a less handwritten medium; I think such a text would actually involve a reflective fantasy of handwriting.) However, unlike the naïve fantasy of handwriting, it acknowledges its own nature as a fantasy. As I will demonstrate in Chapter 2, the charm of Otto Messmer's *Felix the Cat* comes from the conflict it creates between belief and suspension of disbelief. When Felix interacts physically with question marks and exclamation marks, for example, the viewer is pleasantly astonished because he or she

knows that such an interaction is *not* possible, that it merely expresses a fantasy. This sort of self-consciousness or self-reflexivity is mostly absent in a work like *Out of the Inkwell* or *Harold and the Purple Crayon*. The self-aware fantasy of handwriting encodes a concept of selfhood which is less sure of itself, which understands itself as constantly shifting and as conditioned by other people (a succession of *ipse*-selves as well as an unchanging *idem*-self, to use Ricoeur's vocabulary).

After a handwriting-like medium (e.g., ink-and-paper animation or interactive fiction) is replaced by a medium which has less in common with handwriting (e.g., full animation or the graphical video game), the fantasy of handwriting becomes nostalgic rather than originary. At this point, however, it can be either *restorative* or *reflective*. I take these terms from Svetlana Boym's *The Future of Nostalgia*. Boym's categories of nostalgia were developed in the specific context of nationalism and immigrant experience. For Boym, nostalgia is the desire for the return to a literal lost home. My understanding of nostalgia is also influenced by Andreea Deciu Ritivoi's *Yesterday's Self*, which again discusses nostalgia in the context of immigration. Here, however, I adapt Boym and Ritivoi's concepts to theorize nostalgia for lost media or genres.

A work that invokes the *restorative* fantasy of handwriting is one that simply wishes for the return of an earlier state of technological evolution; it tries to restore a lost condition of totally embodied handwriting, ignoring that such a condition never existed to begin with, and that even if it had ever existed, it would be irrecoverable. An example of such a work is the Nintendo DS video game *Scscribblenauts*, which simply presents itself as a remediation of handwriting, leading inevitably to disappointment when the player discovers that the game doesn't and can't perfectly emulate handwriting. The restorative

fantasy of nostalgia assumes that the integral selfhood associated with idiosyncratic (hand)writing is something which has been lost in the sense of being temporarily misplaced, and which can still be recovered. It assumes that selfhood is an unchanging essence which is independent of the technologies that permit its expression.

Of these four types of fantasies of handwriting, the one that interests me most is the *reflective* fantasy of handwriting. As with the restorative fantasy, a work that enacts the reflective fantasy of handwriting is created after the replacement of a handwriting-like medium with a less handwriting-like medium, either in the former medium or the latter. However, unlike the restorative fantasy, the reflective fantasy acknowledges both the nonexistence and the unrecoverability of any originary condition of handwriting. “Restorative nostalgia puts emphasis on *nostos* and proposes to rebuild the lost home and patch up the memory gaps. Reflective nostalgia dwells in *algia*, in longing and loss, the imperfect process of remembrance” (Boym 41). In the context of media transitions, reflective nostalgia is aware that one cannot simply return to a previous state of media evolution. It accentuates the gaps between present and former media ecologies. Instead of seeking simply to restore a lost condition of handwriting, the reflective fantasy of handwriting is interested in the impossibility of such a restoration. At the same time, as noted above with reference to the critical fantasy of handwriting, reflective nostalgia is not a simple deconstruction of restorative nostalgia. Reflective nostalgia acknowledges the desire for the lost home, which represents a lost state of selfhood. Yet at the same time, it realizes that this desire is unsatisfiable because selfhood is an evolving process rather than an immutable entity. Restorative nostalgia activates a complex play of “I know well, but all the same. . .”, a dialectical interaction between

irrational desire and rational knowledge of the unavailability of the desired object. “I know well, but all the same” is Octave Mannoni’s famous formula of fetishistic desire, the operation in which the fetishist believes in the existence of the maternal phallus despite objective evidence of its nonexistence: “reality [...] has to be disavowed by way of a transformation of belief” (75). The restorative nostalgic performs this operation without acknowledging it: s/he believes *all the same* that the object of nostalgia existed in the first place, and tries to forget that s/he *knows very well* that neither of these things are true.

Compared to restorative nostalgia, reflective nostalgia constitutes a more mature and honest means of responding to media transitions: instead of seeking to restore old media, it poses the question of the meaning of media and the relation of media to selfhood. In the context of handwriting, the reflective fantasy of handwriting does not simply seek to bring handwriting back, but also opens up a space for critical reflection (hence the name) on what handwriting is and is not. The restorative fantasy of handwriting presupposes that there is a stable, true, authentic self which can be perfectly expressed through handwriting. The reflective fantasy realizes that this sort of selfhood is always already an object of nostalgic desire, inasmuch as it never existed to begin with, and that media technologies *construct* the self at the same time that they permit its expression. Such a realization does not, of course, prevent us from feeling the desire to return to a prior state of media with its attendant concepts of selfhood and integral identity. This realization can, however, make this desire more self-conscious. The restorative nostalgic is able to achieve a more finely tuned balance between *knowing very well* that the object of nostalgia (in this case, handwriting in the

graphological sense) never existed in the first place and would be irrecoverable even if it had existed, and wishing *all the same* that it could be resurrected.

Chapter Breakdown

The remainder of this dissertation is divided into five chapters, of which Chapters 3 and 4 form a thematic unit, as do Chapters 5 and 6. In Chapter 2, I define the fantasy of handwriting via the example of Otto Messmer's *Felix the Cat* cartoons. I cite these cartoons as a paradigmatic model of the originary fantasy of handwriting, although of course this is a model which need not be literally followed in each of the texts discussed subsequently. I argue, however, that *Felix* specifically represents a model of the critical fantasy of handwriting, insofar as it acknowledges the way in which its enactment of the fantasy of handwriting depends on technological trickery. I then examine how this fantasy of handwriting is nostalgically reenvisioned in two later works of traditional animation, Chuck Jones's *Road Runner* cartoons and Robert Zemeckis's *Who Framed Roger Rabbit*.

Chapters 3 and 4 address groups of texts that have traditionally depended on handwriting in a literal or figurative sense, and explore the impact of digital technologies, specifically computer graphics, on the production and reception of such texts. The question in these two chapters is: What happens to the fantasy of handwriting when it ceases to be originary and becomes nostalgic? How do media that pride themselves on being "handwritten" adapt to the threat that graphics pose to handwriting?

Chapter 3 discusses the genre of interactive fiction (IF) (a.k.a., text adventure) video games. I begin by arguing that at the period of their commercial prominence, IF games depended on naïve appeals to the fantasy of handwriting, and that such a strategy became impossible after the debut of sophisticated computer graphics in video

games. I examine the competing strategies that contemporary IF authors have used in order to reenvision IF's invocation of the fantasy of handwriting after the arrival of graphics. Chapter 4 examines contemporary North American "alternative" comics. I argue that the alternative comics movement has been explicitly informed, again, by naïve fantasies of handwriting, and that these fantasies have been deployed for the specifically political purpose of defining the alternative cartoonist as a literary author. This explains why in alternative comics, unlike in IF, the naïve fantasy of handwriting is still alive and well, and has survived the introduction of computerized modes of visual rendering into other genres of comics. However, the alternative and quasi-alternative comics that interest me more (specifically the works of Kevin Huizenga and Bryan Lee O'Malley, are those that take into a more reflective attitude toward the fantasy of handwriting, using the advent of digital technology as an opportunity to think about the gaps that necessarily exist between the cartoonist and his/her "handwritten" text.

Chapters 5 and 6 discuss nostalgic fantasies of handwriting in graphical genres – i.e., in categories of texts that are defined by their use of computer graphics rather than handwriting as a mode of visual representation. The question here is: What role can the fantasy of handwriting play in genres of texts that seem defined by its absence? If "the graphical" is what *replaces* "the handwritten," then can digital texts invoke the fantasy of handwriting without being overtly disingenuous? I suggest that the answer is yes, as long as this is done with an awareness of the constitutive gaps that always exist within the fantasy of handwriting – both those gaps that necessarily exist *a priori*, and those that are introduced thanks to the difference between handwriting and its digital remediations. In other words, in order to invoke the fantasy of handwriting without

dishonesty, graphical texts must acknowledge both that handwriting itself can never exist in a pure state, and that digital texts cannot emulate handwriting perfectly.

In Chapter 5, I discuss invocations of the fantasy of handwriting in digital films. I argue that Pixar's earlier films employ the fantasy of handwriting in a restorative way. They seek to emulate the handwritten nature of Disney films in a graphical form, but in doing so, these films fail to acknowledge their own status as examples of the sort of technology that renders handwriting obsolete. In later films, especially *Monsters, Inc.* and *Up*, Pixar's invocation of the fantasy of handwriting becomes reflective because it takes into account an awareness of the irremediable loss of originary handwriting. I then go on to discuss Edgar Wright's *Scott Pilgrim vs. the World*, which applies the fantasy of handwriting to both handwritten and computer-graphical imagetexts. This film demonstrates the possibility, broached at the end of Chapter 4, that computer graphics could be a writing mechanism equivalent to handwriting in certain respects – that the difference between the two is more one of degree than kind.

Chapter 6 discusses video games that use a handwriting interface. Such games appear to promise to offer players the opportunity to enact the fantasy of handwriting in literal form. However, as demonstrated by the case of 5th Cell's *Scribblenauts*, such promises are unfulfillable because the fantasy of handwriting, taken to its logical extreme, is in conflict with the specific exigencies of the gaming situation: a game that allows the player to fully exercise the fantasy of handwriting does not provide a meaningful play experience. Moreover, inherent differences exist between originary handwriting and handwriting interfaces, and therefore any digital remediation of handwriting will always be more than partial. Therefore, I turn to SquareEnix's *The*

World Ends with You for an example of a game that acknowledges these constitutive gaps in the video game version of the fantasy of handwriting – and yet also acknowledges the continuing power of fantasies of handwriting in a post-graphical era. Now, let's take up Harold's purple crayon and draw ourselves a road, so that we can embark on this journey of handwriting (Figure 1-4).

Table 1-1. The four types of fantasies of handwriting

	Orinary	Nostalgic
Critical	<i>Naïve</i> Example: <i>Out of the Inkwell</i>	<i>Restorative</i> Example: <i>Scribblenauts</i>
Uncritical	<i>Self-aware</i> Example: <i>Felix the Cat</i>	<i>Reflective</i> Example: <i>Up</i>



Figure 1-1. Two of Joey Ellis's "letter monsters." © 2009 Joey Ellis.



Figure 1-2. A promotional image for the PBS children's show *WordWorld*. © 1995 - 2011 Public Broadcasting Service.



Figure 1-3. A sequence from *Paul Auster's City of Glass*, by David Mazzucchelli and Paul Karasik. © 2004 Paul Auster, Paul Karasik and David Mazzucchelli.

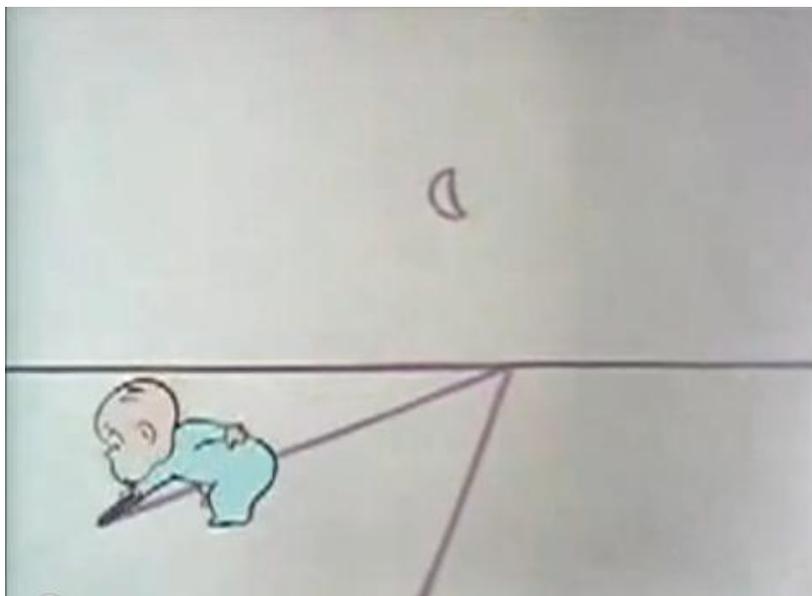


Figure 1-4. A still from *Harold and the Purple Crayon* (David Piel, 1969). © 1969 David Piel.

CHAPTER 2 OUT OF THE INKWELL: TRADITIONAL ANIMATION AS FANTASY OF HANDWRITING

Felix and Fantasies of Handwriting

In this first chapter I will define the contours of the classic fantasy of handwriting as it existed before the advent of digital technology. I begin from the premise that there *is* a general condition of nostalgia for handwriting in contemporary culture – that many contemporary works of North American popular culture seek to remedy a supposed loss of the ability to write oneself into the world, a loss which the creators of these works attribute, at least in part, to the supplantation of print and handwriting by computers. I will seek to more fully justify this premise in later chapters. First, however, I need to establish what exactly the object of nostalgia is – in other words, to show what the fantasy of handwriting is a fantasy *of*, and what nostalgia for handwriting is nostalgia *for*.

The fantasy of handwriting is not to be confused with the “illusion of life” that characterizes modern animation in general, except in the sense that the former represents a more specific form of the latter. The fantasy of handwriting, again, is the fantasy that by manually interacting with a writing surface, a writer can create letters or drawings that magically behave in the same way as other objects – while at the same time retaining their quality as traces of the writer’s hand, as extensions of the artist’s body and soul. In *Felix*, and in all the other texts I discuss in this dissertation, handwriting comes to life; handwriting *moves*, handwriting *does stuff*. Handwriting in this sense is *writing yourself into the world*. Clearly this sort of handwriting is not literally possible, because it violates the laws of physics. But it represents the logical extension of an understanding of handwriting that’s become common in 20th- and 21st-century America, in which handwriting is taken to be a literal inscription of the self. The fantasy

of handwriting should be understood not as a magical alteration of handwriting but as the apotheosis of handwriting, as what handwriting would become if its potential could be fully realized. This, I argue, is why texts like *Felix* are seductive.

And yet the fantasy of handwriting risks being a mere fetishization of handwriting. An excessive reliance on this fantasy leads to the creation of a false binary opposition in which handwriting is seen as an embodied, subjective and personal technology, while competing technologies (e.g., print, typewriting, word processing) are seen as disembodied, objective and inhuman. We need, therefore, to recognize the way in which fantasies of handwriting misunderstand handwriting. The difficulty with such fantasies is not just that they happen to violate accepted laws of physics, but that they *necessarily* do so. Under real-world conditions, handwriting is dead. It represents a petrified or mummified trace of a body that *was* present but is now absent, as Derrida argues in “Signature Event Context.” Therefore, a barrier always exists between the writing self and the written text; the latter is never a pure expression of the former. Moreover, because handwriting is inanimate, it can only be endowed with life by being subjected to some form of technical mediation – the animation apparatus, for example. The precondition of bringing handwriting to life is the imposition of a medial layer between the writer’s hand and the finished text in which the fantasy of handwriting is invoked. Fantasies of handwriting can be deployed critically and productively only when they acknowledge these paradoxical conditions.

Otto Messmer’s *Felix the Cat* cartoons provide a representative example of the fantasy of handwriting. Through a variety of visual strategies, Messmer and his staff seek to create the illusion that *Felix* is made of drawings in motion – that the image

seen on the screen is the literal product of Messmer's act of manual engagement with the raw materials of ink and paper. Yet the viewer of *Felix* always remains aware that this is an illusion, that *Felix* is really made of light rays filtered through a series of frames of celluloid film (or of digital data, under modern conditions of viewing), rather than of ink moving across a sheet of paper. Despite the best efforts of Messmer and his staff to control the layers of mediation involved in *Felix*, the poignancy of *Felix*'s illusion of materiality results precisely from the viewer's recognition that it *is* an illusion. *Felix* is today often read as the apex of an earlier, more personal style of animation, but a correct reading of *Felix* needs to take into account that its apparent materiality was only an illusion. *Felix* resorts to trompe-l'oeil artifice at the very moment when its materiality becomes most visible. The genius of *Felix*, I suggest, is Messmer's ability to balance the viewer's delight in its illusion of handwriting with the viewer's knowledge that it's only an illusion.

Felix: The Kitties and the Critics

Literature Review

Otto Messmer's *Felix the Cat* cartoons were produced between 1919 and 1930, after which the character was revived on several occasions; these later revivals will not be discussed here. The *Felix* cartoons were produced by Pat Sullivan's animation studio, and Sullivan (1887–1933) was originally recognized as *Felix*'s sole creator. In the 1970s, animation historian John Canemaker demonstrated that *Felix* was in fact created by Otto Messmer (1892–1983), Sullivan's lead animator. This attribution is now accepted by nearly all animation scholars, and will here be taken for granted.

¹ The important formal properties of *Felix* will be discussed below. To understand

what follows it suffices to note that *Felix* employs a highly two-dimensional style of animation, with extremely limited use of perspective or depth cues. Felix himself is depicted in an unrealistic manner and looks more like a conventionalized representation of a cat than a realistic drawing of a cat (Figure 2-1). Finally, in *Felix* letters and typographic signs are often treated in the storyworld as real objects; for example, Felix uses the numeral 8 as a pair of spectacles, or converts exclamation marks into wings.

Felix is one of the most widely discussed works of silent animation, but scholars have usually characterized *Felix* as an example of the carefree playfulness of animation, or of the freedom of animation from the constraints of live-action cinema. This reading of *Felix* goes back at least to Marcel Brion's 1928 statement that "Felix is not a cat, he is *the* cat. I would readily say that he is a sur-cat."² The intent of this claim is to characterize Felix as illusory, immaterial, and therefore free from the constraints of everyday existence. Brion's claim has therefore often been cited to stress Felix's affinities with Surrealism (Crafton 48, Leslie 22–23). Brion's rhetoric emphasizes that Felix is *lacking* in material existence, that the material that composes him is irrelevant:

We forget that a man created him, that Pat Sullivan's pen confers upon him for some instants an ephemeral and vagabond existence.³ As soon as the screen brightens, Felix assumes the two dimensions that suffice for all his

¹ In 2005, Judy Nelson, the curator of the New South Wales Library in Australia, claimed that Sullivan was actually *Felix*'s creator. Nelson's case for Sullivan's authorship is based primarily on appeals to Australian national pride, coupled with ad hominem attacks on Messmer and Canemaker. She suggests that Sullivan, an Australian citizen, was robbed of his proper credit by two Americans (Messmer and Canemaker). The documentary evidence she presents is too flimsy to convince anyone not already persuaded of her case. It is unfortunate that this offensive nonsense has now been incorporated into the Wikipedia article on Felix. It's ironic, however, that Nelson claims to have detected visual resemblances between Sullivan's handwriting and the lettering in *Feline Follies*. See "Creator of Felix" for a critique of Nelson's claims, and see Canemaker 1991 for a less slanted account of *Felix*'s history.

² Translations from Brion's article are mine. To my knowledge, his important critical text has not been translated into English.

³ Brion (and Balazs) of course believed that Pat Sullivan was the sole creator of Felix.

needs. He disappears when the light effaces him. Yet, we believe that he is returned to his house, in a suburb of the town of fairies, where he lives in a small transparent house constructed from the rays of the projector. (30)

For Brion, Felix lives in fairyland; the material substrate that makes up his body is the light from the projector. *Felix* has the material properties not of paper but of air. Yet paradoxically, despite having no material support at all, Felix appears to be more lifelike than many live-action performers. Brion seems uninterested in resolving this paradox. For him, the interesting point about Felix is the quasi-magical act whereby a construct of projected light takes on an independent existence. Brion was correct, of course, to observe that *Felix's* true material substrate is “the rays of the projector.” What’s missing here is a recognition of the crucial importance of *handwriting*; I’m going to suggest that we *don't* “forget that a man created him.”

Similarly, writing in 1949, Bela Balazs observes that Felix is a construct of lines on paper as well as projected rays. However, he characterizes the line as having a lower degree of materiality than “reality”:

The substance of this world is the line and it reaches to the boundaries that enclose the graphic art. Drawings such as these do not transform themselves into a natural reality, which their creator might enter like the Chinese painter his landscape. For this world is peopled only by being drawn with pencil or pen. Their outlines do not depict a shape existing independently somewhere outside this world, but form their only actual body. Appearance is not transformed into reality here as in the Chinese story. Appearance is the sole reality here, and art is not made into reality (191).

This implies that the drawn lines of which *Felix* is composed are *not* a part of reality – that a clear-cut distinction can be drawn between “appearance” and “reality,” and that things “drawn with pencil or pen” belong to the former rather than the latter category. By virtue of being self-evidently chirographic, *Felix* belongs to some second-rate

ontological stratum, in which handwriting is taken to be at one remove from the things it depicts.

I find the same assumption in much recent work on *Felix*. While sometimes acknowledging that *Felix* was constructed with real materials – ink and paper – scholars tend to downplay the importance of the viewer’s perception of the text’s material substrate. Esther Leslie, for example, observes that in *Felix* “[e]verything in the drawn world is of the same stuff” (23), but she has little to say about what that stuff is. Her analysis focuses on how Felix resembles surrealist typography of the same period in that both are more ideographic than narrative. Again, Donald Crafton observes that “[t]he independent, detachable nature of his limbs acknowledges that these parts actually exist separately as sheets, cels and cutouts” (343), but he goes on to interpret this as “emblematic of the animator’s creation of the cat out of the elemental materials of ink and paper” (346), which is the primary focus of his analysis of *Felix*. For Crafton, those “elemental materials” are important only to the extent that they serve as the raw material for the animator’s act of self-figuration. I propose, however, that if Felix is “created out of” ink and paper, he never seems to transcend his material substrate in the way that a Disney character does. For reasons to be explained below, the reader never fully forgets that Felix was created with ink and paper, and the reader’s knowledge of Felix’s (original) material substrate is in fact crucial to Messmer’s aesthetic strategy.

The critic who pays the most attention to *Felix's* material aspects is Norman Klein.⁴ His concept of “graphic narrative” emphasizes that *Felix's* world is a graphic and typographic space, resembling contemporary print media and avant-garde typography in its emphasis on two-dimensional spatiality. However, Klein chooses to theorize graphic narrative in terms of Eisenstein’s concept of the hieroglyph, which is a natural sign that doubles as or evolves into a conventional sign.⁵ For Klein, just as Eisenstein’s hieroglyphs are pictures that serve as conventionalized stand-ins for the concepts they describe, Felix is simultaneously a depiction of a cat and a replicable, non-representational surrogate: “A word could be as much a “character” in the story as an image. And images can be simplified until they resemble letters” (6). He continues:

As an ideogram within this grillwork, as the changeable ink spot, Felix usually does what he pleases. Starting from his feline character, he can turn back into an ink letter. He can contort his tail into a question mark. Messmer’s visual gags emphasize the ideogram as Felix wrestles a letter or a line into submission. Titles and characters become interchangeable [...] (7)

In invoking the concept of the ideogram, Klein relates Felix to Eisenstein’s theory of the hieroglyph, which operates on the principle of “denotation by depiction” (Eisenstein 35). The hieroglyph is a sign which originates as a mimetic depiction of some object (e.g., a horse), but then gradually loses its graphic similarity to that object and becomes a mimetic copy of it. The ideogram is a sign that combines two or more hieroglyphs in order to produce a propositional meaning which is present in neither hieroglyph on its own: “By the combination of two ‘depictables’ is achieved the representation of

⁴ Other important critical treatments of *Felix* include Patricia Vettel Tom’s discussion of the cartoon in terms of early 20th-century American culture; Alan Chodolenko’s Derridean reading of the cartoon; and Graham MacPhee’s discussion of *Felix's* spatial registers (169–178).

⁵ I borrow the terms “natural” and “conventional” sign from Murray Krieger’s *Ekphrasis: The Illusion of the Natural Sign*.

something that is graphically undepictable” (Eisenstein 30). This is, as Eisenstein subsequently notes, the same thing that occurs in his system of intellectual montage, which combines multiple signifiers into an emergent meaning that is irreducible to its component parts.

This is a crucial observation, but it doesn't go far enough; what's missing here is the realization that even letters and hieroglyphs have their own materiality. Klein considers the hieroglyph primarily as an element of a code, i.e., a body of signs that signify by their difference from each other; it just happens to be more iconic and less purely symbolic (to use Peirce's famous distinction) than is the case with an alphabetic letter. In other words, an ideogram – say, an ideogrammatic picture of a cat – *looks* like the thing it stands for. However, an ideogram is a sort of Platonic ideal, a form which transcends any of its individual instantiations. The precise visual appearance of an ideogram can be varied within a certain range without affecting its essential identity, just as is the case with an alphabetic letter. Felix could be drawn in several different ways while still remaining an ideogrammatic signifier of a cat (and indeed, the character's visual appearance did evolve significantly throughout the silent period). An individual paper drawing of an alphabetic letter or ideogram, however, is a material object, a thing with its own weight and solidity, however negligible. When Klein relates *Felix* to contemporaneous avant-garde typography, he misses that in the typography of this period, such as in the work of Filippo Marinetti, letters are employed for their visual and material properties as much as for their meaning. In an image like *Après la Marne, Joffre visita le front en auto*, Marinetti exploits the letter M for its mountainous peaks and the letter S for its sinuous curves (Bartram 28) (Figure 2-2). The point here is neither

that M and S are pictures of mountains or snaky paths, nor that M and S are the first letters of words like “mountain” or “snake.” What matters is the thick and heavy form of these letters, their insistent presence on the page. They communicate not merely by virtue of symbolic associations, but also by virtue of their visual substance.⁶ When alphabetic letters or ideograms are put into motion, as happens in *Felix*, they seem to be material objects given life.

I want, therefore, to emphasize *Felix*'s illusion of materiality, in contrast to Klein's stress on its illusion of immateriality. In Klein's reading, the condition of possibility for *Felix*'s typographic interactions is its *lack* of materiality. *Felix* can interact with letters because his world is an immaterial one. Its spaces lack depth, and its objects have two dimensions and can freely change into other objects. *Felix* can interact with typographic signs, like question marks and exclamation marks, because *Felix* is a typographic sign himself; he has no more thickness or weight than the letters in this sentence. By contrast, the world of a typical Disney cartoon is explicitly a simulacrum of a material world. It's a three-dimensional space, populated by objects which are equally three-dimensional and which retain their identity unless subjected to magical influence.⁷ I suggest, conversely, that *Felix* also appears to be a *thing*, an insistent present object.

The apparent material substrate of that “object” is nothing more than ink on paper.

⁶ This “substance” is a quality perceived by the viewer, not a quality inherent in the letter. Drucker warns against “a placid and unquestioning acceptance of the concept of substance as self-evident presence or being” (Drucker 1993 39), which would exemplify the metaphysics of presence that Derrida critiques. Rather, the substance of the signifier is to be understood as “phenomenological, apprehendable, [and] immanent” (43).

⁷ In *Felix*, as in Fleischer's *Betty Boop*, objects can metamorphose into other objects without need of an explanation. The viewer understands such metamorphoses to be permitted by the laws of physics that govern the cartoon world. In Disney films such as *Snow White and the Seven Dwarfs* or *Pinocchio*, objects can be turned into other objects by magic, but such transformations are explicitly identified as magical. For example, when the Blue Fairy turns *Pinocchio* into a real boy, she does so by *altering* the standard laws of physics.

Using Matthew Kirschenbaum's terminology, we could say that *Felix's forensic* material substrate – the stuff it's actually made of – is silver nitrate emulsion on celluloid film stock (or patterns of magnetization on videotape, pits and lands on a DVD, etc.).⁸ However, *Felix's formal* material substrate – the stuff it *seems* to be made of – is ink on paper. And ink and paper have a materiality of their own; they are three-dimensional entities (albeit rather thin ones) with non-trivial visual properties. If Felix can interact with typographic signs like question marks and exclamation marks, then this proves that *Felix* is no more material than these signs, *but also no less so*: typographic signs have a weight and thickness of their own, which is not entirely negligible. Messmer seeks to convince the viewer that the graphic and typographic signs in *Felix* are made of ink on paper, not light projected through celluloid, and that ink and paper are material objects. In Kirschenbaum's terms, Messmer seeks to augment the viewer's awareness of the formal materiality of his cartoons, at the expense of the viewer's awareness of their forensic materiality.

This awareness of materiality also includes the knowledge that the lines and dots on the screen are *handwritten* – that they proceed from the animator's originary act of physical contact with the animation paper. Unlike in the Fleischer brothers' contemporaneous *Out of the Inkwell* series, Messmer is rarely seen actually drawing within his cartoons (although my central case study will be a cartoon in which Messmer *is* shown drawing). Even so, the viewer can't be unaware of the handwritten nature of the images and words in *Felix*. Felix himself is visibly hand-drawn, and the letters in

⁸ For Kirschenbaum, "forensic materiality rests upon the principle of individualization (basic to modern forensic science and criminalistics), the idea that no two things in the physical world are ever exactly alike" (10). By contrast: "Formal materiality thus follows as the name I give to the imposition of multiple relational computational states on a data set or digital object" (12).

Felix are visibly handwritten, in that each instance of an individual letter differs slightly from each other. For example, in Figure 2-3, compare the S's in "sell", "shoe" and "shop" (Figure 2-3). These letters, like handwritten letters in general, record the idiosyncrasy and inconsistency of the hand that produced them. The characters and typographic symbols in *Felix* serve as records of the idiosyncratic nature of Messmer's individual physical movements.

What *Felix* presents, then, is a series of words and images which proceed from Messmer's hand but which seem to take on a life of their own. Of course it is widely recognized that the central act of animation is the illusion of life – the illusion that inanimate drawings or objects can move freely – but *Felix* specifically creates the illusion that Messmer's handwriting⁹ has come to life. In *Felix*, Messmer creates the illusion that he has literally *written himself into the world*. This illusion is convincing precisely because of our knowledge that it's impossible, that real handwriting doesn't work like that. Messmer's handwriting works the way we *wish* our own handwriting worked.

Felix, therefore, will serve as my primary reference point for the fantasy of handwriting. This fantasy can also be seen (at least in retrospect) in other cartoons of the silent period – e.g., *Out of the Inkwell* and Disney's *Alice* series. I don't claim that *Felix* is unique in its mobilization of the fantasy of handwriting. I do suggest, however, that *Felix* can be read as a paradigmatic example of this fantasy. This has much to do with the material conditions under which *Felix* was created.

⁹ Or, from the point of view of the original audience, Sullivan's handwriting.

Writing Surface and Medium in *Felix*

The four material components of handwriting – writing hand, writing tool, writing surface and writing medium – are all present in *Felix* in much the same forms that they take in traditional handwriting with pen and paper. At the level of its production process, *Felix* is literally a handwritten text in ways in which later cel-animated cartoons were not. Compared to cel animation, the paper process used in *Felix* is more homologous to traditional handwriting on paper. This is why *Felix*'s illusion of handwriting is as convincing as it is.

Felix was animated primarily with ink on paper; cels were used only for backgrounds and not for characters. At Sullivan's studio "[t]he animation was drawn mainly on paper, and by 1925 the Barré system of rip-and-slash was not used; instead, cels containing backgrounds were placed over the character drawings" (Canemaker 106).¹⁰ This was the opposite of a system invented by John Hurd in 1914, in which the *background* was painted "in strong blacks and whites upon a medium dark gray paper" and this was overlaid with cels on which the characters and other "movable objects" were drawn (Maltin 9). In Hurd's method, the paper with the background was lower than the cels with the characters, but in Sullivan's method, the paper on which the characters were drawn was a lower layer of the image than the cels on which the backgrounds were drawn (Figure 2-4). The cels were thus physically closer to the camera than the paper, meaning that Sullivan's paper-and-cel system represents a reversal of the usual ordering of "foreground" and "background" (as well as of the plain meaning of those terms): the background was the highest layer of the stack, while the foreground was the

¹⁰ As this implies, there must have been some use of the rip-and-slash system before 1925, and possibly even after. For example, word balloons must have been overlaid on top of the image.

lowest layer. This meant, furthermore, that the characters and other moving elements had to be drawn on paper rather than cels. Characters were necessarily rendered on an opaque rather than a translucent surface. It's also important to note that the *only* way to depict characters moving was to draw them in different positions, since camera movement was unavailable. Presumably for reasons of cost, Sullivan's studio used an antique camera which was incapable of any kind of movement, so the only way to create the illusion of camera movement in or out of the frame was to progressively increase or decrease the size of the objects depicted in each image (106). In order to depict a character moving, then, Messmer and his animators had no other recourse but to draw that character on paper.

Cost was apparently the primary reason why Sullivan's studio continued to animate on paper even after the invention of the cel process (Canemaker, personal communication; see also Barrier 28). The use of cels for background overlays is obviously an effective cost-saving measure, as it means that only one cel has to be created for each scene, and the bulk of the animation can be done with the cheaper material of paper. However, the use of cels for backgrounds creates certain unique technical problems. Canemaker explains:

This method was inexpensive because of the limited use of cels, but it required special planning by the animators in order to avoid having Felix appear to walk through horizon lines or objects. The animators drew nonmoving elements on a cel, which was placed over the character action drawings on paper. If Felix's movements made him cross the lines of the horizon or objects, the cel overlay was removed and the horizon line or the object was carefully traced onto each of the paper drawings containing the character (106).¹¹

¹¹ Of course, it wouldn't have been a violation of verisimilitude for Felix to interact with the horizon line, since he did such things routinely. However, clearly Messmer preferred not to have such interactions occur by mistake. Another obvious solution to this problem would have been to cut away the part of the

Because what appears as the background was actually the foreground, it became necessary to take precautions to maintain the illusion that the reverse was true. Moreover, the parts of the background with which the characters might interact had to be kept as simple as possible, so that they could be traced onto paper quickly if necessary. Thus backgrounds in *Felix* tend to be minimalistic assemblages of lines, and they often contain large expanses of blank space, within which characters can move around without interfering with the background.¹² Because this blank space was placed over a white background, it appears in the films as white space. Characters tend to walk *behind* background elements far more often than in front of them.

Because of the use of paper as the primary writing surface for the character animation, the process of producing *Felix* had many similarities with the process of handwriting. Both these processes involve the production of inscriptions on a surface, which is typically opaque rather than translucent. The paper used to produce the *Felix* cartoons was thick and opaque:

Most [of the *Felix* drawings I have seen] are on a medium weight ledger stock. A few however are on a slightly heavier coated stock. This seem[s] to correspond to larger images and my educated guess is that they used that coated stock for scenes with a larger scale to prevent buckling in the larger expanses of black ink (keep in mind all camera moves were hand drawn).

This is [in] contrast to the Aesops Fables cartoons of the era [by Paul Terry] which were animated on a tissue thin onion-skin paper and then traced onto cels. The Hearst Intl studios art I have seen is similar to this heavier coated stock that Sullivan used (Newgarden, personal communication).

celluloid overlay that threatened to interfere with the characters, while leaving the rest of the overlay in place. I cannot confirm whether Messmer used this method.

¹² This is one reason why it was beneficial for *Felix* to be entirely black: if his body interfered with a background line, it would be impossible for the viewer to tell.

In the process used at Sullivan's, transparency was not the primary consideration. *Felix* can be contrasted to a film like *Gertie the Dinosaur*, where, due to the lack of a registration system, each drawing had to be traced onto the next one; therefore, the drawings had to be executed on translucent paper. Because Sullivan's method did not require retracing, the paper didn't need to be translucent. Instead, it had to be thick and heavy enough to support the ink – just like writing paper. The paper used in *Felix*, then, is a thick and substantial material, a substance with weight and solidity.

Moreover, whereas celluloid, onion-skin and rice paper are clear, paper is colored.¹³ Of course cels are not entirely colorless, especially not when stacked atop one another. One guidebook on animation advises: "Check your exposure sheet to see which shot has the most layers of cels. Add clear cels so that every shot has the same amount of layers. This will ensure that your film maintains a consistent look. Even though the cels are clear, they do take on a gray shade when layered" (Bohl 124). Cels in the silent era were thicker than they are now, so that fewer cels could be used without visibly altering the color of the image (Furniss 2). However, even though cels have color, that color is supposed to be invisible; the viewer is supposed to see only the color of the ink and paint applied to the cels, not the color of the cels themselves. In *Felix*, on the other hand, the color of the paper is consistently visible. Most frames in *Felix* contain large areas of white space (both for aesthetic reasons and, as noted above, to minimize interference between characters and background), and these bright expanses contrast starkly with the black ink used for the characters. Paper in *Felix* is not a neutral background but a crucial component of the color scheme of the image.

¹³ An important difference between Sullivan's and Hurd's processes was that Hurd used gray paper, whereas Sullivan used white paper.

In *Felix* ink is the medium of inscription, presumably again due to a combination of aesthetic and technical reasons: ink is cheap and can be easily applied to paper. A similar logic explains the limited range of tonalities used in *Felix*. Objects in *Felix* cartoons, including the protagonist, tend to consist of large undifferentiated expanses of black ink. Canemaker's account of *Felix*'s creation hints at the reasons why:

Messmer made animated drawings in pencil, then brought them to the studio to "a couple of girls who inked and blackened it in." To save time and labor, he decided to make the film's protagonist, a cat, all black "because it saves making a lot of outlines, and solid black moves better" (51).

Inking and blackening-in a pencil outline obviously takes much less time than painting it in a range of graytones, and this is especially significant in the case of the protagonist, who must be drawn more times than any other character. The use of pure black makes the character both distinctive and easily reproducible.¹⁴

The reason why Felix is black and his paper is white is the same reason why ink is black and writing paper white. In order to be readable, a handwritten or printed letter has to stand out visually from its support. The Latin alphabet thus differs from writing systems such as cuneiform, in which letters are incised into or elevated above the writing surface, and can be distinguished from the surface by depth cues or by patterns of light and shadow. Letters are readable because their color contrasts with that of the writing surface. Paper tends to be white and ink black because these colors present the

¹⁴ Felix's literal blackness is often interpreted as a metaphor for blackness in the racial sense. As Canemaker notes, Felix's visual appearance was based on that of Sullivan and Messmer's earlier character Sammy Johnsin, who was a blatantly racist stereotype (Canemaker 38). Stefan Kanfer claims that Felix "was black in more than the literal sense [...] Felix embodied the dominant racial views of the twenties. Audiences saw a dark, big-eyed, half-primitive figure, clever and improvisatory in the tradition of Br'er Fox" (39). Such readings of Felix are not limited to animation historians. Controversy erupted in 2009 when Niall Ferguson wrote a *Financial Times* editorial comparing President Obama to Felix, on the grounds that both were black and unusually lucky. The reading of Felix as a racist caricature is certainly not implausible, but it would be beyond the scope of this essay to consider this question in depth. Here I can only suggest that *Felix*'s play with its material conditions of production is less innocent than it seems.

sharpest possible contrast. Brightness (the ability to reflect light) and whiteness (the degree to which the paper's shade is perceived as white) are both important measures of the quality of paper. Notably, brightness is a matter of how white the paper *is*, while whiteness is a measure of how white it *appears*; the color of paper is both a material and a perceptual property, and “a slightly bluish shade is perceived as being whiter than a neutral white” (Norberg n.p.). Lettering is therefore a *visual* phenomenon which operates by visual discrimination between colors. The lettering in *Felix* itself offers a good demonstration of this. Letters in *Felix* are composed of thick, blocky fields of black, making them fully legible even under poor conditions of projection (cf. Figure 2-2). Furthermore, the purpose of written signs (including but not limited to letters) is to represent a thing in repeatable form: a grapheme is meant to substitute for a given phoneme, morpheme or concept wherever it may occur. For ease of reproduction, written signs tend to be simple and stylized.

All these properties of letters also apply, in a sense, to Felix. “To save time and labor, [Messmer] decided to make [*Feline Follies*'s] protagonist, a cat, all black 'because it saves making a lot of outlines, and solid black moves better” (Canemaker 51). Felix was made black for ease of reproducibility and for greater contrast with a bright background. Felix's highly stylized and geometric visual appearance also contributed to making him easy to redraw. Moreover, in a basic ontological sense, Felix *was* an inscription on paper; prior to being photographed, “he” existed only as ink traces on animation paper. Felix's similarity to a written letter is highlighted in *Felix Doubles for Darwin* (1923), in which Felix transmits himself over the transatlantic telegraph cable. At the Cape Town end of the cable, Felix is received as a series of dots and dashes on a

paper tape. The dots and dashes metamorphose into their Morse Code equivalents – F E L I X – and the letters leap off the paper and metamorphose into Felix. This sort of transformation is possible because the dots and dashes representing FELIX, the letters FELIX, and Felix the Cat are all black inscriptions on a white background.

In Klein's reading, Felix is an ideogram, a visual sign that stands for a concept – namely, the concept of “cat;” Felix signifies “cat” by convention as much as by mimetic resemblance. He bears only minimal visual similarities to an actual cat, so we understand him as a cat because we have learned to associate him with catness (Figure 2-5; cf. Figure 2-1). Therefore, Felix functions as a differential signifier, within a differential system of signs of which “cat” is only one such element; he represents a cat because he lacks the characteristic visual qualities of, for example, a dog.¹⁵ However, I've tried to demonstrate here that even if Felix is a purely typographic character, typography is a visual and material phenomenon. A letter signifies by virtue of its physical, material substrate as well as by its function in a differential system. The *physical* properties of the drawings and letters in *Felix* are as crucial to the cartoons' effect on the viewer as are the semiotic values of these drawings and letters.

In various *Felix* cartoons, Messmer takes advantage of Felix's visual and material resemblance to a typographic letter by having Felix interact physically with letterforms and other typographic signs, such as punctuation marks. As we will see in the next section, such interactions are crucial to Messmer's construction of a fantasy of handwriting.

¹⁵ Here Klein's argument aligns well with Scott McCloud's and Andreas Huyssen's parallel (but independently developed) arguments that cartoon characters are like letters because of their abstract schematic visual appearance.

Letters and Punctuation Marks in *Felix*

According to Klein's reading, Felix's "lettricity" gestures to his immaterial nature. However, the similarity between Felix and a letter works in *both* directions: this similarity suggests that letters are material in the same way that Felix is. This will become evident from a brief survey of Felix's interactions with letters.

We can divide the letters in *Felix* into diegetic and extradiegetic letters, and we can subdivide the latter category into extradiegetic letters that represent sounds and extradiegetic letters that represent non-auditory concepts. *Diegetic letters* are those that the viewer understands as representing letters that exist in the diegetic world.¹⁶ When presented with diegetic letters, the viewer understands that if s/he were transported into the diegetic world, s/he would continue to see those letters as letters. The signs in Figure 2-3 that read SHOES (partially obscured) and BANKRUPT are simple examples. The reader understands diegetic letters to be physically bound to their material support, as real-world letters are. The letters of this present sentence, for example, are physically instantiated as either patterns of pixels on an LCD screen, or arrangements of ink particles fused to paper by a laser beam. In either case, the letters are physically bound to a writing surface and cannot exist independently of that surface. Nearly all real-world letters are bound to a surface in this way; the rare exceptions, such as the Hollywood Sign, are closer to sculpture than lettering. Physical connection between writing and the writing surface is to some extent necessary for writing to be easily producible and reproducible. If one wrote using letters that were independent of the

¹⁶ I use the term "diegesis" in the film-theoretical sense: "The total world of the story action is sometimes called the film's *diegesis* (the Greek word for "recounted story") (Bordwell and Thompson 80). I am not using "diegesis" as the opposite of "mimesis".

writing surface – Scrabble tiles, for example – then not only would the letters be in constant danger of falling off the writing surface, but the number of texts one could produce would be limited by the number of tiles (letters) available, and one might need to destroy an old text in order to write a new one.¹⁷ Clearly it's far more efficient for letters to be bound physically to the writing surface. The fact that letters are dependent on their support, however, seems to imply that letters are not *themselves* physical objects – that their material properties (weight, thickness, etc.) are negligible – that they are in some way an attribute of the writing surface.

What sometimes happens in *Felix*, however, is that the physical continuity between writing and surface is either broken or simply ignored. In *Non-Stop Fright* (1927), Felix encounters a sign that reads 478 MILES (Figure 2-6).¹⁸ He takes the 4 off the sign, inverts it, and sets it on the ground. Next he removes the 7, puts the long end in his mouth, and lights the short end. Felix starts to read the newspaper he has just picked up, but evidently unable to see it well, he takes the 8 off the sign and attaches it to his face (Figure 2-7). Finally, Felix sits down on his “chair” to smoke his “pipe” and read his “newspaper,” which he can do thanks to his “glasses.” When he's done reading, Felix throws the 8, the 7 and the 4 back onto the sign in that order, so that the sign now reads 874 MILES, but with the numerals in incorrect orientations (Figure 2-8).

¹⁷ By contrast, moveable type can be used to print multiple copies of the same text because the type itself does not become part of the writing surface, but merely serves as a template for the application of ink to that surface. For the same reason, the same type can be reused many times to print many texts, although the number of letters in any *given* text might be limited by the amount of type available, as occurred in the printing of Ezra Pound's *Hugh Selwyn Mauberley* (cf. Rogers).

¹⁸ This sign defies verisimilitude in several ways. It doesn't state *what* is 478 miles away in the direction indicated, which makes it useless. It's also located in the middle of nowhere, rather than on a road, where such a sign would usually be found. Thus, the sign appears to have been introduced into the narrative purely for the sake of the gag I'm about to describe.

A gag such as this reveals that letters in Felix's diegetic world are not bound to their surface of inscription in the same way that real-world, handwritten or printed letters are. Let's consider this scene from an infradiegetic perspective and ask why Felix is able to sit on the number 4? One answer is because under *Felix's* laws of physics, the number 4 is *convertible* into a chair. Accordingly, Crafton reads this scene as an example of "polymorphous plasticism" (329), the condition whereby any object can transform into any other without violating the viewer's sense of the consistency of the diegetic world. Another answer is because Felix himself is two-dimensional, and therefore he should have no trouble sitting on an object of negligible thickness. The numeral can support his weight because he has no weight to support. But I would also suggest that if Felix can sit on the number 4, this suggests that the number 4 is as solid as he is. If cats in Felix's world are as thin and weightless as letters, then letters must also be potentially as solid and heavy as cats. For Felix, a letter is not an immaterial inscription on a surface, but a physical object which can be manipulated and used as a tool. In Felix's world, letters have as much reality as anything else. And this suggests an important sense in which the same is also true in our own world. The materiality of letters is much less dramatically evident in real life than in *Felix*, but watching *Felix* suggests to me that the letters I'm typing now are *things* as well as signifiers. These letters may not be capable of supporting my weight, correcting my vision, or even existing independently, but they are physical entities as well as elements in a differential system. The implication here is that letters are physically real entities – and that if letters could move, this would represent the apotheosis of handwriting, not the opposite of handwriting. Writing and drawing must constitute modes of physical action as well as

thought or communication. To create words or drawings is to create *things*, to produce new entities which hadn't existed before and which come into existence through one's act of material engagement with the writing surface. If words and letters are not as substantial and independent as other types of objects, this is only because actual handwriting falls short of the true potential of handwriting.

What makes the above gag possible, of course, is the characteristic illusion of animation: the 4, 7 and 8 were repeatedly drawn in slightly different positions, and the drawings were photographed and projected so as to create an illusion of motion. Therefore, the letters never actually become unmoored from their material support, and they aren't even the "same" letters from one frame to the next.¹⁹ This gag, then, is funny because it conflicts with the reader's knowledge that letters can't actually be manipulated in the way in which Felix readily manipulates them. More, this joke is predicated on the stillness and immobility of the letter; the illusion of motion results from the successive presentation of a succession of immobile drawings.

A similar illusion is at work in the gags in which Felix interacts with extradiegetic written signs. In the context of a visual narrative, an extradiegetic sign is one that the viewer or reader understands as existing outside the diegetic space of the narrative (e.g., a sound effect, caption box or word balloon). Extradiegetic written signs or letters may represent either sounds or affects. In a silent visual medium, such as comics or silent film, one important purpose of extradiegetic signs is to convey information that is difficult or impossible to represent visually. Since, again by definition, the only sensory

¹⁹ Moreover, the letters were displayed on a celluloid overlay for the early frames of the shot, and for the later frames the overlay (or part of it) was removed and the letters were redrawn onto the paper. So this shot takes advantage of the interchangeability of foreground and background.

channel available in such a medium is that of sight, nonvisual phenomena can only be represented by visual signs.²⁰ However, such signs are typically presented and understood as ontologically separate from the diegesis. For example, when a reader encounters a word balloon in a comic book or a silent animated film, the reader understands that if he or she were within the text's diegetic universe, he or she wouldn't see the word balloon or the words inside it, but would instead hear those words being spoken. The word balloon is necessary because of the lack of synchronized sound, but it stands outside the image. The border of the word balloon acts as a barrier between different types of signs; it separates drawings that represent sounds from drawings that represent things. If the reader imagines the word balloon as having any material existence, he or she probably imagines it as a sort of two-dimensional overlay floating above the three-dimensional diegetic world.²¹ I don't know of any cartoon in which Felix actually interacts with word balloons or the letters inside them, but this did happen in other cartoons of the era. For example, in both John Hurd's *Bobby Bumps Puts a Beanery on the Bum* (1918) and Disney's *Alice is Stage Struck* (1925), one character threatens to make another character "eat his words" and then literally does so by forcing a word balloon down the second character's throat.

Extradiegetic signs representing *affects* seem to have even less materiality. These include thought balloons, caption boxes, and emanata (Mort Walker's term for

²⁰ This is an obvious oversimplification since silent animated cartoons often were accompanied by nonsynchronized sound. However, in silent animation, sound could not be *relied upon* as a channel for the presentation of narrative information.

²¹ For a more detailed theoretical account of word balloons, see Groensteen 69ff. In the Nintendo 3DS version of *The Legend of Zelda: Ocarina of Time*, "things like speech balloons really pop up from the screen, giving the impression that the game itself exists on one plane and the display elements are sort of hovering slightly above it" (McInnis 2010).

conventionalized symbols of emotion, such as the light bulb that appears over the head of a character who has just had an epiphany [Petersen 240]). When the reader encounters a sign of this type – say, a light bulb over a character’s head – he or she understands that if he or she were inside the diegetic world, he or she would see nothing at all that corresponded to the sign. Such a sign stands not for a visual or aural phenomenon, but for an invisible and inaudible affect, whose presence can only be inferred indirectly (e.g., by the facial expression of the character who has had the idea). If the reader understands the conventional associations of the sign, he or she will not mistake it for a real image (such as by thinking that a light bulb is actually floating over the character’s head). Such conventionalized representations of affect are useful because they provide a convenient means of communicating narrative facts that would otherwise require many words or images. Emanata have the potential to be ontologically troublesome because they often consist of nondiegetic *images* (i.e., iconic signs) that exist alongside diegetic images, but in most standard cartoons this ontological problem is glossed over. Again, there seems to be an unbreachable barrier between images of things and images of affects. When punctuation marks are used as emanata, as was often done in *Felix*, the diegetic-nondiegetic barrier is even stronger because the nondiegetic sign is not a mimetic image at all. On seeing an ? or a ! floating above a cartoon character’s head, the reader understands that the character feels questionable or exclamatory, not that the punctuation mark is actually hovering over the character. This latter reading makes no logical sense, because the punctuation mark doesn’t depict any thing. There is no real-world object which is signified by the symbol ? or !.²² Yet neither does the punctuation mark represent an audible sound. As Tim

²² There are, of course, real-world objects that look like punctuation marks, such as Richard

Conley observes in a study of James Joyce's question marks: "Punctuation [...] is in many ways itself the plainest proof of Derrida's contention that writing in Western culture and tradition precedes speech, "directing" as its constituent marks do the oral performance of a text" (135).

Neither the question mark (?) nor exclamation mark (!) can be spoken; neither is a conventional substitute for a sound in the English language.²³ Such punctuation marks serve to indicate the tone of speech or the state of mind of a speaker, rather than to transcribe the sounds the speaker utters: "Punctuation is the conduit that directs us to creation, the trace of the presence of an embodied act [...] it is not the speaker, but rather the state of the speaker or writer – his affect or feeling – that punctuation records/accords (Brody 12). Punctuation is a mark not so much of sound as of the affect associated with sound, the sense in which sounds are to be heard. For Brody, punctuation marks condition the way in which the reader imagines the speaker or performs the text. Yet when used as emanata, punctuation marks can't be understood in this way. When several flashing punctuation marks appear around Felix's head, as happens once in a while, we do not understand Felix as *saying* "????", because the standalone question mark is unspeakable. The question mark, then, is nothing more than a conventional sign of an affect, and has no visual or aural substance within the storyworld of the comic.

Artschwager's question mark sculptures (Brody 18ff). See Brody's book for an extensive discussion of the phenomenology of punctuation.

²³ In the transcription of some African languages, ! is used to represent a click consonant that does not exist in spoken English. The International Phonetic Alphabet uses a different symbol that resembles ! for this purpose. In English, attempts to specify the pronunciation of ! are not unknown. For example, the official website of the dance-punk band !!! states: ""!!! is pronounced by repeating thrice any monosyllabic sound. Chk Chk Chk is the most common pronunciation, but they could just as easily be called Pow Pow Pow, Bam Bam Bam, Uh Uh Uh, etc." (Wikipedia, "!!!" n.p.).

There is, then, an instinctive assumption that diegetic and extradiegetic signs are absolutely separate, belonging to different orders of reality. Now we're in a position to understand why it's shocking when Felix interacts with extradiegetic signs, such as by manipulating question marks and exclamation marks. One common use of this device occurs when Felix's tail turns into a question mark, as in the opening shot of *Feline Follies* (1919) (Figure 2-9). This transformation obviously takes advantage of the visual similarity between a cat's tail and a question mark, and therefore stands as strong evidence for Felix's basic typographic nature. However, it only represents a temporary breach of the diegetic-extradiegetic barrier because the question mark typically turns back into a tail after a few frames. We could easily read this type of transformation as representing a dreamlike state of mind.

Far more ontologically confusing is the opposite type of transformation, in which a question mark or exclamation mark turns into an object. To take one of many possible examples, in *Felix Follows the Swallows* (1925), Felix wants to follow some migrating birds south for the winter. Being a land animal, however, he has no obvious way to accomplish this. After a brief period of confusion, Felix has a sudden epiphany, as represented by the appearance of two exclamation marks over his head (Figure 2-10). He grabs the exclamation marks by the dots (Figure 2-11), then expands their vertical portions, turning them into triangular wedges (Figure 2-12), which he proceeds to use as wings (Figure 2-13).²⁴ In the next scene, a stereotypically depicted black human cook

²⁴ What was the idea that Felix had? Apparently, the idea of using the exclamation marks as wings. However, it seems impossible that this was Felix's idea, because the exclamation marks didn't exist *until* Felix had the idea. So maybe Felix had the idea of *having an idea*, which would generate exclamation marks? Whether the idea or the exclamation marks came first is ultimately an unanswerable chicken-and-egg question, and this gestures toward the argument I'm going to make below: that in *Felix*, the affect of having an idea is represented as being *identical* with the typographic sign/physical object that stands for that affect.

sees Felix flying overhead, mistakes him for a game bird, and throws a swordfish at him. The swordfish penetrates the exclamation marks/wings, which dissipate into clouds. Another exclamation mark appears over Felix's head, indicating his shock at this reversal of fortune. After running in midair frantically for some frames, Felix again grabs the dot of the exclamation mark, and the stroke turns into a parachute, allowing Felix to float to the ground in safety.²⁵

Again, we can interpret this sort of gag in two ways. The first way is to emphasize Felix's ontological similarity to a typographic sign. Felix can interact physically with exclamation marks because he himself is just a sign on paper, with no three-dimensional extension. The second reading, however, is to emphasize the reality of the exclamation marks. In Felix's world, exclamation marks are not just signs but real, solid, physically manipulable objects. Now as discussed above, both of these readings were also possible in the case of Felix's interactions with diegetic letters. However, diegetic letters, by definition, at least have *some* sort of necessary material existence within the diegetic world. Even before Felix interacts with the numbers 478, these numbers already exist in his world, although they seem to be bound to their material support. Felix's interactions with nondiegetic punctuation marks add a new wrinkle to the equation, because prior to Felix's interactions with these signs, the viewer perceives them as having *no* physical existence. They are merely conventionalized indications of Felix's subjective affects, of the states of Felix's mind. Thus, when we see Felix interact with exclamation marks, we revise our initial assumptions about the immateriality of

²⁵ Other cartoons in which Felix uses question marks and exclamation marks as tools include *Felix Saves the Day* (1922) (question marks as ladder), *Felix Finds 'Em Fickle* (1925) (question mark as club) and *Felix Out of Luck* (1924) (question mark as tail extension). See also *Feline Follies* (1919) in which Felix uses musical notes as the roof and baseboard of a car, and *Felix Lends a Hand* (1922), in which Felix and Skiddoo the mouse look daggers at each other, then fight a duel with the daggers.

these signs. We realize that these are not just signs but objects, and objects which, moreover, are produced by Felix himself. When an exclamation mark appears over Felix's head, he's not just having an affect; he is *creating an object*. In Felix's universe, invisible affects can only be perceived if they are represented by graphic signs. This means that affects can only *exist* if they can be represented by graphic signs, because in this world, *esse est percipi* – to exist is to be perceived, since the visual channel is our only source of information about Felix's world. And in Felix's world, graphic signs have material existence. Anything which is perceptible is also, at least potentially, a thing that can be repurposed to some end that is not, conventionally, associated with its initial state. So when Felix has an emotion, he necessarily does so by producing a sign, and this sign is necessarily also a *thing*. In short, for Felix, to have feelings is to make things. For Felix, feeling confused entails summoning an object into existence *ex nihilo* – an object which is simultaneously a thing and the expression of an affect. And again, I think we can read this as the liberation of a potential which was always implicit in handwriting. When I write by hand, I literally give physical form to my subjective emotions and affects. The logical next step in this process is for the physical concretizations of my emotions to take on a life of their own.

Of course, again, Felix is able to interact with exclamation marks in this way only because of the characteristic illusion of animation. Both Felix and the exclamation marks are constructs of ink on paper, which are endowed with the illusion of motion by being repeatedly redrawn in slightly different positions. I suggest, however, that the point of the gags described here is to make the viewer forget this fact. The viewer is supposed to believe that Messmer's traces of ink on paper have come to life – that it's

literally the constructs of ink that are moving, as opposed to the diegetic objects they represent.

***Felix* as Fantasy of Handwriting**

I now suggest that in its treatment of letters as material objects and in its identification of emotion with object creation, *Felix* expresses may be read as an idealized version of handwriting.

As explained in the introduction, handwriting (including hand-drawing) entails expressing one's embodied subjectivity by means of physical interaction with a writing surface. Both these processes work by creating physical records of the writer's idiosyncratic patterns of movement, and thus handwriting, figuratively speaking, records the trace of the writer's unique body and its motions in space and time. Handwriting has therefore historically been associated with the production of texts that record the writer's subjective affects and emotions (although as I also argue in the introduction, this association is historically contingent rather than necessary.) In writing by hand, one *expresses oneself* or *writes oneself* at least one and possibly in two senses – by creating a material record of one's unique body, and by producing a linguistic record of one's emotions. In both these senses, handwriting involves creating objects (letters and texts) that didn't exist before, or that previously existed only as raw materials and idealized forms, and that take on a substantial form by virtue of the writer's act of physical intervention. To write by hand is to write oneself *into the world*. To this extent, Felix's act of turning his emotions into material objects is an allegory for the act that Messmer performs when he draws Felix.

I'm not the first critic to have read *Felix* as an analogy for Messmer's art of subjective creation. Donald Crafton argues that *Felix* represents the high-water mark of

what he calls self-figuration, “the tendency of the filmmaker to interject himself into his film” (11). He notes elsewhere: “With Felix, the quest for self-figuration reaches its end. Messmer no longer feels obligated to physically enter the image (although in *Comicalamities* he did briefly toy with the ‘hand of the artist’ convention). Instead, he enters the film through total identification with the character” (338). This suggests, however, that the actual *process* of handwriting only matters in *Felix* when we actually see it taking place, as in *Comicalamities*. For Crafton, *Felix* is the acme of self-figuration because of the way in which Messmer interjects his own personality into the character:

Only by viewing dozens of Felix films does one come to understand that Felix’s special attraction arose not from the clever gags (although they were very important) but primarily from the consistency and individuality of the character. Unavoidably one sees Felix as a living being, whereas his only competitor in this respect, Koko, seems real because his motion is to a greater degree an index of real motion. [...] Felix is innocent of any such mimetic tendencies. Instead, he is an index of a real personality. After meeting Otto Messmer, one realizes that the personality is that of the creator (338).

I want to suggest, however, that handwriting matters in *Felix* in a more general sense. Felix’s interactions with written signs are analogous to animation in a very specific sense which has not heretofore been noted. Animation is like Felix’s typographic transformations because both are acts of *creating expressive objects*. “Objects” here should be understood in the sense of object-oriented programming or Graham Harman’s object-oriented philosophy: an object is a thing that, within a certain context, has certain unique properties and that can enter into relations with other objects. The objects created are not just brute blocks of matter, but are expressively charged – in Felix’s case, because the objects in question literally *are* simulacra of

affects, and in Messmer's case, because animated drawings capture the idiosyncratic physical activity and the subjective affects of their creator.²⁶

Of course, the crucial difference between animation and Felix's object creation is that Felix makes things out of thin air, whereas Messmer does so by interacting with a material substrate.²⁷ When Felix creates an exclamation mark, question mark or musical note, he doesn't create it *from* anything; it simply appears above him. There's no infradiegetic agency is responsible for producing the exclamation marks. They are literally created *ex nihilo*.²⁸ In Felix's world the law of conservation of mass doesn't apply. Messmer, on the other hand, can create things only by *drawing* them on paper or cels. Like Felix, Messmer creates expressive signs that are also material objects, but unlike Felix, Messmer creates them out of the raw materials of ink and paper. However, this difference (creation *ex nihilo* versus creation from raw materials) is less significant than it seems, if we understand Felix's acts of object creation as idealized, magical versions of Messmer's acts of handwriting. When Felix creates objects by having affects, he does literally what animation technology allows Messmer to do figuratively. Felix's acts of object creation represent a magical means of realizing the potential of handwriting.

²⁶ See Philippe Marion, *Traces en cases*, discussed in chapter 3. For an additional treatment of questions of subjectivity in animation, see Chow. What I'm describing here is similar to what Chow calls the "spiritual-functional loop," although my analysis diverges from his to the extent that I emphasize the importance of physical materiality.

²⁷ I use "Messmer" here to refer to the *graphiateur* of *Felix*, the subject-position to which we attribute the graphic enunciations of the cartoon. Obviously, Otto Messmer himself was not solely responsible for all the images in *Felix*.

²⁸ Similarly, Joe Oriolo's version of Felix has a "bag of tricks" which can turn into any object. Because it's magic, there is no need to explain how it can gain or lose mass.

This point is powerfully demonstrated in *Comicalamities* (1928).²⁹ The opening frames of this cartoon depict a blank sheet of paper. An animator's hand (presumably Messmer's hand, though I can't confirm this) reaches into the frame and draws Felix in outline, with no tail. Felix angrily gestures to his posterior, and the animator draws a tail on him. However, Felix remains white rather than black, so he goes to a bootblack and has himself blackened in. Now that he completely exists, Felix goes off to seek satisfaction for his animal desires. He encounters Kitty (David Gerstein's name for the white female cat who serves as Felix's recurring love interest), who is weeping because her face is ugly. Using body language, Felix asks the animator for an eraser, which he uses to erase Kitty's face, and then for a pen, which he uses to redraw her face, making her beautiful. However, Kitty promptly begins to use her newfound beauty as leverage against Felix, demanding expensive gifts before she will submit to his attentions. Felix goes on several perilous adventures to obtain valuable gifts for her, with some assistance from the animator's hand. Each time Felix returns with a gift, however, Kitty is unsatisfied and asks for more. Finally, Felix decides he's had enough of this treatment, and he rips Kitty off the sheet of animation paper. He tears up the paper that formerly constituted her, and here the cartoon ends.

Comicalamities starts off by mimicking the typical opening sequence of the Fleischers' *Out of the Inkwell* series, in which the principal character is drawn into existence by the animator. Indeed, *Out of the Inkwell* sometimes does seem to deploy

²⁹ My reading of *Comicalamities* is based on the version available on the Lumivision *Felix!* DVD. This version of the film is unfortunately incomplete as it lacks the title cards. However, I can find no version of the film that does have the title cards and that is easily accessible to a contemporary American audience. Therefore, my reading should be taken as an account of how contemporary viewers might respond to *Comicalamities*. I am bracketing the question of how the film's original audiences might have responded to it. For a reading of *Comicalamities* that puts it into dialogue with its Modernist artistic context, see Tom 69-70.

the fantasy of handwriting in the same way that *Comicalamities* does; for example, in the 1919 *Out of the Inkwell* short “The Tantalizing Fly,” Koko uses a pen to draw objects into existence. However, the illusion of materiality in *Comicalamities* is more convincing. In *Out of the Inkwell*, Koko typically exhibits a much lower degree of independence and insubordination relative to his creator – for example, he gets stuffed back in the ink bottle at the end. Throughout this cartoon, By contrast, throughout *Comicalamities* Felix acts independently of the animator and even circumvents the animator’s will (for example, when an iris starts closing around him, signaling the end of the cartoon, and Felix forcibly reopens the iris). Instead of being manipulated by the animator, Felix forces the animator to do what he, Felix, wants, and the cartoon only ends when Felix has had enough and signals for the iris to be closed. Moreover, when Messmer finishes drawing him, Felix doesn’t lose his identity as a drawing; the viewer remains conscious of his status as a mark on paper. In *Out of the Inkwell*, on the other hand, when Fleischer finishes drawing Koko, the clown seems to *transform* from a mark on paper into a living creature, thereby (temporarily) giving up his previous ontological condition. As Crafton suggests, this has to do with Fleischer’s use of rotoscoping, which is meant to emulate realistic motion. When Koko starts moving around, he becomes a surrogate for a real person, Dave Fleischer; he becomes attached to an extradiegetic object of reference other than the ink of which he is composed.

Most seriously, however, the viewer of *Out of the Inkwell* has a much harder time believing in Koko’s reality, because Koko’s two-dimensionality is in such stark contrast with the accompanying three-dimensional live-action footage of Max Fleischer in his studio (Figure 2-14). Lacking shadows and depth cues, Koko visibly seems to belong to

a lower order of reality than his creator. Even if the viewer accepts that Koko can get off the animation paper and move around, the viewer can't accept that he has any weight or thickness. One imagines Koko as a mere two-dimensional paper cutout. Indeed, the two-dimensional appearance of animated characters was a persistent problem in films that combined animation with live-action footage, and this problem wasn't solved until *Who Framed Roger Rabbit* (Robert Zemeckis, 1989), sixty years after *Out of the Inkwell*. (See the discussion of this film below). To be effective, the fantasy of handwriting must make the viewer believe the handwritten signs are real, that they have the same weight and thickness we associate with everyday objects. *Out of the Inkwell* fails to convince the viewer of this. In *Comicalamities*, on the other hand, Messmer circumvents the problem of two-dimensionality by limiting the use of live-action footage. All we see of the animator is his hand, and Felix never leaves the plane of the animation paper. Moreover, *Calamities* uses no camera movement (which was of course impossible) or parallel editing, so when real objects are shown, we only see them from a single perspective. (By contrast, an *Out of the Inkwell* short like "Modeling" [1921] makes extensive use of cross-cutting in the scenes involving Fleischer.) Thus, objects like Messmer's hand, the pen, the eraser and the inkwell seem to have the same dimensionality as the drawn objects in the cartoon; the principal difference between these two categories of objects is their respective degree of realism.

For this reason, the viewer of *Comicalamities* is willing to believe (at least for a moment) that Felix can be both a drawing and an independently existing material object. The viewer accepts that Felix can behave independently of the animator, and that he can exercise the same power that the animator typically enjoys: the power to

manipulate the material substance of which his world is composed. As the bootblack gag demonstrates, Felix's world is actually made up of ink on paper, and the power to manipulate ink on paper is the power to create objects. Conversely, the power to erase ink or to tear paper is the power to destroy objects. By revealing Felix's world as a construct of ink on paper, this cartoon affirms rather than denies the materiality of that world. An ink drawing of a face may be thinner and flatter than a real face, but the drawing and the face don't partake of different modes of existence. Although the drawing pretends to be something other than itself, it doesn't thereby cease to be a trace of ink on paper. In *Comicalamities*, the viewer of the drawing isn't even allowed to forget that the drawing is a trace of ink on paper, and that ink and paper are real, material objects. The strongest reminder of this fact is the closing scene, in which Felix rips Kitty out of existence. This effect forces the viewer to acknowledge that Kitty is a paper cat rather than a real one, but also that even a paper cat has more than a merely two-dimensional existence. Tom claims that "[w]hen Felix exposes the flat surface beneath the animated sheet, he not only destroys the female character but also transgresses the rules of the animation game" (70), but I would argue that Felix is not so much transgressing the rules as revealing the implicit assumptions by which the game operates. Felix's seemingly destructive act is actually the ultimate argument for the materiality of the animated image. And if the animated image is material, then the producer of the animated image can literally write himself or herself into the world. To write by hand is not to draw lines on paper, but to *make things*.

Transition: Illusory Materiality and the Legacy of *Felix*

The crucial aspect to recognize here, however, is that this is all an *illusion* of materiality. Our sense that Messmer is "writing himself into the world" is predicated on

the illusion that the *Felix* cartoons are actually “made” of ink and paper, rather than light rays projected through a strip of silver nitrate (or visual information recorded digitally, as is the case under contemporary conditions of viewing). Messmer and his staff resorted to deliberate artifice in order to create the illusion of interactions with materiality that are not only impossible in the real world, but also never actually happened in the mediated orders in which they appear to take place. The strongest evidence of this occurs in the climactic scene of *Comicalamities*. At normal speed, it appears that Felix is actually tearing the paper. However, frame-by-frame viewing (an option not available to the original audience) reveals that the leading edge of the paper – the part that Felix’s hand is holding, and that seems to extend above the plane of the paper – is actually drawn rather than real (Figure 2-15). *Trompe l’oeil* artwork is introduced at the very point where the cartoon is most invested in making the viewer acknowledge its own material existence. The viewer is asked to believe in the cartoon image as a three-dimensional, material construct, at precisely the point when it is least so.

This scene is emblematic of how *Felix* promises a greater degree of self-figuration, in Crafton’s phrase, than it can actually deliver. The characteristic strategy of *Felix* is to convince the viewer that the drawings are moving, that Messmer has literally made his handwriting come to life. If true, this would imply that Messmer had achieved the ultimate extreme of self-expression, by giving independent physical form to the trace of his idiomatic selfhood. Such an implication is at work in much recent work on *Felix*. The standard critical consensus is that *Felix*, and other cartoons of the silent era, succeeded in expressing the self and personality of the animator in ways which were not possible with later styles of animation.

For example, Klein characterizes *Felix* as the primary example of a “graphic narrative” style of animation which insisted on the equal status of words and images and on the flatness of the image. The primary aesthetic influences on graphic narrative animation were comic strips and other forms of popular illustration (N. Klein 12–15). After the introduction of sound into animation in 1928, “live action becomes the model instead” (17). Sound implies a third dimension to the image, and is therefore incompatible with the flatness of graphic narrative. Thus, sound turned graphic narrative into a marginal style, as suggested by Klein’s section title “1927: Sound Alters Graphic Narrative.” For example, *Felix* depended on a silent pantomime aesthetic and was effectively doomed by Sullivan’s refusal to employ sound. Instead, live-action cinema became the primary influence on animation, or in other words, the primary medium that animation remediated. The style of animation that Paul Wells calls hyperrealism, or that Klein calls full animation, sought to emulate live-action film but also to surpass its realism.³⁰

In full animation, the useful property of animation is not its flatness but its drawnness. Because animation is drawn, it’s free of any obligatory connection to a profilmic event. Therefore, animation can be used to depict phenomena that cannot be photographed, or to make things look more attractive and distinctive – more like themselves, in a sense – than they actually look. This last property of animation makes it effectively suited to the aesthetic strategy that Eco and Baudrillard refer to as

³⁰ Full animation and graphic narrative correspond, in a certain degree, to Thomas Lamarre’s categories of cinematism and animetism (7). Lamarre specifically claims that he defines animation in terms of the relative lateral motion of layers, and distinguishes his approach from that of other critics, like Manovich, who define in terms of “the work of the hand” (xxviii; cf. Manovich 295). As should already be clear, what interests me about animation is precisely the property that doesn’t interest Lamarre – its hand-drawn nature. However, I think this is simply a difference in emphasis.

hyperrealism. The hyperreal is that which resembles the real, but extends or enlarges on it to the point of being able to replace it.³¹ For both the aforementioned critics, hyperrealism has unfortunate political implications. It supplants authentic experience, distracts the viewer from daily life, and so on. The hyperrealist aesthetic thus serves as evidence for a more wide-ranging critique of Disney as capitalist, imperialist, impressive, etc. For authors like Eleanor Byrne and Ariel Dorfman and Armand Mattelart, Disney uses hyperrealism in service of its attempt to keep viewers content with the status quo: if one can escape into a magical world that's better than the real world, one is more likely to ignore injustices of the real world.³² By contrast, the graphic narrative style is frequently characterized as a liberatory style of animation; its freedom from the constraints of physical reality seems to be associated with freedom in a more general sense. Thus, more than one animation scholar has described the disappearance of graphic narrative as a tragic loss, a sacrifice of liberatory potential in the interest of technological advancement. Crafton's book, for example, is pointedly entitled *Before Mickey*. It begins by arguing against the dominant narrative in which pre-1928 animation is dismissed as a mere precursor to Disney (3–5), and ends with the claim that:

it is this transportive function, the implicit "sentimental journey" in all early animation, that made it gratifying and compelling and that established the expectations and desires of the audience long before Mickey boarded his first steamboat. (349)

³¹ Paul Wells describes the Disney style of animation as hyperreal (25–26), but without necessarily adopting the negative political connotations inherent in Eco and Baudrillard's uses of this term. Disneyland is one of Eco's principal examples of the hyperreal. Cf. Eco 43.

³² See Byrne's introduction to *Deconstructing Disney* for a more thorough discussion of liberal critiques of Disney. See also Dorfman and Mattelart. For additional discussion of Disney's politics, see Elizabeth Bell et al., eds., *From Mouse to Mermaid: The Politics of Film, Gender, and Culture* (Bloomington: Indiana University Press, 1995) as well as Bell, Haas and Sells, eds., *From Mouse to Mermaid*, as well as Miriam Hansen, "Of Mice and Ducks: Benjamin and Adorno on Disney," *South Atlantic Quarterly* 92 (1993): 27–61.

For Crafton, *Felix*, as the apotheosis of silent animation, becomes emblematic of what gets lost in the transition from “graphic narrative” to “full animation.” In Esther Leslie’s brilliant *Hollywood Flatlands*, what *Felix* represents is made even more explicit. Leslie shows that for intellectuals like Walter Benjamin and Theodor Adorno, pre-Disney style of animation was valuable precisely for its disconnection from mimetic realism. In Horkheimer and Adorno’s *Dialectic of Enlightenment*, Disney’s seamless realization of a three-dimensional alternative world is castigated as a particularly effective tool for domination by the culture industry. The more believable Disney’s world, the more convincing its presentation of an authoritarian morality. By implication, critical attention to *Felix* becomes valuable because it reminds us that the “illusion of life” isn’t everything. The anti-realist style of *Felix* represents an alternative to the oppressive realism of Disney. A classic example of this understanding of animation history is Adorno and Horkheimer’s statement: “Cartoons were once exponents of fantasy as opposed to rationalism. They ensured that justice was done to the creatures and objects they electrified, by giving the maimed specimens a second life. All they do today is to confirm the victory of technological reason over truth” (110).³³

Critics therefore ascribe to *Felix* (and other cartoons of its era) a package of related properties – flatness, antirealism, self-figuration. After the analysis above, we could also add handwrittenness to these package. All of these properties contribute to apparently make *Felix* a more personal, authorial, subjective work than later animation, specifically Disney animation. And yet at the same time, we can’t forget that the expression of selfhood is not precisely what *Felix* is about. Unlike *Out of the Inkwell*,

³³ The last sentence clearly refers to Disney, but it’s not clear to me which specific cartoons the first two sentences refer to.

Felix does not aggressively foreground the presence of its creator. A contemporary critic like Brion was able to “forget that a man created him,” whereas when we watch *Out of the Inkwell*, we can forget everything *but* that. Felix is such an aggressive, lifelike personality as to overshadow his creator. Indeed, as Crafton argues (259, 298), Felix represents the endpoint of a progressive disappearance of the animator’s body. The earliest animators, like Winsor McCay and Emile Cohl, actually represented themselves sketching; in McCay’s vaudeville performances, the animator himself, and not just his filmic image, was actually present to the audience. In *Out of the Inkwell*, when we see Max Fleischer drawing, it’s usually only his hand that we see; however, Fleischer’s entire body remains visible in other shots. In *Felix*, Messmer’s body is usually completely absent, and even when we do see him, he reduces himself to a disembodied hand. What remains in *Felix* is not Messmer’s body but the handwritten trace of that body, or rather the filmic trace of that trace. And Messmer’s handwriting doesn’t move, but only appears to do so. What animation really provides is death 24 times a second, as Laura Mulvey argues in her book of that title. (Similarly, in his article on *Who Framed Roger Rabbit*, Alan Cholodenko holds that death lies at the heart of cinema.)

Furthermore, we need to remember that Messmer himself was the furthest thing possible from an aggressive self-promoter. He worked in anonymity his entire career, and seems to have been happy to do so. Even when he was able to sign his name to his work, he was so shy that he hesitated to do so. In his early career as a newspaper cartoonist,

Messmer usually signed his work with his full name or “O. Messmer,” but predicting the excessive humility which would lead in the near future to his receiving no public credit for Felix the Cat’s success, Messmer “got a little self-conscious having my name on them. Didn’t think I was worth it. So I

used a *nom de plume* once in a while: 'Otz.' That's what my name was."
(Canemaker 14-15)

This was a self that could only express itself indirectly, through the mediation of a fictional surrogate – first “Otz” and then Felix. In Messmer’s act of writing himself into the world, the writing surface and the medium of inscription are far more visible than the writing hand, which is concealed by the much more aggressive presences of Felix and Pat Sullivan. Even if we ignore the ways in which any handwritten text stands at a remove from the full presence of the author (see my discussion of Derrida’s “Signature Event Context” in the introduction), we find that in *Felix* an unusually wide gap separates the author’s unique body from his text. The Disney style of animation is frequently criticized for its reduction of the animator to an alienated assembly line worker, but this critique often seems to assume that labor conditions in earlier periods of animation were less alienating, which is not the case with *Felix*. A reading of *Felix* as the full expression of Messmer’s selfhood misses the point.

Thus, we need to add something to Birgitta Hosea’s claim that “It is essentialist to conceptualize traditional drawing and hand-drawn animation as honest, personal and subjective in opposition to the bland, mechanized perfection of digital imagery in which individual work is homogenized through the use of standard computer software” (365). Hosea’s claim is that this binary opposition misrepresents computer animation, and she is correct in several respects, as we will see in Chapter 5. But this opposition equally misrepresents hand-drawn animation. It’s obvious enough that the latter process can never completely capture the artist’s embodied subjectivity – but neither can the former process. As Alan Cholodenko points out, animation studies all too frequently “poses, embraces and models the animator as the very limit case of the filmmaker, that is, as

author,” and this is self-evidently a metaphysics of presence that needs to be deconstructed.

Cholodenko goes on, however, to read *Felix* in terms of Barthes’s concept of the death of the author, suggesting that the nonexistent author is a sort of spectral presence haunting the animated text. I think this formulation downplays the very real importance of authorial presence in a cartoon like *Felix*, even when that presence is known to be fictitious rather than actual. Even if – and especially if – Messmer is not physically present in the text of *Felix*, the viewer still *desires* to read Messmer into his text. What gives *Felix* its poignancy is precisely the simultaneous presence and absence of Messmer’s selfhood, the simultaneous seductiveness and incompleteness of its illusion of handwriting, and the viewer’s awareness of these paradoxical conditions. The viewer’s knowledge that Felix is *not* a handwritten text only increases the viewer’s desire to see it as such. In important regards, that which makes *Felix* emotionally affecting is that the viewer knows Messmer can’t literally write himself into his creation – and yet the viewer *wants* to believe that this is possible.

What matters in the fantasy of handwriting is not the *actual* presence of the animator, but the audience’s *desire* for such presence. The ability to pull our question marks or exclamation marks off the page, and turn them into umbrellas or wings, is indicative of a mystical identity between graphic traces and the self that produces them. Because Felix has this ability, he can write himself into the world; he can externalize his subjective affects without separating them from his body. Felix has a “real personality” (cf. p. 79 above), a stable core of selfhood, and he can inscribe that self onto the world. *Ab initio*, this fantasy is already appealing to some viewers – such as myself – but it

becomes even more appealing at times of competition from other media which make it more difficult to believe either in the possibility of externalizing the self, or to the very existence of a “self” as stable core of subjective identity. Competition between handwriting and newer media makes the fantasy of handwriting more important because it enriches that fantasy with the element of nostalgia, the longing to return home. Faced with a media ecology where words seem to have no connection to the self, and where the very existence of the self is not guaranteed, we desire for a return to a mythical condition where to draw or to write was to write ourselves into the world.³⁴ And yet we know this desire is never satisfiable, because that mythical condition never actually existed. Even in its naïve state, as represented by *Felix*, the fantasy of handwriting was already mediated by technology. The same technology that destroys the naïve version of the fantasy of handwriting is merely a more advanced incarnation of the technology that made this fantasy possible to begin with. Artists who attempt to revive the fantasy of handwriting, as well as critics who appeal to it, need to take this into account. When artists simply seek to restore the naïve version of the fantasy of handwriting or when critics lament the loss thereof, they are engaging in what Svetlana Boym calls restorative nostalgia – the simplistic desire to resurrect a lost object, without acknowledging that this lost object never truly existed in the form in which it is imagined in the first place. In order to achieve the more critical and more politically useful effect that Boym calls reflective nostalgia, the artist or critic must acknowledge that the lost object was always already lost to begin with, that it was never fully present in the form

³⁴ By saying “we” here I don’t mean to imply that this is a universal desire. At this point I’m not addressing the question of *who* (i.e. which segments of the possible viewership of *Felix*) feels this desire.

with which our memory endows it, and that a return to this lost object must always be conditioned by our knowledge of its phantasmal nature.

In the remainder of this chapter, I want to examine two more recent works of animation, from different periods, that achieve the effect of reflective nostalgia for handwriting – although without always succeeding in avoiding restorative nostalgia. Chuck Jones’s Road Runner cartoons and Robert Zemeckis’s film *Who Framed Roger Rabbit* will serve as examples of how to read a text with an eye to its restorative or reflective invocations of the fantasy of handwriting.³⁵

Road Runner: An Acme Essay in Critical Theory

As I suggested briefly above, writing of any kind tends to be excluded from Disney animation because these films are committed to what Lamarre calls cinematism – they seek to create a bullet’s-eye view of a world composed in three dimensions. If the Warner Bros. (and MGM) films of the 1940s and 1950s represent an alternative to the dominant Disney style, then this is due in no small part to these films’ use of typography, which, as suggested in the above quotation from Conley, gestures to the flatness of the screen. Lettering is everywhere in Warner Bros. and MGM films, especially Chuck Jones’s Road Runner cartoons, which I will discuss in depth here. These films are full of road signs, signs held up by characters, product labels, verbal tributes to members of the production staff, and other insertions of language into the field of the image. In the Road Runner cartoons, the emphasis on handwriting is strong enough that it can be analyzed in terms of the fantasy of handwriting.

³⁵ Because my interest here is primarily theoretical rather than historical, I will not attempt to survey all the films that invoke fantasies of handwriting. Other films I could have discussed include *Gerald McBoing-Boing* (Robert Cannon, 1950) and *Harold and the Purple Crayon* (David Piel, 1959) (cf. Figure 1-4).

Disney films represent verbal discourse, including speech, exclusively by means of synchronized dialogue. Lettering, when it appears, is always diegetic. By contrast, Chuck Jones's Warner Bros. cartoons use a combination of synchronized dialogue and signs held up by characters. In the Road Runner-Coyote series, Jones uses signs exclusively. One of Jones's nine rules governing the series is that there can be no dialogue (except the Road Runner's signature "beep beep").³⁶ Like *Felix's* word balloons, the Road Runner and Coyote's signs are introduced in order to compensate for the unavailability of synchronized dialogue. In *Felix* this unavailability is due to the simple fact that synchronized sound was not commercially viable until 1927. In the Road Runner-Coyote series, on the other hand, this unavailability is due to a constraint that the animator chose to impose on himself and his staff. Chuck Jones could have used synchronized dialogue, as he did in other cartoons; he simply chose not to. This was largely the result of personal preference. Like Messmer, Jones preferred to tell stories via pantomime.³⁷

As he developed as a director, Jones became in effect a physiognomist, telling entire stories through the character's features and body language and eschewing dialogue. Years later, Jones described his method: "In principle, we usually tried to tell

³⁶ For a list of the rules, see Jones 225. Others include, for example, "The Road Runner cannot harm the Coyote except by going 'Beep-beep'" and "The Road Runner must stay on the road – otherwise, logically, he would not be called Road Runner." Although the classic cartoons generally did follow these rules, it's possible that they were invented after the fact. Jones's principal screenwriter, Michael Maltese, claimed never to have heard of the rules (Barrier 496).

³⁷ From 1937 to 1973, Messmer's primary occupation was producing giant animated displays for Douglas Leigh's advertising agency (Canemaker 145). As Canemaker observes: "Here was work incredibly similar to what Messmer did when he first joined Pat Sullivan's studio nearly a quarter of a century before: thinking up silent visual gags for black-silhouetted characters" (146). See Canemaker 146 for a photograph of one of Messmer's storyboards for Leigh. Of course, Jones, unlike Messmer, also used music to tell his stories. A discussion of Jones's use of music is outside the scope of this chapter, but see Goldmark 10–43 for an extended examination of music in Warner Bros. cartoons.

our stories through action rather than words. My first films as director were too wordy, but I learned not to use dialogue when actions would suffice.” (Goldmark 37)

Moreover, as Goldmark suggests (37), the lack of dialogue in the Road Runner cartoons is motivated by and also accentuates the characters’ animal nature. Although they can read, write, and operate complex machinery, the Coyote and the Road Runner are ultimately driven by animalistic drives – by, respectively, the desire to eat and to avoid being eaten. Their nonhuman nature is emphasized by the pseudo-Latin species descriptions that are applied to them at the beginning of each cartoon (e.g., *Acceleratii Incredibus* and *Carnivorous Vulgaris*). The animalistic nature of these characters also helps to justify the potentially disturbing violence of the series. On being asked to respond to a female viewer who characterized the Road Runner cartoons as sadistic, Jones replied, “It’s a natural situation for a member of the dog family to chase a member of the bird family. It’s no less natural for that situation to exist than it is for this lady you refer to eat a porterhouse steak” (Jones and Furniss 36). The ability to speak English would humanize the Coyote to the extent that his predatory behavior would no longer be justifiable.

The chain of causality here is not exactly clear – did Jones eliminate dialogue from the Road Runner cartoons because the characters were animals, or did he decide to tell a story about animal characters so that dialogue would be unnecessary? In either case, however, Jones rejects the use of synchronized dialogue, which was one of the major ingredients in Disney’s creation of a hyperreal aesthetic. The ability to emit intelligible sounds would have brought the characters closer to three-dimensionality; instead, the characters seem to inhabit a two-dimensional space. In the next section I’ll examine

ideological implications of the decision not to use synchronized sound. At this point it's sufficient to note that the lack of the third dimension provided by sound, plus the Coyote's indestructibility, reminds the viewer that the Road Runner and Coyote are traces of ink and paint on celluloid rather than actually existing characters. But Messmer's use of signs (as well as one specific gag that I'll examine in detail below) suggests to the viewer that even ink and paint on celluloid are real objects.³⁸

I now examine the use of signs in the *Road Runner* cartoons. The Coyote and Road Runner usually communicate their thoughts with body language. Usually their thoughts are fairly simple in nature and thus easily inferred from their physical language and facial expressions. However, on the rare occasions when one of the two characters has a complex thought that would be difficult to communicate visually, he does so by holding up a sign. For example, at the end of *There They Go-Go-Go!* (Chuck Jones, 1956), the Coyote tries to drop some rocks on the Road Runner, but the rocks get stuck and fail to fall. The Coyote tries to dislodge the rocks by jumping on them from above. When this fails, he stands below the rocks and starts poking at them with a long pole. Now the rocks finally start to move, and the Coyote's facial expression suggests that he's feeling optimistic. But suddenly, realizing that he's about to drop the boulders on himself, he looks at the camera and holds up a sign (Figure 2-16). Here the sign suggests something more specific than the shocked facial expression: that the Coyote is shocked and horrified, not because he's about to have dozens of heavy rocks dropped on him, but because it's his own fault. (As Barrier observes, "in the world of Jones's cartoons [...] the grisliest fate is not to be maimed or killed, but to be

³⁸ In this section, the word "sign" will refer exclusively to an object of the type depicted in Figure 1-16: a piece of paper with a message written on it.

embarrassed” [499]; the Coyote’s self-inflicted physical injuries automatically heal themselves, but the embarrassment remains. More on this below.) The oath “in heaven’s name” and the double underline under the word “doing” are idiosyncratic touches that suggest something about the Coyote’s personality, which makes this sign funnier as well as more informative than simple body language could communicate. The Coyote, then, communicates by *handwriting*, by the production of graphic traces of his emotional affects. And the Coyote’s handwritten self-expressions are also physical objects, though not in quite the same literal sense in which Felix’s emotional affects are physical objects. The Coyote communicates by spontaneously generating signs bearing handwritten letters. This is only one step removed from Felix’s act of spontaneously generating the letters themselves.

The Coyote’s signs are typically depicted as rectangular white placards with black lettering, attached to white or light brown signposts (cf. Figure 2-16). The signs are usually lettered in a simpler style than the other major instances of lettering in these cartoons: the labels on the packages the Coyote is constantly receiving from the Acme company. These signs serve much the same purpose as the word balloons in *Felix*: they serve as containers for speech or for verbalized thoughts, and they act as frames or barriers that separate words from the field of the image. Unlike the sign, however, the word balloon is understood as a conventional device, a signifier that doesn’t exist in the real world. As noted above (p. 72), when the viewer of *Felix* encounters a word balloon, s/he understands that if s/he were inside the diegetic world of the cartoon, s/he wouldn’t see the word balloon but would instead hear the words contained in it. But when the viewer of a Road Runner cartoon sees the Road Runner or the Coyote holding up a

sign, the viewer understands that if s/he were in their diegetic world, s/he would see the sign itself, rather than hearing the words written thereon. The sign belongs to the same diegetic level or world as the character holding it, whereas the word balloon is both inside *and* outside that diegetic world. Nor does the word balloon *originate* from within the diegetic world. It makes no sense to ask what infradiegetic agent is responsible for drawing the word balloon or writing the letters inside it. By contrast, a white rectangular sign on a signpost is obviously an object in the diegetic world. The existence of this object implies that someone must have written the words on the sign (not to mention manufacturing the sign and signpost and attaching the one to the other). The sign must be a product of a prior act of handwriting.

On the other hand, this is an act of handwriting that we never actually see. I don't know of any example in which the Coyote or the Road Runner is actually shown writing the words on the signs; the signs tend to appear with the words already written on them. It's as though the signs are magically generated rather than being produced in the normal way. Moreover, in some cases the act of writing these signs is an act that *couldn't* logically have happened, because there is no time. In *Gee Whiz-z-z-z-z-z-z* (Chuck Jones, 1956), the Coyote pulls out a sign from behind his back while falling off a cliff (Figure 2-17). It reads HOW ABOUT ENDING THIS CARTOON BEFORE I HIT?³⁹ Therefore, if the Coyote himself wrote this sign, he must have done so after he began to fall, meaning that the sign could only have been written in the interval between this shot and the previous one. This in itself seems unlikely, as the sound effects are continuous

³⁹ This sort of casual breach of the fourth wall was of course quite common in Warner Bros. and MGM cartoons, and helps to distinguish this tradition of cartooning from the Disney style, in which the fourth wall is typically respected as scrupulously as it is in the classical Hollywood cinema.

between the two shots, indicating that there was no temporal gap between shots during which the Coyote could have written the sign. What happens next is more inexplicable. After the Coyote holds up the first sign, the iris begins to close, and the Coyote pulls another sign from behind his back with his other hand; it reads THANK YOU. Since there's no cut here, there is no temporal point at which he could have written this second sign. And even if he wrote it beforehand, how did it get into his hand, since his hands were both holding the Acme Rocket Sled in the previous shot? The existence of these two signs is inexplicable. Now a sign, unlike a word balloon, is a hard, solid and material object; it cannot exist without being created by someone, and it occupies a consistent volume of space. Yet these signs come out of nowhere, magically appearing from behind the Coyote's back. And they also disappear into nowhere. At the end of *There They Go-Go-Go* the Coyote throws the IN HEAVEN'S NAME – WHAT AM I DOING? sign off the left edge of the frame, and we never see it again. In some cases the signs' existence involves a further sort of logical contradiction, in that the messages they carry are incompatible with their very existence. In *Fast and Furry-Ous* (1949), the Coyote paints a crosswalk across the road and puts up a sign reading SLOW SCHOOL CROSSING, hoping to trick the Road Runner into slowing down. But the Road Runner foils his plan by holding up a sign saying ROAD RUNNERS CAN'T READ. If this claim is true, then how did the Road Runner write the sign? And if someone else wrote it, then why is the Road Runner carrying around a sign that he can't read?⁴⁰

⁴⁰ This gag is repeated in the second Road Runner-Coyote cartoon, *Beep! Beep!* (1952), where the Road Runner holds up a sign that reads ROAD RUNNERS CAN'T READ AND DON'T DRINK. Note also that other cartoons in the series offer strong evidence that Road Runners *can* read and write. In *Zoom and Bored* (1957), the Road Runner holds up a sign saying I JUST DON'T HAVE THE HEART. Because "I" here refers deictically to the Road Runner himself, he must have written the sign. In both *Ready – Set – Zoom* (1955) and *Scrambled Aches* (1957), the Road Runner is temporarily fooled by the Coyote's written messages.

In these cartoons, then, much like in *Felix*, the act of verbal communication is identical with the act of creating objects *ex nihilo*. In the Road Runner series the objects created are not free-floating letters, but letters bound to a writing surface; however, this still implies that a written message is an object, a physical entity with as much weight and solidity as anything else. And yet, as in *Felix*, this material similarity between words and things also works in the opposite direction: if the Coyote's signs are as material as he is, then the Coyote himself must be as immaterial as these written messages, which come out of nowhere and have no physical consistency. This of course is indeed the case. The Coyote is famously able to survive falls, explosions and other severe physical traumas without suffering permanent harm. He may be flattened to a pancake or have his fur singed to a crisp, but he always recovers completely by the following scene. The viewer never seriously fears for the Coyote's life – another of Jones's rules is that "THE COYOTE IS ALWAYS MORE HUMILIATED THAN HARMED BY HIS FAILURES" (Jones 225). Whereas the viewer of a Disney cartoon like *Snow White* and *Pinocchio* often has good reason to fear for the heroine or hero's life and bodily integrity, the viewer of the Road Runner cartoons knows that the Coyote can survive anything (and so can the Road Runner, since if the Coyote ever caught him, the bird's life and the Coyote's hopeless quest would end, and the series would be over).⁴¹ Similarly, the Coyote is constantly receiving Acme products despite having no permanent address

⁴¹ In Cheeseburger Brown's Web-published short story "Wile: The Unauthorized Biography of Wile E. Coyote," the Coyote actually does catch and eat the Road Runner, but is left with no purpose in life and attempts a series of unsuccessful careers before ultimately joining the Church of Scientology.

and no money⁴², and we never find out what happens to these products after the Coyote uses them unsuccessfully.

The viewer never entirely forgets that all these things – the characters, the signs, and the Acme products – are elements of animated drawings. The signs can't really be made of wood or cardboard, but they *are* made of ink and paint traces on celluloid. The Coyote is not a creature of flesh, blood and fur, but he *is* a drawn and painted creature. And yet in a sense this isn't enough. As a construct of ink and paint on celluloid, the Coyote is inert; rather than a self-identical entity capable of independent motion and thought, he is merely an assemblage of still images. The Coyote is given life only through the intervention of technology – the same technology that constantly frustrates his efforts to do something productive with his life (it seems only natural to regard the Acme Corporation as a parody of Warner Bros.) The liminal, shifting materiality of the signs and the characters is thus an allegory for the materiality of the *Looney Tunes* cartoon text itself. In drawing the Road Runner cartoons, Chuck Jones creates something which is more than just a series of inert marks on paper – but also less than a living, breathing reality. The Road Runner cartoons gesture toward the desire for handwriting in their presentation of verbal communication as object creation. But they also suggest that this desire for handwriting will always ultimately be frustrated, because it depends on an ethos of purity and spontaneity which is at odds with the technological apparatus that makes it possible.

This is made abundantly clear by a running gag that appears in three of the classic Road Runner cartoons, which I will call the *painting gag*. In *Fast and Furry-Ous*, the

⁴² One common theory among fans is that the Coyote receives these products for free because he is a beta tester for Acme.

Coyote tries to trick the Road Runner into running into a solid wall by painting a picture of a tunnel on the wall (Figure 2-18).⁴³ The tunnel is visually continuous with the road that leads into the wall, so the Coyote's idea is that the Road Runner will be unable to tell the painted tunnel from the real road and will slam into the wall at full speed.

Instead, however, the Road Runner runs into the painting and *through* the tunnel, which has mysteriously changed from a representation of a tunnel to a real one. The Coyote tries to run in after him, only to slam into the wall at full speed, because now the painting is a painting again (Figure 2-19). (Note that in Figure 2-19, the painting is shown from a different angle and no longer appears perceptually continuous with the wall.) Adding insult to injury, the Road Runner runs back out of the painting, which has now turned back into a tunnel, and knocks the Coyote down as he tries to get up. This gag is repeated in *Going, Going, Gosh!* (1952) with slight differences. Here the painting is on a canvas rather than a mural, and the Coyote places it at the edge of a cliff, hoping to make the Road Runner run through the painting and off the cliff. Of course, the Road Runner runs into the painting. When the Coyote leaves his hiding place to investigate, a truck drives out of the painting and runs him over. The Coyote tries to run through the painting, but now it's a painting again, and he runs straight through it and off the cliff.

Here, when the Coyote tries to interact with his paintings, they remain flat screens or opaque two-dimensional representations. The "real world" and the world depicted in these paintings are perceptually continuous, but ontologically and materially discontinuous. As Anne Friedberg observes, the frame of this painting "marks a

⁴³ In using a painting to fool a bird, Wile E. Coyote seeks to imitate Zeuxis, whose painted depictions of grapes were so realistic that some birds tried to eat them. However, the Coyote ultimately succeeds only in imitating Parrhasius, who painted a *trompe l'oeil* picture that was so realistic it fooled Zeuxis, Parrhasius's rival painter. The difference here is that whereas Parrhasius's painting fooled another painter, the Coyote's painting ends up fooling himself.

separation – an 'ontological cut' – between the material surface of the wall and the view contained within its aperture" (5, citing Victor Stoichita). When the Road Runner interacts with the paintings, however, the "ontological cut" vanishes and the painting becomes an open window into another world. The painting is able to shift freely and reversibly from a dead representation to a living reality.

However, these shifts can also occur in the opposite direction relative to the two characters, as is proved by the third instance of the painting gag. In *Gee Whiz-z-z-z-z-z-z* (1956), the Coyote has apparently learned from his first two failed attempts at the painting trick. Thus he executes a painting that depicts a bottomless chasm in the middle of the road. If the viewer has seen the first two cartoons that featured the painting gag (and knowledge of those cartoons seems to be assumed), then the Coyote's assumption is clear: he expects that the Road Runner will run into the painting and plummet to his demise.⁴⁴ Instead, of course, the Road Runner runs straight through the painting and continues on his way. Trying to follow him, the *Coyote* runs into the painting and falls into the ravine. So the Coyote's initial assumption – that the painting was transparent when the Road Runner interacted with it, but material when he himself interacted with it – turns out to be wrong. In fact, whether the painting is material or immaterial depends entirely on which of these statuses happens to be most

⁴⁴ The Coyote also puts up a sloppily handwritten sign that says "DANGER / BRIDGE OUT." Why he did this is not clear, since it would tip off the Road Runner to the trap awaiting him. A further problem with the Coyote's plan is that even if the Road Runner did run into the painting, he could probably stop before falling into the gap. Throughout the series the Road Runner shows an uncanny ability to stop on a dime just before he would have triggered one of the Coyote's traps.

advantageous for the Road Runner and disadvantageous for the Coyote. In simpler terms, the painting is always what the Coyote doesn't want it to be.⁴⁵

The Coyote has the power to turn drawn representations into living, breathing realities, and this is a form of the fantasy of handwriting. The Coyote has the same power to write himself into the world that Felix enjoys (we might call this the *power* of handwriting). The difference is that Felix exploits the liberatory potential of the power of handwriting. He uses handwriting to escape from danger, to solve perplexing problems, and to satisfy his desires. The Coyote *tries* to use handwriting for these purposes but invariably fails, because he lacks the ability to choose whether his handwritten traces come to life or whether they remain bound to their writing surface. His power of handwriting is exercised only at the whim of some invisible agency that is not favorably disposed toward him. Something similar happens in *Duck Amuck* (Chuck Jones, 1953), where the power of handwriting exists, but is displaced from the cartoon's protagonist to its creator.⁴⁶ Daffy doesn't have the ability to draw or erase objects; only Bugs has this power. But whereas Messmer and Fleischer used their power of handwriting to help their respective protagonists, Bugs uses handwriting to humiliate and embarrass Daffy. In both the Road Runner cartoons and *Duck Amuck*, the power of handwriting exists, but is of no benefit to the characters who need it most.

⁴⁵ In their attempt to axiomatize the Road Runner cartoons, McCartney and Anderson explain this in terms of the Coyote's belief in the reality of representations. Two of their axioms are "*Coyote's Dilemma I: If Coyote believes something he made is a representation then it is an instance of that type*" and "*Coyote's Dilemma II: If Coyote believes that something is an instance, and he previously believed it to be a representation, then it is a representation*" (7). I suggest, however, that the Coyote's *belief* is not the point; the real principle at work here is that things (including technological devices as well as paintings) always behave in whatever way is least *favorable* to the Coyote, and most favorable to the Road Runner.

⁴⁶ *Duck Amuck* is obviously another example of the fantasy of handwriting. I discuss it here only in passing due to lack of space, and also because this cartoon has already been theorized extensively elsewhere.

Notice, now, that the claims I just made about the Coyote's handwriting could also be applied to his use of technology. He seeks to exploit the power of technology for his own benefit, but never succeeds, because some invisible force always changes the laws of physics to make the Coyote's devices backfire. This is no coincidence. It reminds us that, as I suggested above, technological manipulation is what makes the power of handwriting possible, by creating the illusion of letters and drawings coming to life. The fantasy of handwriting is based on an ethos of naturalness, authenticity and self-presence, but is only imaginable because of technological assistance; moreover, it becomes valued and cherished only as a result of technological change. Mastery over handwriting therefore requires mastery over the technological apparatus that makes the fantasy of handwriting possible. This latter form of control is something that Wile E. Coyote and Daffy Duck don't have. Neither did Otto Messmer, and neither did Chuck Jones. We could understand Bugs in *Duck Amuck*, or the aforementioned invisible force that manipulates the laws of physics in the Road Runner cartoons, as a figure for the animator, the creative artist who can turn traces of ink and paint into reality. This reading is tempting and not entirely wrong. But at the same time, Jones is like the Coyote or Daffy: a figure at the mercy of a technological apparatus he didn't create and can't fully control. The production of an animated film as complex as the Road Runner cartoons demands corporate financing, state-of-the-art equipment, and an assembly-line production process. Jones was therefore able to exercise his power of handwriting only at the discretion of Warner Bros., a company which is often placed in binary opposition to Disney in terms of their respective animation styles, but which has become increasingly vulnerable to the same sorts of critiques that are often leveled against

Disney: “[T]he metonymic and monolithic construction of Disney has begun to rub off on Warner Bros” (Sandler 8).⁴⁷ The Road Runner cartoons represent a critical use of the fantasy of handwriting insofar as they acknowledge how the desire for handwriting can only ever be incompletely satisfied, and then only through the mediation of a technological apparatus which is difficult to imagine in terms of handwriting. Nowhere is this paradoxical condition more clear, however, than in the last text I will discuss.

Who Erased Roger Rabbit?

Who Framed Roger Rabbit is often credited with inspiring the late-'80s and early-'90s revival of the moribund theatrical animation industry. It also constitutes an affectionate tribute to the past of animation; thus, *Who Framed Roger Rabbit* is explicitly nostalgic in a way in which the Road Runner cartoons, themselves being products of the classic era of Hollywood animation, are not. *Who Framed Roger Rabbit* might easily be read as a restorative-nostalgic film which seeks naïvely to revive the golden age of animation, and with it the fantasy of handwriting, in a new and superior form. However, a closer inspection reveals that *Who Framed Roger Rabbit* is also a text driven by reflective nostalgia. At the same time that it revives the memory of hand-drawn animation, it also gestures to coming technological changes which will make hand-drawn animation obsolete.

*Who Framed Roger Rabbit*⁴⁸ is a very loose adaptation of Gary Wolf's 1981 novel *Who Censored Roger Rabbit?* This bizarre novel might be described as a hardboiled

⁴⁷ See the other essays in *Reading the Rabbit*, particularly those by Simensky and Mikulak, for an examination of Warner Bros.'s corporatist practices, including its marketing practice and its efforts to exert control over the legacy of its cartoons.

⁴⁸ There is no question mark after the title of the film. “Film-industry superstition teaches that question marks in titles are bad luck” (Ebert 12).

detective novel about cartoon characters. The title character, Roger Rabbit, is a 'toon, a creature of nonhuman appearance who speaks in word balloons. Roger Rabbit and his fellow 'toons appear in comic strips, which, in the world of the novel, are composed not of drawings but of photographs of toons. 'Toons also have the ability to create identical doppelgangers which they use as stunt doubles (this appears to be Wolf's explanation for the indestructibility of cartoon characters). When Roger is killed, his doppelganger hires private eye Eddie Valiant to solve his murder, leading to a convoluted plot which I will not attempt to summarize.

The concept of characters speaking in word balloons represents a particularly pure example of the fantasy of handwriting. In this novel, 'toons' words literally have physical form and substance: Roger's "word balloon came out so heavily weighted down with guilt, it dented the top of my desk" (63). Words literally record the affects with which they are spoken: " 'What a hectic day I had,' he said. His words collapsed inside their balloon like so many beanbags" (91). Words also indicate the physical qualities of their speakers: " 'Hah, hah' appeared over Baby Herman's head in the lettering style found on a preschooler's handmade valentine" (9). It's suggested that the letters in these word balloons are made of the same material substrate as ordinary letters: "The balloons popped, letting the question marks parachute to the floor. I was tempted to scoop them up and pocket them, since I knew a book publisher who bought them to cut type-setting costs in his line of whodunits" (53). The materiality of words even plays an important role in the plot: a word balloon found under Roger's corpse becomes a crucial piece of evidence. 'Toons in the novel enjoy the power of handwriting, the power to translate their subjective affects into physical form.

However, there are also tantalizing hints (which unfortunately remain no more than hints) that the power of handwriting is something to be *ashamed* of – that the power to write oneself into the world represents an older, primitive, atavistic means of communication which both 'toons and humans want to leave behind. 'Toons are capable of “suppressing” their word balloons and often choose to do so in order to make themselves appear more human (26). This is one example of how 'toons in the novel are constantly striving to achieve human status. Humanoid 'toons such as Jessica Rabbit are able to “pass” for human, and in the climax of the novel, it turns out that two 'toon characters used a magic lantern to transform themselves into humans. There is an obvious analogy here to real-world racial passing, and 'toons are consistently presented in the novel as an oppressed racial minority (Wolf even makes the tantalizing suggestion that the America of the novel was originally inhabited by 'toons, rather than Native Americans [113]).

However, we can also read the treatment of 'toons in the novel as an allegory of real-world media ecologies as well as racial politics. In seeking to suppress her word balloons, Jessica tries to undergo the same transformation that cartoons underwent in 1927: she wants to replace written text with synchronized dialogue. This seems like a literal example of the ideology that Derrida calls phonocentrism: “absolute proximity of voice and being, of voice and the meaning of being, of voice and the ideality of meaning” (*Of Grammatology* 12). According to this ideology, speech has a privileged connection to authenticity, originality, self-presence, etc., whereas writing serves merely as a technological supplement. But I think what's going on in *Who Censored Roger Rabbit?* is actually the reverse. The claim made by the naïve version of the fantasy of

handwriting is that *writing*, rather than speech, that represents the originary, privileged condition. This claim needs to be distinguished from Derrida's superficially similar argument that the original condition of language is arche-writing, because the term "writing" does not mean the same thing in both cases. Derrida's argument is

that the alleged derivativeness of writing, however real and massive, was possible only on one condition: that the "original," "natural," etc. language had never existed, never been intact and untouched by writing, that it had itself always been a writing. An arche-writing whose necessity and new concept I wish to indicate and outline here; and which I continue to call writing only because it essentially communicates with the vulgar concept of writing. (Derrida 1998 56)

For Derrida, "writing" means a generalized condition of *différance*, of non-originality. In the fantasy of handwriting, "writing" means something different, something much more contaminated by what Derrida calls the metaphysics of presence. Writing, and specifically handwriting, connotes – to edit Derrida's quotation above – "absolute proximity of [trace] and being."

In a text like *Who Censored Roger Rabbit?* that subscribes to this view of handwriting, writing-oneself-into-the-world has the same sort of privilege that, in phonocentrism, attaches to hearing-oneself-speak. And for a 'toon like Jessica, this is precisely the problem. Handwriting represents the earlier, more (ab)original means of communication. Speech stands for civilization and technological progress, precisely because it's *not* natural to 'toons – presumably 'toons have word balloon glands instead of voice boxes. It makes sense that creatures who are themselves made of ink on paper should communicate using constructs of ink on paper – just as it made sense for Felix to use word balloons instead of synchronized dialogue, even after the latter option

became available.⁴⁹ For 'toons, then, writing is *physis* (“the arising of something from out of itself” [Heidegger 10]), and speech is *techné* (what “reveals whatever does not bring itself forth and does not yet lie here before us, whatever can look and turn out now one way and now another” [Heidegger 13]). In seeking to suppress their word balloons and to appear human, the 'toons in the novel subscribe to the same ideology of technological progress that rendered *Felix's* fantasy of handwriting obsolete.

The above represents my own speculative reading of *Who Censored Roger Rabbit?*, as Wolf's novel is highly inconclusive on most of these points. Wolf never seriously explores problems of semiotics or writing and speech technology that are posed by his use of word balloons. *Who Censored Roger Rabbit?* is ultimately little more than a standard detective novel which uses cartoon characters merely as a gimmick. We could describe it as an uncritical invocation of the fantasy of handwriting, to the extent that it never poses the question of what is at stake in its invocation of the materiality of handwriting.

The film adaptation of the novel, however, goes much further in exploring the tense relationship between the fantasy of handwriting and technological mediation. Set in Los Angeles in 1947, the film is a combination of live-action and animated footage, with live-action characters sharing the frame with animated Toons (the film uses this form rather than “'toons”). In the film, the Toon characters *are* handwritten, or more specifically hand-drawn and hand-painted, rather than *using* handwriting. They are literally made of ink and paint. In the film's best-remembered line, Jessica tells Eddie,

⁴⁹ This is a slightly excessive reading, as the novel is unclear as to whether 'toons are flesh-and-blood creatures or constructs made of art materials. On the cover of the 1981 Ballantine edition, Roger is depicted in a fairly realistic style, suggesting that he's merely a larger and more anthropomorphic version of a real rabbit.

“I’m not bad, I’m just drawn that way.” Roger is framed for murdering Marvin Acme because paint from Roger’s glove is found at the crime scene; implicitly, paint traces are the Toon version of fingerprints. When Eddie’s girlfriend Dolores finds him in a compromising position with Jessica, she accuses him of “dabbling in watercolors,” and Eddie punningly calls Jessica a “painted hussy.” Toon characters work at, but are barred from patronizing, the Ink and Paint Club.⁵⁰ Most notably, the Dip, the only thing that can destroy the otherwise invincible Toons, is a mixture of turpentine, benzene and acetone, all of which are paint thinners used to remove animation from cels.

The Toons in the film are constructs of ink and paint, but they are specifically *three-dimensional, material* constructs of ink and paint. In earlier films where live-action and animated footage were juxtaposed, such as *Song of the South* (Harve Foster and Wilfred Jackson, 1946) and *Mary Poppins* (Robert Stevenson, 1964), a recurring problem for filmmakers was the obvious contrast of two-dimensionality and three-dimensionality (Cotta Vaz and Duignan 124). We already saw this problem at work in *Out of the Inkwell*. Thus, animation director Richard Williams said:

The initial feeling I had about the picture was that it would look a bit gimmicky. The problem was how to ensure the cartoons didn’t make the live action look false, and that the live action people didn’t make the cartoons look false. They could vitiate each other, cancel each other out. Like a flat Tony the Tiger surrounded by live-action people. You don’t believe he’s real because he’s surrounded by live action, and you don’t believe the live action’s real because there’s a flat cartoon someone has pasted onto the screen, as if on glass. (Clarke 1988)

In order to avoid this problem, the animators and special effects staff of *Who Framed Roger Rabbit* went to great lengths to synchronize the camera movement and lighting of

⁵⁰ This is a clear reference to the real-life Cotton Club in Harlem, where black people were welcome as performers but not as customers. Otherwise the film mostly ignores the racial subtext of the novel.

the animated footage with those of the live-action footage, and to ensure that the animated and live-action characters were able to interact believably. The specific techniques by which this was accomplished are not important at the moment (but see Turner 1988a and 1988b). What matters here is that these techniques worked. The viewer of *Who Framed Roger Rabbit* has the sense that the animated characters and the live-action characters are occupying the same space (Figure 2-20). As in the novel, it's not clear *who* is responsible for drawing the animated characters; no animators are ever shown in the film.⁵¹ Even so, the film succeeds much more completely than any previous film of its genre in creating a plausible vision of what cartoon characters would look like if they came to life.

Whereas the novel, in keeping with conventions of the hardboiled detective genre, presents 'toons in a highly negative light, the Toons in the film are positively associated with laughter, entertainment and emotion. This is not quite the same package of values that are typically associated with the fantasy of handwriting, but it's reasonably close. Toons make humans feel authentic emotion and inspire humans to meet higher standards of behavior. (For example, Eddie is able to quit drinking because his experiences with Roger and Jessica restore his sense of self-respect; earlier in the film, other human characters refuse to sell out Roger for a \$5000 reward.) "In ROGER RABBIT [*sic*], the cartoon figures redeem their human counterparts from isolation and despair. Like performers in live-action musicals, they celebrate energy, spontaneity and freedom from constraint" (Ohmer 101).

⁵¹ However, a draft of the film's screenplay (available at <http://sfy.ru/?script=who_framed_roger_rabbit>) includes an unfilmed scene in which Benny the taxicab operates a drawbridge by literally drawing it with a pencil.

The story of *Who Framed Roger Rabbit* seems to demonstrate the triumph of Toons, and the values they stand for, over an oppressive ideology of corporatism, dehumanization and technology. The villain of the film, Judge Doom, seeks to use Dip to destroy Toontown, the district of Los Angeles where Toons reside. He plans to replace it with a freeway on-ramp, which he will force the citizens of Los Angeles to use by dismantling the city's public transit system. The freeway system will be a source of immense profit: Doom envisions it as

a place where people get off and on the Freeway. On and off. Off and on. All day, all night. Soon where Toontown once stood will be a string of gas stations. Inexpensive motels. Restaurants that serve rapidly prepared food. Tire salons. Automobile dealerships. And wonderful, wonderful billboards reaching as far as the eye can see.

In building the freeway system, Doom also intends to destroy the traditional urban community of Los Angeles, a community based on the same sort of positive but anarchic values of which the Toons act as models. To accomplish this plan, he builds a giant, threatening dip-spreader vehicle (Figure 2-21), a grim, inhuman technological apparatus which contrasts sharply with the more friendly, colorful and traditional mode of technology represented by the trolley cars. In short, Judge Doom seems to stand for progress for progress's sake; his goal is to create a more sophisticated, better-organized society, at the expense of the atavistic, regressive elements of the traditional society whose heart is Toontown. In the climax, it turns out that Judge Doom is himself a Toon who has put on a rubber suit so as to appear human. Doom's motivations for betraying his fellow Toons are not explained, but one assumes that he, like the 'toons in the novel, is a self-hating Toon; he sees his own hand-drawn identity as a vestige of a more primitive, aboriginal condition which he must overcome at any cost.

Thanks to Eddie's heroism, Judge Doom is defeated. Subsequently, Eddie finds Marvin Acme's lost will, which gives the Toons legal title to Toontown. It turns out that Marvin Acme's will was written in "Acme Disappearing-Reappearing Ink" on what appeared to be a blank sheet of paper, which Roger then used to write a love letter to Jessica; this plot twist further highlights the importance of handwriting. The film ends on an unambiguously positive note with the entire cast singing "Smile, Darn Ya, Smile" (a song first featured in a 1931 Merrie Melodies cartoon). Handwriting triumphs over technological mediation; the values of community, tradition, and authenticity win out over the values of progress and sophistication. This ending seems like an uncritical use of the fantasy of handwriting, and to a large extent it is. The happy ending is saccharine enough to leave the viewer unsatisfied. In naïvely celebrating the victory of handwriting and the values that it represents, the film seems to ignore factors that conspire to make such a complete victory impossible in real life.

And yet this is not quite true, because the viewer is constantly aware that in real life, Judge Doom's plan succeeded. "By being set in 1947, *Who Framed Roger Rabbit's* 1987 recall doubles as anticipation of the forthcoming 'rubbing out' of cartoons in the '50s" (Cholodenko 1991, 217). In the following year, the decision in *United States v. Paramount Pictures, Inc.* helped precipitate the end of the studio system, which had guaranteed the commercial viability of theatrical animation. "After 1948, the number of screens reserved for cartoons began to slip after the movie studios were forced to divest themselves of their theater chains" (N. Klein 206). Over the early part of the following decade, this crisis was worsened by the growing popularity of TV: "After the crisis of 1953, animators began to leave in increasing numbers to work for TV

commercials, while animation studios shifted toward TV as well, and toward stories more appropriate to a shopping medium, stories about department stores and spending sprees” (208). The decline of theatrical animation and the studio system coincided with the rise of the Interstate Highway System and the dismantling of the Los Angeles streetcar system. Theatrical animation and traditional public transportation were both emblematic of a sort of traditional urban community which collapsed shortly after 1947.⁵²

In the ending of *Who Framed Roger Rabbit*, Zemeckis reverses this collapse and presents a utopian vision of an alternative reality where Toons and their associated values were able to survive. The ending also implies that the film as a whole is engaged in a similar project. By ending the film in this way, Zemeckis signals that his goal is to reverse the stagnation of theatrical animation, to revive this moribund genre along with the positive values that the film associates with this genre. In this sense, *Who Framed Roger Rabbit* is engaged in restorative nostalgia. And yet Zemeckis also expects the viewer to realize that such a project of restorative nostalgia didn't actually work in 1947. Judge Doom's speech, quoted above, is only funny if the viewer knows that all the things he predicts actually did happen. The film depends on the viewer's desire for hand-drawn animation, but also on the viewer's knowledge that hand-drawn animation is already a lost object. To this extent, *Who Framed Roger Rabbit* meets the criteria for reflective nostalgia.

A similar blending of restorative and reflective nostalgia can be seen in the film's attitude toward technology. *Who Framed Roger Rabbit* has difficulty disguising its

⁵² Pixar's *Cars* (John Lasseter and Joe Ranft, 2006), to be discussed in Chapter 4, exhibits similar nostalgia for the traditional communities that were destroyed by the Interstate Highway System.

dependence on the very corporate and technological apparatus that Judge Doom exploits. “The scale and complexity of *Roger Rabbit* posed the same challenge ILM would face a few years later when hired to create a liquid-metal cyborg for *Terminator 2*: the success of the movie depended on extending effects art and technology to create effects never seen before” (Vaz and Duignan 125–126). The creation of the animation/live-action blending described above was only possible thanks to ILM’s massive special effects apparatus. This did not go unnoticed by contemporary viewers: Susan Ohmer noted that the film’s “visual flair is impressive and enjoyable, yet the stress on technological wizardry (a further characteristic of Spielberg productions) blunts its emotional impact” (104). The film’s invocation of the fantasy of handwriting is only possible thanks to its use of the same sort of corporatist technological apparatus that typically represents the polar opposite of handwriting. Moreover, its effects were achieved primarily through optical printing, a technology which lacks the embodied and manual associations of handwriting. The spectacular nature of the film’s technological achievements is largely responsible for its appeal to viewers; therefore, the viewer can hardly be unaware of the bad faith inherent in the film’s attitude toward technology. In using a newer, more advanced technological apparatus to praise the virtues of an older, less advanced mode of creation, the film engages in the sort of hypocrisy characteristic of restorative nostalgia. Paradoxically, “ROGER RABBIT [*sic*] brings animation history back to life, but too often with the aim of proving that modern is better” (Ohmer 99).

From the vantage point of 2011, however, *Who Framed Roger Rabbit* can also be viewed as the last great monument of the tradition of American theatrical animation, rather than as a departure from that tradition. *Who Framed Roger Rabbit* was perhaps

the last theatrically animated major motion picture to be animated entirely by hand using traditional ink-and-paint processes. The following year, *The Little Mermaid* (Ron Clements and John Musker, 1989) made limited use of computer animation, and was the final Disney film to use hand-painted cels. Disney's next feature, *The Rescuers Down Under* (Hendel Butoy and Mike Gabriel, 1990), was produced using the Computer Animation Production System (CAPS), in which the animator's drawings were scanned into a computer and colored digitally, rather than being inked onto cels and painted (Wikipedia, "Computer. . ."). The elaborate optical printing processes used to create *Who Framed Roger Rabbit* were obsolete almost as soon as the film was released. Contemporaneous discussions of the film do not indicate whether Zemeckis and Williams were aware of this fact (for example, Williams never mentions computers in his 1988 interview with Jeremy Clarke). Contemporary viewers, however, cannot forget aware that the film's achievement was and will necessarily remain one-of-a-kind, that such a sophisticated combination of optical printing with traditional animation will never again be commercially viable. Viewing *Who Framed Roger Rabbit* with this knowledge in mind, we experience an effect of restorative nostalgia. We realize that this film succeeds more than any other film in making us believe that ink and paint could literally come to life. Yet we also realize that this success is unrepeatable.

The subsequent history of the fantasy of handwriting in animation is intertwined with the history of computer animation, a topic I will explore in Chapter 4. In this chapter, however, I have defined the fantasy of handwriting and the difference between critical and uncritical uses of this fantasy. With these analytical tools established, we proceed to consider how the fantasy of handwriting interacts with digital technology in various

contemporary popular-cultural media. The first of these that I will consider is the interactive fiction game.

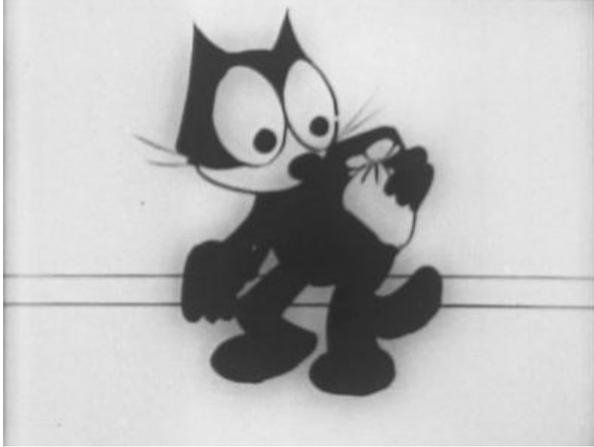


Figure 2-1. Still from *Futurizty* (1928) demonstrating Felix’s “ideogrammatic” appearance and lack of resemblance to an actual cat. All Felix images © 2011 Felix the Cat Productions, Inc.

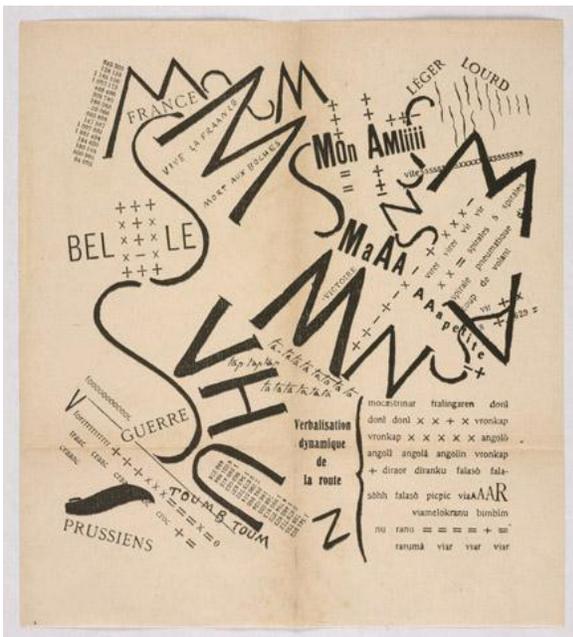


Figure 2-2. “Après le Marne, Joffre visita le front en auto” by Filippo Tommaso Marinetti. © 2006 Artists Rights Society (ARS), New York / SIAE, Rome.



Figure 2-3. A still from *Felix in Hollywood* (Otto Messmer, 1923). All Felix images are © Felix the Cat Productions Inc.

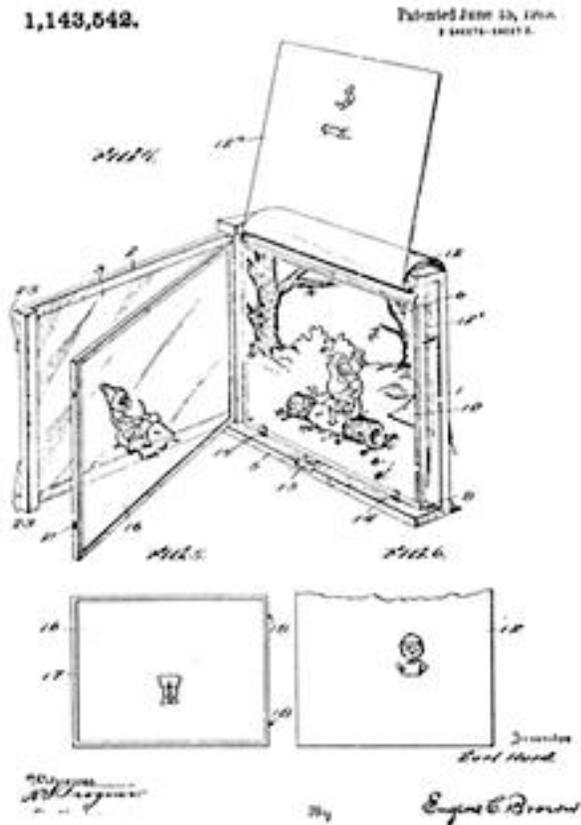


Figure 2-4. Diagram of the Hurd process, in which paper is used for the background and cels for characters. Sullivan's process was the opposite of this. From U.S. Patent 1,143,542, in the public domain.



Figure 2-5. A black kitty. Compare to Figure 1-1. Licensed under a Creative Commons Attribution-Share Alike 3.0 Unported license.



Figure 2-6. Still from *Non-Stop Fright* (Otto Messmer, 1927) showing the 478 MILES sign in its original state.

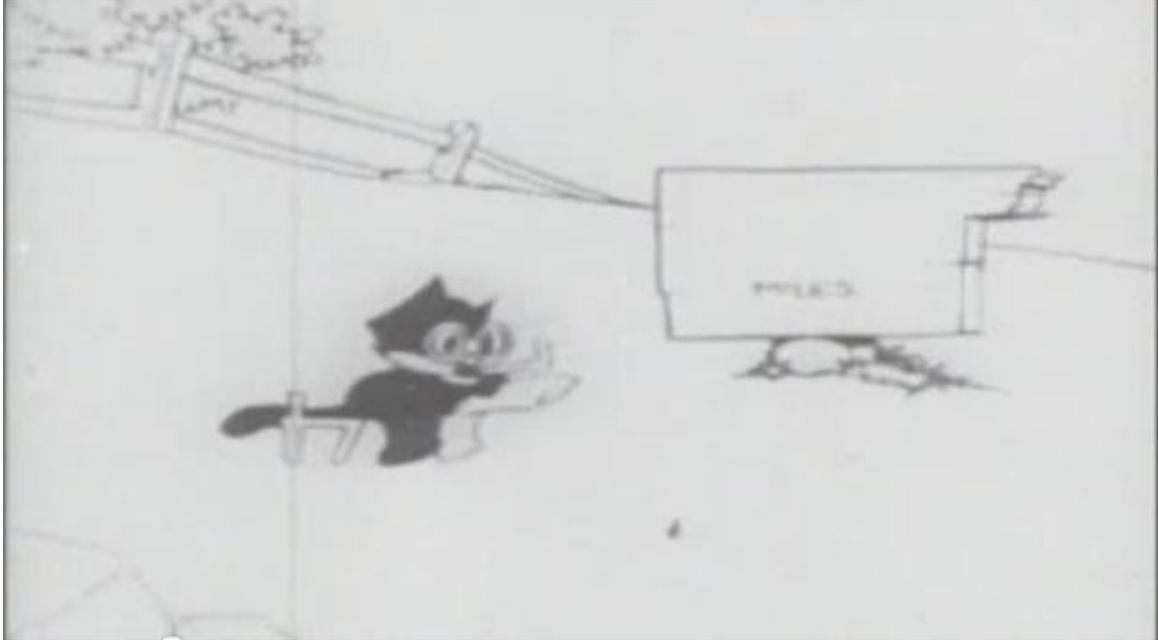


Figure 2-7: Still from *Non-Stop Fright*. Note the glasses (8), the chair (4) and the pipe (7).

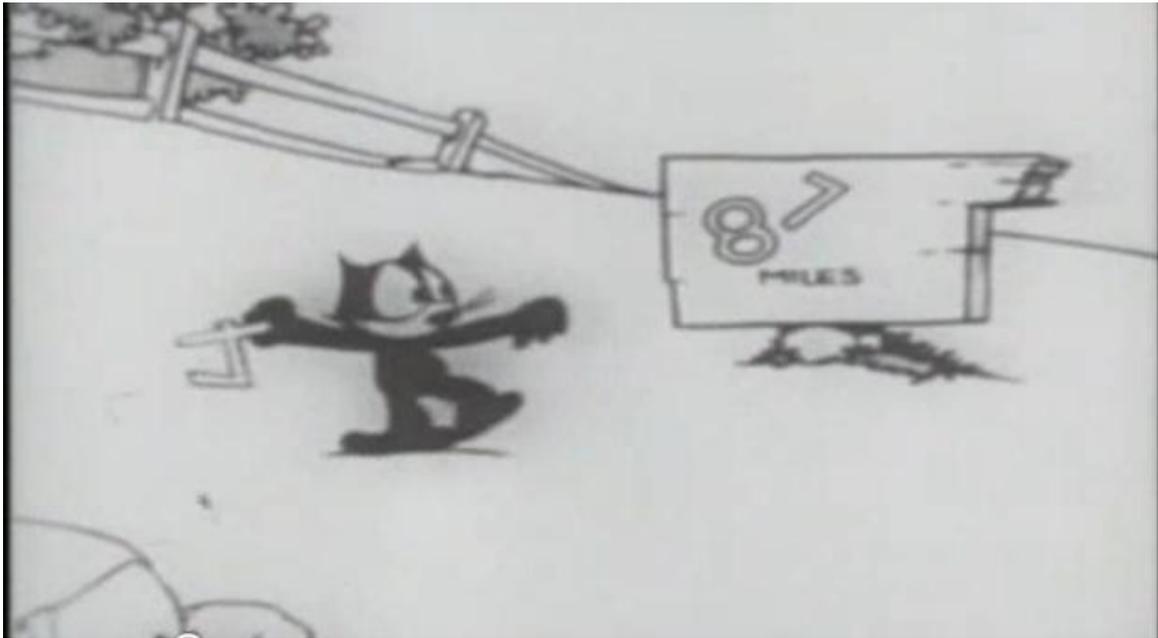


Figure 2-8. Still from *Non-Stop Fright* showing Felix in the act of replacing the numerals.



Figure 2-9. Still from *Feline Follies* (Otto Messmer, 1919) showing Master Tom's tail transformed into a question mark.



Figure 2-10. Still from *Felix Follows the Swallows* (1925) showing Felix's spontaneous generation of exclamation marks.



Figure 2-11. Still from *Felix Follows the Swallows* showing Felix treating the exclamation marks as objects.



Figure 2-12. Still from *Felix Follows the Swallows* showing Felix converting the exclamation marks into tools.



Figure 2-13. Still from *Felix Follows the Swallows*. Here the exclamation marks have become Felix's wings.



Figure 2-14. Still from *A Trip to Mars* (Dave Fleischer, 1924). Note the visual contrast between the animated and live-action elements of the image. This film is in the public domain.



Figure 2-15. Still from *Comical Amities* (Otto Messmer, 1928) showing Felix tearing Kitty out of the image. Note that the leading edge of the paper is drawn, not real.



Figure 2-16. Still from *There They Go-Go-Go* (Chuck Jones, 1956) showing a typical Coyote sign.

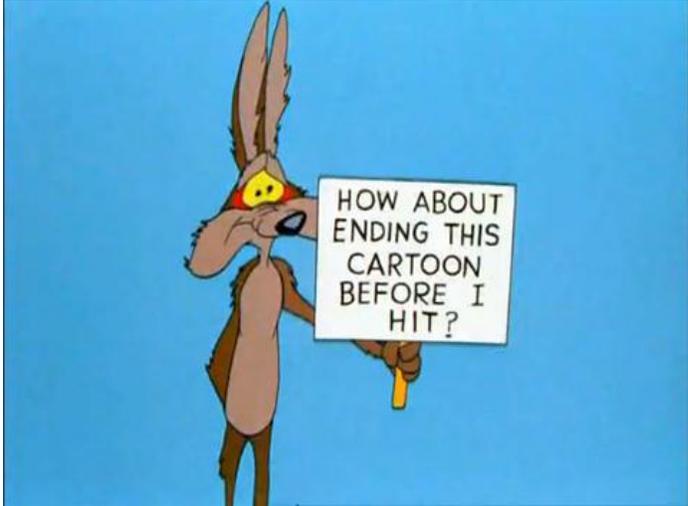


Figure 2-17. Still from *Gee Whiz-z-z-z-z-z-z* (Chuck Jones, 1956) showing a sign that logically shouldn't exist.



Figure 2-18. Still from *Fast and Furry-ous* (Chuck Jones, 1949) showing the first use of the painting gag. Note that the painting is difficult to distinguish from the surrounding "real" objects.



Figure 2-19. Still from *Fast and Furry-ous*. From this angle the painting can be clearly recognized as a two-dimensional representation.



Figure 2-20. Still from *Who Framed Roger Rabbit* (Robert Zemeckis, 1989). Note the seamless integration of live-action and animated footage. Compare to Figure 2-14.



Figure 2-21. Still from *Who Framed Roger Rabbit* showing the clanking, mechanical doomsday device.

CHAPTER 3
BECAUSE IT'S NOT THERE: INTERACTIVE FICTION AS FANTASY OF
HANDWRITING

Word and Image in Interactive Fiction

Interactive Fiction as Handwriting

In the previous chapter, I defined the basic contours of the fantasy of handwriting, then explained how this fantasy is affected by a transition from an older medium which appears to be more like handwriting to a newer medium which appears to be less so. In that chapter, however, the newer medium in question – full animation – was still significantly close to handwriting. Full animation still meets my definition of handwriting: it involves a writing surface, a writing tool, a writing medium, and a writing hand. The difference is that A) full animation includes other components which are irreducible to those of handwriting (e.g., the multiplane camera). And B) full animation makes its handwritten nature less visible; it presents itself as something different from handwriting. However, full animation is still imaginable as a process of handwriting, as we see in *Who Framed Roger Rabbit*, which emphasizes the handwritten materiality of full animation.

In this chapter, on the other hand, I examine a media transition in which an older medium which resembles handwriting is replaced by a newer medium which is *not* easily imaginable as handwriting. This chapter is concerned with the replacement of text-based video games by graphical video games. I will suggest that the video game genre of interactive fiction is susceptible to being imagined as a process of handwriting.

¹ Although interactive fiction doesn't involve actual, literal handwriting, the process of

playing interactive fiction can be, and often has been, characterized as being *like* handwriting – as involving the production of inscriptions on a surface. Interactive fiction is therefore an appropriate site of originary fantasies of handwriting. Over the course of the 1980s and 1990s, interactive fiction lost its former prominence and commercial viability due to competition from graphical adventure games. I will suggest that the graphical video game cannot easily be imagined in terms of handwriting in the same way that interactive fiction can. In the graphical adventure and other genres of graphical video games, fewer opportunities are offered for the player to imagine the gameworld, and the physical connections between player actions and changes to the gameworld become less evident. It *makes sense* to imagine IF in terms of handwriting; it makes *less*, if any, sense to imagine a graphical adventure game in terms of handwriting. Therefore, whereas in the previous chapter I examined a transition from a more handwritten medium to a less handwritten one, here I examine a transition from a handwritten medium to a *non*-handwritten medium. Pen-and-paper animation differ in degree; IF and graphical adventures differ in kind.

Although the player of an IF game does not actually write by hand, the process of playing IF may be imagined as a process of handwriting in two interrelated senses: in terms of the representation of the gameworld and in terms of the interface. IF, thus, is a

¹ Hereafter abbreviated IF. The genre of IF is also known as the text adventure, although these terms are not precisely synonymous. The term “interactive fiction” includes all or nearly all works that use a text-based parser, while the term “text adventure” privileges gamelike works that feature “out-of-the-ordinary undertakings involving risk and danger” (Montfort 2005 6). For further discussion of the difference between these terms, see Montfort 2005, 6–8. “Interactive fiction” implies a view of IF as an aesthetic object, while “text adventure” implies a view of IF as a gaming genre. As Jeremy Douglass argues, however, these perspectives are not mutually exclusive: “IF objects are sometimes games that are played, and sometimes stories that are read, and often both or neither. Further, their narrative and rule aspects interact continuously at a deep level” (15). The present analysis considers IF primarily as an aesthetic experience and only secondarily as a ludic or gamelike experience, but it must be understood that the aesthetic and gamelike qualities of IF are inseparable.

doubly handwritten medium. In the first place, IF, by definition, presents the diegetic world of the game through the medium of ekphrastic text, which I understand here to mean text that describes visual phenomena in sufficiently precise detail as to enable the player to imagine them more or less vividly. The process of reading an ekphrastic text and imagining the things it describes is analogous to “drawing” or “painting” on the “surface” of the mind. In playing an IF game, the player “paints” a mental picture, however minimal, of the visual phenomena referenced in the game’s room and object descriptions. In the second place, unlike in a classical ekphrastic text, the IF player not only imagines the world but also creatively intervenes in that world: the act of inputting textual commands enables the IF player to rewrite or redraw the world s/he has imagined. Moreover, the IF player does this using the medium of the keyboard, which, unlike other gaming interfaces, has strong preexisting associations with writing. The IF interface is not a pencil or even a typewriter, but it is less dissimilar to these than a mouse or a control pad would be.²

Thus, in the commercial era, IF was the site of an originary fantasy of handwriting. As alternatives to IF became more sophisticated, the leading IF publisher, Infocom, deliberately marketed its games by appealing to the package of values associated with handwriting. Ekphrasis represented the most immersive means available of presenting a large, explorable gameworld, while the text-based parser represented the most efficient available means of interacting with such a gameworld. In

² Here I am assuming that the standard way of playing IF is via a computer with a keyboard. This assumption has generally been true throughout the history of IF. I am not taking into account the possibility of playing IF on a mobile device or tablet with a touch interface. However, this possibility has existed for over a decade (see for example <<http://www.pocketgear.com/us,en,usd/984,Palm-Tungsten-E2/4856791,product-details,Pilot-Frotz.html>>). Clearly, such devices are even closer to handwriting than a keyboard would be, but see Chapter 6 for more discussion of such interfaces.

the late 1980s, the availability of sophisticated computer graphics led to a change in these conditions. Graphics became superior to text in both immersiveness and efficiency, and the IF genre accordingly lost its commercial viability. The act of writing IF therefore had to be reframed as a deliberate aesthetic choice rather than as a response to practical limitations of existing computer hardware. Authors who still wished to produce IF games had to justify their decision to do so by appealing to values other than visual verisimilitude. That is, post-commercial IF authors were forced to argue that IF appealed to other desires than the desire to inhabit a transparent, three-dimensional gameworld, and these were the same desires to which the fantasy of handwriting appeals. Thus, for certain sections of the player community, IF became an object of nostalgia and a site of nostalgic fantasies of handwriting.

Contemporary IF authors have adopted two separate approaches for appealing to the fantasy of handwriting, corresponding to the two levels on which the fantasy of handwriting operates in IF games. (Therefore, the two approaches sometimes coexist within the work of a single author or even within a single text.) The first approach, which is found in games like Nick Montfort's *Ad Verbum* (2000), is to emphasize the materiality of the IF interface. A game like *Ad Verbum* gives the player the sense that in IF, words (if not necessarily letters) function as material objects, and that writing in IF is a process of object interaction. The second approach, which is found in games like Emily Short's *City of Secrets* (2003), emphasizes the ekphrastic aspects of the IF experience. In this approach, the player is asked to understand the process of playing IF as a process of creating and manipulating mental pictures. For an author like Short, IF is distinguishable

from graphical video games in terms of the personal, idiosyncratic nature of the visual experiences it provides.³

Literature Review

IF has enjoyed increasing critical attention over the past few years, particularly since the publication of Nick Montfort's *Twisty Little Passages: An Approach to Interactive Fiction* (2005). According to Eric Eve's definition, an interactive fiction is "a turn-based program driven by textual input from the player, responding with output that is principally or wholly textual, and involving a parser and a world model" [Eve 2007 paragraph 1]. In other words, IF is a program that (1) simulates a diegetic world containing various spaces and objects (the world model), (2) presents that world to the user/player through the medium of unillustrated or sparsely illustrated text, and (3) permits the user to interact with its simulated world by inputting textual commands. IF, then, is distinguished from other genres of video games by its lack of images, and from other forms of recombinatory or procedural textuality by its inclusion of a world model.

Up to this point, IF has typically been examined from the viewpoint of its textual and programmatic aspects. For Montfort and others, IF descends from the canonical traditions of riddle-making and ergodic textuality and participates in the contemporary movement of electronic literature. According to these claims, the value of IF for scholarly study lies in what it tells us about textuality, literariness, and the transformations of both in the digital era. The existing critical discourse presents IF as a primarily *textual*, *procedural*, and *ludic* phenomenon – as an art form or communicative medium which A) is made up of verbal or linguistic signifiers and B) subjects these

³ This argument is presented in somewhat different form in Kashtan 2011.

signifiers to rule-based manipulations, and which C) has historically been used to produce games.⁴ With rare exceptions, critics have focused on the semiotic and textual aspects of the IF medium, ignoring its visual and material aspects.

This may seem no more than logical since, by the second element of the above definition, IF consists mostly or entirely of words and letters – differential signifiers par excellence – and makes limited use of images. For most IF critics, IF is a verbal, textual and literary medium whose closest affinities are with the tradition of ergodic textuality that extends from the I Ching and the Exeter Book, through the Oulipo and Cortázar, to hypertext fiction. On this assumption, the visual aspects of IF, if any, are usually ignored. Espen Aarseth, for example, treats IF as “a new type of literary artifact” (107). His reading of the Infocom game *Deadline* considers only its literary and ludological aspects. In Nick Montfort’s definitive work on the genre, *Twisty Little Passages*, he has little to say about IF’s specifically visual qualities. Exceptions to this general neglect of IF visuality include Terry Harpold’s “Screw the Grue: Mediality, Metalepsis, and Recapture”; Dennis Jerz’s article on the genealogy of *Colossal Cave*; and Montfort’s own article “Continuous Paper.” All of these will be cited below.⁵

In summary, however, most critics have been uninterested in the specific materiality of the IF text. This makes some sense because the materiality of any IF text seems to be contingent rather than absolute. An IF text is composed of signifiers whose precise visual instantiation is irrelevant to their semantic value, whether we understand

⁴ See, for example, Montfort 2005, 2 (claiming that IF “has been a major current in electronic literature”) and 37–63 (explaining how IF descends from and is comparable to the textual riddle). Similarly, Jeremy Douglass’s dissertation on IF begins: “Re-examining historical and contemporary IF illuminates the larger fields of electronic literature and game studies” (ix). Douglass further suggests that the two primary critical perspectives on IF are electronic literature and games studies (14).

⁵ Zach Whalen discusses the visual aspects of IF text in passing (111).

“text” in this sense to mean the game’s source code, the string of signifiers produced in the execution of that code, or both. Most IF games can be played on a variety of interpreter programs and computational platforms; indeed, as I will explain below, IF’s cross-platform nature was one reason for its commercial success. Furthermore, contemporary IF interpreters give the player the option to alter details such as the font, text color and background color, without altering either the program’s source code or the text (i.e., the ordered string of signifiers) that the program generates (Figure 3-1, Figure 3-2). According to a common-sense understanding, the IF work “is” the source code, or perhaps the string of signifiers produced in the execution of that code, but not the material instantiation of that code. Two players who play the same version of *Ad Verbum* using the two sets of interface options shown in Figures 3-1 and 3-2 are playing the “same” game; the differences in font and color are largely cosmetic.⁶

Because IF is usually (naïvely) understood as a non-visual phenomenon, the question of the user’s visual experience also typically goes unasked. Scholars typically examine IF from the perspective of either electronic literature studies or games studies or both. Jeremy Douglass observes that “[i]t is difficult to choose a critical terminology and situate the study of IF in digital media without privileging either an Electronic Literature or a Games Studies framework of assumptions” (14), suggesting that no other options are imaginable.⁷ Under either of these two frameworks, however, the IF player’s experience is understood as primarily semiotic and/or procedural in nature. The

⁶ This is of course analogous to the commonsensical but naïve assumption that the identity of a literary text resides in the text – the ordered array of signifiers – and that the material instantiation of those signifiers is merely a cosmetic feature. See Jerome J. McGann, *The Textual Condition* (Princeton University Press, 1991).

⁷ See Aarseth and Myers for more or less literal examples of each of these two approaches to IF.

electronic literature approach considers IF in terms of its manipulation of textual signifiers in ways unavailable to printed literature. Under this approach, the IF player's primary activity is the interpretation of text and the generation of other text in response. The games studies approach considers IF in terms of its operational logics. Under this approach, the IF player's role is to engage in successful play, to solve puzzles by working within a pre-given set of rules.

Without denying the value of either of these approaches, however, I want to suggest that they both miss the "phenomenological, apprehendable, immanent" nature of the IF play experience (Drucker 1993 43). They give insufficient consideration to the materially situated and sensuous aspects of the IF experience. I, however, want to suggest here that these aspects of IF are important. More specifically, I contend that IF is phenomenologically similar to handwriting on a variety of levels; that IF is, or claims to be, enjoyable for the same reasons that handwriting is enjoyable; and, ultimately, IF deploys fantasies of handwriting.

IF as Originary Fantasy of Handwriting

Ekphrasis

As Marie-Laure Ryan argues (120ff), one of the basic affordances of narrative in any medium is the creation of a story world or a virtual reality, a hypothetical space in which the existents of the narrative are located and in which the events of the narrative take place. The simulation of such a world is crucial to the phenomenon of immersion, or the reader's sense of absorption into a narrative, and one important component of such world-building is spatial immersion, or the simulation of the physical space in which the narrative occurs. In ergodic textual artifacts, the conceit of spatial immersion is also a necessary means of making the text traversable. I infer this from common

sense: in order to accomplish tasks that require him or her to explore a fictional space and to interact with the objects in that space, the player must have at least a basic sense of the geography of that space and of the spatial relations of the objects found in it.

In text adventure games, that sense of spatial immersion is conveyed to the player by means of descriptive text, consisting principally of room descriptions and object descriptions. The basic purpose of both these types of texts is to enable the player to visualize phenomena described by the text. As Eric Eve explains, in IF

the physical world is generally modelled as a series of discrete locations known as rooms. The totality of rooms in a given work of IF is often referred to as the map. Such rooms could correspond to rooms in a building, but they need not and frequently do not [...] Conceptually, a room is that segment of physical space that is immediately accessible to the player character (paragraph 7).

In other words, the typical arrangement of space in IF is that the gameworld is divided or segmented into several discrete, mutually exclusive chunks. Such a spatial arrangement is not unique to IF. The fifth item of Mark J.P. Wolf's taxonomy of video game spatial structures is "adjacent spaces displayed one at a time" (59).⁸ In graphical video games dating back to the late 1970s, such as *Superman* and *Berserk*, "adjacent spaces or rooms are displayed as a series of nonoverlapping static screens which cut directly one to the next without scrolling" (59). However, in a text adventure game, by

⁸ This spatial arrangement is the sixth item in Wolf's taxonomy of spatial structures in video games. It is essentially the same spatial arrangement we find in graphical adventure games like *Myst* or in the LucasArts games developed using the SCUMM engine, except that in such games the individual chunks of space are represented in three dimensions, not two. As Wolf observes, this spatial structure is similar to the continuity editing style in film, whose purpose is to convince the viewer that the spaces depicted in consecutive shots are physically adjacent to each other. "Adjacent spaces displayed one at a time" is also the characteristic spatial arrangement of comics and graphic novels.

definition, these chunks of space cannot be represented by onscreen images.⁹ Instead, a block of onscreen text – the “room description” – is used to communicate the relevant properties of the present room, including the exits from that room and the objects it contains. The room description might be said to take the place of the absent graphical image of the room (although this formulation is anachronistic insofar as IF predates graphical adventure games; moreover, the image of the room is not “absent” in the sense of having been removed or abstracted, inasmuch as it never existed to begin with.)

Consider, for example, the following room description from *Zork I: The Great Underground Empire* (Blank et al., 1980), one of the classic works of the commercial era of IF:

Living Room

You are in the living room. There is a doorway to the east, a wooden door with strange gothic lettering to the west, which appears to be nailed shut, a trophy case, and a large oriental rug in the center of the room.

Above the trophy case hangs an elvish sword of great antiquity.

A battery-powered brass lantern is on the trophy case.

This text names the room and enumerates all the visible exits from the room (the doorway and the wooden door) and the visible objects in it (the door again, the trophy case, the rug, the sword and the lantern). These objects are all “implemented.” That is, they are defined in the game’s source code as objects that have certain properties, one

⁹ Some IF games, such as the late Infocom game *Arthur: The Quest for Excalibur* (1989), do employ graphical depictions of rooms and objects. Usually, however, these depictions serve merely to illustrate the text, and the player needn’t refer to them in order to complete the game. For example, *Arthur* gives the player the option of turning off the graphics. Roberta and Ken Williams’s *Mystery House* (1983) was revolutionary because alongside its textual descriptions, it included vector-graphical images which took up most of the screen space, and because these graphics included essential information not given in the text. It is these properties, especially the latter, that distinguish IF from the graphical adventure.

of which is that the avatar may be able to interact with them. The description mentions no objects that aren't implemented (although room descriptions often do mention such objects), and it does not fail to mention any visible objects that are implemented. There *might* be other objects in the room that are neither mentioned nor implemented. For example, because the room is lighted, there must be some kind of light source.

However, the player need not worry about interacting with any such objects. On reading this description, the player can assume that everything it mentions is potentially relevant to his or her goal of solving the game, and that the room contains no relevant objects besides those mentioned in the description.¹⁰

The qualifier "visible" is necessary here because in *Zork I* there's a trap door under the rug. This object is left unmentioned because on first entering the room, the avatar can't see it. Finding the trap door (by moving the rug) is a puzzle. The player may well know about the trap door before moving the rug, perhaps from having played the game before, but such knowledge does not extend to the avatar. If the player inputs a command referring to the trap door before moving the rug, the game responds "You can't see any trap door here!" In this case the player may be able to visualize the trap door under the rug. Perhaps the avatar can even imagine that there's a trap door there, if we accept that the avatar can have cognitive operations that the player doesn't share. However, the avatar still can't "see" the trap door in the sense that it is not physically within his or her visual field.¹¹ Thus the room description represents what the avatar, not

¹⁰ The claims made here about room descriptions can also be applied to object descriptions, since rooms are actually defined in game programming languages such as Inform 7 as a class of object.

¹¹ Similarly, many games feature hidden exits or switches that aren't mentioned in room descriptions, and can't be used, until the avatar learns about them. For example, in Jon Ingold's *The Muldoon Legacy* (1999), the avatar can open a secret passage by feeling a certain wall. However, this action only works if the avatar has already learned, from information provided elsewhere in the game,

the player, sees when he or she looks around the room. It is a translation of the avatar's direct visual experience into words. The primacy of *seeing* in IF is indicated by the ubiquitous presence of light sources in *Adventure* and games descended from it. Exploration can't take place in the absence of light, and light source conservation and transport are common puzzle themes. As Jeremy Douglass observes, this made sense in *Adventure* "as it is highly dangerous to wander around cave systems in the dark" (132), but the need for light sources subsequently became divorced from its original context and evolved into a generic convention. Games like Taro Ogawa's *Enlightenment* (1998), where the player's goal is to extinguish all the light sources in a room, or Andrew Plotkin's *Hunter, in Darkness* (1999), where exploration takes place via senses other than sight, are deliberate reactions against this primacy of sight (Douglass 134).¹² The standard conceit in IF is that the avatar experiences the gameworld visually, and that the text presents the avatar's visual experience to the player. The player then has the opportunity to back-translate those words by activating the faculty of readerly visuality – by forming an imaginary visualization of the things the avatar sees.

As translations of visual objects in the medium of language, IF room descriptions (and object descriptions, of which room descriptions are special cases) are examples of ekphrasis. In current critical discourse, ekphrasis is most often defined as the verbal

about the existence of the secret passage. If the player tries to feel the wall before the avatar has received this information, then the parser replies "Playing a restored game, are we?"

¹² See also *Rover's Day Out* (Jack Welch and Ben Collins-Sussman, 2009), which includes a section in which the player character is a dog and therefore has to navigate by scent.

description of a visual work of art.¹³ However, Janice Hewlett Koelb argues that this meaning of the term is a twentieth-century invention, dating back no earlier than Leo Spitzer's 1955 essay on Keats's "Ode on a Grecian Urn" (2). For ancient rhetoricians, ekphrasis was defined in terms of method and phenomenology rather than subject matter: it meant "[a] speech which leads one around (*periegematikos*) bringing the subject matter vividly (*enargos*) before the eyes" (qtd. in Koelb 23), regardless of what that subject matter was. An ekphrasis is a description that permits vivid visualization. IF room and object descriptions clearly meet this definition.

Visualization

In playing IF, the player uses (or, as I will explain below, must be given the opportunity to use) the game's ekphrastic descriptions as the groundwork for the creation of a mental image of the gameworld. The generation of a visual image from an ekphrastic description is metaphorically comparable to handwriting (or drawing). Visualizing a described space is an act of making an inscription on a blank surface. The absence of visual depictions in IF is comparable to the blankness of a sheet of paper. In playing IF, as in drawing or painting, one starts from nothing and creates a complete, vivid visual representation. Moreover, the precise way in which this image is realized is specific to oneself. Handwriting is idiosyncratic to each writer and to each occasion of writing. Different people with the same name will have different autographs, and even a single person will sign his or her name differently each time. Similarly, different players, or the same player on different occasions, will visualize a given ekphrastic description

¹³ The standard reference on ekphrasis is Krieger. See also Heffernan, Hollander and Loizeaux, cited below; Wendy Steiner, *The Colors of Rhetoric*, University of Chicago Press, 1982); and Grant Scott, *The Sculpted Word: Keats, Ekphrasis, and the Visual Arts* (University Press of New England, 1994).

differently. For example, in the above description, the shape, color and pattern of the rug are not mentioned (EXAMINE RUG merely produces the statement “There’s nothing special about the carpet”). I can therefore feel free to imagine the rug as looking like whatever I want it to, and I’m free to imagine it differently every time I play.

In my view, the incompleteness of room and object descriptions is central to the aesthetic effect of IF. Visual images, whether photorealistic or otherwise, have the property of “visual ‘over-specification’”: an image can include an arbitrarily large number of details. In a verbal picture, by contrast, details can only be included if they are specifically mentioned (Chatman 125). Chatman explains:

[T]he number of details in Maupassant’s sentence is limited to three. In other words, the selection among the possible number of details evoked was absolutely determined; the author, through his narrator, ‘selected’ and named precisely three. Thus the reader learns only those three and can only expand the picture imaginatively (125).

The word “only” in the last sentence, however, should not lead us to underestimate the importance of the reader’s (or player’s) ability to expand upon those details provided by the text. Part of the appeal of IF is that it prompts the player to imagine what the text doesn’t describe, and to do so in a personal, idiosyncratic way, thereby putting his or her own unique stamp on the gameworld.

For example, the opening room description of Zork I – “You are standing in an open field west of a white house, with a boarded front door. / There is a mailbox here” – is one of the most frequently quoted phrases in video game history. Its memorability is due to the simple yet evocative nature of the image it offers. The open field, the mailbox and the whiteness of the house suggest a sense of rural simplicity, but the boarded front door attests to either danger or dilapidation. Yet the description says nothing about many aspects of the house, such as its size, architectural style, and height. The player

is thus free to imagine this house as resembling whatever white house comes most readily to his or her visual memory. In November 2006, Jim Heckel posted a thread on rec.games.int-fiction in which he asked readers how they visualized the white house, noting that he himself “visualise[d] the open field west of the large white house as the bowling green in front of Mount Vernon” (“Trivial. . .” n.p.). Neil Cerutti responded, “Frankly, I never imagined a field at all. It was more of a very small clearing, with a grungy old house up most of it.” Another poster commented, “I tend to imagine the “field” as meaning a kind of oversized lawn (like many country houses have), unkempt and returning to nature (which goes well with a house that has been boarded up) . . . a messy clearing surrounded by trees.” S. John Ross, on the other hand, commented that “I haven’t the foggiest idea how I pictured the entire scene the very first time I played. My suspicion is that I didn’t picture the entire scene. Just a mailbox with a house behind it. The rest probably just went in one eye and out the other, so to speak.” Clearly, there is no single right way to see the house. Different players (or the same player at different times) picture the house differently according to their repertoires of visual and other sensory experience. This is true even though the game does provide a slightly more specific visual account of the house: the command EXAMINE HOUSE produces the result “The house is a beautiful colonial house which is painted white. It is clear that the owners must have been extremely wealthy.”¹⁴ Even this more explicit description is not necessarily enough to override or replace mental images that players conjure up on reading the more famous incomplete description of the house (especially since the game’s characterization of the house as beautiful and expensive is plainly

¹⁴ I had never thought to try this command before reading the thread, probably because I saw the house as a scenic backdrop rather than an object that could be interacted with.

false – the boarded front door and windows suggest the house has become dilapidated, and it contains only two rooms and an attic).

One of *Zork's* most famous objects, the grue, is similarly underdescribed and therefore prompts the player to picture it idiosyncratically. If the avatar enters an unlit room without a light source, the parser says, "It is pitch black. You are likely to be eaten by a grue." If the player is foolhardy enough to ignore this warning and remain in the darkened room, then within a few turns the game says "Oh, no! You have walked into the slavering fangs of a lurking grue!" or "Oh, no! A lurking grue slithered into the room and devoured you!", and the avatar dies. As Terry Harpold notes, the grue is a clever solution to the procedural requirement that the player carry a light source when in dark rooms: "a menacing grue frees the game's designers from the practical burden of representing movements in total darkness in a text-only interface" (n.p.). The grue is therefore an example of what Harpold calls "recapture," the phenomenon in which "a structure in the gameworld or a pattern of play corresponds in a direct way to an underlying attribute of the program, representing it to the player in a form that is appropriate to the world and masks the technical requirement that it fulfils" (n.p.)

Zork accomplishes this by "representing" the grue as a creature that cannot be described. Unusually, the game recognizes the nonstandard command WHAT IS A GRUE.¹⁵ However, the answer to this question, instead of shedding any light on what a grue looks like, only intensifies the sense of mystery created by its strange name:

¹⁵ This works because *Zork* treats WHAT IS and WHAT IS A as synonyms for EXAMINE. Bizarrely, this means that in order for the command WHAT IS A GRUE to work, there must be a grue object in every room. Therefore, commands like PUSH GRUE work in every room in the game, and produce humorous results such as "Pushing the lurking grue has no effect."

The grue is a sinister, lurking presence in the dark places of the earth. Its favorite diet is adventures, but its insatiable appetite is tempered by its fear of light. No grue has ever been seen by the light of day, and few have survived its fearsome jaws to tell the tale.

Because the grue flees instantly when exposed to light, it cannot be described visually. Now this could mean that the grue is entirely unvisualizable, and that the word “grue” is merely a signifier with no visible signified. Citing an article which listed “the word GRUE” as one of the notable villains in video game history, Jeremy Douglass notes: “the Grue is wonderfully wordlike - stubbornly non-visual, a signifier with no signified, a legend, an idea, a ‘sinister, lurking presence,’ an almost-abstract cause of death with unseen jaws.”¹⁶ In a sense, this is true – Douglas’s observation highlights the fact that in IF there is a certain affinity between things and words, as I will discuss below. At this point, however, I also want to suggest that the grue is not just a verbal phenomenon but also a visual one, since the player is invited to visualize it. Because the grue is not described, the player is invited to imagine it as resembling his or her own image of a fanged, slavering monster (of course the player will not necessarily do so). Because the grue is not described, it becomes *more* frightening than it would be if it were pictured, for the same reason that monsters in Val Lewton horror films are famously scarier when they’re not directly depicted on screen: the player imagines it as whatever s/he happens to be most scared of at the moment.

The white house, then, is a more evocative and interesting space than comparable spaces in early graphical adventures of the time, while the grue is a scarier monster than the enemies in contemporaneous graphical video games (the ghosts in *Pac-Man*,

¹⁶ The article that prompted Douglass’s blog post was “Timeline of notable video game villains” by P.J. Hruschak. This article is no longer available online.

for example).¹⁷ Because the player's imagination is not subject to limits of computer graphics technology, spaces in games like *Zork* are arguably richer and more immersive than spaces in games like *Mystery House*.¹⁸ A still stronger claim could be made, however: that spaces in IF are richer and more immersive than spaces in *any* possible graphical game, because human imagination is unlimited, whereas graphics, however verisimilar, are necessarily subject to some sort of limits on their representational ability. Infocom made precisely this claim in their publicity. A 1983 Infocom advertisement features a large picture of a brain and the caption WE UNLEASH THE WORLD'S MOST POWERFUL GRAPHICS TECHNOLOGY. It continues:

You'll never see Infocom's graphics on any computer screen. Because there's never been a computer made by man that could handle the images we produce. And there never will be.

We draw our graphics from the limitless imagery of your imagination – a technology so powerful, it makes any picture that's ever come out of a screen look like graffiti by comparison. And nobody knows how to unleash your imagination like Infocom.¹⁹

[...] And you're immersed in rich environments alive with personalities as real as any you'll meet in the flesh – yet all the more vivid because they're perceived directly by your mind's eye, not through your external senses (Infocom).

The claim here is that text is *more* visually rich and immersive than graphics, because the power of imaginative visualization, elicited by textual mimesis, is unlimited. An image represented graphically on the screen, or on any writing surface whatever, is obviously subject to the limits of the technologies used to produce it. The (debatable)

¹⁷ The thief in *Zork* is also sometimes cited as one of the classic video game villains.

¹⁸ Not to mention physically larger. *Mystery House* features a much smaller gameworld than a typical Infocom game, presumably because of the greater amount of memory required to store images as compared to text.

¹⁹ This is a version of the standard and trite claim that reading requires more imaginative effort than watching films (or playing video games or reading comic books).

implication is that imaginary images are not subject to such limits. Infocom's ads of the period emphasize the poverty of the computer graphics of the time – another Infocom ad from this period displays a crude, pixellated sprite from a competing company's graphical video game, followed by the caption WOULD YOU SHELL OUT \$1000 TO MATCH WITS WITH THIS?²⁰ However, these ads also imply that IF's advantage over graphics is not contingent on the particular quality of those graphics: "There's never been a computer made by man that could handle the images we produce. *And there never will be*" (Infocom, emphasis added). Graphics, it is implied, are always subject to technological constraints, whereas images in the player's mind are entirely unbounded.

It's easy to see that this claim is highly excessive.²¹ In the first place, the domain of imaginative visuality is limited to the player's preexisting visual experience and received conventions – the visual vocabulary of her or his culture – which are not trivial constraints: one can't imagine the appearance of something one has never seen before. IF games have sometimes deliberately, interfered with visualization by employing objects for which the player has no visual referent; for example, in *The Gostak* (Carl Muckenhoupt 2001) all the nouns (and verbs) in the game text are nonsense words. But a more serious objection is that the sensitivity and vividness of imaginary images vary between players. Even those cognitive scientists who admit the existence of readerly visuality would hardly claim that all people visualize with equal strength.²² Indeed, IF is perhaps the only video game genre which is accessible to the blind and the visually

²⁰ \$1000 is the price of a computer system, not a game: "In fact, people have been known to purchase computers and disk drives solely for the purpose of playing our games."

²¹ I thank Phil Sandifer for his assistance in helping me realize this.

²² See Esrock for a detailed study of the scientific debate over the existence and importance of readerly visuality. Esrock's conclusion is that the faculty of readerly visuality does exist and is important.

impaired (thanks to text-to-speech software), and there is a significant constituency of blind IF players. If such players form a sensuous concept of the gameworld at all, they must do so without reference to its visual aspects. This point helps us realize that despite the frequent visual bias of IF (as explained above), other sensory faculties also help to shape the player's experience of the IF gameworld. According to one blogger:

Visual descriptions are only one small part of experiencing a location or an item. Authors should consider all of the senses. Describing the way something feels in the player character's hand, what it smells like, how it tastes, or what it sounds like all contribute to the experience. It's not uncommon for blind and visually impaired persons to reference what they read or hear with things they've physically encountered, or with events and actions that are widely understood or easily experienced (Taylor).

In making the claim that IF is more visually rich than graphics, Infocom is therefore both overstating the vividness of imaginary visuality, and ignoring those phenomenological aspects of the IF experience that are not reducible to the visual sense. Infocom's claim, therefore, is fantastic in nature, and it relies on assumptions similar to those that undergird the fantasy of handwriting. Infocom's ad characterizes the imagination as a site of unbounded creativity: through the use of the imagination, one can create a perfectly vivid picture of anything one wants.

Infocom could even have gone further and made another claim that would have strengthened the argument of their ad campaign. It could be argued that imaginary images are superior to real images, not because of their respective immersive qualities, but because unlike graphics, imagination is *personal*. The difference between images "perceived directly by [the] mind's eye" and those seen "through [the] external senses" is that the content of the former varies for each user and is unique to that user. When I play *Zork*, I see *my* version of the White House. The images I form in my head are not necessarily more transparent or visually pleasurable than the images I see on a screen,

but the former images are my own creation. In forming them I personalize the text, taking a participatory role in its creation. By contrast, in playing *Mystery House*, I see the same house every time, and so does everyone who plays the game. When I play a graphical video game, the images on the screen interfere with my ability to form my own images.

This critique of graphical video games is an example of a common criticism of the effects of visual media on readerly visuality. Critics of visual media often argue that readerly visuality is an important skill and that it disappears when readers are supplied with preexisting images. In 1951, for example, Ruth Mary Weeks argued that the necessary skills for the understanding of literature include “[t]he ability to visualize from reading and keep clear in mind a large cast of characters, often of unfamiliar types and from many walks of life” and “[t]he ability to picture strange places from reading and to visualize their details” (140). When students see a film of a novel before reading the novel, Weeks argues, they lose the opportunity to develop these skills: “Look at our third reading skill – to picture from reading the unfamiliar setting of a story. This also is all done by the film – indeed overdone – leaving no room for the delightful embroidery one does one’s self upon a novelist’s hints and descriptions” (140). Weeks understands literary visualization as an individual activity, whose principal charm is that it represents a subject’s opportunity for idiomatic creation. If the reader has already been exposed to someone else’s visualization of the story and characters, then this opportunity is lost. For Italo Calvino, this fear is not confined to the limited case of visualizing specific texts, but represents a more generalized cultural concern:

We are bombarded today by such a quantity of images that we can no longer distinguish direct experience from what we have seen for a few

seconds on television. The memory is littered with bits and pieces of images, like a rubbish dump, and it is more and more unlikely that any one form among so many will succeed in standing out.

If I have included visibility in my list of values to be saved, it is to give warning of the danger we run in losing a basic human faculty: the power of bringing visions into focus with our eyes shut, of bringing forth forms and colors from the lines of black letters on a white page, and in fact of *thinking* in terms of images. (92)

For Calvino, the ability to translate text into images, to turn marks on paper into marks on the canvas of the mind, is an indispensable cognitive skill. Therefore, in his novels, Calvino seeks to exercise a “possible pedagogy of the imagination that would accustom us to control our own inner vision” and “enable the images to crystallize into a well-defined, memorable, and self-sufficient form” (92). Games like *Zork* could be seen as working toward the same sort of pedagogy.

The claim that mental images are more personal than graphical images is more nuanced and more persuasive than the claim that mental images are more vivid than graphical images. Yet both claims are equally naïve. The mental images I form when reading a text are never entirely mine; they depend crucially on instructions given by the text, and also on my visual memory, my state of mind, and my repertory of cultural associations. The choice of how to imagine, say, the white house or the grue can never be an entirely free choice. Moreover, on reading the same text on two different occasions, I might form entirely different images. This suggests that mental images do not depend on an immutable core of subjectivity, or that if mental images are subjective in nature, then subjectivity itself is a time-bound, mutable phenomenon. Therefore, the premise that the mental images of IF are absolutely personal is another naïve claim. Although Infocom didn’t make this claim in precisely these terms, it seems to be the logical extension of claims they did make. Combining these two arguments – that

mental images are more vivid *and* more personal – we get something close to the graphological view of handwriting.

It can therefore be claimed that IF of the commercial era relied on (premises similar to those of) the graphological concept of handwriting. According to the implicit logic behind Infocom’s ad campaign, IF is superior to graphics-based games because A) imagination is more vivid than graphics, representing an unbounded power of picturing the world, and B) the pictures that one creates while making IF are absolutely specific to oneself. It remains to be shown, however, that commercial IF deploys a naïve *fantasy* of handwriting. I will demonstrate this by showing how in IF, the player’s mental images are manipulated, made to come to life and to perform practical work.

Visualizability

In terms of gameplay, it doesn’t matter how I imagine something like the rug, the white house, or the grue, or even whether I do so at all. Visualization of this sort is not strictly necessary to gameplay. However, the *ability* to accurately visualize the gameworld is often essential to meaningful play in IF.²³ When visualizability breaks down – that is, when room and object descriptions fail to accurately convey what the avatar can see – meaningful play and the ability to traverse the game successfully may be impeded.²⁴ For example, sometimes a room description mentions an object that’s not implemented. If the player tries to interact with such an object, the game is supposed to

²³ According to game designers Katie Salen and Eric Zimmerman, “meaningful play” is the criterion by which the success of game design is measured. They define it as “the process by which a player takes action within the designed system of a game and the system responds to the action. The *meaning* of an action in a game resides in the relationship between action and outcome” (Salen and Zimmerman 34).

²⁴ I want to distinguish here between *visualizability* and *visualization*. Visualizability is a property of the IF text. Visualization is a faculty of the player, which represents one of several possible modes of realizing visualizable information. It’s possible that players might understand a visualizable text in a nonvisual way. This is necessarily the case with blind IF players, discussed above.

reply that the object is not important. However, sometimes the game fails to acknowledge the object's existence and instead outputs its default response for commands that reference nonexistent objects: "You can't see any such thing" or "I don't see that here." This behavior is generally considered a design flaw or even a bug: "[I]t looks very clumsy if, having told the player that the room is decorated with striped wallpaper, the game responds with "You see no such thing" when the player tries to examine it" (Eve paragraph 15).²⁵ Such behavior creates a gap between the visual experience of the avatar and the verbal experience of the player. If the player can read about things the avatar can't see, this challenges the conceit that the room description represents the avatar's visual experience of the room. In terms of handwriting, the problem here is that the game has prompted the player to draw a mental picture of a given room which contradicts the game's own implementation of that room, and therefore the player's mental picture of the room is inaccurate and useless.

An opposite but perhaps more egregious breach of visualizability occurs when the text fails to mention objects that are implemented and that the avatar should be able to see. For example, in *+3* (Dave Baggett and Carl de Marcken, 1994), the avatar must give three objects to a troll in exchange for the right to cross a bridge. The INVENTORY command reveals that the avatar is holding just one object, and the game's single room contains no objects that can be acquired. The solution, not evident to many players, is to take off the avatar's shirt, shoes, pants, socks, glasses and/or underwear, thereby supplying the missing two items. This solution, though perfectly logical, is cruelly unfair

²⁵ Eve probably chose to use wallpaper as an example because of Andrew Plotkin's game *Delightful Wallpaper*, in which the avatar is an incorporeal ghost, and is thus unable to interact with the titular wallpaper or with any other object. Nonetheless, Plotkin includes many implemented objects in the game and goes to the trouble of including descriptions for all these objects. According to one reviewer, it was precisely these descriptions that made Plotkin's game more than a mere puzzlefest (Bond).

because none of these articles of clothing is mentioned anywhere in the game.²⁶ In particular, they aren't mentioned in the responses to the commands INVENTORY and EXAMINE ME. An experienced player would thus conclude that the avatar was wearing nothing important – which is to say, her or his clothing are not significant objects in the gameworld – because on looking at himself or herself, the avatar sees nothing worth mentioning (e.g., the parser reports nothing worth mentioning). The player would assume that the avatar was wearing clothes (otherwise the avatar's nudity might be mentioned), but that the clothes had no relevance to gameplay. The underlying assumption here – arguably a general convention of IF to which +=3 calls attention – is that everything *important* the avatar can see will be translated into descriptive text. Objects left unmentioned are assumed to be below the avatar's perceptual threshold, and thus either nonexistent, or irrelevant to the task of traversing the game. In drawing a mental picture of the gameworld and its objects, the player therefore focuses only on the objects specifically mentioned, because only these objects are worth the effort of picturing. +=3, however, tacitly instructs the player to draw *no* mental picture or a *false* mental picture of the avatar; it neglects to provide the player with information that needs to be incorporated into this imaginary self-portrait. Therefore, the player is unable to use this mental picture to facilitate his or her interaction with the game.

These examples lead us to an important realization: in IF, ekphrasis is *prescriptive*. In traditional ekphrastic texts, ekphrasis is a self-contained, autotelic

²⁶ In fact, this game was created specifically to prove that a puzzle could be simple and logical without being fair. During a debate on the rec.arts.int-fiction newsgroup, Baggett asserted that such a puzzle was possible, and created +=3 to demonstrate this point.

activity. The reader of a text like Ruskin's word-paintings or Diderot's *Salons*²⁷ is invited to visualize the images described by the text, but only for the sake of doing so; the reader needn't *do* anything with the images he or she forms. By contrast, the IF player engages in readerly visualization in order to facilitate his or her avatar's interaction with objects in the gameworld. The IF player constructs mental images of the gameworld in order to productively intervene in these mental images, in order to determine how he or she might be able to transform the world that the images represent. In IF, then, the pictures that the player "draws" are made to *do work*. These are images that *do stuff*, and they are also manual inscriptions, inasmuch as they carry the unique imprint of the player's idiosyncratic way of visualizing. At least, this is the standard conceit that IF obeys, and it meets my definition of a fantasy of handwriting – a *naïve* fantasy, because it predates the introduction of technologically superior alternatives to IF (i.e., transparent computer graphics), and because, at least in the Infocom era, it was offered in an uncritical, non-self-aware way. Yet readerly visibility is not the only type of "handwriting" that IF involves.

Mapping and Writing

Playing IF also involves another process that resembles handwriting and that *is* often essential to the task of completing the game: the task of mapping the gameworld. Most IF games include many rooms or rooms with multiple objects in physical contact with each other. In order to productively interact with the gameworld, the player must possess at least a minimal understanding of the spatial relationships between objects in each room and between the rooms themselves. Some puzzles in text adventures even

²⁷ For a discussion of these particular texts as examples of visual prose, see Wettlaufer, Alexandra K., *In the Mind's Eye: The Visual Impulse in Diderot, Baudelaire and Ruskin* (Editions Rodopi B.V., 2003).

require the player to figure out how non-contiguous rooms are spatially related. For example, in *Zork*, a treasure is located in the Drafty Room, but that room is accessible only by a narrow passage that the avatar can get through only by dropping all his/her items, including his/her light source. In order to get a light source into the Drafty Room, the player has to realize that that room is located directly below the Shaft Room, where there is a shaft containing a bucket that can be raised and lowered. Knowing this, the player can go to the Shaft Room, put a light source in the bucket and lower the bucket, then enter the Drafty Room with an empty inventory and collect the light source.²⁸ This puzzle depends on realizing how these two rooms, which are separated by many intervening rooms, relate to each other.

Such mental operations require constructing a mental or physical map, which involves metaphorical or actual handwriting. In playing an IF game – especially a game like *Adventure* and *Zork* that features a large explorable gameworld – the player needs to literally or metaphorically draw a picture of the world. Indeed, the very origins of the genre lie in an act of picturing a space. *Adventure* was created in tandem with a hand-drawn map of part of Kentucky’s Mammoth Cave, which was based on computational line plots of data gathered by Crowther and other cavers with compasses and measuring tapes (Jerz para. 59). Indeed, it is often mistakenly believed that Crowther’s original version of *Adventure* was the *same* artifact as this map (Jerz paras. 7, 61).

Early IF players repeated this primal scene of handwriting by creating their own handmade maps of the gameworlds created by Crowther and others. As Eve observes,

²⁸ Other puzzles that require similar acts of spatial visualization include the coal mine puzzle in *Sorcerer* (Steve Meretzky, 1984) and the puzzle of getting a light source upstairs in *The Muldoon Legacy*. I’m describing the experience of an ideal player here, not my own experience – I admit I used online walkthroughs to solve all these puzzles.

“[t]he totality of rooms in a given work of IF is often referred to as the *map*” (para. 7), “probably because someone designing a work of IF containing more than a handful of rooms almost certainly needs to draw a map indicating their spatial relations before attempting to write the game, and players often find it useful to draw schematic maps as they play” (Eve 2007 fn5). Montfort describes the appearance of such maps:

Tracy Kidder noted that one *Adventure* player’s desk held “roughly drawn maps. They consisted of circles, inside of which were scrawled names such as Dirty Passage, Hall of Mists, Hall of the Mountain King . . . Webs of lines connected the circles, and each line was labeled, some with points of the compass, some with the words up and down. Here and there on the maps were notations — ‘water here,’ ‘oil here,’ and ‘damn that pirate!’” (Montfort 2004, n.p.)

Two decades later, when I started to play IF extensively, I facilitated my own understanding of IF gameworlds by drawing maps in ink on printer paper, although by that time dedicated IF mapping software was available. Perhaps this explains my sense that the navigation of an IF world is in some sense an inscriptive act.

In its earliest period, IF also involved other forms of literal inscription. Montfort observes that “early interaction with computers happened largely on paper: on paper tape, on punchcards, and on print terminals and teletypewriters, with their scroll-like supplies of continuous paper for printing output and input both” (Montfort 2004, n.p.). For example, Crowther wrote *Adventure* on an ASR-33 Teletype, an interface that operated in a similar way to a typewriter. As described in the introduction, typewriting seems less embodied removed from handwriting, but also less disembodied than word processing, since it preserves a visible causal connection between the writer’s act of manual engagement and the appearance of text. Montfort even speculates that Crowther may have corrected his code in pen or pencil, as was common at the time: “debugging and revising *Adventure* is likely to have involved not just computational

reasoning, but proofreader's marks" (2004, n.p.). As Montfort explains at length, IF originated in an era when paper, not the screen, was not only the standard medium of human-computer interaction but also the standard surface used for reading and writing in general. At its origin, IF was substantially an inscriptive medium, and this fact contributes to my perception that playing IF is still, in some way, an act of making images so as to do things with them.

Interface

Finally, the IF interface is phenomenologically similar to handwriting. As I touched on in my discussion of the grue, words in IF are also *things* and *actions*. To interact with a thing, the player must name it; to do an action, the player must name that action. Thus, being aware of a thing's existence is equivalent to knowing its name; in order to know that an object is implemented, the player has to notice that that object is mentioned in a room or object description. This is another reason why +=3 is unfair: the player doesn't know s/he can interact with the shoes, socks, etc., because these *words* are mentioned nowhere in the game. Similarly, in order to play IF effectively, a player needs to know common verbs like LOOK, GET and EXAMINE, and some IF games even include special verbs that can only be used if the player has already learned them. The classic examples here are the magic words XYZZY and PLUGH in *Adventure*, which teleport the avatar to the walls on which where they are written. As additional examples, in *Arthur*, Merlin gives the avatar the power to transform into several animals, and the player triggers these transformations by using the word CYR. In *Once and Future* (G. Kevin Wilson, 1998), after the avatar provides assistance to an old man, the man gives the player/avatar the ability to summon him with the command SAY "MAN, OLD MAN, HELP ME." In these cases, acquiring a magical power is equivalent to learning the word

that triggers that power.²⁹ The conceit, at least, is that in IF, nouns are things and actions are verbs.

In IF, then, to name an action is to do it, which seems to imply that an IF player can do anything s/he can name. Because the text-based parser allows the player to type any word in the Latin alphabet, the player can try any command s/he can think of, and this fact creates a perception that any verb in the English language might potentially be recognized by the game – that the range of diegetic operator acts the player can perform is limited only by the player’s vocabulary (cf. Galloway 26). By contrast, in graphical adventure games (at least those that don’t use a text-based parser, as *Mystery House* and *King’s Quest* did), the player can only choose from a limited menu of predefined actions. For instance, in LucasArts’s SCUMM engine games, the player directs the avatar’s actions by choosing from an onscreen menu of verbs (later replaced by icons). The first such game, *Maniac Mansion* (1987), offered a list of 15 verbs (Figure 3-3), but in later games the number of available verbs got progressively shorter. In *Full Throttle* (1995), the player’s entire range of options is represented by four icons (an eye, a tongue, a fist or a boot) whose meanings change depending on context (Figure 3-4). In *Myst* (1993) and similar games, there isn’t even a menu; the only way the player can choose an action is by deciding where on the screen to click.

²⁹ This is not strictly true, as the commands just cited only work if the *avatar* has learned them. In *Once and Future*, if the player tries to SAY “MAN, OLD MAN, HELP ME” before having learned that phrase, the game replies “Now now, no cheating. You haven’t heard that phrase anywhere in this game yet.” *Arthur* behaves similarly if the player tries to use the CYR command prematurely. Therefore, both these magical powers actually belong to the avatar, rather than the player. However, the (mis)perception still exists that these commands are triggered by the act of typing – that to type a command is to enact that command. Note also that these two commands aren’t exactly comparable, as one is a command used by the player, while the other is a phrase said by the avatar. See also footnote 9 to p. 136 above.

This comparison suggests that IF gives the player more interactional freedom than graphical adventure games, insofar as the player's repertory of possible actions in IF is in theory far larger. In IF, the player seems to have the ability to do anything. The logical consequence of this (seemingly) unbounded freedom of input is that whatever I *do* type seems to represent a choice out of an infinite number of equally possible outputs, and that choice must therefore be in some sense a *subjective* one. The words I type are uniquely *my* words and actions. And since these words are also actions, playing IF involves making inscriptions that *do stuff*, that come to life, and that simultaneously serve as records of the writer's unique personality. This, then, is another sense in which IF is the site of a naïve fantasy of handwriting. I'm not necessarily claiming that Infocom consciously deployed the fantasy of handwriting in these exact terms, although Infocom ads do make claims that verge on such a deployment of the fantasy of handwriting; for example, one 1983 ad claims that "unlike ordinary computer games with their pre-programmed action[,] Infocom's interactive fiction stories grow out of your individual imagination, because the actions you choose to take in them shape the course of events" ("Infocom - Advertisements"). A 1984 Infocom product brochure states, "an Infocom work of fiction can never be complete until you become a part of it" (*Incomplete Works*). In general, I'd suggest that the invocation of the fantasy of handwriting is somehow inherent to the IF gaming situation. At least to an inexperienced player, IF seems to offer unlimited interactional and expressive freedom.

Again, this is a *naïve* fantasy of handwriting because, of course, IF never allows anything close to perfect interactional freedom. In the first place, a given IF parser only ever *understands* those verbs that are included in the standard library of the game's

programming language, or that are defined in the game's source code. These verbs necessarily represent an extremely limited subset of the verbs in the English language.³⁰ Thus, in any given IF game, the player is free to *attempt* any action s/he can name, but only a very small number of actions will have any effect on the game.

This is a common source of frustration, as Matt Barton observes:

Although adventure games [like] *Colossal Cave Adventure* and *Zork* may provide the illusion of "total freedom," in actuality the player is quite limited by the relatively small set of commands recognized by the parser. Indeed, one of the most common complaints hurled against any adventure game (textual or graphical) is that only one solution to a problem has been implemented, when the player can easily imagine several very plausible alternatives (27).

IF games may *seem* to an uninitiated player as though they offer unlimited interactional freedom, yet they only ever recognize a very limited subset of all the possible inputs the player might enter. Even when an IF game does accept the verb that the player inputs, it may misunderstand the player's use of that verb. Harpold's essay "Screw the Grue" is named after a command that he entered while playing *Zork*, intending it in the sense of "copulate with the grue," that is, as an invective directed toward the annoying monster. This definition of the game was not, however, included in the game's vocabulary. The game understood the verb to mean "apply a screwdriver to the grue", an action which the game did understand in part – some objects in the game could accept a screwdriver in this way – but not as an action that could be applied to grues. Therefore, the game parser replied that Harpold was using the command "screw" in a way that it didn't understand.

³⁰ For example, see <<http://www.inform-fiction.org/manual/html/tables.html#tbl6a>> for a list of all the standard actions included in the Inform 6 library. Note that some of these actions correspond to many different verbs, so in many cases the player's choice of one word over another (e.g., TAKE over GET) is irrelevant to gameplay.

This example demonstrates that in playing IF, the player cannot expect to be able to take any action he or she desires, even though the IF interface seems to offer that ability. But Harpold goes further; he notes that the game properly understood the import of his next command, “fuck the grue,” but discouraged him from pursuing this course of action by replying “What a loony!” The game effectively *directed* him to play in an appropriate way, which does not include copulating with or insulting the grue. By complaining that Harpold was using commands improperly, the game forced him to adapt his play behavior to the game’s requirements, the “back-end limits of the game’s database” (n.p.). (This was an example of recapture; see p. 145 above.) In playing IF, then, a player gradually learns to impose limits on his or her *own* interactional freedom, adapting his or her behavior to (his or her expectations about) the game’s vocabulary; an implicit contract between player and game develops, in which the player agrees to only use certain standard verbs, if the game agrees to understand those verbs. At the same time, the game agrees *not* to require the player to use *non*-standard verbs, at least not without notifying the player of these verbs in advance. Frustrating situations in IF often occur when a game doesn’t understand a standard verb, or when the game requires the player to perform an action, but only accepts a nonstandard verb.³¹

Thus, IF never offers players the unbounded freedom associated with the graphological concept of handwriting. The player’s interactional freedom is always

³¹ This latter situation is known as “guess-the-verb.” An example occurs in one of the possible ending sequences of *Once and Future*, where the demon Jolinaxas throws the avatar to the floor and breaks his leg, damaging the floor in the process. At this point, the only way the player can win the game is by having the avatar use his other leg to break through the floor. However, in playing the game, I couldn’t figure out the proper command for doing this, and had to be told that the only acceptable command was KICK. Other alternatives, like JUMP, STOMP or HIT FLOOR WITH FOOT, don’t work. This situation was very frustrating because KICK, in this sense, is an uncommon verb; it’s not one of the verbs that I, as an IF player, expect to have to use.

constrained by affordances of the IF system and by the player's horizon of expectations. This is not a bug but a feature. As Karen and Joshua Tanenbaum argue, absolute interactional freedom is not compatible with the specific nature of the gaming situation, which they understand as defined by productive constraints:

In fact, as Chris Crawford has pointed out, the ultimate interactive narrative software system already exists: Microsoft Word. If the goal of game design was to make games that were simply toys, bereft of meaning or message, this notion of unrestricted agency would be sufficient. However, we *need* constraints in order to make interactive experiences meaningful and pleasurable. Most formal definitions of games rely on the presence of rules and constraints in order to define and bound the play experience.

If the gaming situation depends on the pleasures of playing within rules and overcoming constraints created by others, then absolute interactional freedom the gaming situation, turning a game into a software toy. Therefore, to the extent that it purports to provide such freedom, the commercial IF game promotes a naïve fantasy of handwriting.

IF as Nostalgic Fantasy of Handwriting

Ekphrasis vs. Graphics

In the commercial era, IF was the site of *originary* fantasies of handwriting. With the arrival of sophisticated computer graphics in the mid-'80s and early '90s, IF became an object of nostalgia and therefore a site of *nostalgic* fantasies of handwriting.

Until about the mid-1980s, IF was superior to graphical video games in terms of its ability to represent a large, immersive gameworld. Graphical video games predate *Colossal Cave* by at least 15 years, but these games ran on mainframes or dedicated arcade machines. The creation of sophisticated graphics was beyond the technological capabilities of contemporary home computers. Displaying text was much less difficult. For example, the first commercially successful personal computer was the Osborne 1,

released in 1981. This computer had a monochrome screen incapable of displaying bitmap graphics (Wikipedia, “Osborne 1”). On such a platform, a visual depiction of a building with keys, a brass lamp, food and water on the ground would have been out of the question. Text made it possible to “show” visual phenomena that could not have been depicted with the graphic resources available (Figure 3-5). IF also had an additional commercial advantage over graphics because of its cross-platform nature. Infocom games were designed for the Z-Machine, a “software computer [which] could be implemented on many different platforms, including almost all of the popular microcomputers in the United States during the 1980s” including business machines as well as dedicated gaming machines (Montfort 2005, 126). Since any commercial computer could display text, all the Infocom games could simultaneously be ported to any new platform simply by writing a new implementor for that platform. The use of graphics, by contrast, would have made cross-platform availability an insurmountable obstacle.³²

For these and other reasons, the use of ekphrasis rather than graphics made the commercial success of IF possible. According to the standard view of the genre’s history, however, IF’s reliance on text was also the cause of its commercial decline. Over the course of the 1980s, as the graphical capabilities of home computers advanced, the new genre of the graphical adventure gradually rendered IF commercially obsolete.³³ The balance started to shift in favor of graphics after the 1984 release of the

³² The most sophisticated treatment of the text-rendering capabilities of early video game platforms is Whalen 2008. Note that IF is still much less platform-dependent than most graphical video games, which makes IF one of the easiest video game genres to teach.

³³ See Montfort 2005 for a detailed account of the history of IF. Douglass critiques Montfort’s historical account by arguing that the commercial era was in fact an anomalous exception to the norm of independent development of IF [19–20].

EGA graphics standard, which could display 16 colors simultaneously (M. Wolf 2008, 84). *Mystery House*, the first graphical adventure, featured crude vector graphics drawn with a light pen, but in *King's Quest* (1984), Roberta Williams took advantage of the advanced rendering capabilities of EGA to create a world with numerous rooms and objects, which was displayed in a limited 3D perspective. From this point on, graphical adventure games were capable of depicting gameworlds analogous to those described in IF: worlds with numerous interconnected rooms, each of which contained numerous stationary and movable objects. Concurrently, the text adventure genre went into a state of commercial decline from which it has never recovered. Infocom stopped producing text-based games after 1989, with the sole exception of *Zork: The Undiscovered Underground* (1997), which was ironically created as publicity for the graphical game *Zork Grand Inquisitor*. The last successor to Infocom, Legend Entertainment, shifted its focus from text adventures to graphical adventures in 1993. Since then, for-profit commercial text adventure games have been rare, and no contemporary game has come anywhere near the level of popularity formerly enjoyed by Infocom games.³⁴

It is often claimed that the commercial decline of IF occurred because the primary purpose of IF is to create a simulated, interactive gameworld; when graphics could do this more effectively than IF, IF's *raison d'être* was eliminated. David Myers observes that in terms of gameplay, IF and graphical adventures are formally identical: "After *ADVENT* [i.e., *Adventure*], the adventure genre moved through several superficially distinct forms: the original text adventures; graphic adventures (e.g., *Myst*); and third-

³⁴ Notable commercially released works of IF include Kent Tessman's *Future Boy* (2004) and Peter Nepstad's *1893: A World's Fair Mystery* (2002), which was marketed not to dedicated gamers but to history buffs

person graphic adventures (e.g., *King's Quest*). The differences among these were the result of differences among game signifiers; each employed the same basic signification process" (15). In Galloway's terms, in all these games the player engages in the same diegetic operator acts – exploring space, acquiring and interacting with objects.

Therefore, the purpose of textual descriptions in IF is the same as the purpose of graphics in graphical adventures: to show the player the spaces that the avatar can explore and the objects s/he can interact with.

Critics typically assume that graphics serve this purpose more effectively than text, because of the superior transparency of graphics. For example, Espen Aarseth notes: "Images, especially moving images, are more powerful representations of spatial relations than texts, and therefore this migration from text to graphics is natural and inevitable" (102). Similarly, Mark J.P. Wolf writes that "Part of the reason for the use of all text, at least initially, was the difficulty of doing graphics" (M. Wolf 2001, 13), implying that graphics, if available, would automatically be the preferred option. Julian Dibbell argues along similar lines in a discussion of *Adventure*:

It's hard to believe that that world once represented the high frontier of computer gaming. Where players of latter-day quests like *Myst* point-and-click their way through complex graphical environments of an almost liquid radiance [...] *Adventure* was strictly hunt and peck – its game space nothing more than a collection of laconic text descriptions navigated by means of simple two-word commands ("go north," "climb beanstalk," "get coins," "open clam"). (135)

Dibbell is dissatisfied with *Adventure* primarily because its text is written in an extremely sparse style (which is certainly true), rather than because it uses text as such, but his rhetoric nonetheless sets up a stark contrast between the "liquid," "radiant" visuality of *Myst* and the bare textuality of *Adventure*. Dibbell damns *Adventure* with faint praise by implying that it is important less in its own right than as a precursor to other more

notable games.³⁵ Views like this imply that the gaming industry follows a teleological progression towards ever-greater transparency, and that the decline of IF was therefore foreordained. On the other hand, some authors characterize the gaming industry's ideology of transparency as unfortunate, and describe IF nostalgically as having been sacrificed on the altar of progress. Aarseth regrets that the text adventure game, a "young, vigorous, if somewhat bland tradition of textual entertainment . . . was quickly overrun by the entertainment market" (128]) More recently, Andy Klien began a 2005 article on IF by writing: "Only once in my life have I seen a wonderful medium effectively wiped out by new technology" (qtd. in Douglass 2007, 21–22). IF has now become an object of nostalgia.

What all this ignores, however, is that the past two decades have seen an explosion of IF production. The creation of robust IF programming languages such as TADS (Michael Roberts, 1987) and Inform (Graham Nelson, 1993) enabled individual programmers to write their own IF games. *Curses* (Graham Nelson, 1993) was a watershed text, serving as proof that individuals could write text adventures comparable in size and sophistication to earlier commercial works. The Usenet groups rec.arts.int-fiction (created 1987) and rec.games.int-fiction (created 1993) and the Interactive Fiction Archive (founded in 1992 by Volker Blasius and Dave Baggett) offered forums

³⁵ A final example of such views of text adventures is the online animation "video games," an installment in the Strong Bad Email series appearing on homestarrunner.com. On being asked what it would be like if he were in a video game, Strong Bad describes several old-fashioned video games about him, the last of which is a text adventure, *Thy Dungeonman*. Strong Bad characterizes the game as being "maybe for those intellectual people with better imaginations," but its primary features are archaic language and unresponsiveness to the player's commands: on entering the command "get ye flask," the player is inexplicably told "You can't get ye flask!" Three actual *Thy Dungeonman* games were later released, the last of which includes crude graphics. *Thy Dungeonman* might be read as a parody of or nostalgic homage to text adventures, but it also implies that the text adventure is an archaic genre, a thing of the past which deserves to stay there.

for discussion and free distribution of examples of this new breed of IF. Contests such as the annual Interactive Fiction Competition (first held in 1995) encouraged the development of new works in the genre.

One might easily think that to create IF nowadays is to engage in restorative nostalgia. Indeed, nostalgia for the commercial era has played a significant role in contemporary IF production. A number of post-commercial IF games are sequels or explicit homages to Infocom games; Baf's Guide to the IF Archive lists over 30 different games that use the setting of Infocom's *Zork* and *Enchanter* series.³⁶ Even those games that aren't explicit homages to commercial games often include references to these games; for example, it is very common for post-commercial IF games to provide a humorous response to the command XYZZY.³⁷ In a more abstract sense, any IF game that includes the standard tropes of the text adventure genre (e.g., treasures, a scoring system, a large explorable gameworld, or a fantasy setting) is likely to be perceived as having been influenced at some level by *Adventure* and *Zork*. Post-commercial IF, then, might be seen as a restorative-nostalgic medium which seeks to reverse the teleology of technological progress and return to an earlier era of video game history. As Zach Whalen and Laurie N.F. Taylor argue, this sort of nostalgia plays an important role in the contemporary video gaming scene: "As game technology has improved and as daily life becomes more saturated with media technology, . . . early video games have also become objects of nostalgia in that their low-resolution aesthetics have come to be

³⁶ Notable examples include *The Meteor, the Stone and a Long Glass of Sherbet* (Graham Nelson, 1996); *Spiritwrak* (D.S. Yu, 1996); *Frobozz Magic Support* (Nate Cull, 1996); *Zero Sum Game* (Cody Sandifer, 1997); and *Enlightenment* (Taro Ogawa, 1998).

³⁷ Several hundred examples of such responses are catalogued at <<http://plover.net/~davidw/sol/xyzzzy.html>>.

perceived as a retrospective ideal” (7). Under this reading, then, the handwritten aspects of IF would be one of the things for which contemporary IF authors and players are nostalgic.

However, contemporary IF also often seeks to do something more than to trigger nostalgic recollections of the genre’s golden age. IF is also a medium with artistic intentions. As discussed above, IF is now widely understood as a form of electronic literature, and IF games are often included in the developing canon of the latter genre; for example, IF games were included in both volumes of the anthology *The Electronic Literature Collection*.³⁸ From being a commercial genre, IF has now become, at least in part, an artistic or auteurist genre. IF authors now develop their works primarily for an audience of connoisseurs and of fellow IF authors, meaning that IF now follows what Bourdieu calls the autonomous principle of hierarchization (38); in simpler though obviously more reductive terms, IF has become an art that is practiced for its own sake.³⁹

If IF has become an auteur- and “art”-oriented medium, however, then that means it has to confront the question of its artistic legitimacy. IF can no longer justify its existence on the grounds of the superior transparency of text as compared to images. It is usually conceded that graphics are now the more effective medium in terms of mimesis or transparency – it seems counterintuitive to claim that *Zork* offers a more vivid, immersive visual experience than *Myst*, let alone more modern games like *Grand Theft Auto IV* or *Final Fantasy XIII*. Alternative justifications must therefore be found for

³⁸ See for example <<http://collection.eliterature.org/1/>>.

³⁹ I make this point here only as a way of introducing the argument that follows. However, in future work I’d like to explore this claim further and to examine how IF employs tropes of handwriting as a signifier of literariness.

eschewing the use of graphics. In order to establish IF as a viable mode of artistic production, contemporary IF authors need (or believe they need) to show that text still has advantages over graphics, that text has affordances that graphics lack.

I now want to argue that one way in which IF authors have sought to do this is by appealing to *reflective* fantasies of handwriting (though not, of course, in those precise terms). Compared to graphical video games, IF seems more conformable to certain privileged values such as subjectivity, personality and authenticity. Yet for precisely this reason, IF can be a way of encouraging players to think critically about these values and about their continuing importance in the contemporary era. I will demonstrate this with close readings of two post-commercial IF works, Emily Short's *City of Secrets* and Nick Montfort's *Ad Verbum*. I will argue that these games deploy critical fantasies of handwriting on two levels: respectively, the level of readerly visualization and the level of the IF interface.⁴⁰

***City of Secrets* and Ekphrasis**

Emily Short is among the most prominent IF authors of the post-commercial era, having won the 2006 Interactive Fiction Competition and multiple XYZZY Awards. Perhaps Short's best-known work is her first game, *Galatea* (2000), which was included in the original *Electronic Literature Collection* and which could be described as an animated statue. *City of Secrets* (2003), however, has been called "possibly Short's most polished work" (Muckenhaupt n.p.) and which represents the most sophisticated demonstration of her approach to IF visuality. The game was commissioned by a San

⁴⁰ In Kashtan 2011, which derives from an earlier version of this material, I came to somewhat different conclusions about *Ad Verbum*.

Francisco musical group called Secret-Secret, who provided Short with the basic plot, but Short finished the game on her own initiative when the commission fell through.

City of Secrets is a game about spaces. The game takes place in a fictional world which bears some resemblance to the real world, but is clearly not the real world, as demonstrated by the fact that magic works.⁴¹ The avatar in this game is a factory worker who is traveling to attend a wedding. While passing through “the City,” a major cultural center the avatar has never visited before, the avatar’s train breaks down (on purpose, as it turns out). The player/avatar’s explicit goal at the beginning of the game is merely to pass the time until the next train leaves by seeing the local sights. Slightly later, the player is asked to locate a female rebel named Evaine, who is believed to be in the remote northwestern section of the City. In both cases the player’s goal is not to collect the objects located in a space, but merely to explore that space. Whereas the puzzles in a typical text adventure involve figuring out how to acquire objects, the puzzles in *City of Secrets* (which are deliberately simple, as this game was designed for beginning players) usually involve overcoming barriers to further exploration. The primary reward the player gets for solving these puzzles is the ability to explore previously unseen spaces. The City itself is inherently worth exploring because it’s a tourist destination, a place of great historical and cultural importance. Moreover, as an imaginary space, the City is just as unfamiliar to the player as it is to the avatar (if not more so), and therefore

⁴¹ For example, the bathroom in the hotel contains some complementary toiletry items. Most of these are unremarkable, but instead of a tube of toothpaste there is a canister of “tooth paint,” labeled “Dr. Brinner’s Most Elegant Tooth Polish * Original Formula for Three Hundred Years * Satisfaction Guaranteed * Not for use by those allergic to Magic.” Using the tooth paint produces the response “You paint your front teeth meticulously with the polish. And now your canines literally twinkle when you smile. Ting! Just like in the ads.” This is one of my favorite moments in the game, because it produces an uncanny sense that the gameworld is superficially similar to the real world, yet operates by fundamentally different rules.

the player is motivated by the same desire as the avatar: to experience this unfamiliar and interesting place.

To create a game like this seems like an odd decision, if we adhere to the argument that text is inferior to graphics in its ability to create immersive, mimetic representations of an explorable, immersive gameworld. For example, *City of Secrets* came out two years after *Grand Theft Auto III*, which featured a similar emphasis on spatial exploration and unlocking barriers to additional exploration, but which also featured state-of-the-art graphics.⁴² Why bother representing a gameworld in words, when representing a gameworld is what graphics do best?

This is the same sort of question that confronts contemporary ekphrastic poetry. Scholars of ekphrasis have often seen this trope as a means by which poetry, and verbal art in general, asserts its artistic legitimacy and cultural relevance relative to visual art. James Heffernan theorizes ekphrasis in terms of the *paragone*, the struggle for supremacy between word and image (136). W.J.T. Mitchell argues that ekphrasis is the genre in which text (in the narrow sense given above) confronts its other: “Ekphrastic poetry is the genre in which texts encounter their own semiotic ‘others,’ those rival, alien modes of representation called the visual, graphic, plastic, or ‘spatial’ arts” (9). Elizabeth Bergmann Loizeaux suggests, on the other hand, that ekphrasis may suggest a less competitive relation between the so-called sister arts: it may be motivated by “such modest, and profound, feelings as companionship or friendship, the terms in which poets often describe their ekphrastic motives” (15). Under any of these models, however, ekphrastic literature expresses a certain anxiety about the value of

⁴² See Whalen 2006 for a detailed examination of spatiality in the *Grand Theft Auto* series (specifically *Grand Theft Auto: San Andreas* [2004]).

words, a doubt as to whether words *can* do anything that images can't, and perhaps do better. For example, Loizeaux begins her book by quoting Frank O'Hara's "To Larry Rivers": "And what poet ever sat down / in front of a Titian, pulled out / his versifying tablet and began / to drone? Don't complain, my dear, / You do what I can only name" (1).

Moreover, in the present cultural moment, ekphrasis and visually oriented writing in general may express a certain anxiety for an earlier time when the cultural power of the image was less than it is now. Ekphrastic literature has perhaps always been both fascinated and repelled by the apparently superior mimetic power of "images" to "text." As Murray Krieger argues, ekphrasis entails "the defensive concession that language, as arbitrary and with a sensuous lack, is a disadvantaged medium in need of emulating the natural and sensible medium of the plastic arts" (12) – although he adds that ekphrasis also depends on "the prideful confidence in language as a medium privileged by its very intelligibility." The more visual media appear to increase in ubiquity and mimetic power, the more unequal the terms of this relation become. Loizeaux observes that twentieth-century poets' interest in ekphrasis arises from ambivalent reactions to the growing cultural importance of the image:

The widespread presence of ekphrasis in twentieth-century poetry can be understood as both a response to and a participant in what W.J.T. Mitchell has called "the pictorial turn" from a culture of words into a culture of images that began in the late nineteenth century with the advent of photography and then film, and has accelerated since the mid twentieth century with the invention of television and, now, digital media. Excited – and haunted – by a sense of images' increasing power in western culture, poets have taken up ekphrasis as a way of engaging and understanding their allure and force. (3–4)

At the same time that images have attained unprecedented cultural power, poetry has now "further lost popular readership and its significant social role" (6). Explicit

confrontation with the image now becomes a way of justifying the continued appeal of poetry, if not its very existence. An obvious motivation behind this project of self-definition is the desire to justify the continued existence of ekphrastic poetry (if not of poetry itself) now that the commercial and cultural importance of poetry have been usurped by visual media. One way to argue for the continued importance of visually oriented text (of what I, in an earlier version of this project, called “verbal visuality”) is to argue that the images prompted by ekphrastic or descriptive texts are different in kind, not degree, from the images of visual media. This might entail claiming that ekphrastic poems and descriptive prose require the reader to “draw” images on the “canvas” of his or her mind, and that by virtue of this means of production, such images are fundamentally different from the pre-rendered images that are provided by works of visual media.

As we’ve seen above, Infocom made exactly this sort of argument, but they made this argument in a naïve way, by claiming that mental pictures are more vivid and immersive than real pictures. I noted above (page 149) that this makes little intuitive sense. It’s hard to accept that say, *City of Secrets* offers a richer *visual* experience than *Grand Theft Auto III*. Presumably most people are neither able nor inclined to create mental pictures that rival the transparency of contemporary computer graphics. Generally speaking, mental pictures are just not that vivid. At least in my experience, they are flickering and inconsistent; they are there one instant and gone the next. They are difficult to retain in memory, and seem to lack the level of detail found in photographs or computer graphics.⁴³

⁴³ Whether this was always the case is an intriguing question which is outside the scope of the present study. The classical technique of artificial memory involved the memorization of large and

But perhaps what readerly images lack in vividness, they make up in personality. Readerly images may not be as vivid as direct perception, but they are specific to the individual reader: every reader of a given text sees something different. This is the point that Peter Schwenger emphasizes in his study of readerly visuality: that readerly images result from a complex interplay between the reader's visual memory and the writer's instructions as to what to visualize.

“[L]iterature consists of a steady stream of erased imperatives,” according to Elaine Scarry, imperatives that are often instructions to produce mental pictures. Yet no matter how detailed or precise those instructions may be, they are never comprehensive enough to override the individual's memory bank of images and associations. These play upon the author's dictated pictures, an obligato of the unconscious, of memory and desire (Schwenger 4).

We've already encountered the claim that readerly images are specific to each reader (p. 150 above), and Schwenger supports this claim, suggesting that readerly images depend on the reader's visual memory. However, Schwenger reminds us that readerly visuality is not a matter of personal *choice*; when reading I don't consciously summon images to my mind; rather, they seem to come of their own accord. As Calvino observes, writers from Dante to Douglas Hofstadter have observed that mental images seem to come from nowhere or to “rain down into the fantasy” (87), and have offered various, often fanciful, conjectures as to where such images come from. Presumably, mental images come from “the individual's memory bank of images and associations”, and not from, say, “a light that is formed in heaven”, as Dante suggested (qtd. in Calvino

extensive artificial spaces (e.g. palaces) filled with a wide variety of objects. It's difficult to imagine nowadays how such feats of memorization could have been possible. Frances Yates observes: “We have to try to imagine the memory of a trained orator of that period as architecturally built up with orders of memorised places stocked with images in a matter to us inconceivable” (43). Equally inconceivable to us, however, is the feat of accurately visualizing all these places and images. A logical hypothesis is that the development of writing must somehow have made such vivid visualization unnecessary, but I am not able here to explore this hypothesis further.

82). But these images seem to come to mind of their own accord, and not as the result of a conscious act of will.

Schwenger further complicates the claim that mental images are personal by arguing that mental images are also authorially-determined. They depend on the author's "instructions to produce mental pictures." Handwriting in this way becomes a site of a complex and shifting encounter between authorial instructions and readerly visuality. Schwenger devotes an entire chapter to the uncanniness of the process in which readers give up part of their authentic selfhood to enter into the literary experience. The ending of Cortázar's "Continuidad de los parques," in which a reader is killed by the protagonists of the book he is reading, is a figure for the uncanny absorption that reading involves (Schwenger 12); Schwenger also compares the reading experience to ghostly possession. At the same time, however, the reader never *entirely* gives up his or her subjectivity. "Now their [i.e., readers'] imagining is placed at the service of an other, a fictional character that they become, though only up to a point. Neither one nor the other, readers are that third thing that hovers and hesitates, ghostlike, in a space between" (25). So even the most transparent reading experience still involves some sort of contribution from the reader. The author's images aren't sufficiently vivid or insistent as to interfere with the process of readerly visualization, and this claim is also applicable to authorially supplied graphical images – Roberta Williams's images in *Mystery House*, or even Rand and Robyn Miller's images in *Myst*, aren't vivid enough to forestall any and all visualizing activity on the player's part. Readerly visuality, then, is like handwriting – but it's like handwriting on a palimpsest.⁴⁴

⁴⁴ I'm reminded of an ancient Jewish maxim: "One who learns Torah in his childhood, what is this comparable to? To ink inscribed on fresh paper. One who learns Torah in his old age, what is this

In that case, if IF has any advantage over graphical video games in terms of visualization, then that advantage is simply that IF interferes with the reader's visualizing activity to a lesser degree than graphical video games do. Although this is more a difference of degree than of kind, it suggests that IF can potentially be more effective than graphical games in facilitating an encounter between authorial "instructions to visualize" and the reader's power (or compulsion) to visualize, and more generally between the subjectivity of the author and that of the reader.

In the room and object descriptions in *City of Secrets*, Short tries to facilitate such an encounter. Her descriptive language is precise and detailed, but also deliberately limited in terms of what it reveals. However, by deliberately limiting the visual information she provides, Short encourages the player to supply this information by exercising the faculty of readerly visibility. For example:

Sun Court

The courtyard is paved in stone, and inlaid at the center with a wheeling gold sun.

Streets lead out north and south, and a narrow alley west.

On every side the buildings rear back, all metalwork and awnings at the lower levels, sheer plaster above. The most magnificent, however, is the white stone temple at the east side of the court, many stories high and faced with columns and statues. (Figure 3-6)

This description accomplishes the practical purpose an IF room description: it enumerates the exits from the room and the implemented objects in it, thereby making this part of the game's geography visualizable. However, the descriptions is in no way ultraprecise; it provides insufficient information to permit the player to visualize exactly

comparable to? To ink inscribed on erased paper" (*Pirkei Avot* 4:20). The analogy, of course, is that the reception of new information is always conditioned by information already present. A more recent metaphor for the non-emptiness of the mental "writing surface" is Freud's mystic writing pad.

what these spaces look like. Short declines to describe the architectural style of the buildings or to specify the number of buildings or the things depicted in the statues. This omission of detail is a deliberate choice on Short's part, since she has also written descriptions which are obsessively detailed. Her 2000 game *Metamorphoses*, for example, contains a number of murals which can be both examined and looked at through a magnifying glass, revealing additional details which can themselves be examined. Short suggests: "In writing *Metamorphoses* I did think of what I was doing as specifically ekphrasis, and that's one reason there are so many layers of detail within the scenery, especially the murals: I was trying to capture a little of the sense, found in Ovid and Catullus, that worked pictorial objects have astounding levels of detail" ("Post Position").⁴⁵

In *City of Secrets*, however, that the omission of details from the text creates gaps in the player's visualization of the scene, gaps which the player then has the opportunity to fill. The reader therefore engages in the operation that Wolfgang Iser calls "filling in," which, as Schwenger argues, operates on a visual as well as a propositional level: Of such syntheses the basic element is the image" (57). (Note that "filling in" could also be read as a metaphor for handwriting.) We could also compare the reader's reception of this description to Scott McCloud's concept of closure, in which the reader of a comic creates mental images that fill the gaps (or gutters) between the comic's panels (66–68).⁴⁶ If the concept of closure was designed to account for texts that consist of

⁴⁵ This post was a response to a blog post in which Nick Montfort discussed my paper at the 2009 DAC conference, which represented an earlier stage of the present project. I'm thankful to both Montfort and Short for their generous assistance with my work, including permission to reproduce images from their games.

⁴⁶ Douglass claims that closure operates in IF at the level of the command line, where the player makes "an attempt (which may be frustrated) to discover or solve the gap between the current state of the

sequences of images, then it applies to the IF text insofar as IF, as encountered by the player, involves precisely such a sequence: in playing IF the player is presented with a series of visual experiences translated into verbal terms. Closure is what sutures the gaps in this sequence of disparate images.

However we define this process, clearly it operates in a different way for each individual player. Even if Short's room descriptions were more detailed, they would be unable to supersede the reader's preexisting mental pictures of analogous rooms. For example, however Short described the Sun Court temple, I would inevitably imagine it as looking like the U.S. Capitol; another player, however, might imagine it as resembling some other building. However, Short's descriptions condition the way the player visualizes, because these descriptions are not just sober, objective accounts of what the avatar sees. (An example of such a description would be a heraldic blazon or the instructions for one of Sol LeWitt's wall drawings; each of these types of text is simply a set of impartial, objective commands as to how a given image ought to be realized.) Short's descriptions are often deliberately imprecise, emphasizing the affect and the atmosphere of a place rather than its exact visual appearance. For example, a bar called Scheherazade is described as follows:

Despite the light that leaks in through the windows, the place seems to be trying for a dark and anonymous ambiance, with high-backed booths and wood paneling, a ceiling painted black, and hanging swatches of brocaded purple velvet. The decorations are mostly allusions to the City's distant shady past as an outpost of thieves and smugglers on the Vuine.

simulation and its next state" (244). He argues, however, that closure in comics is purely *retrospective* (it operates only after the second panel is read) whereas closure in *IF* is *prospective*, acting to fill a gap before the player knows what's on the other side of the gap. I'd suggest that retrospective closure is also involved in IF; it operates to connect adjacent room or object descriptions, or even adjacent pieces of visual information in a single room or object description.

The few details that Short does provide – the black ceiling, high-backed booths, and purple velvet – hint at what gives this place a “dark and anonymous ambiance,” but the player is invited to fill in the remaining details in his or her own way. The decorations, involving thieves and smugglers, suggest why the place is “trying for” such an ambiance: it is a place of darkness, of secrecy and anonymity, a hideout for outlaws or at least for people who have something to conceal.

A description like this is effective because of what it leaves out as well as what it includes. In her blog post “The Prose Medium and IF”, Short argues that “detail for detail’s sake” is unnecessary in IF and can even be harmful, because detail in IF is not employed for its own sake. The purpose of details in IF prose is to give the player the information he or she needs to complete the game. Players are expected not just to process the details but to use them as a guide for how to interact affectively with the game’s operations and its diegetic world. Providing excessive detail would therefore be distracting and tiresome. Short explains, however, that detail can do something else:

Some of the most effective writers of mood create their effect not with a large number of common details (the flowers are red, the door is yellow, etc) but with a small number of very particular ones; and I think that that is especially true in IF. Words in interactive fiction individually carry more weight than they carry in static prose, if only because of the amount of attention we demand the player give to each one. [...] In this respect IF is closer to poetry than to conventional prose: it is worth taking more time to select fewer words, because each one will be inspected through a jeweler’s loupe. (paras. 19, 20)

Short suggests here that the purpose of details in IF is not to create a vivid, immediate and sensuously present mental picture of a scene, but to suggest the mood associated with that scene. Short does this by providing sparse but carefully selected details, which serve the player as building blocks around which a more complex and personal vision of

the scene can be created.⁴⁷ Short doesn't tell us what precisely the Scheherazade bar looks like, but she provides us with affective lenses that we can apply to our own visualization of the place. Short's goal in this game is not to match the transparency of graphical video games, but to activate a mode of visibility which is affectively rather than sensuously vivid.⁴⁸ Ekphrasis has been used for this purpose since ancient times: Quintilian wrote, for example, that lawyers should use ekphrasis only where "motivated [...] by the speaker's emotional engagement with and amplification of his client's plight" (qtd. in Koelb 29). For ancient rhetoricians, ekphrasis was not a transparent means of visual representation but a tool for augmenting the emotional resonance of the described scene. *City of Secrets* suggests that this effect becomes, if anything, more potent when the described scene is an interactive one.⁴⁹

Moreover, Short's descriptions say less about what precisely the avatar sees than about *how* the avatar is affected by what is seen, and here it becomes important that the avatar in *City of Secrets* is an individualized character with his own history and background. The avatar in most classic Infocom games (and in *Ad Verbum*) is merely a cardboard cutout, an empty shell for the player to inhabit. The graphical Zork sequel *Zork: Grand Inquisitor* (1997) coined the term AFGNCAAP, or "Ageless, Faceless, Gender-Neutral, Culturally Ambiguous Adventure Person", to describe this sort of

⁴⁷ Note also that these images aren't mapped to specific rooms; they change when the player triggers important events in the game's narrative.

⁴⁸ Excessive use of detail also tends to be considered harmful when it occurs in prose fiction; overly vivid descriptions are often criticized as "purple prose." As Chatman argues, the amount and granularity of detail are among the major factors in which film differs from narrative fiction (48), and this certainly also applies to IF and graphical video games.

⁴⁹ A version of this process occurs in the science fiction film *Inception* (2010), where "dream architects" create blueprints for dream spaces, and the individual dreamer then fleshes out these blueprints by adding "projections" of objects drawn from his or her memory.

avatar.⁵⁰ Because the AFGNCAAP is simply a fictional surrogate for the player, s/he is deliberately deprived of any personal qualities that might make it difficult for the player to identify with him or her. By contrast, in *City of Secrets* complete identification with the avatar is not the point. The avatar is *not* the player, and in playing the game, the player is required to adjust his or her thoughts and actions to those of the unfamiliar person s/he inhabits.

For example, the description of the mosaic in the Sun Court reads “The mosaic is an elegant job and executed in rich materials, but the design has a facile modern quality that does not entirely appeal to you.” The temple is described as “[b]uilt in an old style, but unworn, unchipped, unpolluted.” Combined with the profusion of illusionistic artwork in this area of the City, especially the façade-painting, these descriptions suggest that the Sun Court is an insincere place. It is recognizably less ancient than it appears to be. This suggests that the City’s government, of which this space is the public architectural symbol, is trying to pass itself off as something it’s not. The player’s visualizations of these scenes are thus filtered through the avatar’s impressions of them, as Short comments: “With *City of Secrets*, though, it’s true that I was trying to do something a little bit different [as compared to *Metamorphoses*]: to hint at the protagonist’s perceptual filters by describing styles and trends rather than straightforward physical detail” [Short 2009].

I’d argue that this game deploys the fantasy of handwriting, insofar as it asks the player to create mental images that do stuff, that perform work. In order to have a satisfying experience with *City of Secrets*, the player must visualize. The player needs

⁵⁰ See <<http://tvtropes.org/pmwiki/pmwiki.php/Main/AFGNCAAP>> for an extensive list of games (including graphical games) that feature this type of avatar.

to understand the nature and contents of the game's spaces, and although an in-game map is provided, it's not a detailed one; the player still needs to understand for himself/herself how different areas in the City are located relative to each other. Because *City of Secrets* is intended for beginning players, it doesn't require much visualization other than this, but Short's other works do often require the player to visualize and to do so in an affective and critical way. In *Savoir Faire* (2002), a deliberately challenging adventure game, the player has the magical power to create "links" between two similar objects, whereby one object takes on the properties of the other or is affected by events that occur to the other. In order to use this power effectively, the player has to observe visual and other similarities between the two objects, and this may require a minute inspection of the two objects involved. For example, the first puzzle in the game is to open a locked door. The description of the doors reads "A pair of white-painted doors that lead into the upstairs corridor of the house. Each door panel is decorated with the family crest, picked out in ostentatious gold, as though to warn servants not to wander that direction uninvited." In a nearby room the player finds a teapot, whose object description reads "In order to make the linkages possible, however, it has been painted a glossy white, and the crest of the family executed on one side in intricate detail." The solution to the puzzle is to link the doors to the teapot, then open the lid of the teapot, causing the doors to open. This works because the teapot and the doors are both white, openable, and decorated with the same crest.⁵¹ To notice these similarities, the player has to read both these object descriptions carefully. The player might conceivably do this without visualizing, but the

⁵¹ The same example is used in a different context in Montfort and Mitchell.

fairness of the puzzle depends on the two objects being visualizable. In this case, then, Short requires the player to create mental images for the practical purpose of deciding how to interact with the objects represented with the images; the player's mental act of "handwriting" is not merely autotelic but is directed toward a goal.

To that extent, Short's work deploys the fantasy of handwriting: it requires the player to create images which are subjective in nature, partaking of the player's uniqueness, but which also "come to life" and do work. However, if Short is deploying the fantasy of handwriting, then it's a *reflective* fantasy of handwriting because of the crucial way in which Short acknowledges the non-self-sufficiency of handwriting. Short's games emphasize the way in which readerly visibility is always conditioned by factors external to the reader. The reader's act of visualization is a site of an encounter between player and text. If this act of visualization an act of handwriting, then we can infer that handwriting is never a completely free, unconstrained process (just as IF never allows the player complete interactional freedom); handwriting is a culturally and historically situated process whose execution depends on factors external as well as internal to the player.

Short uses various other devices, including graphics, expressive typography and feelies (see below), to further emphasize the way in which the player's experience of IF is conditioned by the specific materiality of the play situation, the "phenomenological, apprehendable, immanent" qualities of the IF experience. In the first place, *City of Secrets* includes a frame containing images, located to the left of the main gameplay window. However, these images are more suggestive or symbolic than mimetic. They suggest the dominant mood or tonality of the scene the player is witnessing, rather than

showing anything in that scene. Accordingly, Jeremy Douglass calls the images in this game “ambient illustrations” (45). In Figure 3-6, for example, we see a stylized representation of the sun against a field of orange fading into white. This image doesn’t depict anything in the Sun Court, except perhaps the sun symbol on the pavement, but it suggests the offputting, blinding sunniness of the scene. What we get here is a complex, synaesthetic interplay between the images described *in* the text and the images that the text *is*. The actual images help to shape the player’s mental images, at the same time that the latter inflect the player’s interpretation of the former.

Furthermore, *City of Secrets* attends to the way in which “text” is inescapably a visual phenomenon. In this context it’s worth noting that although *City of Secrets* allows the player to change the font, text color and other such options, the title screen and the left-hand window include text which is not affected by these changes (Figure 3-7). Without speculating on the precise associations of this font, I merely note that it was chosen deliberately. The player enters this game through the threshold of an image which is primarily composed of textual signifiers, yet contrary to my commonsensical definition of “text,” the precise visual instantiation of these signifiers is clearly important.

For a certain subset of the game’s audience, *City of Secrets* was an even more material and visual experience than it is now. On releasing the game, Short offered players the opportunity to purchase a special edition of the game that came with a boxed set of “feelies.” The term “feelies” refers to “[m]ultimedia epitexts such as journals, maps, and artifacts, bundled to illustrate the IF work. Popularized by Infocom” (Douglass 392). Commercial IF games were physical artifacts – floppy discs packaged in boxes and sold in brick-and-mortar stores – and the inclusion of feelies further

intensified the physicality of those objects.⁵² This physical side of the IF experience was lost when IF moved to a digital model of distribution. Seeing this as an unfortunate development, Short helped to create a website, feelies.org, that produced and distributed feelies for contemporary works of IF:

feelies.org started with a conversation that I had with some of my friends in the IF community, about how the one aspect of commercial IF we really missed (as players) was the feelies. Some modern IF comes with "virtual feelies" – PDF files or fake Websites or whatever that are distributed in a Zip file with the game – and I like those, but we were also missing the tangible physical objects. (Loguidice n.p.)

The *City of Secrets* feelies included such items as a “[t]ourist guide to the City, including map, digitally-offset printed by Imagers.com in full color on glossy paper,” a “[q]uantity of dried liontail in a labeled plastic bag, contained in velvet and/or satin gift bag from boutique magic shop” and a “3rd class train ticket on Southern Light Rail from Valodsci to Westallia, punched and stamped as appropriate by conductor.” For players who did not purchase the paper feelies, Short also created an online website for the Southern Light Rail company.⁵³ This website prominently features the same font used in the game’s title screen.

The fact that Short paid so much attention to the physical and material aspects of *City of Secrets* indicates that for her, the visual instantiation of an IF game is not an irrelevant cosmetic detail. It directly influences the player’s experience of the game, an experience which is visual in multiple senses. The visuality of *City of Secrets* results from a collaboration between the preexisting visual memory of the player and the visual

⁵² Feelies served the additional practical function of copy protection. Infocom games like *Sorcerer*, *Leather Goddesses of Phobos* and *Zork Zero* were unsolvable without information which was printed on the feelies, and which, in a pre-World Wide Web era, would have been otherwise unavailable.

⁵³ This website is now defunct, but is available via the Internet Archive Wayback Machine at <http://web.archive.org/web/20060104205445/http://emshort.home.mindspring.com/CSUpcoming.htm>.

details, verbal and graphical, supplied by the author, as focalized through the “perceptual filters” of the avatar – who, unlike the avatars in *Zork* and *Ad Verbum*, is a well-defined character with a particular personality and history. The visual experience of this game depends on a complex and shifting interplay between the player’s visual memory, the details the author provides via the protagonist-avatar, and the visual-imagetextual aspects of the gaming itself.

What we learn from the example of *City of Secrets* is that the arrival of graphics does not render IF an artistically obsolete medium; IF still has the ability to offer experiences of readerly visuality which are difficult, at least, for graphical video games to provide. However, it no longer makes sense, if it ever did, for IF authors to claim that readerly visuality is a superior form of transparent immediacy. The uniqueness of IF’s visuality has to be founded on IF’s ability to stage an encounter between the reader’s power of mental “handwriting”, the author’s instructions for the use of this power, and the material conditions under which this power is exercised.

***Ad Verbum* and Textual Materiality**

A second way way in which IF responds to the seemingly superior representational capabilities of text is by foregrounding the materiality of the IF interface. In IF, as discussed above (p. 159), writing is equivalent to acting: the name of a thing is equivalent to the thing itself, and typing the name of an action is equivalent to doing the action. This could be used as evidence for a naïve fantasy of handwriting: because IF allows the player to type any word, it must therefore (potentially) enable the player to perform any action. That claim, however, is false, because it creates an unfulfillable promise of perfect interactional freedom. More generally speaking, the fantasy that words could be identical to things and actions is a utopian fantasy. It

expresses a wish that the originary split between signifiers and signifieds, revealed in the arbitrariness of the signifier, could be healed, and that language could be restored to its Edenic and pre-Babelian state. (On this point, see p. 31 above.) Clearly this is an impossible dream, not only because it assumed a prior state of linguistic plenitude that never actually existed, but also because it denies the importance of language as such: if there were a one-to-one correspondence between words and things, then what would be the use of poetry?

But it's possible to deploy this sort of fantasy of handwriting in a more critical way, by emphasizing the *uncanniness* of any possible attempt to identify signifiers with signifieds. If an object is identical with its name, for example, then the linguistic properties of the object's name – for example, the letters it contains – must somehow be reflected in the object. And if an object is renamed, it must become a different object. Similarly, the nature and outcome of an action must be influenced by the verb that's used to express the action, and if two different verbs are used to describe what appear to be two identical actions, then those actions must not really have been identical. The identity between words and their referents in IF may have confusing and bizarre results. The fact that nouns in IF are things, and verbs are actions, might open up a space for critical reflection on the materiality of language and the linguistically determined nature of our perception of things.

This is what happens in Nick Montfort's 2000 game *Ad Verbum*. This game is similar to a standard adventure game, but its gimmick is that nearly all its puzzles depend on some sort of linguistic manipulation; to solve the game's puzzles, the player must enter commands according to various linguistic constraints. Exploiting Bolter and

Grusin's logic of hypermediacy, this game forcibly reminds the player of its nature as a text-based computer program, rather than a window into a simulated world. This is evident immediately in the introductory text of the game:

With the cantankerous Wizard of Wordplay evicted from his mansion, the worthless plot can now be redeveloped. The city regulations declare, however, that the rip-down job can't proceed until all the items within have been removed.

That's what the demolition contractor explains to you, anyway, as you stand eagerly on the adventurer's day labor corner. Once he learns of your penchant for puzzle-solving and your kleptomaniacal tendencies, he hires you for the job. You hop into the bed of his truck, type a few Zs, and arrive at the site, eager...

"Z" is the standard abbreviation for the "wait" command, so the last sentence erases the boundaries between player and avatar, between typing commands and performing actions. Throughout the game the player is consistently reminded that he or she is simultaneously exploring a diegetic world, and typing commands in response to verbal descriptions.

Some of *Ad Verbum's* puzzles in fact involve no interaction with objects or spaces, only manipulation of language. For example, on the first floor of the mansion, the player encounters a little boy, Georgie, who refuses to give up his toy dinosaur unless the player can name more dinosaurs than Georgie can. Georgie knows an arbitrarily large number of real dinosaur names, so the solution is to input fake dinosaur names – i.e., nonsense words ending in "saur" or "saurus" – until Georgie gets frustrated and gives up. All that's involved here is simple manipulation of language, and this puzzle calls attention to the way in which IF is at one level a purely linguistic experience.

Other puzzles in the game do force the avatar to interact with rooms and objects, but in order to make the avatar do so, the player has to satisfy certain linguistic

constraints. Most notably, the game contains several “constrained rooms” where the output text consists entirely of words starting with a specific letter. For example, the initial room description of the “Wee Wardrobe” is as follows:

Wee warehouse warily warded wearable wares - when wares were within.
Wan, whitewashed walls wait without woolens. Wooden, weathered
wainscoting wobbles weakly.

Within: . . . wooden weapon.

While the avatar is in this room, the same constraint applies to the player’s input text. Obvious commands like TAKE WEAPON are not accepted; if the player enters a command containing a word that doesn’t start with W, the parser replies “Wha? Wha? Withhold wrong words. Write wholesomely.” The puzzle, therefore, is to command the avatar to take the two objects in the room and then leave, using only words beginning with W. (One solution is WIELD WEAPON, then WHACK WAINSCOTING WITH WEAPON to reveal the “weird widget” behind it, then WIN WIDGET, then WITHDRAW.) This constraint applies even to nondiegetic commands like HINT, SAVE, RESTART, RESTORE and QUIT, and on first entering a constrained room, the player must read a warning alerting him or her to this fact. The game also includes four other constrained rooms, as well as other rooms that behave similarly, such as one which only accepts commands where the noun and the verb are spelled identically.

The constrained rooms call attention to the fact that the world of this game is a linguistic construct, a tissue of words and letters. Of course, this is true in a sense of the diegetic world of any IF game: the white house in *Zork* doesn’t exist independently of

the language that describes it.⁵⁴ *Ad Verbum*'s innovation, however, is to make explicit the linguistic nature of the IF gameworld. Since the spaces of *Ad Verbum* are called into being by language, it's logical that these spaces can have linguistic properties, like the property of only containing objects that start with W.

In an earlier version of this project, I argued that by virtue of being defined in purely verbal terms, these spaces resist translation into images. What would a room would look like if it contained only things beginning with S? In the real world, we aren't able to observe the first letter of an object's name by looking at it, especially since any given object may have various possible names. We might imagine a space based on the physical *form* of a letter – for example, an S room where the walls, ceiling and furniture have sinuous, snaky curves, or a V room full of sharp, severe triangles. However, the constrained rooms in *Ad Verbum* are organized according to the linguistic, not the visual, properties of their corresponding letters. These are entirely linguistic spaces. In *Ad Verbum*, a letter is defined purely in relational terms, as a member of a set with 26 members. *Ad Verbum* is thus resistant to the sort of typographic manipulation we encountered in *Felix* (and will encounter in *Scott Pilgrim* or *Monsters, Inc.*). As Edmond Chang argues in an unpublished essay, *Ad Verbum* is, at some level, about the materiality of language; it shows that

words have shape, words have weight, words have materiality. *Ad Verbum* recognizes that the player is reading and typing, that words describe places, spaces, things, and actions, that the player is the adventurer, that

⁵⁴ To this extent, room descriptions in IF games are what John Hollander calls *notional ekphrases*, i.e., ekphrastic texts describing visual phenomena that don't actually exist and can't be seen [Hollander 1995, 4].

the adventurer is seeing, taking, touching, doing, and moving, and that through all of it, the words occupy literal, figurative, and cyber dimensions.⁵⁵

Language in *Ad Verbum* is not material in the same way as language is material in, say, *Felix the Cat*, or in avant-garde Modernist typography or in Rimbaud's poem "Voyelles." In those texts, letters have sensuous and material substance; letters are objects in the sense of occupying space in the world or having physically perceptible properties. *Ad Verbum*, however, does not attend to the sensuous, material substratum of letters; it seems to indicate that letters and words are pure signifiers, the material instantiation of which is irrelevant. (This perception is supported by the fact that unlike *City of Secrets*, *Ad Verbum* includes no graphics, feelies or special fonts.) To put this another way, in *Ad Verbum*, it seems as though the act of writing is purely an act of manipulating signifiers, not an act of manually producing signifying marks on a writing surface.

We could, then, argue, that the spaces and objects of *Ad Verbum* are fundamentally resistant to visualization. And to an extent, this is true. *Ad Verbum* employs the trope that James Heffernan, a scholar of ekphrastic poetry, describes as the trope of representational friction, in which the ekphrastic poem calls attention to the artificiality of the artwork it describes (4, 18–19, 37). For example, Homer's description of the shield of Achilles includes the statement that "the earth darkened behind [the ploughmen] and looked like earth that has been ploughed / though it was gold" [qtd. in Heffernan 2004 19]. At the same time that Homer celebrates the amazing power of art to reproduce reality, he reminds the reader that the work of art is ontologically dissimilar to the reality it reproduces. Homer celebrates "the wonder . . . of graphic verisimilitude"

⁵⁵ The original URL for this essay is no longer valid, but it can be accessed through the Internet Wayback Machine at <http://replay.waybackmachine.org/20060207141454/http://www.edmondchang.com/668k/wordsmatter.html>.

specifically by telling the reader “that what appears on the shield is not the ploughed earth itself, but gold that has been somehow made dark enough to resemble it” (Heffernan 19). Because the shield is made of gold, not dirt, it can represent dirt only via artifice and convention. By analogy, because poetry is made of language, it can represent images or things only through a similar artifice. Representational friction, thus, is a trope that foregrounds the dissimilarity between the descriptive poem and what it describes. It reminds the reader that the poem is a poem, not a painting or sculpture: that the reader is not beholding a physically present picture, but imagining a picture based on his or her interpretation of graphic signifiers. Representational friction reminds the reader of the nature of the activity he or she performs in reading a poem.

Therefore, representational friction serves as a useful device for defining the specificity of poetry as distinct from painting and sculpture, and in *Ad Verbum*, Montfort seems to be using representational friction for a similar purpose. In *Ad Verbum*, linguistic constraints and guess-the-verb puzzles serve to define the specificity of IF as opposed to graphical video games. Montfort doesn't refute the allegation that computer graphics are more effective in some ways than words at representing the contents of fictional spaces. Montfort accepts the premise that IF can't compete with graphical video games in terms of transparent immersivity, and therefore that IF can't match the commercial appeal of graphical games. However, Montfort seeks to claim for IF another type of legitimacy in terms of aesthetic or academic appeal. Montfort does this by stressing that the visual and spatial aspects of IF are metaphorical, not literal, because IF is a fundamentally linguistic medium. IF is an independent and aesthetically legitimate medium because of, not despite, its lack of graphics. Contemporary IF is not

an atavistic throwback to the era before the graphical video game, but an artistic medium in its own right.

By characterizing IF as a textual medium, Montfort is also able to connect *Ad Verbum* to earlier, more canonical forms of ludic textuality. Thus, *Ad Verbum* contains explicit references to famous constrained texts like Walter Abish's *Alphabetical Africa* and Georges Perec's *La Disparition*, and in *Twisty Little Passages*, Montfort argues that the predecessors of IF include works of potential literature such as Raymond Queneau's *Cent mille milliards de poèmes* (70) and Marc Saporta's *Composition no. 1* (71). These comparisons both connect IF to a preexisting avant-garde cultural tradition, and suggest that *Ad Verbum*'s primary aesthetic goal is to interrogate the operations of electronic textuality. According to Terry Harpold, literary texts of the type just mentioned are examples of what Jean-Gérard Laplacherie calls *grammatexts*, or texts in which “the ‘graphic substance’ of the letter, line, and page are foregrounded or are otherwise independent of the ‘phonic substance’ and discursive structures they may also represent” (89). The grammatext therefore emphasizes “aspects of written and printed texts that are autonomous with regard to the reproduction of speech” (88–89). With some modification, the concept of grammatext is also applicable to digital texts. Thus, Harpold places *Ad Verbum* in the category of alphabetic grammatexts, which “are characterized by structures corresponding to the (ideally) nonfigurative traits of alphabetic glyphs” (90). In *Ad Verbum*:

Gameplay in the [constrained] rooms is alphabetically determined both in the usual sense of the word and in Laplacherie's narrower application, in that the lipogrammatic constraint enforces a patterning of text generated by the game independent of its narrative or mimetic signification. (107)

On this reading, *Ad Verbum* is about the separability of language's alphabetic structure from its meaning. To this extent, *Ad Verbum* deconstructs the standard conceit that serves as the foundation for IF's fantasy of handwriting: that words in IF are equivalent to things or actions. Like the Oulipian authors whom he claims as influences, Montfort conceives of literature (in this case electronic literature) not as a vehicle for the communication of transcendent meanings, but as the result of a process of manipulating signifiers. Furthermore, *Ad Verbum's* use of constraints also acts as a critique of IF's other common fantasy of handwriting in IF, which holds that writing is equivalent to doing, and that the unconstrained nature of the IF interface is indicative of absolute freedom of action on the player's part. By placing explicit constraints on the player's freedom of action in this game, Montfort reminds the player that all other works of IF are equally constrained, albeit in less obvious ways. This is in keeping with the Oulipian principle that *all* writing is constrained writing, at least in the minimal sense that all writing is subject to "constraints of the language in which the text is written" (Motte 11). In playing IF, the player doesn't express genuine freedom of choice or engage in creative expression, but merely operates within a system of pre-given rules and constraints.

Without denying the validity of such a reading of *Ad Verbum*, I want to suggest that it's also important to remember that the reflective fantasy of handwriting is more than a simple debunking of the naïve fantasy of handwriting. At the same time that the reflective fantasy denies the possibility of any scenario in which words literally come to life and become things, it also acknowledges the intuitively appealing nature of such a scenario. Thus, I contend that *Ad Verbum* depends on the fantasy of handwriting as well

as debunking it. According to an orthodox reading, *Ad Verbum* discourages the player from visualizing and reminds the player that in IF, nouns are *not* things and verbs are *not* actions. But suppose we ignore this reminder and assume that in *Ad Verbum*, the standard conceit of IF *does* apply, and that rooms and object descriptions *do* represent translations into words of what the avatar sees. We must then conclude that in *Ad Verbum*, unlike in the real world, the linguistic structure of an object or action is phenomenally perceptible.

Objects in the *Ad Verbum* world are linguistic in nature, and subject to linguistic manipulation. After clearing out the Sloppy Salon, the player is stuck with a sofa which is too heavy to move down the stairs to the dumpster. Luckily, elsewhere in the game the player finds a verbosifier, a device whose function is to change the name of a piece of furniture to a synonymous name which is one letter longer. By applying the verbosifier to the sofa, the player changes it successively into a couch, a daybed, a sofabed, and a loveseat. Each of these changes affects not just the name of the object but also its identity, so when the object becomes a loveseat, it also becomes small and light enough for the avatar to carry it down the stairs and throw it into the dumpster. In this world, then, objects are identical with their names, and the *Ad Verbum* be structured in such a way that their linguistic properties are phenomenologically perceptible. *We* can't look at an object and see what letter its name begins with, but the *Ad Verbum* avatar *can*, if we accept the conceit that IF room descriptions are verbal representations of what the avatar sees. I have argued elsewhere that *Ad Verbum* simply debunks this conceit, but I now think it's more provocative to assume that *Ad Verbum* follows this conceit, and then to follow this assumption to its logical conclusion. Perhaps the Wizard

of Wordplay's house is like WordWorld (the storyworld of the children's TV show of the same name), where, say, a chair is literally made up of the letters C, H, A, I and R. Or perhaps objects in the Wizard's house are visibly linguistic in some other way which we wouldn't be able to imagine. Thinking of this, I feel uncomfortable as well as excited, because *Ad Verbum* confronts me with the true mysteriousness of the relation between words and things. Another game that accomplishes uncanny effects through similar means is *Earl Grey* (Adam Parrish and Rob Dubbin, 2009), in which the player has the magical power to remove or add letters to words or rearrange the order of letters in a word. (These actions are triggered, respectively, by the special verbs KNOCK, CALL and STEEP). Doing any of these things produces corresponding changes in the objects described by the words. For example, at one point the player enters a room with a painting of a cave mouth on the wall and a piece of paper lying on the floor. The player must KNOCK the mouth, turning it into a painting of a cave moth. The player then acquires the letter U and can CAST it into the paper, which becomes a pauper. This mechanic suggests that within the diegesis of this game, at the same time that objects are made of flesh and blood, stone, paper, etc., they are also made of *language*. The game's playful violation of the standard barrier between language and being contributes to its humor and also its scariness. Later in the game, having been injured, the player has to use the STEEP command to turn a nearby "camelid creature" into a "medical creature." This creature is described as follows: "Owing to its medical nature, it hovers above the ground with compassionate equanimity and five enthusiastic tentacles." If language is identical to being, then anything that we can name, we can also create – including, perhaps, things that aren't quite so benign as the gentle medical creature.

Moreover, in *Ad Verbum*, not only words but actions are identical with their names. The standard conceit in IF is that when the player types a command, this is equivalent to, and can be visualized as, the avatar performing that action. When I type “take lantern” and press the enter key, I may imagine that my avatar reaches out his or her hand and takes the lantern. Of course, what actually happens is that the game program interprets the words “take lantern” as an action, then checks for whether the action can succeed or not in the present condition of gameplay. If it can succeed, the lantern is moved from its current position and added to the player’s inventory (Nelson 2001, 87). And at some level, I know this; I realize that typing is not the same as acting. But in *Ad Verbum*, this rule doesn’t apply: it takes place in a world where to name an action literally *is* to take that action. For example, one puzzle requires the avatar to acquire four books using commands that follow the linguistic constraints used in the text of the books. The “dust casing” does not accept commands that include the letter E, the “abecedarian book” only accepts commands in which the first word starts with A and the second word starts with B, and so on. If the player tries to take these books using inappropriate commands, “a mysterious force holds the book to the ... shelves.” Possible solutions include ACQUIRE BOOK and LIFT CASING.⁵⁶

In the context of obtaining a book, the words TAKE, GET, HOLD, and UPROOT all describe the same action. When I pick up a book, I can use any of these verbs interchangeably to describe what I’m doing. But in *Ad Verbum*, the “mysterious force” that governs the books will accept only some of these actions and not others. The force

⁵⁶ These two books allude to Georges Perec’s novel *La Disparition* and Robert Pinsky’s poem *ABC*. Perec’s book is written without the letter E. Pinsky’s poem consists of 26 words, the first beginning with A, the second with B, and so on. Montfort’s abecedarian book follows a similar constraint but is limited to two words, which is the most common length of an IF command.

allows the avatar to rip the casing or uproot the copybook but not take or get them, merely because the former two actions satisfy the constraint and the latter two don't, even though the four actions are not semantically distinguishable and can all be visualized in the same way. Here Montfort is deliberately subjecting the player to the notorious "guess the verb" situation, where the player knows what he or she wants the avatar to do, but has difficulty finding the specific verb that tells the avatar to do it.

When this phenomenon occurs in games, players typically see it a design flaw, because it violates the logic of transparency. In real life, if one knows what one wants to do and if one is physically capable of doing it, one can simply do it. Knowledge of the name of the action is not required. For example, if I want to heat some water so that it boils gently, I can do so whether or not I happen to know the verb "to simmer." In *Ad Verbum*, this logic does not apply; performing an action entails knowing its name, and seemingly synonymous actions with different names are not actually identical. It's very difficult to imagine how this might work. Maybe actions taken in the Wizard of Wordplay's house are accompanied by a visual depiction of their names, in the fashion of comic book sound effects.⁵⁷ In any event, here *Ad Verbum* again confronts us with the bizarre implications of the premise that typing is equivalent to acting. These implications can be extended further. For example, what if a dyslexic person or a preverbal child were to enter the Wizard of Wordplay's house? Would such a person be unable to successfully execute any action at all?

⁵⁷ See <<http://tvtropes.org/pmwiki/pmwiki.php/Main/UnsoundEffect>> for a discussion of non-sonic sound effects, accompanied by numerous examples. This topic will come up again in my analysis of the *Scott Pilgrim* comic.

As I argued in the introduction, one of the functions of the fantasy of handwriting is to heal the constitutive gap in language, to create a reassuring vision of a world where language is not alienated from being and where linguistic ambiguity, equivocation and misunderstanding are not possible. The fantasy of handwriting plays on our nostalgic desire to return to an Edenic condition of language, where to name an action is to do it, and where an object and its name are one. However, my reading of *Ad Verbum* suggests that if we could return to such a pre-Saussurean condition of language, we would be unable to recognize it. The gap between language and being is created, it can only be sutured, and not retroactively healed. To the extent that *Ad Verbum* simultaneously acknowledges and critiques this desire for linguistic plenitude, it expresses a reflective fantasy of handwriting.

In conclusion, these two case studies show that the arrival of graphics doesn't kill IF, but it does force IF to adapt, and one way that IF can do so is by appealing to the reflective fantasy of handwriting. When facing competition from graphics, IF can no longer naïvely claim to offer perfectly transparent visibility or complete interactional freedom. What it *can* do, however, is acknowledge the *desire* for these things while simultaneously acknowledging the unsatisfiability of this desire. In the next chapter, I suggest that a similar pattern is at work in another traditional medium that now confronts the challenge of graphics: the alternative comic.

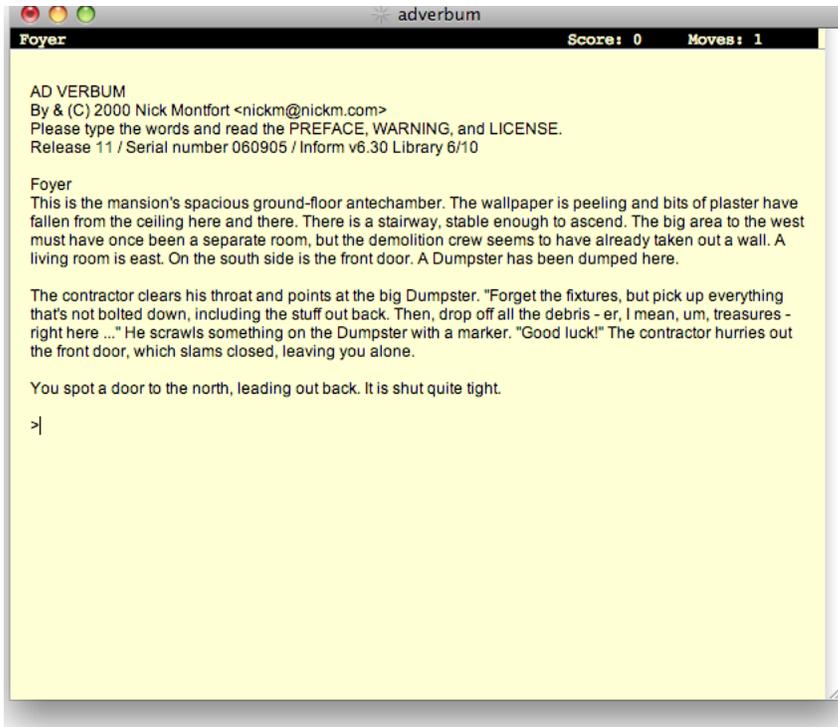


Figure 3-1. Screenshot from *Ad Verbum*. Reproduced by permission of the author.

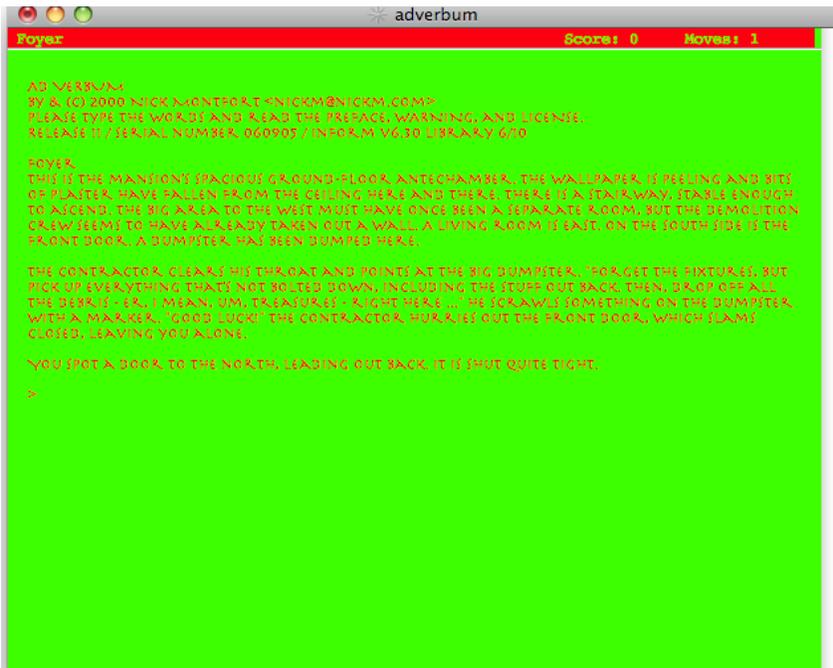


Figure 3-2. The "same" scene from *Ad Verbum*, but with a different font, font color and background taken color. Reproduced by permission of the author.



Figure 3-3. Screenshot from *Maniac Mansion* (LucasArts, 1987). Note the menu of twelve verbs/actions.



Figure 3-4. Screenshot from *Full Throttle* (LucasArts, 1995). Although this game uses the same engine as *Maniac Mansion*, it replaces the menu with four icons whose meanings change based on context.

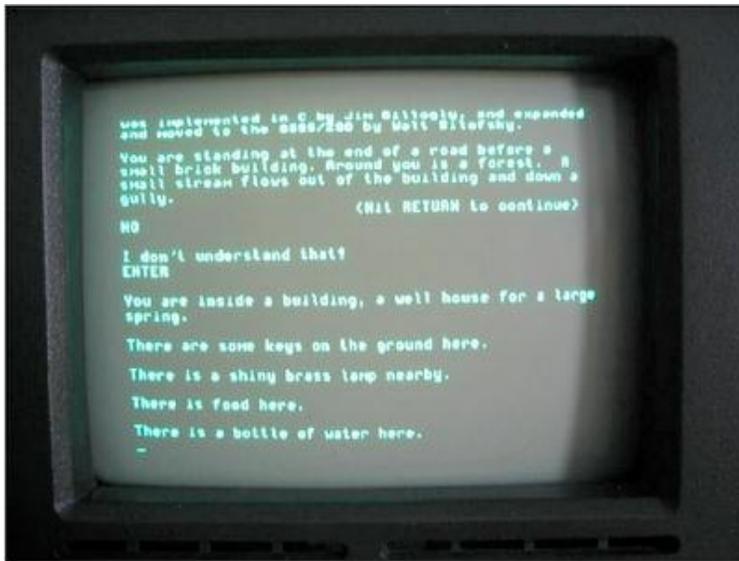


Figure 3-5. *Adventure* running on an Osborne 1. Originally uploaded by Cetcom. Licensed under the GNU Free Documentation License.

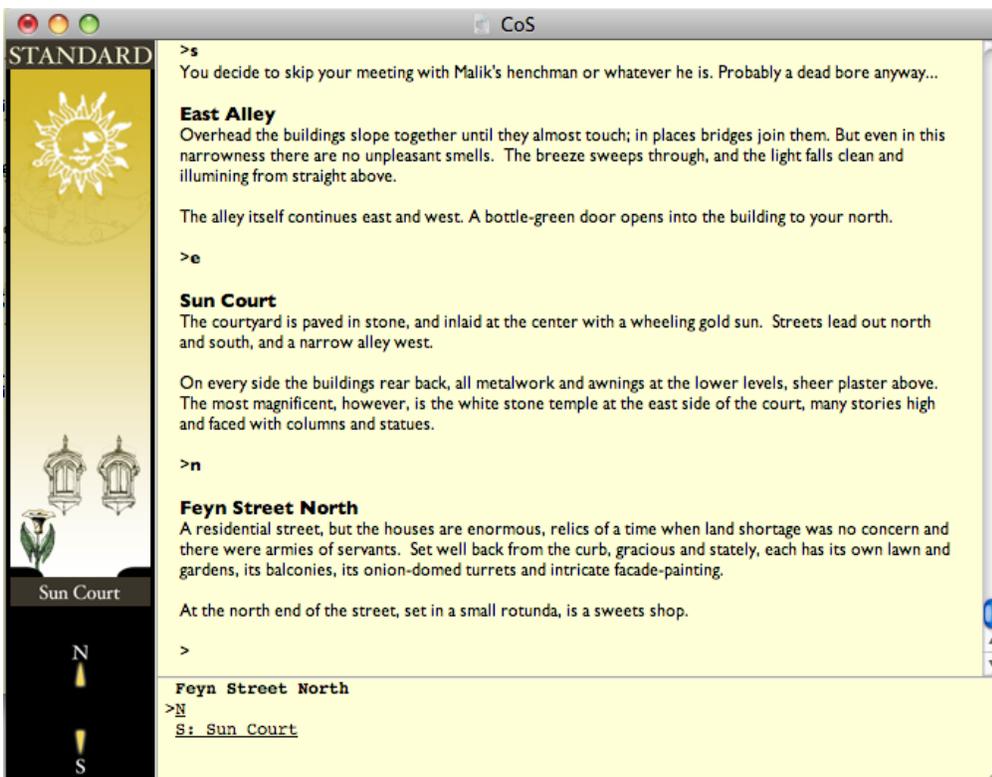


Figure 3-6. Screenshot from *City of Secrets*. Note the “ambient illustration” at the left. Reproduced by permission of the author.

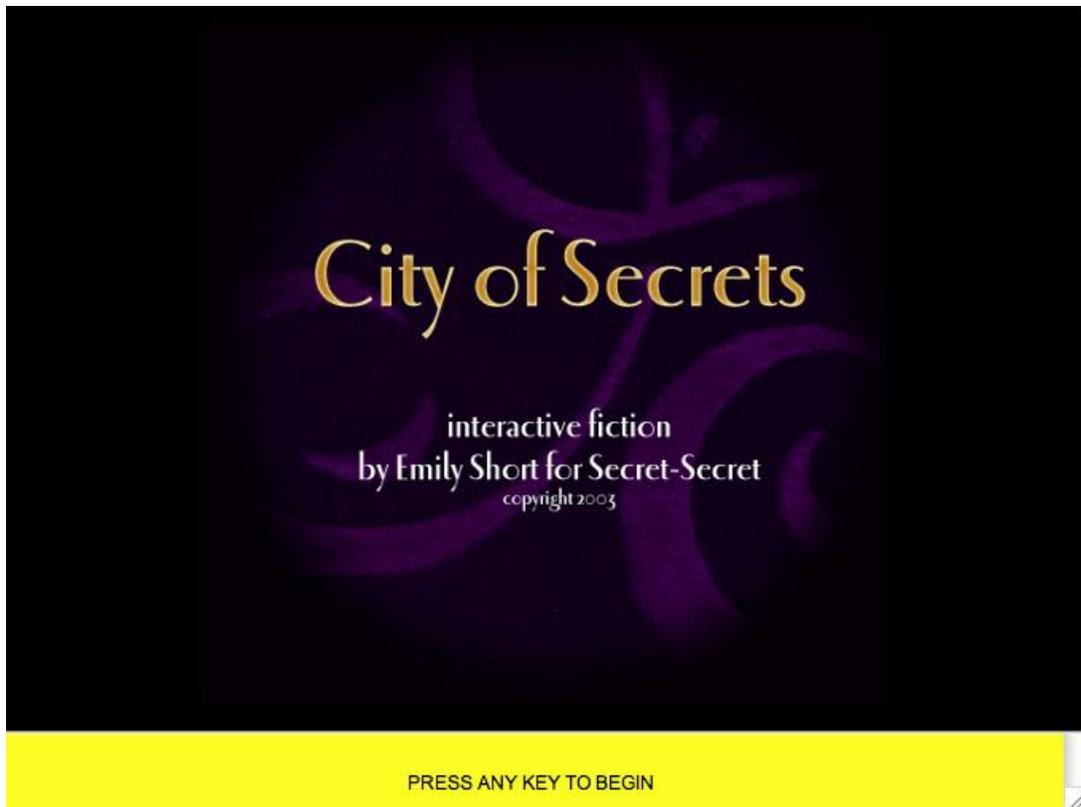


Figure 3-7. Screenshot from *City of Secrets*. Note the idiosyncratic font. Reproduced by permission of the author.

CHAPTER 4
IT'S ALL LINES ON PAPER, FOLKS: RESTORATIVE AND REFLECTIVE FANTASIES
OF HANDWRITING IN ALTERNATIVE COMICS

Opening Remarks and Literature Review

Alternative Comics as Art

In this chapter I examine the effect of computer graphics on fantasies of handwriting in contemporary American alternative comics. In many ways, the argument of this chapter is similar to that of the previous chapter. I will argue that in its “originary” state, prior to the arrival of computer graphics, the alternative comic, like commercial IF, was ideologically dependent on a naïve version of the fantasy of handwriting. As in the case of IF, an appeal to fantasies of handwriting served as a way to establish the artistic legitimacy of the alternative comic, as well as its superiority to competing categories of texts (specifically, in this case, commercial comic books). In both cases, handwriting serves as a signifier of literariness and authorship; fantasies of handwriting are invoked in order to prove that IF and alternative comics deserve to be classified as literary and authorial genres. In alternative comics, as in IF, the encounter with computer graphics forces a rethinking of the premises behind the fantasy of handwriting by making it clear that this fantasy is based on false premises. By confronting the supposed threat of graphics, alternative cartoonists like Kevin Huizenga and Bryan Lee O’Malley are able to take a more critical perspective toward the fantasy of handwriting, while also acknowledging the seductiveness of this fantasy.

However, although the general contours of my argument are the same in both these cases, the political stakes in each case are different. In a sense, handwriting explicitly matters to alternative cartoonists and their readers in a specific way; it has a particular symbolic resonance for this community that it does not have for IF authors

and players. As I suggested in the last chapter, in the case of IF, the strategy of appealing to the fantasy of handwriting arose as a reaction to the planned obsolescence of the genre, which resulted from technological advances in video game graphics. Handwriting-based strategies were initially adopted in IF on primarily commercial and practical grounds. It was only after the commercial collapse of the genre that IF programmers began to regard themselves, and to be regarded by their players, as principally artists or authors, and they appealed to the values associated with handwriting in order to justify their claims to this status. Thus, by the time that IF began to conceive of itself as an artistically oriented medium or as a form of procedural literature, IF's version of the naïve fantasy of handwriting had already been debunked; indeed, these two events were temporally simultaneous and causally linked. A single event – the arrival of sophisticated computer graphics – both rendered IF's naïve fantasies of handwriting inoperable, and also led to IF's emergence as a form of art.

¹ Thus, the most artistically advanced (or at least, the most self-consciously artistic) works of IF are those that don't take the fantasy of handwriting at face value.

In the case of alternative comics, on the other hand, the emergence of the medium as an art form is a *separate* event from the encounter with graphics. Alternative comics evolved from '60s and '70s underground comix and ground-level comics, but emerged as a separate category in the early 1980s; the key development that made alternative

¹ As mentioned in the previous chapter, Douglass argues, in opposition to conventional wisdom, that IF was always an independent and auteurist medium. "The commercialization of IF, while foundational for the later commercial computer games industry, can be recast in this telling as an important anomaly, a brief big-business deviation from the otherwise constant association of the IF genre with individual authors each networked into a kind of literary salon culture" (Douglass 20). However, I would argue that *Adventure* and its immediate sequels were not consciously intended as works of art; e.g., Crowther created *Adventure* as an amusement for his children. By contrast, works of the mature commercial era, including the two that I examined in depth in the previous chapter, often have explicitly artistic intensions.

comics possible was the rise of comic book specialty shops (Hatfield 2005, 25–26).² From the beginning, the alternative comic defined itself as an artistically oriented medium and opposed itself to the commercial mainstream (i.e., superhero comic books). Indeed, this opposition is the key distinguishing characteristic of the alternative comic, as its very name suggests. Alternative comics creators, readers and critics are often indifferent or openly hostile toward mainstream comics (whereas contemporary IF authors and players are often affectionately nostalgic for the Infocom canon). However, when the alternative comic defined itself as art, it did so by appealing to the *naïve* fantasy of handwriting. Alternative cartoonists claimed to be authors in the same sense as literary authors, in the specific sense that their work preserved the unique trace of their gestural activity. In most comics criticism, this claim goes unchallenged. Critics often have observed that authorship and in comics is a complex matter not reducible to the pure, unmediated expression of the author's identity, but the basic assumption still tends to be that the alternative comic acquires authenticity by virtue of its physical connection to the artist's body.

In alternative comics, then, the naïve fantasy of handwriting serves to guarantee the artistic legitimacy of the genre and to justify the claims of cartoonists to the status of artists. In what follows, I will argue that the encounter with graphics can lead the alternative comic toward a more reflective use of the fantasy of handwriting. In confronting the effects of digital technology upon culture and upon artistic practice,

² See Hatfield's chapter "The Rise of Alternative Comics" for a detailed historical account of the development of the genre. On specialty comic book stores, see Robert Beerbohm, "Secret Origins of the Direct Market, Part Two: Phil Seuling and the Undergrounds Emerge," *Comic Book Artist* 7 (Mar 2000), 116-125. See also Beaty for an account of the rise of a similar avant-garde comics culture in Europe.

cartoonists demonstrate the fantastic nature of the premises behind the fantasy of handwriting, but also discover the continuing appeal of that fantasy.

Alternative Comics as Literature

In a broad – and tautological – sense, “alternative comics” simply means “comics that are alternative to the mainstream – meaning superheroes in the US and kids’ comedy in the UK” (Sabin and Triggs 13). “Alternative” implies the existence of a “mainstream,” and therefore the term has been critiqued on the grounds that superhero comics no longer qualify as “mainstream” culture (for example, Oni Press publisher James Lucas Jones has used the term “real mainstream” to refer to his company’s offerings in non-superhero genres). In this chapter I use the term “alternative comics” to refer to the specific corpus of material which is published by North American companies like Fantagraphics and Drawn & Quarterly, and which forms the principal subject matter of publications like the *Comics Journal* and conventions like the Small Press Expo.³

According to historical accounts of comics scholars like Hatfield and of Sabin and Triggs, the alternative comics phenomenon evolved out of the underground comics of the 1960s but was catapulted to prominence by the development of the comic book specialty market in the late 1970s and early 1980s. Sabin and Triggs date the alternative comics movement as beginning in 1976 and as still existing at the time of their book’s publication in 2001. Whether “alternative comics” still exists as a distinct category of comics production is debatable. The standard format of alternative comics

³ Douglas Wolk uses the term “art comics” to refer to essentially the same corpus of material. This term implies that “art” can be clearly distinguished from non-“art,” and that where comics are concerned, the former category only includes a limited, historically and culturally specific body of material. For obvious reasons, I find this distinction problematic. When I refer to the self-conscious artistic *intentions* of alternative cartoonists, I do not mean to imply that other types of comics are not self-consciously artistic, and I have no opinion as to whether such artistic intentions are a necessary or a sufficient criterion for defining something as art.

was the serial comic book distributed through specialty stores, and Hatfield demonstrates that this publishing model crucially shaped both the economic development of the alternative comics industry and the narrative strategies it favored (153–158). However, the alternative comic book has now been largely supplanted by the standalone graphic novel and to a lesser extent the webcomic. Moreover, to a large degree the alternative comics movement has been co-opted by the commercial publishing industry. American publishing firms like Random House and Macmillan now have their own graphic novel imprints, which publish work by artists who formerly were or might have been published by Fantagraphics or Drawn & Quarterly. Therefore, in a sense the “alternative” comic book has now been integrated into the commercial mainstream. Nonetheless, I’d suggest that contemporary comic book production, as well as critical and scholarly attitudes toward comics, have been shaped by the alternative comics movement; when artistically oriented cartoonists make comics, and when academic or journalistic critics write about comics, they operate under the same framework of assumptions that governed the alternative comics movement at its peak.

Ideologemes associated with alternative comics were in large part the creation of Fantagraphics Books and its publication *The Comics Journal (TCJ)*. *TCJ* was the first publication to attempt to subject comics to objective aesthetic criticism, according to its editor-in-chief Gary Groth. In his role as both publisher of Fantagraphics and editor-in-chief of *TCJ*, Groth played a pivotal role in defining the alternative comics aesthetic (a role which is hinted at by the title of Ana Merino’s exhibition catalog *Fantagraphics: Creadores del Canon*, i.e., *Fantagraphics, Creators of the Canon*). For this reason, my account of the alternative comics ideology will rely heavily on Groth’s contributions to

this discourse, as well as Douglas Wolk's *Reading Comics*, which reflects the influence of Groth or others influenced by him. It is important to note that Groth and Wolk's writing tends to be highly polemical, and often presents a less nuanced view of artistic identity and creativity than we find in some alternative comics criticism or even in the comics themselves. In Groth's case, at least, this is no accident but part of a deliberate effort to offer a stark binary opposition between alternative and mainstream comics. However, for this reason, Groth's and Wolk's accounts are useful resources for unpacking the ways in which the fantasy of handwriting operates in alternative comics, because their writings present this fantasy in its purest form. Although other critics (e.g., Charles Hatfield and Hillary Chute) provide more nuanced and critical accounts of alternative comics, I will suggest that these writers often implicitly rely on weaker forms of the same fantasies upon which Groth and Wolk's writings rely

A central goal of the alternative comics movement is to elevate the cultural status of comics and to dispel the prevailing stereotype of comics as lowbrow art appropriate only for children. Practitioners and theorists of alternative cartoonists seek to establish comics as a legitimate field of artistic endeavor, to show that comics can "compete with" or "stand on their own against" canonical prose literature, gallery art, or art cinema. Ever since the medium of comics first came to the attention of highbrow critics in the early 20th century, most such critics have viewed comics as lowbrow art and as primarily intended for children.⁴ The rare cases in which cultural elites have embraced comics, such as Gilbert Seldes's laudatory essay on *Krazy Kat* ("The Krazy Kat That Walks By Himself," in *The Seven Lively Arts*, 1924, included in Heer and Worcester) are, or are

⁴ See Heer and Worcester for numerous examples of negative critiques of comics by highbrow cultural critics.

perceived by the alternative comics community as, exceptions to a general disdain for the medium. The stated purpose of the *Comics Journal* was to change the reading public's perception of comics, as Groth wrote in 1988: "The interviews reprinted here represent the *Journal's* more 'constructive' attempt to inform the reading public (and rehabilitate the public's perception) as to the legitimacy of the comics form as a bona fide art" (Groth and Fiore x).⁵ According to Bart Beaty, the contemporary European comics avant-garde has sought to appeal to Bourdieu's autonomous principle of legitimacy; that is, its members seek "the prestige that is accorded to artists by other artists." The autonomous principle exists in a dialectic with the heteronomous principle, according to which the criterion of success is "financial success, measured primarily by sales or performances" (8; see also 20–21, 30–31). The American alternative comics movement seeks more or less the same thing. Publications like the *Comics Journal* seek to establish the superiority of the autonomous principle, and alternative comics themselves often participate in the same effort. Attempts to differentiate alternative and mainstream modes of production are often seen in alternative comics themselves, from the underground movement's deliberate parodies of superhero clichés, to *Maus's* (Art Spiegelman) characterization of itself as "not like other comics," to Eddie Campbell's construction of an alternative comics canon in *How to Be an Artist*.

Beaty argues, however, that European avant-garde cartoonists seek to legitimate their work by comparing it to visual art, and that in doing so, these cartoonists have

⁵ This effort entailed making an exaggeratedly sharp distinction between the comics which the *Journal* promoted and the comics with which uninitiated readers were familiar. In arguing that *their* comics weren't for kids, the *Journal* conceded the claim that other comics *were* for kids. Paradoxically, then, the *Journal* sought (and still seeks) to establish the highbrow credentials of comics by accepting precisely the same traditional binary opposition between "real" art and commercial art under which comics were condemned in the first place.

deliberately declined to appeal to literature as a model for their work. In American comics, the opposite is true. For alternative cartoonists, the quest for legitimation via the autonomous principle often manifests itself as a deliberate effort to assimilate comics to literature.⁶ However, the comics-literature comparison is more often seen in comics criticism and scholarship. Joseph Witek has demonstrated that when Art Spiegelman's *Maus* became popular, journalistic critics frequently tried to exclude it from the category of comics. Such critics often claimed that comics were a medium for children, and that because *Maus* was obviously not for children, it needed to be placed into some other category. One of these critics, Lawrence Langer of the *New York Times*, therefore observed: "Art Spiegelman doesn't draw comics. It might be clever to say he draws tragics, but that would be inaccurate too. Like its predecessor, 'Maus: A Survivor's Tale II. And Here My Troubles Began' is a serious form of pictorial *literature*" (n.p., emphasis mine). In making this claim, Langer was echoing *Maus*'s own back-cover blurb, which stated: "Put aside all your preconceptions. These cats and mice are not Tom and Jerry, but something quite different. This is a new kind of literature."

The identifications of (adult, serious, literary, alternative) comics with literature has become a commonplace in more recent scholarly writing on comics. The terms "comics" and "literature" are juxtaposed in the titles of at least two recent scholarly works on

⁶ The reasons for this cultural difference are too complex to go into here. Beaty notes that in Europe there was an older critical tradition that privileged "the literary aspect of comic book production," but that "[a] generation of cartoonists raised in art schools saw in postmodernism's erosion of high/low distinctions the possibility of creating avant-gardist work in the comic book form" (7). In the United States, however, prior to the rise of the alternative comic there was no significant tradition of viewing comics through the lens of either literature or art. I'd provisionally suggest that when comics first came to be viewed as having serious artistic intent, literature simply seemed like the natural category in which to place comics, given that comics are typically narrative in nature, and that the most widely read alternative comics in America typically employ genres (e.g., autobiography and journalism) that are conventionally associated with literary prose.

comics, Charles Hatfield's *Alternative Comics: An Emerging Literature* (2005) and Rocco Versaci's *This Book Contains Graphic Language: Comics as Literature* (2007). The authors of both these books, like myself and my advisors, are academics based in English departments. Similarly, journals such as *ImageText: Interdisciplinary Comics Studies* and conferences like "Graphic Engagement: The Politics of Comics and Animation" (Purdue University, 2011) or "The New Narrative" (University of Toronto, first held in 2008) are sponsored by departments of English or comparative literature. At least in North America, literature departments have become the principal disciplinary locations for academic comics studies, rather than, say, departments of art history or media studies. As one final example, in the introduction to *The Best American Comics Criticism*, Ben Schwartz uses the term "literary comics" or "lit-comics" to refer to the corpus of texts most often discussed by the critical writings in his anthology (10).

In a philosophical discussion of the definition of comics, Aaron Meskin summarized the reasons why literature seems like a natural category in which to include comics:

They [i.e., comics] are, after all, typically full of text, commonly found in bookshops where they are often sold in book form under the 'Graphic Novel' heading, appreciated (at least in part) by means of reading, taught in literature classes, occasionally discussed in academic journals devoted to literature, and often reviewed in the book review sections of newspapers and magazines. (Meskin n.p.)

However, "literature," when it is used in this context, is typically an undefined term. In the works mentions here, Hatfield, Versaci, and Schwartz neither interrogate the category of literature, nor offer an explicit definition of the term. In a more recent article, Hatfield does address the controversy that developed over his use of the term "literature." He cites a reviewer, Jan Baetens, who worried that his characterization of

comics as literature had more to do with cultural politics than with the inherent nature of the medium. By calling comics literature, Baetens suggested, Hatfield was simply trying to elevate comics to the status of a respectable medium, at the expense of erasing the phenomenological distinctions between the reading of comics and the reading of literature (Hatfield 2010 ¶16). Hatfield also cites Bart Beaty's question: "[I]f so much of culture can be subsumed under the rubric of literature, is there any sense in calling it literature?" (¶18) Hatfield's response to these critiques is: "*Alternative Comics* insists on framing comics in literary terms, not in a mere bid for status, but, from my point of view, as an incipient attack from within on hidebound ideas of what literature itself is or should be" (¶16).

In my view, this response leaves the original objections intact. Hatfield still asserts, without proof, that literature is the proper category in which to situate comics. He holds that if comics are not viewed as literature, then this is simply because "literature" happens to have been defined in an excessively narrow way, and not because the term "literature" connotes a set of formal or medial properties which comics lack, as Baetens and Beaty suggest might be the case. Hatfield therefore still neglects to explain why it makes sense to view comics through the lens of literature in the first place. Finally, even when critics deny that comics are "literature," they sometimes still end up evaluating comics by the same critical standards that they would use to evaluate traditional literary texts. For example, Douglas Wolk explicitly claims that comics are not literature (14), yet as I will discuss below, his standards for evaluating comics are similar to very traditional standards for evaluating literature. The question that none of these authors asks is:

What does it *mean* to say that comics are literature? That is, what sort of assumptions about comics are implicit in this characterization?

Authorship in Alternative Comics

I propose that one unexamined assumption behind claims that comics are literature (though hardly the only such assumption) is that comics are *authored* texts. A widely-held unexamined assumption among comics scholars is that a literary text is an *authored* text – that the literary work is the product of a single, self-identical subject. It goes without saying that the unity and singularity of the author have been challenged in academic criticism of literature and other media, but I would suggest that comics critics have largely neglected this important critical shift and have taken for granted that “literature” is the production of a discernible and consistent “author.”⁷ Therefore, a “literary” comic must be in this sense an authored comic.

For example, one common way of distinguishing “alternative” and “mainstream” comics is according to differences between their typical production processes, which correspond to differing conceptions of the creator as author. American commercial comics are typically produced on a work-made-for-hire basis, without creator ownership, and involve an assembly-line production process where a different person is responsible for each aspect of the comic. A typical mainstream comic book is the creation of a writer, a penciller, an inker, a colorist, a letterer, and one or more editors. Often all of these are different individuals, and usually none of them has an intellectual property interest in the comic or its characters. Some of them, especially the colorist

⁷ Obvious references here are Foucault’s “The Author Function” and Barthes’s “The Death of the Author.” See Staiger for a comprehensive survey of the state of authorship theories as of 2003, with specific reference to cinema studies.

and letterer, are more often viewed as hired help or as craftspeople than as artists in their own right.⁸ Writers who sympathize with alternative comics often refer to this system as an “assembly line;” for example, Robert Fiore observed in 1988: “the high productivity demand of the comics industry necessitates an assembly-line approach to comics creation” (Groth and Fiore 3). The term “assembly line” characterizes this production process as Fordist and Taylorist, and as motivated by a desire for efficiency rather than artistic quality. Creators who work in this assembly-line system can and often do become superstars; even some letterers and colorists (e.g., respectively, Todd Klein and Dave Stewart) have achieved star status. However, star creators of mainstream comics are more comparable to Hollywood stars than to art-cinema auteurs. Their names sell comics, but they themselves are not viewed as the primary creators of those comics.⁹

By contrast, alternative comics creators typically do everything themselves, including writing, artwork, and (crucially, we will see) lettering. Alternative comics creators are also almost always the sole owners of everything they create. This (non)division of labor is often understood as having inherent aesthetic merit, as Wolk explicitly states:

[C]omics produced under the sole or chief creative control of a single person of significant skill are more likely to be good (or at least novel enough to be compelling and resonant) than comics produced by a group of people assembly-line style [...] This naturally coincides with the observation

⁸ I suspect that women have been employed in commercial comics as letterers and colorists more often than as writers, pencillers, or inkers, and that this is related to the lower artistic stature of the former two jobs, although I can't prove these claims.

⁹ See Wolk 32–34 for a confused discussion of the difference between auteurism in comics and in cinema. Although Wolk apparently rejects Andrew Sarris's concept of the filmic auteur, he does so only in order to adopt the even more essentialist notion of Romantic authorship that I discuss below.

that a comic owned by its creator is more likely to be stylistically adventurous than one produced on a work-made-for-hire basis .(31–32)

Later he states even more bluntly that “the presence of an auteur is pretty much a prerequisite for art comics” (35). For authors like Wolk, a division of labor between writer and artist is acceptable only when one of the two figures is clearly dominant, or when the two creators work together so closely as to become essentially a single creative entity.¹⁰ Harvey Pekar appears to be an exception to this rule, but actually is not. He may not have drawn his own material, but he exercised such creative control and collaborated so closely with his artists that he deserved to be recognized as the sole creator, the *author*, of *American Splendor*.¹¹ For Wolk, collaborative authorship, when all parties are equally responsible for the outcome, no matter the qualities of the contributions of individual collaborators, is less genuine or *authentic* than sole authorship. According to Wolk, the alternative comics author is a singular, self-identical author, and this is what makes his or her comics more artistically authentic than those of the mainstream.

For critics like Groth and Wolk, the singularity and self-identity of the alternative cartoonist is a function of his or her idiosyncratic style and his or her desire for self-expression, two qualities which the mainstream cartoonist lacks. Groth wrote in 1988: “if we define a hack by his [*sic*] willingness to subordinate his talent to purely commercial

¹⁰ In a 2007 conference paper, I critiqued this claim for reasons other than the ones I provide here.

¹¹ This is of course an oversimplification, as *American Splendor* often engages critically with the fact that Pekar’s stories are interpreted differently by each of his artistic collaborators. For example, one of Pekar’s stories “shows different and conflicting pictures of Harvey, culled from past *American Splendor* stories, to suggest how Joyce [Brabner]’s image of him was influenced by his comics prior to their first face-to-face meeting” (Hatfield 2005 126).

dictates, we find that the comics industry has been dominated by hacks since its inception” (*New Comics* xi). By contrast, the ’60s underground comix movement

was the only time in the history of the comic book when meaningful change was not the result of predominantly economic motives; the underground cartoonists worked out of an inner need, from the social and cultural matrix, not the economic one. (xi)

For Groth, whereas the mainstream cartoonist uses his or her talent for purely mercenary purposes, the underground cartoonist’s goal is to satisfy an “inner need.”¹² The alternative cartoonist continues the project of the underground cartoonist, using comics as a vehicle for self-expression rather than for monetary enrichment. Thus, the alternative cartoonist is defined negatively as one who is unconcerned with financial success or mass appeal, and positively as one whose work expresses his or her personality, subjectivity, or self. Wolk argues along similar lines: “ ‘Expressiveness’ is more the point of art comics than characters or plot points; they privilege the distinctiveness of the creator’s hand, rather than the pleasures of the tools of genre and readerly expectations” (30). Similarly, in an interview published at Amazon.com, Wolk claimed that “art comics are primarily about particular cartoonists’ self-expression, and superhero comics are primarily about the characters and their shared fictional history (“Amazon.com”).¹³ In summary, then, the alternative comic is an authored work insofar as A) it is the product of a single, self-identical individual, and B) its purpose is to

¹² The elitism and snobbery of this formulation are obvious. See Pustz, M. J. *Comic Book Culture: Fanboys and True Believers* (Univ Pr of Mississippi, 1999), 98–99, for a detailed discussion of Groth’s and the *Journal’s* role in fostering stereotypes of alternative comics readers as snobs.

¹³ See <http://archives.tcj.com/messboard/viewtopic.php?p=113481&sid=0cf9e233359642aad69e1fbbfd53999d> > for an argument about other possible definitions of “art comics.” Much confusion results from the fact that such discussions often fail to distinguish between “art” in the sense of the general category of that which has aesthetic merit (as opposed to non-art), and “art” as the specific category of visual art (as opposed to literature).

express that individual's "self" – although the meaning of "self" in this context still needs to be defined. (Note that these two reasons why the alternative comic is an authored work are analogous to the two cherished properties of handwriting, existence and uniqueness.)

This conception of the alternative cartoonist echoes a very traditional concept of literary authorship, and here the common association between alternative comics and literature becomes important: even though critics like Wolk deny that comics are literature, they still rely implicitly on a literary model of authorship. As Janet Staiger explains, the concept of authorship as self-expression – "expressive realism" or "authorship as personality" – has a distinguished history:

Coming from Romanticism and the theorizing of John Ruskin, expressive realism is not just the conveyance of a faithful representation of nature; the artistic individual is "noble" or unusual by virtue of the special insight into the world that is transmitted into and through the artwork. [...] [M.H.] Abrams distinguishes expressive criticism as theorizing "poetry [to be] the overflow, utterance or projection of the thought and the feelings of the poet" This leads to an evaluative hierarchy that privileges poetry that expresses feelings (rather than ideas), is mimetic to a internal state of mind rather than the external world, and is its own end. (33–34)

To this extent, the alternative comics auteur is a throwback to the figure of the Romantic artist-hero, with his or her "spontaneous outflow of powerful feelings." The deep conservatism of this concept is a clue to why it proves appealing to critics like Groth and Wolk. Writing about the use of authorship-as-personality theories in cinema studies, Staiger notes that

one major reason for such an authorship approach to cinema is because it allows films to be treated as art. If individuals impart aesthetically sophisticated insights through movies, then art exists. Conversely, if scholars find such insights in movies, sentient beings are assumed to have put them there. (34)

Personality-based theories of authorship define art tautologically as that which proceeds from an artist, i.e., a singular and self-identical creative subject. Thus, claiming that the creators of certain texts are “artists” is equivalent to claiming that these texts meet the definition of “art.” The same logic applies to comics: if alternative comics have artists, they must be art, which is precisely the point that critics like Groth and Wolk are seeking to demonstrate.

The emphasis on the alternative comics auteur as a singular, self-identical and temporally consistent figure may help explain why autobiography has typically been the dominant genre of alternative comics, as well as one of the most widely discussed genres among comics scholars.¹⁴ Autobiography can be understood, at least naïvely, as a genre that expresses the author’s “selfhood” – meaning, for example, the idiosyncratic aspects of the author’s character, or the qualities that distinguish the author from others. As Hatfield argues, autobiographical comics implicitly purport to be authentic factual representations of the author’s experience (Hatfield 2005, 113). Of course, autobiographical comics inevitably fail to achieve such factual accuracy, because their presentation of the author’s “self” is filtered through the medium of comics. However, by honestly acknowledging this, the autobiographical comic promises to be an authentic record of the author’s unique way of seeing:

While these tales revel in artifice, in the end they present the artist’s own techniques to us with such self-critical candor that implied claims to truth, though now bracketed, still inform our reading. These tales bear out Paul John Eakin’s observation that “[a]utobiographers themselves constitute a principal source of doubt about the validity of [their] art” (276); yet this

¹⁴ On autobiography, besides the references previously cited, see Hillary Chute, *Graphic Women: Life Narrative and Contemporary Comics* (Columbia Univ Pr, 2010), which I was not able to read in time to incorporate its insights into this chapter; and Michael Chaney, ed., *Graphic Subjects: Critical Essays on Autobiography and Graphic Novels* (Madison: University of Wisconsin Press, 2011).

doubt, this radical self-questioning, reinforces rather than corrodes the seeming veracity of autobiography, for the texts' admissions of artifice defer the question of trustworthiness to a new level, that of creation. (124–125)

Despite its inevitable lack of *factual* authenticity, the autobiographical comic purports, at least according to a naïve understanding of autobiography, to offer a unique mode of access to authorial subjectivity. The appeal of the alternative comic comes from its faithful representation of the author's subjectivity. I now suggest that this subjectivity is a specifically *embodied* subjectivity.

Authorship as Embodiment in Alternative Comics

Although this claim is obviously far too complex to be more fully documented here, I would observe that at least since the Romantic era, the *physical activity* of the writer has often been an important signifier of literariness. The Romantic concept of authorship as self-expression implies that the author is the sole creator of his or her work, that the work comes into being through the author's act of creation *ex nihilo*. This act of creation is often figured as a *physical* act. Blake makes a rural pen and stains the water clear; elsewhere, he invokes the Muses to "Come into my hand / By your mild power, descending down the Nerves of my right arm / From out the Portals of my Brain." Keats fears that he may cease to be before his pen has gleaned his teeming brain. Heaney's squat pen rests, snug as a gun, between his finger and his thumb.¹⁵ Moreover, the physical activity of the writer is often mythologized; stories often circulate about writers' idiosyncratic working habits or about the physical, material circumstances in which texts are composed. Famous examples here include the story of Coleridge's visitor from Porlock, who interrupted him just after he, "taking his pen, ink, and paper,

¹⁵ I thank Donald Ault and Judith Page for suggesting some of the above examples.

instantly and eagerly wrote down the lines that are here preserved” (Woods 1240); or the anecdote that Jane Austen “wrote upon small slips of paper, which could be easily put away, or covered with a piece of blotting paper” (qtd. in Tomalin 218). In *Neatness Counts*, Kevin Kopelson offers an extended account of the ways in which writers’ physical writing spaces (e.g., desks) serve as metaphors for the creative activity of writing.¹⁶ In short, then, one might say that the literary author is frequently depicted as a figure who *writes by hand*, whose work is the product of his or her hand as well as his or her heart and mind. This model of literary creation is clearly recognizable as a naïve fantasy of handwriting. It has affinities with the graphological view of handwriting, which holds that the idiosyncrasies of the writer’s handwriting reflect the idiosyncrasies of the writer’s self, and that handwriting is therefore an index of a stable, self-identical core of personal identity.

Of course, handwriting is only one of many possible metaphors or figures for the poetic act, and even among the Romantics, the image of literature as handwriting competed with other metaphors for literary creation. For example, “[m]ost of Wordsworth’s poems dramatize the recollection of events in the mind and not on paper. Wordsworth himself often composed while walking outside and then later dictated his lines to a family member” (Judith Page, personal communication). However, I want to suggest that the alternative comics community has chosen to emphasize this particular model of authorship, and that the reason is because a model of authorship based on handwriting is particularly well-adapted to the political purposes of this community. The model of authorship-as-handwriting implies that the author is a singular, self-identical

¹⁶ See also D. Chandler, *The Act of Writing: A Media Theory Approach* (Aberystwyth: University of Wales), 159.

figure – that the author’s work is the product of his/her hand and no one else’s.

Handwriting guarantees the *existence* of the author; this is the first of the two relevant properties of handwriting that I discussed in the introduction.

But handwriting also has another relevant property: it reflects the *uniqueness* of the author. According to the graphological theory, handwriting doesn’t just prove that the author was there, but also records distinctive traits of the author’s character; it preserves something of the author’s innermost self. Through the use of unique, idiosyncratic handwriting, the writer reveals that which is particular to him or her. The use of handwriting as a metaphor for authorship therefore also serves to guarantee that alternative comics are about self-expression – that the alternative cartoonist has a unique self which is distinguishable from that of other people, and that this self is expressed in his or her comics. This is another key distinction between alternative and “mainstream” comics. Clearly, not all mainstream cartoonists draw in the same style, but a critic like Groth would likely argue that the style of a mainstream cartoonist does not truly reveal his or her personality.¹⁷ Such a critic might note that mainstream cartoonists often try to draw like the latest popular artist of the moment; the appearance of a mainstream cartoonist with a genuinely innovative style, like Neal Adams, typically leads to a wave of imitators who draw in the same style. Moreover, mainstream cartoonists are often required to follow the house style of the company they work for. Thus, for example, one famous instructional textbook on superhero comics is called *How to Draw Comics the Marvel Way* (Stan Lee and John Buscema, 1984).

¹⁷ A Grothian critic would, however, probably admit the existence of certain exceptions to this rule. For example, in his discussion of “hacks” (cf. p. 214 above), Groth notes that Harvey Kurtzman and Carl Barks were not hacks, implying that despite working in the commercial comics industry, they succeeded in developing unique styles that reflected their personalities.

By contrast, in alternative comics each cartoonist is expected to develop an individual graphic style, which is perceived as reflecting something about the cartoonist's personality. The idiosyncrasy of the cartoonist's drawing and lettering reflects the uniqueness of his or her selfhood. Wolk makes this point seemingly involuntarily when he observes, as quoted above, that art comics (i.e., alternative comics) "privilege the distinctiveness of the creator's *hand*" (30, emphasis mine). For the alternative comics community, stylistic idiosyncrasy is an inherently valuable trait in an artist – much more valuable than mimetic accuracy, and probably also more valuable than technical competence or visual appeal. Many celebrated alternative cartoonists, like Jeffrey Brown, Mat Brinkman or David Heatley, have graphic styles that are highly idiosyncratic but would be considered extremely crude by the standards of commercial comics. (Figure 4-1) In alternative comics, the highest goal is not to present a perceptually realistic or exciting rendering of an imaginary scene – as is the case in commercial comics – but to develop a unique, idiosyncratic style.

Moreover, another standard expectation is that an alternative cartoonist's style should be visible not just in the images inside his or her panels (i.e., diegetic images), but in every aspect of his or her comic, including letters, panel borders, word balloons, and other nondiegetic lines. Speaking of the Canadian alternative cartoonist Seth, Wolk observes that his panel borders "are not perfectly straight, and they don't have a consistent thickness: they've got the same wobble as Seth's other brushstrokes, so they declare that they were made by the same hand that drew the image within them" (132). Here Wolk unknowingly rediscovers a principle observed by the Belgian comics theorist Philippe Marion:

The lettering of comics tends to obey a *principle of homogeneity*: the manuscript trait corresponds in a more or less solidary manner to the drawn trait. Inasmuch as they conjugate themselves visually, they tend to produce upon the reader-spectator the same effect of trace. (61)¹⁸

In the work of an artist like Seth, diegetic and nondiegetic images share the same graphic qualities, or the same “tenor of the trace” (*teneur en trace*), which is Marion’s term for the property by which a drawn line records or reveals the idiosyncratic physical and psychological activity of the hand that drew it. The homogeneity of diegetic and nondiegetic lines therefore indicates the presence of a single subject responsible for both. Notably, Marion does *not* claim that this figure, whom he refers to as the graphiator (*graphiateur*), is identical with the actual physical person or persons responsible for the artwork and the lettering. The graphiator is a notional construct, the comics equivalent of Wayne Booth’s implied author (in literature) or André Gaudreault’s monstrator (in film). However, authors like Wolk tend to make the naïve assumption that the graphiator and the physical author are in fact identifiable, that the homogeneity of diegetic and nondiegetic lines testifies to the cartoonist’s physiological and psychic integrity.

These beliefs in the identity of drawing with handwriting, and of the artist’s bodily movements with the states of his or her subjectivity, are visible not only in alternative comics criticism but also in the comics themselves. In their work, alternative cartoonists often emphasize the intimate connection between the drawing tool, the artist’s hand and body, and the artist’s self.¹⁹ In Justin Green’s *Binky Brown Meets the Holy Virgin Mary*

¹⁸ “[L]e lettrage de BD obéit souvent à un *principe d’homogénéité* : le trait manuscrit répond de manière plus ou moins solidaire au trait dessiné. Lorsqu’ils se conjugent visuellement, ils tendent à produire sur le lecteur-spectateur un même effet de trace.” My translation.

¹⁹ A full discussion of this trope is beyond the scope of this chapter. I hope to explore this topic in more detail in future work.

(1972), a seminal (pun intended) inspiration for alternative comics, the frontispiece shows the artist drawing with a pen held in his mouth, while a scythe is positioned dangerously close to his groin (Green 10).²⁰ As Hatfield suggests, the pen represents “the mobile alternative to a penis held motionless, hostage, by a symbolic threat of castration” (134). In Craig Thompson’s autobiographical *Blankets* (2003), he depicts himself masturbating while reading a handwritten letter from his girlfriend Raina (146) (Figure 4-2). The curvaceous lines of her letters remind him of those of her body (and provide his only means of access to her body, from which he is separated both by physical distance and by their sexually repressive upbringing). “[T]here is no question that he is talking not just about writing, but about handwriting. [...] Here, he is clearly making a connection between the flow of Raina’s handwriting, the pressure of pen on paper, and the body that made the marks: for Craig, the trace of the writer’s hand gives manuscript an erotic appeal” (Tinker, n.p.). Thompson subsequently depicts himself ejaculating on a sheet of paper, another process which involves marking a blank surface with fluid ejected from a hand-held tool.

Both of these texts represent drawing as an essentially masculine act, setting up a circuit between the pen, the penis, the drawing hand, and the self. At the same time, however, female alternative cartoonists also often insist on the importance of writing and drawing. In *Fun Home*, Alison Bechdel painstakingly reproduces her father’s handwriting, and draws an extended contrast between the intimacy of handwriting and the impersonality of typewriting. When Alison comes out as a lesbian to her mother, she

²⁰ Anecdotally, I have a friend, a very talented artist and also a paraplegic, who actually does draw with his mouth. In the early '80s he was hired to work at Marvel, but was unfortunately forced to quit after a month due to the tremendous bodily strain imposed by extended sessions of drawing with his mouth.

does so by writing a typewritten letter. Her mother responds with a disapproving letter which is also typewritten (77). This is unusual insofar as most of the private writings depicted in the book (e.g., letters and diary entries) are handwritten. As Alison writes in her diary about her anger over her mother's letter, she accidentally cuts her hand and "smear[s] the blood into my journal, pleased by the opportunity to transmit my anguish to the page so literally" (78). Elsewhere, Alison depicts herself masturbating while drawing (170).²¹ As a final example, Lynda Barry's work often emphasizes the spiritual and therapeutic aspects of drawing. For example, in *Picture This*, Barry observes: "a steady kind of writing with a paintbrush made a state of mind available to me and a chance for words to come unhindered by threat of instant death by delete button" (200). All these examples suggest the centrality of the drawing act to the way in which alternative cartoonists imagine and represent themselves. For alternative cartoonists, drawing is not a purely mimetic act; instead, it is valuable for its own sake and for the way in which it reveals the cartoonist's personality.²²

A possible objection here is that mainstream cartoonists also often show themselves drawing; see, for example, Jim Aparo's cover to *The Brave and the Bold* #124 (Figure 4-3), or the backup story in *Amazing Spider-Man Annual* #1, "How Stan Lee and Steve Ditko Create Spider-Man!" However, a Grothian critic would probably object that references like these tend to be introduced for humor value, and that in

²¹ *Fun Home* also emphasizes the link between drawing and writing in the sequence where Alison invents a shorthand symbol for the phrase "I think" (142-143). Bechdel also shows herself drawing in the introduction to *The Essential Dykes to Watch Out For*. Again, an extended discussion of handwriting and drawing in Bechdel's work is outside the scope of this chapter, although I hope to return to this topic in later work.

²² I thank Joanna Davis-McElligott and Corey Creekmur for their assistance with the references cited in this paragraph.

mainstream comics the act of drawing is most often understood as having purely mimetic value. An artist like the late Curt Swan is remembered for the exciting and realistic way in which he rendered the adventures of Superman and the Legion of Super-Heroes, and not for the idiosyncratic qualities of his graphic style, or for the idiosyncratic personality revealed thereby. According to the Grothian perspective, for mainstream cartoonists, drawing is a mimetic act and is pursued in order to make a living; for alternative cartoonists (to paraphrase Salman Rushdie), drawing is life itself.

In summary, then, the discourse of alternative comics relies heavily on the naïve fantasy of handwriting. The standard notion is that in creating an alternative comic, the cartoonist writes him– or herself into the world. His/her text faithfully records his or her bodily and spiritual uniqueness, while also, in a sense, taking on a life of its own. Although the artist’s drawings don’t come to life in the same way that Otto Messmer’s drawings do, they nonetheless constitute a permanent record of the artist’s hand. Serge Tisseron, a comics theorist influenced by psychoanalysis, argues that cartoonists are motivated by their desire to externalize their interiority in this way: “Tisseron proposes, generally, to associate every form of graphic activity to a fantasy of ‘decorporation’: the hand makes it possible to place outside oneself the object that was previously in the interior” (Marion 17).²³ Marion goes on to argue that drawing produces a “possibility of continuity with oneself,” and that the desire for such continuity is of central importance in the drawing activity of children (21). Moreover, continuity with oneself shades into *continuity with another*. In externalizing one’s graphic traces, the artist offers them for

²³ “Tisseron propose ainsi, de manière générale, d’associer toute forme d’activité graphique à un fantasme de « décorporation » : la main permet de placer à l’extérieur de soi l’objet qui était auparavant à l’intérieur.” All translations from Marion are mine.

appreciation by a reader or viewer, who thus becomes able to understand the artist's idiosyncratic selfhood. The reader's desire is thus the correlate of the artist's desire: the artist desires to externalize his or her self, while the reader desires to incorporate that self into his or her own. Ideally, in reading an alternative comic, the reader undertakes an intersubjective connection with the artist. (To paraphrase Whitman: "Camerado! This is no [comic] book; / Who touches this, touches a man.") Reading an alternative comic is supposed in this scheme to bring the artist's authentic (if mutable and multiple) self into contact with the reader's authentic (mutable and multiple) self.

Authorship as Fantasy

This concept of authorship-as-handwriting, however, remains *fantastic* rather than real; its importance to alternative cartoonists does not depend on its factual accuracy. Marion begins his discussion of graphiation by observing that it's a matter of perception rather than reality. "The BD image is indeed most often reproduced by photographic duplication. This aspect, linked to the context of a mass communication, will not be discussed here. I take into consideration only the graphic nature of the message of BD, *as it appears to the reader-spectator*" (22, footnote 2, emphasis mine).²⁴ In most cases the reader encounters the comic as an always-already reproduced artifact. Except in the case of original art, there is always a gap between the artist's hand and the text the reader consumes, and this gap is necessitated by the business model of alternative comics, which depends on mass publication rather than gallery exhibition. Emma Tinker suggests that alternative cartoonists are aware of these facts, but that they wish things

²⁴ "L'image de BD est en effet le plus souvent reproduite par duplication photographique. Cet aspect, lié au contexte d'une communication de masse, ne sera pas abordé ici. Je ne prends en considération que la nature graphique du message de BD, telle qu'elle apparaît au lecteur-spectateur."

were otherwise: “although alternative comics writers know that their work is for mass production, they are nevertheless curiously nostalgic for the personal, the handmade, the manuscript” (Tinker n.p.).

I suggest that the alternative comics ideology often seeks to *forget* the existence of this gap, both by not mentioning it, and by creating extratextual means of access to the embodied subjectivity of the artist. One of these means of access is actual in-person contact between creators and fans. Such contact happens often at comics conventions and festivals, which, as Beaty explains (120ff), are a standard feature of both the American and European alternative comics scenes. Events like the Alternative Press Expo or the MoCCA Art Festival offer opportunities for readers to encounter comic creators in person, as well as receiving sketches or signatures, which function as auratic traces of the artist’s body. A further important way of obscuring the gap between comics text and comics creator is through the exhibition or sale of original art pages, which are the holy grail of comics collecting because they represent the actual physical stamp of the artist’s hand.²⁵ At least partly for this reason, the original art page functions in American comics both as a potentially priceless collector’s item and as a privileged and contested signifier of creative agency. Indeed, the history of the circulation of original art in the American comics industry closely parallels the history of the evolution of the auteur status of the comics artist. In the 1980s, one of the principal rights that the creators’ rights movement sought to secure for artists was ownership of their original art

²⁵ Tinker notes, however, that “the original is not generally regarded in quite the same light as a drawing that was not made with publication in mind. It is perfectly acceptable for artists to use Tipp-ex, or white-out, on comics originals, and to leave outlines in pale blue pencil which are not picked up in reproduction.” This reminds us that visual differences are often, perhaps even always, introduced between the original and the reproduced page, even in the absence of digital production tools. Of course, an even bigger problem with the auratic status of original art is that it’s always already severed from the actual presence of the artist, as Derrida argues in “Signature Event Context.”

pages. At the time it was common practice to withhold and even deliberately destroy original art, precisely because this art had significant value both financially and as a symbol of the creator's artistic legitimacy and agency, which were denied by the industry's position that artists were employees rather than autonomous creative figures.²⁶ In alternative comics, artists retain their own artwork as a matter of course, and often exhibit it in galleries.

Furthermore, even when the artwork of alternative comics is reproduced rather than original, the comics themselves often appear to be, or actually are, hand-crafted artifacts. In the introduction to *Unpopular Culture*, Bart Beaty describes Nadia Raviscioni's comic book *Odile et l'eau*, a hand-printed book which is "limited to 150 signed and numbered copies," is "printed on coarse brown paper that retains a pulpy quality", and features a "peephole" in the paper of the title page (4–5). This comic emphasizes the fact of the physical intervention of the artist and printer in its production. In reading this comic, the reader feels a physical connection with the hand that not only drew the artwork in the comic, but crafted the comic's material substrate. Although this is a Swiss comic book, many American alternative comics reveal a similar concern with materiality and manual production. For example, the anthology *Kramer's Ergot 7* (2008) was a volume of 16.3 x 21.1 inches which was printed on expensive paper and hand-bound (although not by the artists).²⁷ The first 200 copies included a signed and

²⁶ This is another topic that is unfortunately outside the scope of the present discussion. For a historical discussion of policies surrounding original art in mainstream comics, including valuable contributions by John Bacon, Rob Allen, and an anonymous poster going by the name "Drusilla lives!", see <<http://forums.comicbookresources.com/showthread.php?p=11537643>>. The debate over original art in the '80s centered around Marvel Comics's refusal to release Jack Kirby's artwork; on this, see Mark Evanier, *Jack Kirby: King of Comics* (New York: Abrams, 2008).

²⁷ The decision to bind the book by hand was taken for practical as well as aesthetic reasons: there were no binding machines large enough to handle a volume of that size (Spurgeon and Harkham n.p.).

numbered letterpress print, and the book was released in a limited edition of 3500 copies at a price of \$125. By virtue of its rarity and its physical impressiveness, this volume has more in common with an artist's book than a comic book. On the other end of the price scale, the minicomic, a format in which many successful alternative comic artists have gotten their start, is a small-format comic which is photocopied, folded, hand-stapled, and personally distributed by the creator.

Alternative Comics and the Digital

Mechanical Lettering

Given the degree to which alternative comics privilege handwriting and on other forms of manual intervention, it is no surprise that alternative comics have historically eschewed mechanical modes of production. According to Marion and others, the fact that lettering reveals the artist's graphic personality is a reason why comics have typically relied on hand-lettering rather than mechanical typography, which is standard in nearly every other kind of printed matter.

It could be argued (somewhat reductively) that tenor of the trace is coextensive with the qualities of a drawing that are *irreducible to* or *excessive of* its semiotic value. In writing letters by hand, for example, a cartoonist – Seth, for example – follows a series of predetermined patterns, but also improvises on these patterns, investing them with idiosyncratic and personal qualities that are specifically his or hers. Thus, the differences between Seth's letters and, say, Chester Brown's letters are in some sense indexical of the differences between Seth and Chester Brown. Moreover, because the human hand is an inconsistent tool, no cartoonist can consistently execute the same letter in the same way every time. Within a single comic or a single word balloon, subtle variations will exist between each instance of the same letter; note, for example, the

subtle dissimilarities between the various instances of lower-case Y in Figure 4-4. The variations between different instances of the *same* letter, within a single comic or even a single word balloon, are evidence that those letters were drawn by an imperfect hand, and therefore by a *human* hand.

With the use of mechanical lettering, differences between individual instances of the same letter are erased, resulting in a homogeneity between letters that strips out the personal touch of the artist. Atkinson explains, citing Marion:

The 'trace' of this graphic movement can be found equally in the text as it can in the images, and it is notable that comic books and *la bande dessinée* rarely use typeface in the speech balloons and captions, preferring instead hand-drawn letters which retain the 'impulsion personnelle' (personal impetus) of the artist's hand. Typewritten fonts, by contrast, have a regularity that erases the trace of their own production. (271)

Similarly, Joseph Witek claims that hand-lettering “more closely approximates the nuances of the human voice than does mechanically printed type” (qtd. in Versaci 171), and Tinker holds that “[m]ost quality comics still use hand lettering rather than digital fonts, because it is much easier to achieve a visual unity of word and image if both retain the same style and texture of marks.” These critics all have different names for the element that is destroyed by mechanical lettering – “the personal impetus of the artist's hand,” “the nuances of the human voice,” “the visual unity of word and image.” All these terms, however, refer back in one way or another to the uniqueness of the artist's embodied practice and, by implication, his– or herself. What mechanical lettering seems to destroy is a visible trace of the subjectivity of the artist.

The classic example of the supposedly disembodied effects of typographic lettering is Leroy lettering, used at various times by DC, EC and Charlton, which uses a manually operated stencil to produce letters of uniform width and appearance. “The

LeRoy lettering device was invented for jobs like architectural renderings – places where you want uniformity and precision, not personality. It consists of a stylus and a pantographic lettering form; no matter who uses it, the lettering comes out essentially the same” (Evanier n.p.) (Figure 4-5). Like traditional hand-lettering, the LeRoy device works by direct manual intervention; however, like the Palmer method of penmanship, it turns the artist’s hand into a machine (cf. Thornton 181). The LeRoy device allows for greater mechanical perfection and consistency than are achievable with the unaided human hand, but imperfection and inconsistency, as we just saw, may be taken as those attributes which make hand-lettering of artistic value. Therefore, the LeRoy appears to have been used only for practical reasons (lower cost or the unavailability of competent hand-letterers) and has typically been seen as ugly and overly mechanical. For example, EC editor Harvey Kurtzman discontinued its use, partly because “he thought it didn’t blend well with the art; that it looked mechanical and oppressive” and because he had a skilled hand-letterer, Ben Oda (Mark Evanier, personal communication).

There are examples, mostly more recent, of more intelligent uses of mechanical lettering in comics; some of these examples will be discussed below. However, I’d suggest that the alternative comics ideology, taken to an extreme, logically implies that *all* mechanical lettering resembles LeRoy lettering in its suppression of the specificity of the artist’s hand. From this perspective, even if mechanical lettering is used in a more aesthetically appealing way, it still differs from LeRoy lettering only in degree, for two main reasons. First, as noted, mechanical lettering seems inevitably to strip out visible traces of the artist’s self; a mechanically lettered text does not testify to the uniqueness

of the writer. Second, mechanical lettering imposes an extra layer of mediation; it breaks the contact between the artist's hand from the page by adding a technological intermediary. An important objection here is that the LeRoy device is in fact no different from a pen or pencil in this sense; a pen or pencil already acts as an intermediary between the artist's hand and the page, breaking a notionally pure contact between the hand and its trace. Drawing with a pen is already far removed from fingerpainting or writing with bodily fluids. In order to respond to this objection, a Grothian critic would have to claim that the pen, pencil or brush is a uniquely privileged writing tool – that because of properties such as their handheld nature or their pressure-sensitivity, these tools are so closely connected to the artist's hand that they virtually become incorporated into it. The pen, pencil or brush is a nearly seamless extension of the hand, whereas the LeRoy device is a replacement for the hand. Of course, McLuhan argued that *all* media are extensions of the body in one way or another; but the Grothian critic's argument would be that the pen, pencil or brush is an extension of the body in a far more intimate sense than is the case with other media (why exactly this is the case, however, is not clear).

For the two reasons here stated, mechanical lettering seems (from the viewpoint of the alternative comics ideology) to strip out the subjective idiosyncrasy of the artist, both by concealing the artist's uniqueness and by severing the direct connection between artist and text.

Digital Lettering and Post-Production

These critiques can clearly be extended to digital lettering and other forms of digital manipulation. Digital lettering seems to be destructive of uniqueness in the same way as mechanical lettering (although this isn't necessarily true, as we'll see below).

Moreover, digital production processes seem to sever the artist's hand from the text, to a far greater degree than is the case with mechanical lettering. When an artist uses a digital tool, in the first place, the amount of medial layers increases significantly. These "layers" may even become physically distinguishable from each other, rather than just metaphorical. A striking example of this is a page where the artwork is reproduced directly from Gene Colan's pencils, but the lettering is digital (Figure 4-6). Colan's pencils have so much tenor of the trace that the reader almost feels s/he is actually watching him at work, but the word balloons appear to float on top of the pencils, or to exist in a zone entirely removed from them. If the comic had been lettered in pencil, the lettering and the artwork would have seemed organically unified; because of the use of digital lettering, the comic seems like an assemblage of disconnected parts. Digital lettering here seems to physically separate the published page from the artist's hand.

Of course this is merely a more dramatic version of the effect produced by LeRoy lettering. However, processes such as digital lettering also differ from LeRoy lettering in degree as well as in kind (or at least seem to do so). Even when a comics artist uses a tool like a typewriter or a LeRoy device, the artist's hand is still connected to the page in a clearly perceptible way; all that changes is the number of layers of mediation between the hand and the page. However, when an artist uses a tool like a mouse, a keyboard or even a stylus, the medial association between the hand and the page becomes so complex as to be difficult to envisage (cf. Harpold, qtd. on page 10 above). The problem here, in short, is that digital tools disconnect the embodied practice of the artist from the comic – or appear to do so, but as the above discussion should indicate, the alternative comics ideology is based on perception at least as much as on reality.

The apparent lack of physical connection between hand and writing surface also leads to other problems. When digital lettering or other digital tools are applied to preexisting, hand-drawn original art pages, the published version of each page becomes blatantly dissimilar from its original; a visible gap develops between the original page and its reproduction. As Tinker observes (footnote 25), no published page ever looks exactly like its original, but with digital manipulation, the differences between the original page and its reproduction become large enough to have practical consequences. When a page is digitally inked, lettered or colored, this means that there is *no* physical artifact that contains the same visual information as the published page does; the complete page (i.e., the assemblage of pencils, inking, coloring, etc.) only exists as computer memory. The original art, the ultimate link to the artist's hand, therefore becomes difficult, if not impossible, to exhibit or sell. As letterer Todd Klein observes, "comics tell a story, and a page of comics art without the lettering is only half the story. Selling a page of comics art with lettering is usually easier for that reason."²⁸ The logical extreme here occurs when pages are drawn entirely on a graphics tablet, as some artists, notably including industry veteran Brent Anderson, have now started to do.²⁹ Compared to a mouse or keyboard and a screen, the combination of tablet and stylus is more easily imaginable in terms of manual contact between the hand and the drawing surface (I will elaborate on this claim in chapter 6). However, when this tool is used, the "original" art exists only as digital data, i.e., in a form which bears no resemblance to its intended appearance. Indeed, since one property of digital

²⁸ I'll return to this point in my discussion of Kevin Huizenga's original art.

²⁹ See the September 2, 2009 entry on Anderson's website (<<http://www.brentandersonart.com/news.asp>>, accessed October 7, 2010) for Anderson's comments on his switch to a graphics tablet.

information is the indistinguishability of different copies of the same data, it might be said that the very term “original” art is a misnomer.

For all the above reasons, we might expect alternative cartoonists and critics to hold negative attitudes toward digital lettering and other forms of digital production. Such attitudes are less common than one might expect, but are nonetheless easy to locate. For example, the alternative cartoonist James Romberger mentioned in a 2009 thread on the *Comics Journal* discussion board that:

Digital lettering removes the human hand from the finished product and it is to see the work of the human hand that made me look at comics in the first place. [...] With the advent of digital fonts many cartoonists now never bother to learn lettering skills. I would prefer to see even wonky lettering, if it is the artist who drew the pages doing it. Fortunately, many independent artists still do their own lettering by hand, bless them. (“Research Paper Help!” n.p.)³⁰

Similarly, Lynda Barry observed that the use of digital lettering (along with slick paper and computer coloring) that makes contemporary commercial comics less “lively” than their predecessors: “I didn’t realize how much these things added to the aliveness of a comic story until they were gone. I like to believe there is some aliveness there I can’t detect for people who don’t know any other style of comics and for whom this sort of paper, type and coloration is the norm” (Spurgeon and Barry n.p.). For Barry, older commercial comics were enlivened by the evident presence of the human hand, and their liveliness has been destroyed by processes like computer lettering.

Even mainstream comics professionals, who might be expected to hold less purist views than their counterparts in alternative comics, have expressed similar

³⁰ Note, however, that Romberger’s position is rather extreme and that no other contributor to the discussion agreed with him.

reservations. For example, in an article on comics lettering, Michael Thomas quoted the celebrated hand-letterer Tom Orzechowski:

“[C]omic book lettering looks the way it does because it’s traditionally been done by hand,” he said. “By comparison, comic book fonts are something like clip art, available for use by anyone who isn’t prepared to pick up a pen and acquire the skill. . . . [Fonts] can be manipulated, but the user is just cutting, pasting and modifying in order to simulate the look of people who created this art form with pen and ink, and maybe a love of what they were doing.” (bracketed text in original)

In the same article, Richard Starkings, the preeminent digital letterer in American comic books, expressed the view that manual and digital lettering are no different: “No one I know uses their hands to letter; they use a tool called a pen. I use a tool called a computer [...] Computers don’t letter comics. People do” (Thomas n.p.). Although Starkings’s response is logically unassailable, his tone is defensive, suggesting that hand-lettering is an emotionally charged subject. Elsewhere Starkings felt forced to respond to the question “Richard, is hand lettering dead? Did you kill it?” (Starkings and Roshell 63). Although he makes the same objection to the premises behind this question (that “hand” lettering is not actually manual because it uses a pen), he does claim that this challenge is “often” posed to him. Moreover, the precise wording of the question suggests that hand-lettering was “alive” until Starkings “killed” it.

I don’t claim that any of these positions represents the majority view of any community of comics readers – indeed, it’s my impression that digital lettering is more widely accepted now than ever before. However, that the view represented by these criticisms of digital lettering is *logically entailed* by the alternative comics version of the fantasy of handwriting. When handwritten-ness is defined as necessary in order for a comic to make claims to the status of art, then inevitably, comics that are made without direct bodily involvement must be denied that status.

In summary, then, the alternative comics movement is a frequent site of naïve and restorative fantasies of handwriting. In the second section of this chapter, however, I want to argue that the alternative comics movement (or its fringes) can also be the site of a more reflective way of thinking about the relation between digital technology and embodied selfhood. The best place to look for such reflective examinations of handwriting is in alternative comics themselves.³¹ I begin with one case study of an alternative comic that takes a more reflective approach to the fantasy of handwriting. I then proceed to another comic that invokes the reflective fantasy of handwriting while abandoning some of the guiding assumptions of alternative comics.

Handwriting in the Comics of Kevin Huizenga

Huizenga and the Fantasy of Handwriting

Kevin Huizenga is an American cartoonist born in Illinois in 1977. Most of his comics are about Glenn Ganges, a character similar in background to, but not to be confused with, Huizenga himself. He may be characterized as an alternative cartoonist in that his work is published by the two leading publishers of the alternative movement, Drawn & Quarterly and Fantagraphics, and he belongs to the faculty of the Center for Cartoon Studies, run by fellow D&Q cartoonist James Sturm.

At first glance, Kevin Huizenga's work seems like a classic demonstration of how alternative comics deploys fantasies of handwriting. His comics offer a particularly clear demonstration of Marion's principle of homogeneity. His pages are hand-lettered and feature hand-drawn panel borders and word balloon outlines. Huizenga's letters, panel

³¹ It is my impression that comics scholars have not yet considered this issue in depth, and that this is because the field of comics studies, at least in the North American academy, tends to be uninterested in problems of mediality. However, it would take me too far afield to demonstrate this.

borders and word balloons are all composed of lines of uniform graphic quality. All these lines have the same tenor of the trace, appearing to have been drawn with a firm but slightly shaky hand. A typical Huizenga page gives the clear impression of having been created by a single hand, and by a hand with distinctive physical qualities (Figure 4-7). His work therefore records and testifies to the activity of the hand that produced it. Huizenga's investment in manual production is further suggested by the fact that much of his work originally appeared as minicomics. Indeed, when I asked Huizenga what were his theories about lettering, he replied, "I fall in with the school of thought that cartooning is a kind [of] "handwriting" or typography" (personal communication).³²

Again, on a very shallow reading, Huizenga's work initially seems to support the fantasy of handwriting and its associated critique of digital technology. For example, the story that will serve here as my principal case study, "Glenn Ganges in Pulverize," appeared in *Ganges #2*, an entry in Fantagraphics's Ignatz Collection. Although this comic is mass-produced, it emulates the appearance of a hand-crafted artifact. It's significantly larger than a standard comic book and features a dust jacket and quality paper, indicating that it's meant to offer tactile and material as well as intellectual pleasure (Figure 4-8). Almost every line of text in the book is hand-lettered, apparently by Huizenga himself. The very name of the Ignatz Collection testifies to its emphasis on materiality and on artistic expression. The word "collection" to designate a line of books is rare in American comics, but common in European avant-garde comics; it holds specific associations with the pioneering French avant-garde publisher L'Association, which publishes various "collections" grouped by formal and thematic attributes.

³² I'm indebted to Kevin Huizenga for taking the time to answer my questions about his work.

Fantagraphics combined this signifier of avant-garde publishing practices with the name of the villain/love interest of George Herriman's *Krazy Kat*, the classic American comic that perhaps best exemplifies the status of the cartoonist as artist. In short, the book presents itself as an example of a manual mode of production and as an object to be held and cherished, like Huizenga's minicomics but on a grander scale.

The story in this issue about Glenn Ganges's time working at a dot-com startup company, Requestra.com, from 1999 to 2001. Requestra.com, which metonymically represents Internet culture of this period in general, is the acme of inauthenticity. We never find out what goods or services Requestra provides, where its revenue comes from, or what kind of work its employees do. At work, Glenn says things like "We have to make sure the XML integrates with ICQ. Check the FTP because there should be some old FAQs under the B2B supply chain application solution rollout protocols."³³ Requestra's CEO, Steve Stane, pretends to be friendly and caring, but his heartless and unprincipled nature is abundantly clear. The company's motto is "We don't know and that's a good thing," which testifies the lack of any genuine expertise behind its undertakings. Early on in the story the narrator observes: "It was exhausting pretending that the dotcom buzz wasn't really BS – as long as the money kept pouring in." This all seems like a harsh condemnation of the dot-com bubble and the Internet as a whole. The Internet is here presented as a lot of flash concealing no substance. It lacks the authenticity we associate with handwriting.

³³ Page numbers are not provided because this comic book does not include them. The name ICQ is interesting in that it paradoxically suggests both inauthenticity and nostalgia. On one hand, ICQ is an acronym that doesn't stand for anything – it's meant to be pronounced "I seek you." On the other hand, at around the time when "Pulverize" takes place, I used ICQ on a daily basis to chat with my online friends. I haven't accessed ICQ in years and have fallen out of touch with many of the people I used it to talk with, so when it's mentioned, I feel nostalgic.

After work each day, Glenn and his coworkers play *Pulverize*, a first-person shooter video game based on “*Quake* mostly [*sic*], then some Unreal, and maybe a little *Halo*” (Huizenga, personal communication). *Pulverize* seems to be based on a model of subjectivity which is antithetical to that of the prototypical alternative comics author. The alternative cartoonist has a singular, unitary self which is authentically expressed in its work. Games, however, are typically understood in terms of their lack of connection to the real-world situation of the player. As ludologists Johan Huizinga and Roger Caillois argue, in playing a game, one enters a “magic circle” removed from ordinary life.³⁴ Often this entails taking on the role of a fictional character within the gameworld, as Glenn does when playing *Pulverize*. That gameworld, moreover, is often a constructed and artificial environment, and this is especially true in the case of *Pulverize*. As noted, alternative comics tend to employ a style which privileges the visibility of the author’s physical activity above the creation of effects of realism or transparency. Even some video games feature gameworlds whose constructed, artificial nature is obvious. For example, Glenn compares *Pulverize* to *Yipper Yap World*, a game he enjoyed as a child. Mostly based on the Super Mario series (Huizenga, personal communication), this game features two-dimensional graphics and a wildly implausible setting that includes elements like a “monkey rocket suit” and a “native tribe of Rasta-ostriches.” By contrast, *Pulverize* follows the logic of transparency typical of many computer games: it depicts a fictive world in such a way as to seemingly erase the player’s awareness of that world’s artificial nature. Its gameworld is represented in

³⁴ This is of course an oversimplification, which will be nuanced further both here and in the final chapter. Scholars like Alexander Galloway have emphasized the extent to which games are situated, physical phenomena.

such photorealistic detail as to seem as convincing and immersive as the real world, or perhaps even more so.³⁵ Huizenga's artwork testifies to this: in the story, scenes taking place in the *Pulverize* gameworld are depicted in the same style that Huizenga uses to depict Glenn's "real" world. When Huizenga depicts a scene from *Pulverize*, we can tell that the scene takes place in a video game only because we already know (Figure 4-9). In a sequence where Glenn falls asleep and dreams he's inhabiting the world of *Pulverize*, the transition from real world to dream is signaled only by a change in the color of Glenn's face.

Glenn's experience with *Pulverize* begins to seem like a prototypical experience of disembodiment, of severance from authentic selfhood. For Glenn, *Pulverize* becomes much more fulfilling than his work or even his life at home. He stays after work to play *Pulverize* and lies to his wife about it, claiming he has to work late. During the working day, he and his coworkers call each other by the names of their *Pulverize* avatars. Glenn even has dreams in which the *Pulverize* gameworld replaces the real world: "What's weird is that Glenn didn't dream about playing a video game. He dreamt as if he had really been running through the game's endless hallways. His brain was fooled by the game's first-person point of view." Even when fully awake, Glenn imagines himself playing the game; in one panel, for example, he imagines that he's holding a rocket launcher (Figure 4-10).

³⁵ This quality of seeming more real than actual reality is the characteristic property of the hyperreal aesthetic. However, it should be noted that Eco's hyperreal describes a more-real-than-real order that is usually employed in a naïve, unselfconscious way. The hyperreal – of which the classic example is Main Street U.S.A. in Disneyland – typically does not acknowledge itself as participating in the logic of the hyperreal. Indeed, for Baudrillard, one purpose of the hyperreal is to conceal the absence of authentic reality. See footnote 30 to Chapter 2 as well as the discussion of hyperrealism in Chapter 4.

Apparently Glenn is buying into the video game's logic of transparency. He seems to be seduced by its promise to provide the user with a simulated subjectivity, a simulated embodiment, to replace his actual subjectivity and embodiment. Here again we might see a rather shallow critique of digital culture, which would oppose it to the model of consistent and authentic selfhood on which the fantasy of handwriting is based. However, this represents only the first moment of Huizenga's encounter with digital culture. In the second phase of this encounter, Huizenga questions the guiding premises behind the fantasy of handwriting and suggests that handwriting and the digital have more in common than it appears.

Huizenga vs. the Fantasy of Handwriting

Much of Huizenga's best work can be read as a critique of the central premise behind the fantasy of handwriting – that the hand-drawn image offers a privileged means of access to the authentic self of the artist. His work repeatedly demonstrates that authenticity is an elusive notion, in that things which appear authentic are often contaminated by the inauthentic or the fake, and in particular by artificial techniques of reproduction.

For example, in Huizenga's Eisner Award-nominated story "Jeepers Jacobs," the title character is a theologian who believes in the doctrine that the unsaved will suffer "eternal conscious torment" in hell. Jeepers believes this because he thinks that the Bible says so, and that the Bible is the infallible word of God. For Jeepers, the Bible is, metaphorically speaking, God's handwritten trace; it provides an unrestricted means of access to the authentic nature of its divine author. In his own writing, Jeepers tries to similarly use handwriting as a means of access to authenticity. He writes his article by hand, in one sitting, making remarkably few erasures or corrections. However, things

start to go wrong when Jeepers realizes that his philosophy implies that non-churchgoing people like Glenn Ganges (and his hero Tiger Woods) will be condemned to eternal conscious torment. Jeepers thus starts to realize the basic unfairness of his belief that a unique and absolute privilege attaches to the handwriting of a single divine author. Nonetheless, Jeepers attempts to proselytize to Glenn, but instead of telling Glenn the truth about Hell, Jeepers instead, against his own better judgment, ends up telling his own life story. Jeepers figuratively privileges his own “story line,”³⁶ the line traced by his own life, above the narrative trajectory traced by God. Moreover, it turns out that Jeepers’s own story is far more ambiguous than one would expect. His decision to become a theologian was as much the result of random chance as of his desire to serve as a conduit for divine truth. Jeepers’s first love is actually golf rather than theology, and he would probably have become a professional golfer except that, in his final attempt to qualify for the PGA Tour, he was disqualified due to a trivial error. His own life, then demonstrates that decisions which seem to derive from conscious subjective choices may instead be the result of random chance. Subjectivity is a matter of fragmentation and randomness as well as unity, and following the logic of one’s character is not always a simple task.

“Jeepers Jacobs” metaphorically demonstrates that even when “lines” or “traces” appear to express the authentic, idiosyncratic nature of their source, they may unknowingly be complicated by factors external to that source; and that sometimes, a “line” or “trace” which appears to be privileged above all others is not actually so. Following this principle to its logical conclusion, we realize that no special privilege can

³⁶ In *Ariadne’s Thread: Story Lines*, J. Hillis Miller cites this phrase in order to emphasize the similarities among narrative trajectories, written lines, and drawn lines.

be attached to the lines Huizenga draws. The homogeneity of Huizenga's linework is therefore potentially alienating as well as reassuring.³⁷ The homogeneous quality of Huizenga's lines (for graphic objects and letters) is a signal of the common origin of all these lines in the artist's distinctive bodily movements, but also of the *indiscernability* of one type of line from another.

If letters, pictures, panel borders and word balloon outlines are "all just lines on paper, folks" – in R. Crumb's famous phrase – then this implies the quintessentially postmodern claim that no type of line can be uniquely privileged above any other. Certain instances of linework – signatures, for example – seem to provide privileged means of access to the authenticity of the sources responsible for them. However, when viewed simply as visual phenomena, or in the absence of any information as to their source, such lines cannot be distinguished from random scribbles.

That suggests, furthermore, that handwritten lines are not inherently privileged above lines which are rendered mechanically. This point is demonstrated in Huizenga's story "The Curse," in which Glenn Ganges and his family are driven to distraction by the chirping of starlings. As the story explains, the starling was introduced to America in 1890 by an eccentric naturalist, Eugene Schiefflin, who wanted his country to have examples of all the birds mentioned by Shakespeare (73).³⁸ The starling's only appearance in Shakespeare is in *1 Henry IV*, where Hotspur petitions the king to release his imprisoned brother-in-law Mortimer. When the king refuses, Hotspur angrily

³⁷ See Aaron Kashtan, "Jeepers Jacobs in a Network of Lines That Intersect," in *The End Will Be Graphic: Apocalyptic Imagery and Themes in Comic Books and Graphic Novels* (working title), ed. Dan Clanton (Sheffield, UK: Sheffield Phoenix Press, forthcoming).

³⁸ The correct spelling of this name is actually Schieffelin. The story about how he introduced starlings to America is found in many sources, but there is some controversy as to whether he did so for the reason Huizenga gives.

says: “I’ll have a starling shall be taught to speak / Nothing but “Mortimer,” and give it him / To keep his anger still in motion” (qtd. in Huizenga 2006, 73). For Shakespeare “the starling was not a gift to inspire romance or lyric poetry. It was a bird to prod anger, to pick a scab, to serve as a reminder of trouble” (Kim Todd, qtd. in Huizenga 2006, 73), and in a case of life imitating art, it had this effect in real life. The starling, the quintessential non-native, invasive species has proven to be a nuisance, driving out local bird populations and causing millions of dollars worth of excrement-related damage per year (Huizenga 2006, 74–75).

Todd’s contrast between the irritating starling and the bird of “romance or lyric poetry” is crucial. In poetry, songbirds often function as privileged signifiers of naturalness, genuineness or authenticity, from Hardy’s darkling thrush to Stevens’s blackbirds to Shelley’s skylark – a “blithe spirit [...] that from heaven or near it / Pourest thy full heart / In profuse strains of unpremeditated art.” In poems like these, the bird’s song is like (fantasized) handwriting, if not more so. It’s a pure act of disinterested self-expression which emanates from a natural source. By hearing the bird sing and by reproducing its speech in poetry which is literally or metaphorically handwritten, the poet seeks to endow his or her discourse with a comparable degree of authenticity.

Hotspur’s hypothetical starling, on the other hand, is no more than a living gramophone record. All it can do is faithfully reproduce the one word (“Mortimer”) that’s been programmed into or recorded upon its memory. Like a gramophone record or MP3 file, the bird reproduces its recorded message without any conscious understanding of its semantic intent.³⁹ It does this, moreover, in order to fulfill a practical purpose devised

³⁹ It’s also comparable in this sense to Poe’s raven.

by someone else, a purpose of which the bird itself is unaware. (Compare Hardy's darkling thrush, which knows of "some blessed hope" of which the *poet* is unaware.) Even if the purpose of the bird's song is to express itself, it does so by expressing someone *e/se's* intentions. Its supposedly natural speech act in fact indicates how, by virtue of an intentional act of which it can have no understanding, it's been turned into an instrument of mechanical reproduction.

Indeed, in the specific context of comics, the talking bird has been read as a symbol of precisely the *severance* of language from its origin. Thierry Smolderen argues that the juxtaposition of a parrot and a phonograph in the *Yellow Kid* strip of October 25, 1896 was a pivotal moment in the shift from the nineteenth-century label to the twentieth-century word balloon (Figure 4-11). For Smolderen, the label of pre-modern comics did not serve the same purpose as the modern speech balloon. Instead of representing written speech, the label was intended to be read as an inscribed banner that the character carried. The speech balloon, by contrast, is meant to be understood as figuring an embodied speech act; it indicates that the character is actually speaking the words it contains. However, at the same time, the speech balloon is graphically separated from the drawn image of the speaker's body. For Smolderen, the speech balloon thus resembles the parrot and the gramophone in that it severs speech from the authority of the speaker. The parrot "has a talent of making copies – *sound pictures*, really – of human statements. It is also the only example in nature of a speech act without an author [...] the parrot has no more enunciative authority than an image, but it emits 'pictures' of speech acts exactly similar to verbatim records" (104). The parrot thus prefigures the phonograph, which, for Smolderen, is what makes the modern word

balloon and the modern sequential comic strip thinkable: “it is only because a phonograph will record and reproduce human speech as temporally encoded patterns of acoustic impulses that this sequencing of the action seemed the natural course for him”, i.e., Outcault (105). What the parrot, the phonograph and the speech balloon have in common is the *severability* of speech from the embodied act of its performance, the reification of speech that strips it of its original ontological link to the scene of speech and the speaker.

In comics, this severance of speech from the utterer is doubled by the severance of writing from the writer’s hand and of the published comic from the original art. The graphiational act in comics is always at least at two removes from the embodied self of the author. In “The Curse,” Huizenga further stresses this fact by mentioning that the song of the starling, the privileged symbol of pure naturalness, can also be a reproduction of mechanical processes: “One flock in Western Michigan was reportedly made up of starlings whose calls, ‘when isolated, consisted of 30–50% sounds related to automobiles. [The ornithologists] heard distinctly tires screeching. . . the whine of power windows. . .” (79, ellipses and brackets in original).⁴⁰ The starling’s song may express the “full heart” of Shelley’s starling or the “blessed Hope” of Hardy’s thrush, but it might just as easily have expressed mere mechanical noises.

What both these stories suggest is that the romanticization of comics handwriting involves a deliberate forgetting of the constitutive gaps that always operate between the cartoonist and his or her work. In the first place, as observed above, almost all comics

⁴⁰ I couldn’t identify the source for this quotation. Huizenga attributes it to “Groot,” but provides no further citation. By a curious coincidence, Groot is also the name of a Marvel Comics character who, like Hotspur’s starling, only ever says one phrase (“I AM GROOT!”).

are created with mass reproduction in mind, meaning that there is always already a gap between the cartoonist's original art and the text received by the reader. Still more fundamentally, even original art can only testify to the author's prior rather than his current presence. Of course, as Derrida argues in "Signature Event Context," this property holds for any sort of handwritten document, but Marion suggests that the absence of the creator is particularly significant in comics, because it is precisely this absence that permits participation by the reader. "For the reader, as for the hunter or the fisherman, to identify a trace is also to imagine that a being is no longer where it was previously. With the trace one always arrives at the same virtual narrative sequence: here is a presence triggered by an absence" (29).⁴¹ Marion goes on to argue that the reader of a comic, through his or her act of looking, reactivates the graphic activity of the absent author and thus fills the gap left by the author's presence. This act of filling in the gap left by the author is in some sense a double of the reader's act of filling the gaps between panels, which, as Scott McCloud famously argued, is what makes comics narration possible. A comic is an assemblage of discrete images. What allows us to connect these images into a single plenitude (e.g., to understand multiple images of Glenn Ganges as referring to a single character at different moments) is closure. By imagining the absent moments between two successive depicted instants, we unite these moments into a single movement. Yet closure doesn't make the gutter disappear; the gutter divides as well as uniting. McCloud seems to hold the simplistic view that the reader takes the depicted images and uses them to assemble a

⁴¹ "Pour le spectateur, comme pour le chasseur ou le pisteur, identifier une trace, c'est aussi imaginer qu'un être ne se trouve plus là où il était auparavant. Avec la trace on arrive toujours à cette même séquence narrative virtuelle : voici une présence déclenchée par une absence."

transparent, immersive, multisensory experience in his or her head (“Between panels, none of our senses are required at all. Which is why all of our senses are engaged!” [89]). This, however, is an extravagant claim which ignores the fact that comics reading is always an experience of fragmentation as well as unity. As Donald Ault brilliantly argues:

This fragmentation of the gaze allows comics to participate in two different ontological and semiotic fields at once: as multiple appearances of the same *character* at different places *at the same time* on the page and as a representational sequence of windows that show the *same* character *at different times*, a unified embodied consciousness residing in a world that exists independent of the actual drawings. In the former sense, a comic “character” is analogous to an alphanumeric letter or piece of punctuation in a conventional language that takes on significance only relationally or differentially as it is repeated and gathered up into signifying clusters. (paragraph 8)

This is the type of character that Glenn Ganges is. Glenn is explicitly not Kevin Huizenga. Unlike such fictional alter egos as Eddie Campbell’s Alec MacGarry or Harvey Pekar’s Herschel, Glenn is a fictional character not strictly identifiable with the author of the comic in which he appears. Even his name testifies to the differential rather than the substantial nature of language. The name was created by chance when Huizenga saw a road sign that listed the distances to two Michigan towns called Glenn and Ganges; its orientalist connotations of Eastern religion are accidental.

If comics characters are assemblages of fragmentary images, and if comics reading is a fragmentary experience, then perhaps the same is true of comics *authorship*, whether or not it involves digital manipulation. Despite the hand-drawn appearance of Huizenga’s pages, it turns out that these pages are not produced in a continuous process of creative inspiration, but as the result of multiple, discontinuous

acts of redrawing and revision. In an interview with me, Huizenga explained how he uses Photoshop to edit each of his hand-drawn pages:

I fix mistakes and fill black areas and even occasionally shrink a head or move a figure or something relatively drastic. It's difficult to generalize about the drastic changes, because they tend to be unique to unique situations. Occasionally a page will need major surgery – panels changed and swapped out and rearranged. Other times the page needs only minor fixes. I don't like to redraw, but I like to second guess myself and try out new ideas. Photoshop allows for pretty drastic editing, and I'd find comics making very frustrating without knowing I'm not trapped by what I've drawn (Huizenga, personal communication).

The idea of handwriting as an imprint of the artist's body carries the implication that this imprint is permanent and cannot be removed, that the handwritten line is an indelible snapshot of the state of the writer's self at the moment of writing.⁴² Huizenga, however, doesn't want to be "trapped" by the permanence of what's already been drawn or written. If his handwriting expresses his self, it's a self that's open to editing and revision. Huizenga's decision to use Photoshop also prevents him from selling original art, and his fans from connecting with him by buying original art:

I've had people inquire about buying a page and I have to break it to them that the page only really exists digitally. The original art exists on several different pieces of paper, often with major mistakes, and the lettering sometimes is on the back of some scratch paper. Some artists are concerned about this, but I've made my choice in favor of speed and flexibility (Huizenga, personal communication).

Because the original art doesn't exist in a single and permanent physical state, it can't be sold, nor can it be exhibited in a gallery or museum. For Huizenga, the loss of

⁴² This ties in with traditional notions of the work of poetic art as permanent: "So long as men can breathe, or eyes can see, / So long lives this, and this gives life to thee." According to Sven Birkerts, permanency is one of the virtues of handwriting (or typewriting) because it entails a "commitment to truth" (157). Because of the difficulty of erasing what has been written, the writer needs to think carefully about each word before committing it to paper. This recalls the Romantic notion of poetry as "emotion recollected in tranquility," as the attempt to recapture and immortalize the poet's authentic feelings at the moment of a given experience.

revenues from original art sales is presumably offset by the ability to produce work at a faster rate, but the idea of original art that exists in no stable, integral form is a challenge to the idea of the cartoonist as a unitary, embodied hand-writer.

All of this suggests that the fantasy of handwriting in comics is not objectively true – that it represents the expression of a collective desire for authenticity, selfhood, etc., rather than a factually correct description of authorship in comics or other fields, and that its efficacy does not depend on its correspondence to factual reality or lack thereof. In “Pulverize” (the comic) Ganges complements this observation by showing that the video game’s claims to provide total immersion are based on a similar fantasy, one which depends on the desire to escape from reality. *Pulverize* (the game) presents a *fantasy of immersion* which is similar in structure to the fantasy of handwriting.

This is true because *Pulverize*’s logic of transparency is based on constitutive gaps in the structure of simulation. Glenn is never completely fooled by *Pulverize*’s claims of transparency, and in order for the logic of transparency to operate, he *can’t* be fooled. During the first of two *Pulverize* playing sessions depicted in the story, the narrator observes: “As you fall, you see that the valley is really an illusion – it’s a flat image of a valley that rushes up to you, growing more pixelated, and you even start to see the seams of the backdrop right before impact.” As compelling as the world of *Pulverize* may appear to its players, it can never present a fully seamless experience of the world; it’s far from a true virtual reality. This is because of what Phil Sandifer calls “the fundamental paradox of immersion: if the viewer is able to marvel at the “reality” of the immersive experience, she or he is no longer fully immersed” (139). In order to appreciate a transparent media experience, one must understand that it *is* a mediated

experience and not a real one. In order to appreciate the effectiveness with which a film like *Avatar* or a video game like *Grand Theft Auto* (or *Pulverize*) generates an illusion of reality, one must be aware that it's *only* an illusion. The viewer or player must constantly bear in mind the gap between the text's presentation of reality and the real world. If the viewer or player becomes fully absorbed into the diegetic world to the point of forgetting its artifice, the consequences can be disastrous. Fictional demonstrations of this include the phenomenon of "joybooth suicide" depicted in Infocom's video game *A Mind Forever Voyaging* (where young people immerse themselves in Holodeck-like simulators to the point of never leaving), or Yusuf's clients in the film *Inception*, who spend all their time dreaming and never wake up. These examples involve fictional works of immersive art that vastly exceed the power of real-life representational technologies. However, a similar if less dramatic phenomenon allegedly occurred in real life, when viewers of *Avatar* allegedly contemplated suicide because they were dissatisfied with the inferiority of the real world to Pandora (Piazza n.p.).

Glenn therefore knows – he dare not *not* know – that *Pulverize* is only a fake world, that its graphics and sounds are merely the result of human artifice. He realizes that in a purely formal sense, *Pulverize* is at bottom the same game as *Spacewar*, where "two players control 'spaceships' and duel on a black screen dotted with a few white pixels [...] Many years later, much more code goes into writing *Pulverize*, but essentially it's the same thing – abstract combat. [...] Underneath, it's just dots shooting dots at dots." The "game" in both cases is the same, and the graphics and sound serve

only to intensify the emotional appeal of the game.⁴³ Perfect immersion is no more achievable a phenomenon than perfect transparency.

I Know Well, but All the Same

However, both these fantasies are *appealing* fantasies. They depend on powerful desires – the desire for authenticity, for intersubjective connection, for escape from a harsh reality. We may *know very well* (i.e. on a conscious level) that the fantasies of handwriting and immersion are merely attempts to satisfy these desires, but these desires remain *all the same*. (See p. 42 above.)

For Glenn, the non-“abstract” elements of *Pulverize* are precisely what make it seductive. It’s precisely because of the graphics (and sound) that *Pulverize* can be an emotional, affective experience. Glenn makes his argument about “abstract combat” in an attempt to rationalize his disturbing addiction to the game. The second ellipsis in the previous quotation represents the words “And when I realized that, I guess it didn’t seem so wrong to enjoy it as I did.” Hearing this, Glenn’s wife, Wendy, offers another reason why Glenn might feel guilty about his enjoyment of *Pulverize*: she alludes to the Columbine High School massacre of 1999, suggesting that players of games like *Pulverize* may become, through their playing the game, desensitized to real-life violence.⁴⁴ Glenn is visibly troubled by this idea, although he tries to brush it off (Figure

⁴³ This is equivalent to the hardcore ludologist position in games studies, which holds that the identity of a game resides in its formal aspects, and that its narrational aspects (e.g., characters and setting) are purely incidental. For example, Espen Aarseth observes: “Any game consists of three aspects: (1) rules, (2) a material/semiotic system (a gameworld), and (3) gameplay (the events resulting from the application of the rules to the gameworld). Of these three, the semiotic system is the most coincidental to the game” (Aarseth 2004, 47–48). See Sandifer 2009, paragraphs 11–12, for one possible critique of this claim. I will suggest another critique below.

⁴⁴ The Columbine massacre was widely blamed on the killers’ enjoyment of games like *Wolfenstein 3D* and *Doom*. A full survey of the debate over whether video games increase players’ tendencies toward violent behavior is beyond the scope of this discussion, but there is some scholarly literature suggesting

4-12). Glenn's attraction to the game does not go away simply because he realizes on an intellectual level that it's "only" a game.

Glenn's encounter with *Pulverize*, then, can be divided into three moments or phases. In an initial moment of his encounter with *Pulverize*, Glenn is spellbound by the fantasy of immersion that the game offers. In a second moment, Glenn sees through this fantasy, recognizing it as the expression of a desire rather than as a factual account of video game phenomenology. In a third moment, however, Glenn discovers that even after he has "seen through" *Pulverize's* fantasy of immersion, it still remains appealing. *Pulverize* is addictive because it appeals to a fundamental desire – the desire to escape from real life, to enter a fantasy world that's more exciting, more logical, more fair, etc., than real life. This desire is irrational as well as inherently impossible to satisfy, and Glenn knows this. Yet this knowledge does not dispel Glenn's attraction to *Pulverize* – perhaps because this knowledge exists on a rational level, whereas *Pulverize* appeals to Glenn's irrational instincts. Perhaps, then, to attempt to abandon the fantasy of handwriting (such as by quitting *Pulverize* cold turkey) is not Glenn's best option. By doing so, Glenn would merely be attempting to deny his desire for escape, rather than directly confronting this desire. For Glenn, a more psychologically healthy option might be to acknowledge his desire for immersion but to turn that desire to more positive ends. This is what we might call a reflective use of the fantasy of immersion; it involves using the fantasy of immersion under erasure, i.e., in the full knowledge of its artifice.

This is what Glenn and his coworkers succeed in doing at the end of the story. The climactic sequence in "Pulverize" depicts Glenn and his colleagues' last *Pulverize*

that video games may have this effect. See for example Barlett, C. P., C. A. Anderson, and E. L. Swing, "Video Game Effects – Confirmed, Suspected, and Speculative," *Simulation & Gaming* 40.3 (2009): 377.

playing session as a complete group. They play the game knowing that one of them, Bob Bilson, will be fired the next day, and that the others won't last much longer at Requestra; despite their best efforts, the company is doomed because of Steve Stane's mismanagement and because of the inevitable coming collapse of the dot-com bubble. The emotional power of the game is intensified by the knowledge that this is the last time the game can be played by this community – that this means of escape from real life can't last forever, much as they wish it could. The poignancy of the game derives from Glenn's simultaneous acceptance and denial of *Pulverize's* fantasy of immersion, his simultaneous knowledge that *Pulverize* is more attractive than real life and that it's not real life. Glenn observes "the wintry morning light, which never changes, because the sky is a JPEG. Nothing is ever added to or subtracted from the zeroes and ones that make up the buildings or mountains, so nothing changes – time stands still. It's always a winter morning here." *Pulverize* improves on the real world in that it never changes, but this very fact marks *Pulverize* as an unsustainable escape from the real world. For Glenn, these two contradictory realizations (that *Pulverize* is superior to the real world and that it's not the real world) don't simply cancel each other out; rather, the conflict between them is what makes playing *Pulverize* an emotionally fraught experience.

That same antinomy characterizes the action that Glenn and his coworkers subsequently take. Matt Lewis, whose job is in no immediate danger, logs out of the game and logs back in under the name Candypants, which is Bob Bilson's usual screen name. One by one, the other players do likewise, and for a moment "they were all Candypants."⁴⁵ Clearly becoming Candypants in this way is of no practical consequence

⁴⁵ This is a variation on what tvtropes.com calls the "I Am Spartacus" trope, after the scene of Stanley Kubrick's 1960 film, in which the defeated rebellious slaves are told they will be spared punishment if

– the players don't become Bob in any practical sense, nor does their action save his job. But the affective resonance of this action is increased by its practical inauthenticity: “they all felt, as they watched another Candy pants explode into bloody chunks, a real affection and a kind of sadness.” The action is not practically effective, but the feelings it expresses are genuine. It thereby reveals that authenticity is not an all-or-nothing phenomenon; “becoming Candy pants” is pragmatically inauthentic but affectively authentic. Just like *Pulverize* itself, this action in fact benefits from its paradoxical combination of authenticity and artificiality.

I suggest, finally, that Glenn and his coworkers' reflective use of the fantasy of immersion mirrors Huizenga's reflective invocation of the fantasy of handwriting. As we've seen, Huizenga's work reveals the irrational, non-factual nature of the Grothian fantasy of handwriting. It reveals that the comic can never be a fully embodied trace of the presence of a unitary, singular artist. Yet at the same time, Huizenga's work doesn't simply debunk the fantasy of handwriting; his work also depends on the fantasy of handwriting. For example, we've seen that Huizenga cannot sell his original art because it only exists in digital form. And yet readers still *think* Huizenga's art actually exists, because it *looks* handwritten; his use of Photoshop is sufficiently well-disguised as to go unnoticed. (Compare for example the recent work of Scott McCloud, where the use of graphics software is immediately obvious). He plays upon the assumption that the comic is a hand-drawn text, that the published comic is indexically connected to an artifact that bears the mark of the artist's hand. Moreover, readers want to purchase

they will identify their leader Spartacus. All of the slaves claim to be Spartacus, expressing solidarity in the face of certain death. In “Pulverize” the other positive effect of this action is that it ensures that Candy pants will win the game, even though the original Candy pants is not a particularly skilled player.

Huizenga's original art, and are presumably disappointed to discover that they can't. The hand-drawn appearance of Huizenga's art creates a desire for connection with the artist, a desire to see and even to own that ordinary artifact. In the case of Huizenga's work, the unsatisfiability of that desire makes it all the more compelling. Finally, although Huizenga is not Glenn Ganges, it's difficult to resist the temptation to read the latter as a fictional surrogate for the former. We may know, for example, that Huizenga and his wife didn't actually lose a child, as Glenn and Wendy do in the story "Jeezoh," and yet we wonder what actual tragedy in Huizenga's life may have inspired this story.

Huizenga, then, deploys the fantasy of handwriting in a reflective way. On one hand, he demonstrates that the fantasy of handwriting is not a factual account of comics authorship, but merely the expression of a desire. On the other hand, he simultaneously shows that "merely" is not the right word. The desire which underlies the fantasy of handwriting is a powerful one, and remains so even when one discovers that it's "only" a desire. Therefore, an uncritical rejection of the fantasy of handwriting is only slightly better than an uncritical acceptance thereof. What's necessary is to acknowledge the desire for handwriting while recognizing it as a desire.

Transition: Huizenga and Cultural Politics

A more practical conclusion we can draw from Huizenga's work is that the Grothian alternative comics ideology is primarily a matter of cultural politics. Critics like Groth and Wolk describe comics authorship in terms of handwriting, not because this is actually how comics authorship works, but in order to advance a specific agenda about the cultural role of comics. If the Grothian position doesn't stand up to strict scrutiny,

then, that's because it's not *supposed* to; it's a polemical argument rather than a logical one.⁴⁶

A further important point is that in Huizenga's work, what prompts this crucial realization, and opens up a space for critical engagement with the fantasy of handwriting, is the encounter with digital technology. The fantasy of immersion offered by digital texts offers an appropriate metaphor for the fantasy of handwriting offered by alternative comics, because these two fantasies are structured similarly. But if comics and digital technology have this in common, perhaps they have other things in common as well. And if critics like those cited above (p. 238ff) criticize the use of digital technology in comics, perhaps they do so at least partly on political grounds.

The combination of these two insights leads to a further interesting question: What happens if we combine digital technology with the fantasy of handwriting? If these two things are not, in fact, mutually exclusive, then can digital technology be used as a tool in the service of the (reflective) fantasy of handwriting? This is of course what Huizenga does, but his use of digital technology is mostly invisible. If a work makes more prominent use of digital technology, can it still satisfy the artist's desire for handwriting, or the reader's desire to connect with the artist by observing his/her handwriting?

The answer, I suggest, is yes. Recently, when a poster on the comixscholars-l listserv complained about the lack of handwritten qualities in digitally colored and lettered comics. Sharif Bitar replied⁴⁷

⁴⁶ In this, the Grothian account of handwriting has certain similarities with the extreme ludologist account of games. According to my understanding, the reason why critics like Aarseth and Markku Eskelinen seek to define games in a purely formal and ludological sense, is because their political agenda is to define games studies as a separate field independent from the perceived narratological emphasis of literary studies.

I immediately think of music which, despite digitalism (let's call it that), or possibly even because of it, is still enjoyed by people (understatement intended). The computer, or digital middle-man here, cannot be equaled to the hand of the artist. It can be equaled to the pens, brushes, colors and what have you. So what digitalism does is not exchanging the artist but the tool. And even though people tend to refer to non-digital music as "hand-made", most people don't actually mean it that way, because it is still hand-made despite the hand having operated a computer. The same, I from the very heart of the age of digitalism would like to suggest, applies to comics :)

For Bitar, digital coloring and lettering can be tools ("writing tools," to use my term) in the same way as pens, pencils and brushes. I proposed above (page 235) that a Grothian critic might hold that these latter tools are uniquely privileged in some way, but clearly this claim is another instance of the fantasy of handwriting. Ultimately, a mouse, thumbpad, or stylus accomplishes the same purpose as a brush, pen or pencil: to serve as a conduit through which the artist's graphic activity can be communicated to and recorded upon the surface of inscription. The differences between these two categories of tools are a matter of degree rather than kind. Digital tools may *seem* to strip out those unique elements of the writer's bodily activity that are preserved by traditional tools. But this is only an illusion, insofar as even traditional tools can never completely succeed in preserving or communicating the unique traces of the artist. To this extent, digital and traditional tools are different in degree rather than kind. Neither type of tool can fully reveal the presence of the author. *But*, both types of tools can be used to create the *effect* of the author's presence – to respond to the desire for such presence, without claiming to ever be able to fully satisfy this desire.

To demonstrate all this, let's turn to a second case study.

⁴⁷ I thank Sharif Bitar for permission to reproduce the quotation which follows. I prefer not to identify the author of the original comment.

Scott Pilgrim versus the Fantasy of Handwriting

***Scott Pilgrim* and the Apparent Absence of Handwriting**

Bryan Lee O'Malley's *Scott Pilgrim* was published as a series of six graphic novels, in the characteristic digest format of manga, from 2004 to 2010. Around the same time as its completion, the series was adapted into a movie and a video game. The series was published by Oni, which is neither a leading commercial firm like Marvel or DC, nor an "alternative comics" publisher like Fantagraphics, Drawn & Quarterly, or Top Shelf. Its output typically fits into neither the superhero genre, nor standard genres of alternative comics such as autobiography, history or journalism. Oni's output does tend to be informed by the alternative comics sensibility. Oni's publications are creator-owned rather than work-for-hire, and tend to feature a non-transparent style of artwork that testifies to the presence of an artist. Andi Watson's cover to *Hopeless Savages* #1 (2001) is a good example of the Oni house style, to the extent that Oni has one (Figure 4-13). However, Oni's publications typically appeal to popular rather than highbrow audiences. Oni's publisher, James Lucas Jones, claimed that his company's output was informed by a "real mainstream" sensibility: "it's not the superhero stuff, but at the same time, it's what would be considered the mainstream in every other entertainment medium. [...] Comics mainstream needs to get in line with what the rest of the world acknowledges as the mainstream" (Brady n.p.). Oni's authors, therefore, are not necessarily committed to the alternative comics ideology or to the assumptions it makes – e.g., that cartoonists are authors in a literary sense, or that the most interesting thing about a given comic is the way in which it reveals the unique trace of the artist. Nonetheless, I will argue below that *Scott Pilgrim* does subscribe to notions of authorship as handwriting, but in a reflective and non-dogmatic way.

Initially *Scott Pilgrim* appears to be a simple romantic comedy focusing on the love affairs of the title character, a Toronto slacker in his early twenties. As the series advances, however, readers discover that while Scott Pilgrim's world resembles real-life Toronto in many ways, it operates according to video game logic. In the first volume, Scott discovers that in order to date his new love interest, Ramona Flowers, he has to defeat her seven evil exes.⁴⁸ This is recognizably a video game plot, a sort of combination of two ubiquitous cross-genre video game tropes – rescuing the princess and defeating a series of progressively harder bosses. We further discover that Scott's world is governed by video game physics. In a brilliant but surprising moment at the end of volume 1, after Scott defeats Ramona's first evil ex-boyfriend, the latter turns into a shower of coins (worth \$2.10, not enough for cab fare). This occurrence mimics how in classic video games, enemies simply disappear when defeated, leaving behind money or items.

As the series continues, instances of video-game-like behavior proliferate, until it becomes clear that Scott is a video game character living in a video game world.⁴⁹ This becomes most prominent in the fourth volume, where, early on, we see that Scott has a "thirst" meter and a "cash" meter (O'Malley 2007 31); later, we discover that Scott also has as well as a "pee" meter (79) (Figure 4-14). Each of these meters resembles the conventional vertical thermometers that measure characters' health or other attributes in video games. Like such a character, Scott's physical state can be represented as a series of numerical values. This is further emphasized when Scott gains experience

⁴⁸ They are referred to as "exes," not "ex-boyfriends," because one of them is female.

⁴⁹ The series is also full of incidental video game references, for a list of which see <<http://www.gamesradar.com/f/scott-pilgrims-precious-little-videogame-references/a-20100811123011995002>>.

points for doing difficult things. That is to say, his acquisition of superior knowledge, maturity and competence is quantified numerically. Scott gets 500 experience for getting a job (62) and 1000 experience for getting his job back after being fired (149). In the climactic scene of the book, Scott earns 9999 experience for telling Ramona he loves her.⁵⁰ This causes Scott to “level up.” That is to say, Scott acquires enough experience points to pass a threshold beyond which he becomes significantly more competent, and this is quantified as an increase in his GUTS, HEART, SMARTS and WILL scores (Figure 4-15).

All of these increases in Scott’s numerical parameters are represented within the comic using jaggy type. As Whalen explains in depth, jaggy type was the characteristic means of rendering text in early video games. It is characterized by

stair-stepped angles and curves instead of smooth arcs, a sharp distinction between foreground and background colors, (on-screen) pixels aligned flush with the actual screen’s pixels, and rectilinear units which build each letter shape out of uniform bits or pixels and imply a containing grid.
(Whalen 2008, 187)

Jaggy type (like pixelated graphics, which share many of the same graphical properties) evolved as an adaptation to the limited text-rendering capabilities of early video game hardware. Self-evidently, jaggy type is the product of an inscription mechanism that can only render text as an assemblage of discrete parts, and that is incapable of producing smooth lines. Jaggy type therefore announces itself as a product of computational processes and pixel-based rendering, rather than a record of the trace of a human

⁵⁰ The use of the number 9999 is a subtle reference to material parameters of graphical display. In the *Final Fantasy* video games, values such as damage and hit points are capped at 9999. “Such caps are typically either completely arbitrary, or due to the amount of screen/display available for the value. If the score counter only has enough space for four digits, then your highest displayable score is 9999” (“Cap”). (By contrast, other values in these games are capped at 255 or 65535, and caps of this type are determined by the number of bits used to store these values.)

hand. It appears thus to be the (digital) antithesis of (analog) handwriting; the aesthetic represented by jaggy type is precisely what the fantasy of handwriting arose as a reaction against. Texts set in jaggy type look as if they were automatically generated rather than handwritten, and therefore they don't seem to offer any means of access to their author's psyche. If we try to attribute these texts to some authorial agent, we can only conceive of this agent as some kind of robot or computer – some sort of inhuman entity that determines Scott's fate and keeps track of his vital statistics, but that lacks any of Scott's human traits.

Other fonts used in the series also emphasize their divergence from handwriting. Most of the captions in volume 4, for example, are set in a lower-case, sans-serif font that resembles Arial or Helvetica, although it's clearly distinct from both.⁵¹ Like Helvetica, as described in Gary Hustwit's 2007 film of that title, this caption font is slick and mechanically precise; it bears little resemblance to handwriting (Figure 4-16). This font is usually used for captions that represent the voice of the narrator. This narrator appears to be a singular figure, as he or she has a distinctive style of diction and often makes opinionated statements about the characters' behavior. However, the narrator is never seen on-panel.⁵² The fact that this narrator "speaks" in a slick, mechanical font suggests that the narrator belongs to a different order of reality from the characters. S/he is an impartial observer who is not subject to human foibles or irregularities, and

⁵¹ I am unable to identify the exact fonts O'Malley uses, as O'Malley has not made this information public and is currently unavailable for interviews.

⁵² Narration in *Scott Pilgrim* is discussed at length in a 2005 review of volume 1, posted by a blogger going by the name "Sports, Jr." Sports, Jr. assumes that this narrator is the same figure as the programmatic consciousness that keeps track of the characters' numerical parameters. This assumption makes sense with respect to volume 1, but becomes questionable by volume 4, where these two figures seem to "speak" in different fonts – respectively, slick type and jaggy type. However, these figures do sometimes blur into each other, such as when jaggy type is used for comments like "ONE MILLION HOURS LATER" (O'Malley 2007 88) and "OH GOD WHY" (131).

the reader isn't expected to question the narrator's moral judgments on the characters. Even the characters' dialogue, which appears handwritten, actually isn't; it's a font that mimics the standard style of comic book lettering. Actual hand-lettering in the comic is used mostly for sound effects, and represents a small fraction of all the lettering in the series. On a simplistic reading, then, the typography in this comic seems to offer a perfect example of how the use of digital technology destroys the fantasy of handwriting.

Scott Pilgrim and Nostalgia

What this reading fails to consider, however, is that jaggy type has nostalgic associations. For audiences of Scott's age, this form of typography conjures up memories of adolescence. As Whalen observes, jaggy type is commonly encountered in works that appeal to nostalgia for old-style console video gaming (as will be discussed later), and it tends to emphasize programmatic properties of the video game: "Its use is widespread in logotype and graphic design meant for use in a videogame context, and its exaggerated pixelization is a standard marker for technological nostalgia" (190). Jaggy type thus gestures to a past condition of materiality. Jaggy type recalls an earlier period when the medial and technological parameters of computing were more obvious, and thus it performs a similar function to the nostalgic fantasy of handwriting.

To this extent, O'Malley's use of jaggy type reinforces his other nostalgic references to the period when jaggy type predominated. The vast majority of the series' video game references pertain to 8-bit, 16-bit or 32/64-bit games, popular during a period from the late 1980s to the late 1990s. References to more recent console games, such as those for the PlayStation 3, Xbox 360 or Wii, are almost completely absent. Similarly, although the series rarely makes explicit references to other comics, when it

does do so, the comics referenced tend to be from the mid-to-late '80s. At one point (O'Malley 2009, 40–41), Scott tells Ramona a story which a knowledgeable (or obsessed) reader will immediately recognize as a summary of the plot of *Uncanny X-Men* from about 1988 to 1989. In the 2003 Free Comic Book Day special, Scott wears the same 4½ T-shirt that Franklin Richards wore in John Byrne's *Fantastic Four* comics (1981–1986). In short, the comic's archive of references comes from a very specific era of pop culture history, dating roughly from 1987 to 1999.⁵³ Scott and O'Malley show little interest in video games from before that era (e.g., Atari 2600 games) or after. There are a few jarring exceptions in volume 5, where Scott wears a *Rock Band* T-shirt and earns an "achievement" for defeating Kyle and Ken Katayanagi simultaneously; the former game was released in 2007, and the latter term was first used in this context, with reference to Xbox 360 games, in 2005. These references are surprising and possibly jarring, however, because they fall outside the usual temporal domain of the video game references in this series. Scott's lack of interest in more recent video games is even parodied. In volume 6, he says of his PSP, "Look at this brand new gaming device Young Neil gave me! It's like the hottest, newest, hottest thing!" (11) In fact, the PSP was six years old at the time the volume was released.

Scott Pilgrim, then, is a heavily nostalgic work, and it expresses nostalgia for a very specific period – the period when the protagonist and his creator (as well as this writer) were children and adolescents. (Indeed, reviewer Josh Tyler criticized the film adaptation of the comic – to be discussed in the next chapter – on the grounds that its nostalgic references were too specific and would go over the heads of many viewers,

⁵³ I choose 1987 as a starting date partly because this is the earliest year I can personally remember, and Scott is more or less my age .

especially those too young to remember the references' sources.) Of course, the risk inherent to such nostalgia is that it might become simply restorative. Whalen associates jaggy type with restorative nostalgia:

In other words, there is a kind of restorative nostalgia for videogame graphics that frequently “cleans up” the material traces of the display technology. Although the appearance of so-called “jaggy” fonts has come to characterize computer generated type, the low resolution (particularly of early TV console systems) meant that the supposedly harsh, “stair-stepped” curves of letterforms were actually more fuzzy than jaggy (Whalen 2008, 39–40).

Scott Pilgrim certainly does use jaggy type in the way that Whalen describes, and its nostalgia is in some ways purely restorative. I would argue, however, that as the plot of *Scott Pilgrim* develops, its nostalgia becomes reflective. *Scott Pilgrim*, I suggest, can be read as a story about engaging with and working through nostalgia for childhood and adolescence. When we first meet him, Scott wallows in restorative nostalgia; as the series continues, however, Scott's nostalgia becomes reflective, and he learns to use it productively in his quest for adulthood.

At the beginning of the series, Scott Pilgrim is 23 years old and is therefore technically an adult. However, he has no source of income and apparently lives off his parents' generosity. His major activities include playing video games and rehearsing with his rock band. He lives in an unfurnished apartment and shares a bed with his openly gay roommate. His previous relationship ended in a bitter breakup (which, it's hinted, is part of the reason for his lack of initiative); as volume 1 opens, he has just started dating Knives Chau, a 17-year-old high school girl.

Clearly, Scott is a character who is not successfully negotiating the transition to adulthood. According to sociologists Sarah Hayford and Frank Furstenberg:

The end of adolescence, and the entry into adulthood, is signaled by a series of transitions, such as finishing school, entering the work force, leaving the parental home, marrying, and becoming a parent (Hogan and Astone 1986). Taken alone, none of these transitions is either necessary or sufficient for the achievement of adult status, but taken together, they mark the adult stage of life course development. (1)

At the beginning of the series, Scott has accomplished only two of the five transitions mentioned by Hayford and Furstenberg – or rather one and a half, since, despite having left the parental home, he is still financially dependent on his parents. Scott is suffering from a delayed transition to independent adulthood.⁵⁴ At the beginning of the series, he shows little embarrassment about any of this, even though his friends openly mock him for dating a high schooler. Scott appears to be content to remain a teenager, and his romance, such as it is, with Knives Chau is the clearest expression of this: he is romantically involved with a 17-year-old because he himself is still a 17-year-old at heart. Scott's immature behavior thus appears to stem from the same source as his affection for video games and comic books that date from the period of his adolescence. Simply put, Scott is suffering from a Peter Pan complex; he doesn't want to grow up.⁵⁵

Why not? One obvious explanation is because Scott is a lazy slacker; but it would be more charitable to suggest that Scott is *afraid* of growing up. For Scott, childhood is associated with a certain concept of personal identity as stable and unchangeable. As a child and an adolescent, Scott knew who he was. Scott had a consistent core of identity. Or rather, he imagines that he did: in volume 6, Scott learns that his childhood

⁵⁴ In this, of course, he is not alone. Hayford and Furstenberg observe that “people are taking longer to go through the full set of transitions into adult roles,” such that, as the title of their paper suggests, 30 is becoming the new 20.

⁵⁵ I use this term informally. It is not an actual psychological term of art, although “[t]he term has been used informally by both laypeople and some psychology professionals in popular psychology since the 1983 publication of *The Peter Pan Syndrome: Men Who Have Never Grown Up*, by Dr. Dan Kiley” (“Puer aeternus”).

memories have been playing him false. For example, Scott remembers that heroically saved his ex-girlfriend Kim Pine from a bully named Simon Lee, but actually it turns out that Scott himself was the bully and Simon Lee was his victim. If Scott's memories are fabricated in this way, then his memory of the type of person he was in childhood might be equally fabricated; there is no proof that Scott's notion of the nature of his essential kernel of identity is factually correct. Nonetheless, Scott's *fantasy*, at least, is that as a child, he had a consistent, essential, continuous self. Scott's fear is that if he becomes an adult, this stable kernel of identity will be lost, and he will become someone else.

This view of selfhood is, of course, comparable to the concept of selfhood that the naïve fantasy of handwriting assumes. Graphology was based on “[t]he message of a resilient and universal uniqueness” (Thornton 125). That message was highly appealing to persons who feared that their “uniqueness” had been jeopardized by a shift away from a model of selfhood based on character in the social understanding of personality:

Character, a fixed nucleus of identity, had best served the interests of a society in which production was the imperative, but the shift to a consumer society demanded a new form of the self. That new self, personality, consisted of a series of carefully managed presentations, each designed to please a different audience. But as the ever-changing mask of personality displaced the solid core of character, some experienced the eerie sensation that their self had ceased to exist altogether [...] What graphologists responded to was the fear that there was no face behind the mask. (131, 132)

People who bought into the pseudoscience of graphology did so because they wanted to believe that they *had* an essential and stable core of identity, now that selfhood had become defined in a way that seemed to exclude such stability. In assuming that selfhood was essential and immutable, the graphological fantasy of handwriting sought to assuage fears that selfhood was becoming lost in a shifting play of transitional identities.

This is an understandable fear, but it rests on a mistaken assumption – that these two models of the self, as an unchanging essence and as a succession of transitional states, are mutually exclusive. Citing Paul Ricoeur, Andreea Deciu Ritivoi describes these two models of the self as the *idem*-self and the *ipse*-self:

In Latin, two terms stand for the idea of identity, and, as one would expect, they are not perfect synonyms. *Idem*, the first term, signifies identity as something permanent in time, while *ipse* tolerates change, degrees, and variation, and thus includes difference and otherness. (44)

The *idem*-self is the self that remains stable across time, while the *ipse*-self is the self that evolves. Expanding on Ricoeur, Ritivoi proposes an “*integrationist* model of the self” (44) which emphasizes the coexistence of these two components of identity. “I maintain that personal identity evolves in time, but it evolves within certain limits and in accordance with a logic of its own [...] The identity of a person emerges from the person’s life story” (44–45). On one hand, the self passes through a series of changing states; on the other hand, all these states are understandable as variations on a sort of underlying pattern.

Ritivoi argues, furthermore, that what ensures the continuity of the *idem*-self across the succession of *ipse*-states is *nostalgia*. In Boym’s terms, restorative nostalgia could be thought of as a simple mourning of the loss of a previous *idem*-self. In reflective nostalgia, however, one understands that the old *ipse*-self is gone, but that the permanence of the *idem*-self enables the new *ipse*-self to be conceived of as continuous with the old one. Nostalgia, then, can be a tool for allowing the self to change without losing itself entirely, as Ritivoi writes: “I see nostalgia as a defense mechanism designed to maintain a stable identity by providing continuity among various stages in a person’s life” (9), and elsewhere, “Nostalgia allows us to acknowledge both

the need for, and the elusive nature of an *idem*-self in the nature of which the *ipse*-self becomes consistent and significant” (Ritivoi 68).

Ritivoi’s theory of nostalgia was developed to account for immigrant experiences, but I suggest it can also account for Scott’s transition from childhood to adulthood. Creating continuity from childhood to adulthood is exactly the challenge that confronts Scott, and nostalgia is his way of meeting this challenge. He conceptualizes the transition to adulthood in terms of the vocabulary of the texts of his childhood. In volume 4, Scott levels up, not for defeating enemies, but for accepting adult responsibility. He gains experience for getting a job, for humbly begging forgiveness after being fired, and, finally, for telling Ramona: “I’m in love with you. . . And I know that we can make this relationship work” (179), thereby accepting that their relationship is an adult one and not a mere infatuation. Less dramatically, Scott decides that his job at the Happy Avocado is like the “job system” of games like *Final Fantasy V*, and vows to be “maybe the best dishwasher there ever was”, imitating the sort of grandiose pronouncements that characters in anime and manga often make. Scott finds a way to frame the process of growing up in terms of his own cherished complex of cultural references, and thereby assures himself that even as an adult, he can still be Scott Pilgrim the video game character/player. Nostalgia for video games acts as a way of reassuring Scott that becoming an adult doesn’t mean becoming an entirely new self, that something essential about him will survive this transition. Specifically, I’d suggest that what survives is not so much Scott’s essential self, the existence of which is questionable, but rather his *fantasy* of having an essential self, or his *desire* to have an essential self.

What matters is not so much whether Scott really has an essential self, but whether he is able to imagine that he does.

Scott Pilgrim and the Handwriting Effect

I now suggest that the same holds for handwriting in comics. What matters is not so much whether comics actually *are* handwritten, but whether they create the *effect* of handwriting, or whether they can be productively imagined in terms of a desire for handwriting. As we've seen, no modern comic is ever purely, entirely handwritten. But this doesn't mean that cartoonists should abandon the desire to express themselves through handwriting, or that readers should give up their desire to connect with cartoonists by viewing cartoonists' handwritten images. As I suggested above, what is necessary is to respond to the desire for handwriting without claiming that this desire is ever fully satisfiable.

I'd suggest that O'Malley (as well as Huizenga) succeeds in doing this. Despite making use of digital tools in many ways, *Scott Pilgrim* is deeply concerned with its own materiality and analog mediality; it emphasizes its own status as a construct of ink and paper, and tries to create the impression that an artist's hand lies behind it, albeit at several removes. For example, in volume 3, Scott asks Ramona "Is that your natural hair color?" and Ramona replies "What? No. Maybe. I guess it could be." A caption in the same panel reads "NOTE: this book is in black & white" (n.p.). The suggestion here is that the characters are actually handwritten constructs. By convention, the reader assumes that even though the objects in *Scott Pilgrim's* world are depicted in black and white, these objects may be understood as having color within the storyworld – that if the reader were within the text's diegetic world, s/he would see objects in color rather than in black and white. Ramona, however, is just as unaware as the reader of what

colors are represented by the various graytones, and this suggests that the world of *Scott Pilgrim* actually *is* what the reader perceives it as – a construct of black-and-white drawings. A similar awareness of materiality occurs when lines appear around Ramona's head, visually evoking the standard rendering of Spider-Man's spider-sense. As Deb Aoki observed in her interview with O'Malley:

All the while, I'm thinking, 'Oh, [the lines are] Bryan's way of representing that Ramona is angry, that she's radiating emotional tension.'

But then there's a scene in Volume 5 when Kim asks Ramona, "Hey, what's with your head?" and Scott cries out, "You can see it TOO?" Whoah, wait. You mean those lines coming out of her head are more than just comic-book visual symbols to show the reader that Ramona is feeling certain emotions – but that these lines are actually something that the other characters in the book can SEE? Holy cow. What?

Like Felix's question marks and exclamation marks, the lines around Ramona's head are initially perceived as mere graphic conventions, but turn out to have an infradiegetic materiality (i.e., they exist as objects within the diegetic world). A final example occurs in volume 3 when Lynette Guycott punches the highlights out of Knives Chau's hair.

On one level, these metafictional references are just introduced for humor value, but they also remind the reader that *Scott Pilgrim's* words and images are constructs of ink and paper. *Scott Pilgrim* seeks to suggest that even though it's the product of various digital and mechanical processes, at the bottom of all these processes is Bryan Lee O'Malley's graphic activity. Accordingly, *Scott Pilgrim* is entirely hand-drawn. O'Malley's linework has a high degree of tenor of the trace, in that it testifies his unique physical movements. It also testifies to the materiality of his artistic tools: in Scott's first duel with Roxanne Richter, individual brushstrokes are visible (O'Malley 200,7 90–91). Besides the digital lettering, everything in this text appears to be the product of O'Malley's hand. This becomes especially clear when we contrast volume 4 with volume

6, for which O'Malley employed two production assistants, John Kantz and Aaron Ancheta.⁵⁶ A typical page from volume 6 is far more slick than one from volume 4, involving much more use of digitally applied textures and filters.

As noted above, most of the lettering in *Scott Pilgrim* is digital. However, O'Malley's use of digital lettering appears to be motivated by practical concerns. An earlier work of his, *Lost at Sea*, does in fact feature hand-lettering. However: "I stopped hand-lettering for the most part because it hurts my wrist, so now I just use Comicraft fonts or whatever. One day I'll get my own font made" (O'Malley 2008). Moreover, the fonts O'Malley uses are designed in such a way as to suggest the unique touch of the artist. Comicraft (as well as its competitors, such as Blambot) markets fonts which, despite being digital, are designed to appear handwritten and are often patterned after actual handwriting. For example, Comicraft's Hedge Backwards font is based on Richard Starkings's hand-lettering (Figure 4-17), and Comicraft offers many other fonts designed to resemble the lettering of notable cartoonists. Besides using fonts based on others' handwriting, cartoonists have often used specialty fonts based on their own handwriting; Jeff Smith was one of the earliest cartoonists to do so (Figure 4-18). Although O'Malley does not currently use such a font, he suggests in the above quotation that he is interested in the possibility of doing so.

Handwriting-based fonts strike a delicate balance between actual handwriting and the appearance thereof. Clearly, such fonts are mechanical; they have a certain "regularity that erases the trace of their own production" (Atkinson 23). For example, in

⁵⁶ The copyright page to volume 4 mentions that "Steven Birch @ Servo" provided production assistance. I am unable to determine the extent of Steven Birch's contribution to the volume, but presumably his contribution was much less substantial than those of Kantz and Ancheta to volume 6.

Figure 4-18 the three instances of the word “comrade” are identical. The first is similarity between multiple instances of the same letter. A font (like the Baskerville font I’m using in this document) is “regular” because all instances of a given glyph, e.g., the lowercase t, are identical to each other: every instance is the product of a consistent – indeed, the same – mathematical description in the underlying computer files. This is a basic and usually unavoidable difference between handwriting and typographic lettering:

[R]andomness plays a significant role in real handwriting. As noted, no two individuals have identical handwriting and no single individual writes the same letter, word or phrase in the identical manner twice. Even a person’s signature, typically his or her most repeated writing, contains slight variations in every occurrence. (Loeb 2008)

In writing a letter, a human writer may attempt to follow a mental model for what that letter should look like, but s/he never completely succeeds in doing so because of the inconsistency of human physical movements. It’s largely because of irregularity between individual letters that humans outperform computers in deciphering handwritten texts.⁵⁷ In typographic lettering, by contrast, any two instances of a given letter are typically identical because they’re both derived from a single model, such as a piece of metal type or a bitmap. This is one reason why handwritten letters testify to the trace of the hand that produced them. Variations between individual instances of the same letter testify to the variability, and therefore to the human nature, of the hand that produced the letters.

However, typographic letters are also more “regular” than handwritten letters in a second sense: in terms of the precise appearance of individual letters. Because humans can’t consistently draw perfectly straight lines or perfect circles or arcs freehand,

⁵⁷ In a 2007 dissertation, Amalia Rusu described a CAPTCHA technology that exploits machines’ inferior handwriting recognition capacities in order to distinguish humans from machines.

handwritten letters tend to feature irregular lines and imperfect curves. When mechanical tools are used, however, it becomes possible to draw letters that appear perfectly executed – for example, a typewritten “o” can look like a perfect ellipse rather than a failed attempt at the same. Handwritten letters, by contrast, record the imperfect nature of the writer’s hand and therefore indicate that the writer is a human being.

These two aspects of regularity are separable: one does not necessarily imply the other. A technology such as LeRoy lettering combines both types of regularity (perfection and lack of variation), featuring letters which are identical one to another and which are excessively regular in appearance. This sort of dual regularity does indeed create a sense of disembodiment and mechanicity, which can be disturbing if we see it where we expect to see a trace of the writer’s embodied self. Indeed, the threat of this sort of disembodiment is precisely what prompts the fantasy of handwriting in the first place.

In contrast, a font like the one based on Jeff Smith’s handwriting has one type of regularity without the other: it’s invariable (i.e., individual instances of the same letter look the same) but not perfect (i.e., the letters lack machinic perfection and appear to have been executed by a human hand). Therefore, even though this lettering is not typewritten, it conforms to Marion’s principle of homogeneity. The cartoony, exaggerated appearance of the letters matches that of the artwork, and the lettering and artwork both appear to be composed of lines of the same weight, produced by the same hand. If there’s regularity here, it’s a regularity that doesn’t erase the trace of the letters’ production, nor is it the same mode of regularity as in LeRoy lettering.⁵⁸ Comicraft and

⁵⁸ Even so, Smith still faced some criticism over his use of this font. In 2003, Alexandra DuPont asked him “How do you respond to the cries of purists who say that the computer lettering of comics is

Blambot fonts work the same way: despite their typographic and digital nature, these fonts evoke the appearance of the hand-drawn artwork with which they are intended to be paired. We can even imagine a digital font that would have *both* types of irregularity, in which individual letterforms would be based on the handwriting of a specific person and would be subject to random variation. As early as 1995, Luc Devroye and Michael McDougall described “several methods for creating a random printed handwriting font based upon a small sample from a person’s own hand” (Devroye and McDougall 281). I don’t know of any comic that uses such technology, but there’s no reason why it couldn’t be productively used in comics.⁵⁹

In using Comicraft fonts, O’Malley takes advantage of the ease of reproduction associated with digital technology, but he seeks to do so without compromising the *appearance* that his work is handwritten. In this and other ways, O’Malley’s work is informed by the (reflective) fantasy of handwriting despite its digitally altered nature. For example, unlike Huizenga, O’Malley sells his original art – often for quite high prices – and exhibits it in galleries. A 2010 Portland Mercury blog post described an exhibition of

somehow a dishonest thing?” Smith replied by invoking the classic fantasy of handwriting: “Well, I think I understand what people are talking about in general – because I believe that a person who draws a strip should letter it, because graphically that makes it whole. They should be organic to each other.” However, he then proposed that digital lettering makes translation easier and that the insistence on hand-lettering was just an arbitrary rule. DuPont also alluded to the labor-saving effects of digital lettering.

⁵⁹ I focus on lettering here, but similar arguments could be made about digitally produced artwork. For example, Brent Anderson’s artwork in recent issues of *Astro City* is not “handwritten” in the strictest sense, since he produced it on a tablet PC. However, this artwork has the same tenor of the trace as Anderson’s earlier handwritten artwork. Despite being a longtime *Astro City* reader, I wouldn’t be able to tell that Anderson had started producing his artwork by computer if I didn’t know already. What changes is not so much the appearance of the artwork as the ontological fact of its means of production.

Scott Pilgrim originals where each page was on sale for \$1000 (Henriksen 2010).⁶⁰

Unlike Huizenga's art, O'Malley's art actually does exist in final and saleable form.

Certainly O'Malley is not quite as committed to the fantasy of handwriting as cartoonists like Bechdel, Barry or Thompson. O'Malley doesn't aggressively emphasize his own role as an artist, at least not within the boundaries of the texts. *Scott Pilgrim* is not an autobiographical comic in the sense of being a memoir or a *Künstlerroman*; it doesn't explicitly engage with O'Malley's personal history or his development as an artist.⁶¹ O'Malley's presence in the text is minimal and often self-parodying. The about-the-author page in *Scott Pilgrim* volume 4 shows a plush doll of O'Malley being chewed by a cat, with a caption that reads "Bryan Lee O'Malley has been alive since he was born and will live until he dies, which will probably be pretty soon. His dying wish will be the wish that he hadn't wasted his best years drawing this book. His epitaph will be whiny and narcissistic" (206). This artist doesn't foreground his personal involvement with every aspect of the text in the same way that the stereotypical alternative cartoonist does. He does, however, try to keep the reader aware that his work is the product of a human hand, however many layers of mediation exist between that hand and the final published comic. Like Huizenga's work, O'Malley's work is informed by the desire for handwriting, even as it doesn't claim to fully satisfy that desire. Reading O'Malley's comics doesn't offer me a clear means of access to O'Malley's self, and O'Malley would

⁶⁰

See

<<http://blogtown.portlandmercury.com/BlogtownPDX/archives/2010/08/06/bryan-lee-omalley-s-original-scott-pilgrim-art-at-floating-world>>.

⁶¹

For example, *Scott Pilgrim* doesn't deal prominently with the question of O'Malley's Asian racial and cultural background. By contrast, in the work of other Asian-American alternative cartoonists (e.g., Gene Luen Yang, Derek Kirk Kim, Adrian Tomine), Asian identity is often a primary concern even in texts that are not explicitly autobiographical. The subplot with Knives Chau's father in volume 4 does touch on the question of Chinese identity, but only in a parodic way.

probably not claim otherwise. But the handwritten *appearance* of his artwork can still be reassuring, especially when we compare this artwork to more transparent computer-generated art or lettering, because the appearance of handwrittenness suggests that at the origin of the text, there is a *desire* for materiality, subjectivity, embodiment, and the rest of the package of values that handwriting signifies. Again, the fact that this desire is unsatisfiable does not make it any less compelling.

Even *Scott Pilgrim*, though, is more handwritten than not. It was produced primarily by traditional drawing tools rather than digital tools, and cannot be accurately described as a born-digital text. What happens to the fantasy of handwriting when even the appearance of handwriting vanishes –when texts are produced with digital tools rather than pencils, pens and brushes? Can the fantasy of handwriting be preserved under such conditions? These questions will be examined in the last two chapters.



Figure 4-1. An example of Jeffrey Brown's highly crude drawing style.



Figure 4-2. Page 146 of Craig Thompson's *Blankets*, in which Craig masturbates while looking at Raina's handwriting.

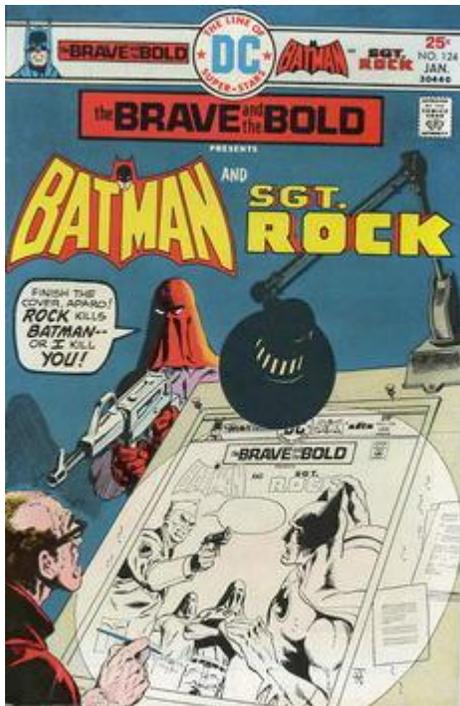


Figure 4-3. Jim Aparo's cover to *The Brave and the Bold* #124, in which he shows himself drawing, but for humorous rather than “artistic” reasons.



Figure 4-4. Panel from Seth's *Clyde Fans*. Note the differences between individual instances of the same letter or word (e.g. y and “you”).

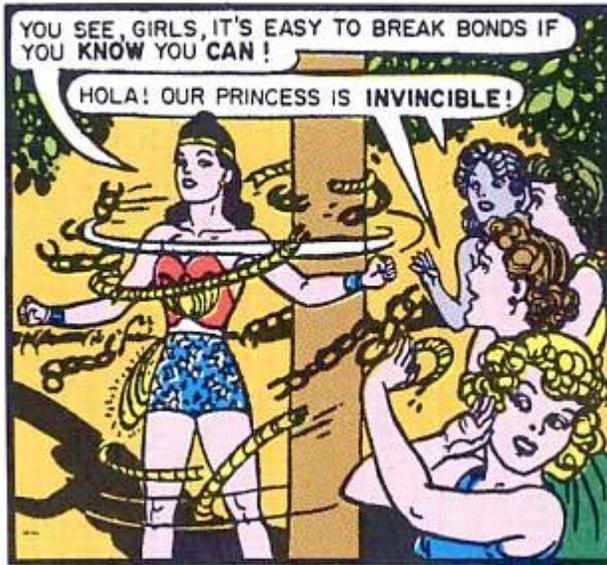


Figure 4-5. Example of LeRoy lettering, from William Moulton Marston and H.G. Peter's *Wonder Woman*.



Figure 4-6. Page from a variant version of *Captain America* #601, reproduced directly from Gene Colan's pencils. Note the incongruity between pencil artwork and digital lettering.



Figure 4-7. Panel from “The Feathered Ogre” demonstrating Huizenga's characteristic style of drawing and lettering. Images by Huizenga are reproduced by permission of the author.

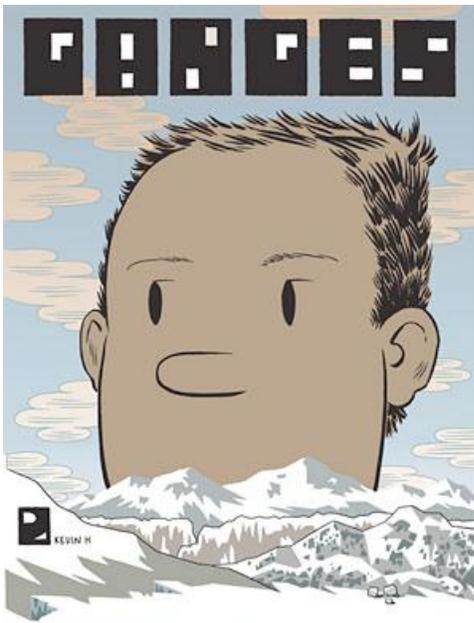


Figure 4-8. Cover of *Ganges* #2. Note the highly idiosyncratic lettering and the lack of any evidence of digital production.

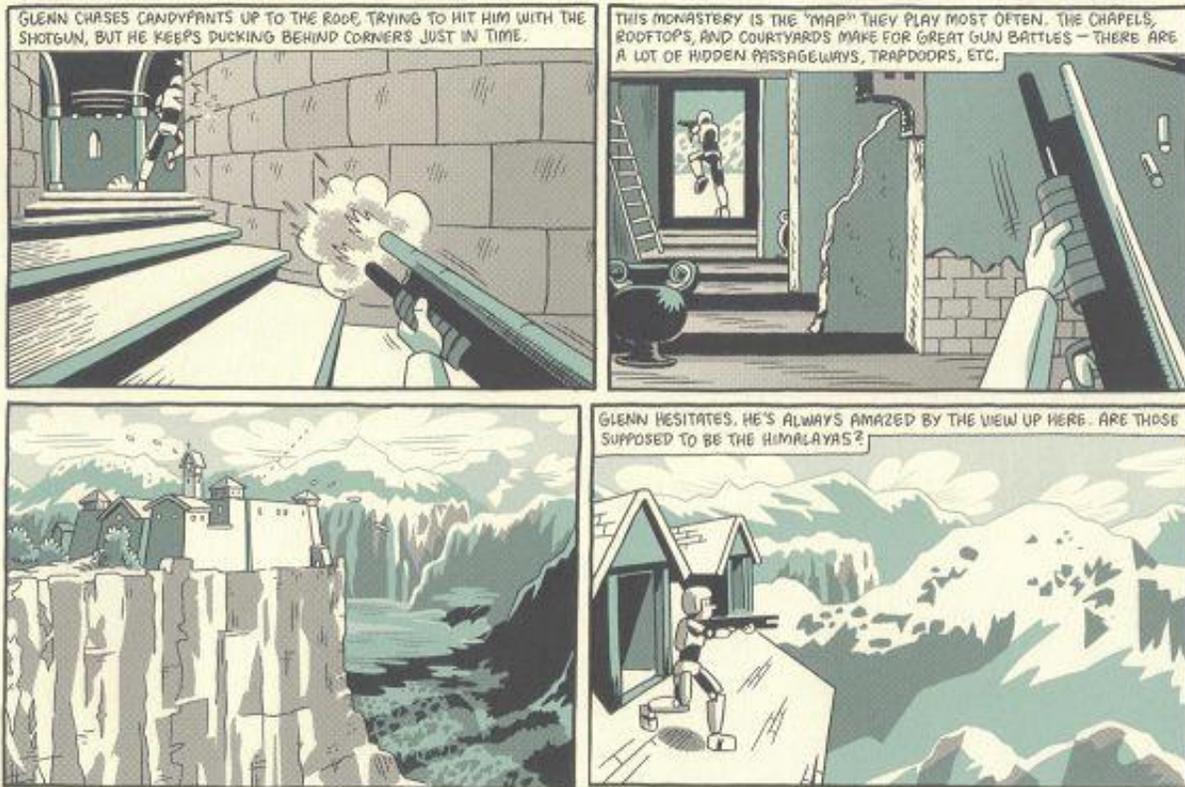


Figure 4-9. A scene from "Glenn Ganges in Pulverize" taking place within the Pulverize gameworld. Compare with the following figure and note the lack of graphic distinction between the gameworld and the "real world".



Figure 4-10. Glenn imagining the real world in terms of the gameworld, from "Glenn Ganges in Pulverize".



Figure 4-13. The cover of *Hopeless Savages* #1, by Andi Watson. An example of Oni Press's "house style," to the extent that there is one.



Figure 4-14. Scott's pee meter, full and empty. (O'Malley 2007 79)

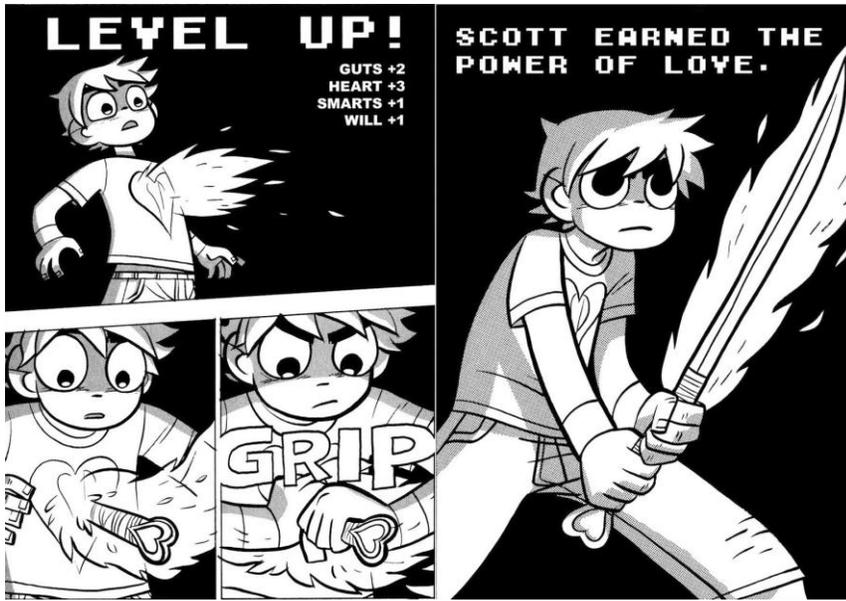


Figure 4-15. Scott levels up. Note the jaggy type.

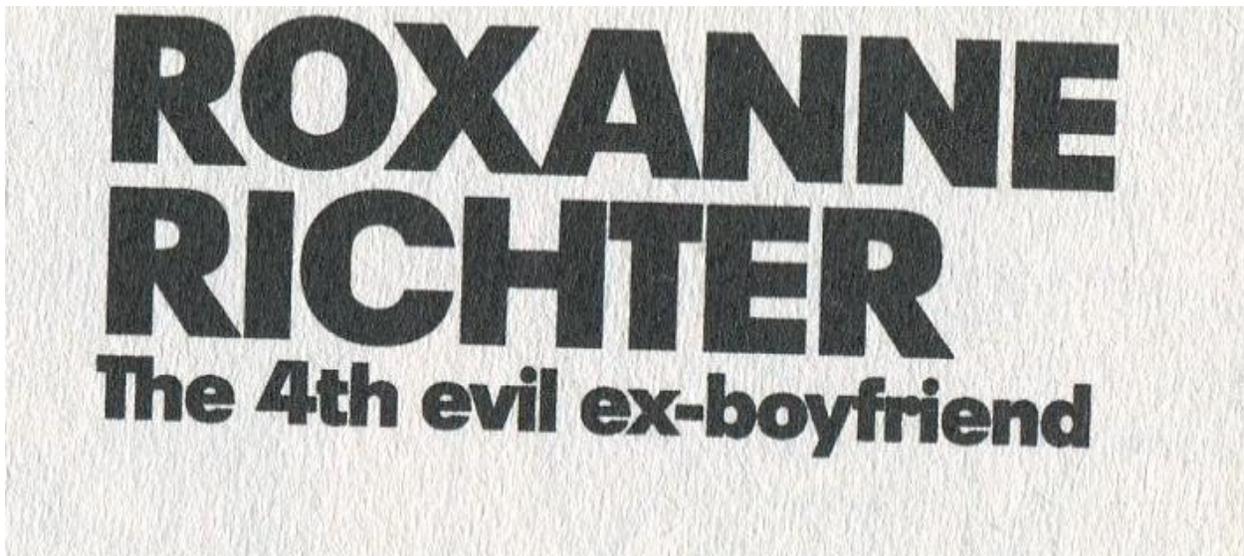


Figure 4-16. An example of the font used in O'Malley's captions. Compare to the font used for the word balloon.

ABCDEFGHIJKLMNOP
 OPQRSTUVWXYZa
 bcdefghijklmnopqrst
 uvwxyz
 1234567890
 (.,!/?\$£€)

Qa

Figure 4-17. Comicraft's Hedge Backwards font, based on Richard Starkings's hand-lettering.



Figure 4-18. Example of Jeff Smith's pioneering handwriting-based font. Compare the three adjacent instances of the word "comrade".

CHAPTER 5
WRITING IN THE AIR: FANTASIES OF HANDWRITING IN DIGITAL CINEMA

Opening Remarks

In the previous three chapters I discussed media which are primarily non-graphical in nature. More specifically, these media are all sites of originary fantasies of handwriting; even before the arrival of computer graphics, these media were understood and imagined in terms of their handwritten properties. The question in these chapters, then, was whether and how these media could continue to promulgate the fantasy of handwriting after the arrival of graphics. In this chapter and the one which follows, I instead examine media which are “born digital,” which are not the sites of an originary (pre-graphical) fantasy of handwriting because they do not predate computer graphics. The question to be considered here, then, is as follows: Can the fantasy of handwriting be sustained in media which, in some degree, are antagonistic to handwriting because they depend on other means of inscription? If so, how?

I contend that digital texts can in fact sustain fantasies of handwriting of both the restorative and the reflective type. The restorative fantasy of handwriting is at work when a digital object attempts to replicate qualities of handwritten texts, failing to acknowledge that such an attempt can never fully succeed – both because no text is ever purely handwritten, and more specifically, because of differences between handwritten texts and digital objects. The reflective fantasy is at work when a text acknowledges the inevitable failure of any simple restoration of handwriting in digital form, but is nonetheless informed, in a self-aware and critical way, by fantasies of handwriting.

In this chapter, I will begin by arguing that both these modes of the fantasy of handwriting are present, often simultaneously, in Pixar's films. Pixar has tended to appeal to fantasies of handwriting in a naïve way, and tried to ignore or cover up the fact that such an appeal to handwriting always coexisted uneasily with their simultaneous promotion of the logic of transparency. Restorative fantasies of handwriting support a project of restorative nostalgia which is prominently visible in films like *Toy Story* (1995) and especially *Cars* (2006), and which sometimes has unfortunate political implications, as in *The Incredibles* (2004). Other Pixar films, however – for example, *Monsters, Inc.* (2001) and *Toy Story 3* (2010) – use the nostalgic fantasy of handwriting in a more honest and reflective way. In these films, the desire for handwriting and handwritteness is tempered by the realization that pure handwriting is unrecoverable, largely because it never existed, in the form in which it is imagined to have existed, in the first place. Yet this opens up the possibility that handwriting can be demoted from its exalted status and used instead as an element in a more general ecology of writing systems, a possibility that is explored by *Scott Pilgrim vs. the Universe* (Edgar Wright, 2010).

Pixar and Restorative Fantasies of Handwriting

Pixar and the Naïve Fantasy of Handwriting

To return to an idea I suggested near the end of the last chapter, the use of digital tools might be regarded as a form of handwriting. This is true to the extent that the use of a tools presently essential to digital artistic practices (e.g., a mouse, keyboard or stylus) is still an act of manual interaction with a writing surface. Traditionally, analog handheld tools such as brushes, pens and pencils have been considered the only possible tools that allow for handwriting. This, however, is a belief based on prejudice,

and the difference between, say, a pen and a stylus has more to do with perception rather than reality. As Harpold suggests (cf. p. 25 above), when one uses a keyboard, there *seems* to be a lack of continuity between the act of manual intervention and the appearance of text on the screen. But this is not *actually* the case; the act of manual intervention is still the direct cause of the appearance of text, and the only thing that changes is the *perceived* closeness or continuity between the one and the other. To that extent, the use of digital tools can be viewed as merely another form of handwriting. This is the claim that Richard Starkings makes about digital lettering in comics: “I still use my hands to do my work. In fact, no one I know uses their hands to letter; they use a tool called a pen. I use a tool called a computer.”

In a larger sense, then, it could be argued that there is an essential continuity between traditional handwriting and digitally remediated versions of handwriting – that these two processes have the same goals and accomplish the same results, despite using different tools. This is essentially the argument that John Lasseter – Pixar’s Chief Creative Officer and the director of four Pixar films – makes in his 1987 article “Principles of Traditional Animation Applied to 3D Computer Animation.” Referring to several new digital animation systems, Lasseter observes

These systems will enable people to produce more high quality computer animation. Unfortunately, these systems will also enable people to produce more bad computer animation.

Much of this bad animation will be due to unfamiliarity with the fundamental principles that have been used for hand drawn character animation for over 50 years. Understanding these principles of traditional animation is essential to producing good computer animation. (35)

These principles, each of which Lasseter describes in detail, are those developed largely by Disney – for example, squash and stretch, slow in and out, and appeal.

These were the principles emphasized in Lasseter's own artistic training. He was one of the earliest students in the animation course at the California Institute of the Arts, which was founded by Walt Disney, and his mentors there included three of Disney's Nine Old Men (Wikipedia, "John Lasseter").

¹ Lasseter further suggests that "[t]he application of some of these principles mean [*sic*] the same regardless of the medium of animation," even if "their application changes due to the difference in medium" (36).

Lasseter's argument, then, is that the creative processes in traditional and digital animation are the same, in that artists working in these media need to obey the same principles. The principles an animator needs to follow are unaffected by the transition from one medium to the other; all that changes is the application of these principles. This is more or less analogous to the claim that, for example, Starkings makes about hand-lettering versus digital lettering. Both Starkings and Lasseter claim, essentially, that traditional and digital media share an essential core of identity, differing only in accidental details such as the nature of the tools employed, or the precise way in which general principles need to be applied.

This philosophy helps to explain Pixar's frequent emphasis, both in its films and in its publicity, on the drawnness of its products. In a 2008 article, Pixar production designer Harley Jessup argues at length that computer animation is at heart a drawn medium:

In the creation of a computer graphic animated film, a team of designers and story artists illustrate the director's vision long before a single frame of

¹ Lasseter's classes at CalArts were held in classroom A113, and references to this number appear in every Pixar feature as well as in many other films created by CalArts alumni. Another Pixar director, Brad Bird, was Lasseter's classmate at CalArts.

film is ever rendered [...] Technical methods continue to evolve at Pixar, but the basic storytelling process based on thousands of drawings, remains the same. [...] Pixar films are filled with images that were born on the drawing board and I often remind the artists on our team that the ability to express an idea in a drawing is a very powerful skill. (170)

Having observed that “[t]hose outside the industry often believe that Pixar films are produced by the computer alone” (170), Jessup cites Lasseter’s refutation of this belief: “Most people don’t realize that we have almost as many artists in Pixar working in traditional media – hand drawing, painting, pastels, sculpture – as we do in digital media” (qtd. in Jessup 170). He concludes:

The act of drawing continues to be the standard medium for communicating visual ideas at Pixar, and although the thousands of drawings we create never appear directly on the screen, they remain the foundation of every feature film we create. The computer is a miraculous tool, but a great story is, in fact, the heart of a Pixar film and to tell that story we always begin with a drawing. (181)

To support this claim, Jessup illustrates his essay with numerous production drawings from Pixar films. The overall message this essay sends is that the production of a Pixar film is, at least initially, a process of drawing. Various additional layers of mediation, as well as various additional steps in the production pipeline, may be interposed between the drawings that illustrate Jessup’s article and the images in a finished Pixar film. But at the heart of each Pixar film is the animator’s act of manual intervention with a writing tool and a writing surface.

Pixar’s films, particularly *Toy Story* (John Lasseter, 1995) and *Toy Story 2* (John Lasseter, Lee Unkrich and Ash Brannon, 1999), often feature a similar emphasis on drawing and drawn-ness. In these films, drawing has ideological associations that are by now familiar: drawing stands for personality, creativity, selfhood, and imagination. Handwriting and hand-drawing both appear in the first scene of the first Pixar film. Like

its two sequels, *Toy Story* opens with a scene in which Andy, the central child character in the trilogy, plays with his toys. The film opens with a shot of a cardboard box which has been converted into a “Saloon” by the addition of a childish drawn sign (note the backwards N) and a crude drawing of a door.² The camera pans to the left, showing other cardboard boxes that read “Bank” and “Skool” [sic], and a childish hand-drawn wanted poster for Mr. Potato Head (“\$50 Bzillion REWARD”). Misspellings, incorrectly formed letters, and shaky linework attest to the “childishness” (and authenticity) of Andy’s handwriting and drawing. As the scene continues, examples of childish handwriting and drawing proliferate; we notice a “Jail” sign on Andy’s baby sister’s crib, and drawings of Andy’s toys attached to the wall above his bed.

Here and elsewhere in *Toy Story*, handwriting and drawing are associated with childhood; most of the instances of writing and drawing shown on screen are obviously the work of children. This is obviously not surprising given that *Toy Story*, unlike its sequels, takes place in a milieu of children. All the significant characters in the film are either children or children’s playthings, and the film mostly ignores the existence of the adult world and the fact that children eventually grow up. But moreover, this film also associates drawing with creativity and imagination. It implies that these values are inherent in drawing and in (healthy) childhood, to the extent that childhood is valuable largely by virtue of being the period of life when people learn to draw.

In the opening scene, Andy’s acts of drawing, storytelling and imaginative play are evidence that he has a healthy imagination. Patti M. Valkenburg defines “imaginative

² Similarly, in *Calvin and Hobbes*, the child protagonist converts a cardboard box into a variety of fantastic devices (a transmogrifier, a duplicator, and a time machine) by writing labels on it. Here, as in *Toy Story*, the child’s creativity is signified by the ability to imagine a cardboard box, a paradigmatically empty and blank object, as something other than what it is.

play” as “play in which children transcend the constraints of reality by acting ‘as if”

(122). She observes that

there are indications that a high level of imaginative play in childhood is positively related to creativity in childhood [...] It has been suggested that the “as if” nature of imaginative play helps the child in breaking free of established associations or meanings and thereby encourages children’s creativity in the long term. (122)

The ability to engage in imaginative play indicates the ability to imagine the world otherwise than it is, to generate new ideas or concepts that don’t correspond to reality as it currently exists. Therefore, imaginative play is analogous to drawing and storytelling, both of which also involve the creation of original phenomena that need not correspond to real-world referents. In the opening scene of *Toy Story*, Andy engages in all three of these phenomena at once, proving that he possesses a healthy (perhaps even unusually healthy) faculty for creativity and imagination. And the implication is that the creators of the film are like Andy in this sense. *Toy Story* may not be “drawn” in the same literal sense as the images on Andy’s cardboard boxes, but it, too, is an example of the expression of creativity through drawing and storytelling.

Moreover, drawing functions in *Toy Story* as a signifier of selfhood. The plot of the first film centers around Andy’s acquisition of a new and more technologically advanced toy, Buzz Lightyear, who threatens to replace the cowboy doll Woody as Andy’s favorite toy. A key moment in the film comes when Buzz reveals the name “ANDY” written, in permanent marker, on his boot, indicating that Andy has accepted Buzz as a cherished possession. Seeing this, Woody looks at his own boot, and we see that “ ‘Andy’ is written on it also but in a much more childish scrawl, and is largely faded” (Whedon et al. n.p.); it also appears to be drawn in the childish medium of crayon (Figure 5-1). Notably, the ANDY on Woody’s boot is written with a backwards N. The superior

penmanship of the ANDY on Buzz's boot indicates that Buzz is a newer toy, dating from a period when Andy's expressive abilities were less refined.

The obvious reason why Andy writes his name on his toys is to identify them as his property, as his material possessions. But by this act of self-inscription, Andy also identifies his toys as products of his creativity, as objects which are in some sense his creation. Andy of course did not literally create his toys; a poignant moment in *Toy Story* occurs when Buzz notices the words MADE IN TAIWAN stamped into his arm. But in playing with his toys, Andy invests them with something of himself, using them as outlets for the expression of his creativity and his subjective compulsions. His toys are physical sites of his creative activity. He testifies to this by signing his name to his toys, an act which is analogous to an artist's act of signing his work, or Walt Disney's act of affixing his name to his films (albeit in simulated and reproduced form).

Thus, uses of handwriting in *Toy Story* serve to reinforce the perception that the film, despite its computer-generated nature, is essentially a handwritten and hand-drawn object. To this extent, *Toy Story* relies on the naïve fantasy of handwriting. Its constitutive illusion is that through the "magic" of animation, Pixar's animators have succeeded in giving life to inanimate objects. There is an obvious analogy between the film's central conceit, which involves inanimate things coming to life, and animation itself, which creates the illusion that inanimate drawings (or sculptures, puppets, etc.) have come to life and acquired the capacity for independent action. The way in which Andy's toys come to life when Andy plays for them is a metaphor for animation.³

³ This is a deliberate oversimplification. See in particular Bill Brown, "How to Do Things with Things (A Toy Story)," *Critical Inquiry* 24.4 (1998): 935–964, for an examination of the uncanny aspects of the illusion of inanimate things coming to life. See Susan Honeyman, "Manufactured Agency and the

Pixar and the Fantasy of Immersion

However, Pixar's invocation of a naïve fantasy of handwriting coexists uneasily with its use of the logic of transparency. As Jay Bolter observes, Pixar's work is a paradigmatic example of the latter:

Computer graphics processing is rapidly taking over the animated cartoon; indeed, the takeover is already complete in Disney/Pixar's *Toy Story* (USA 1995). And here too the goal is to make the computer disappear: to make the settings, toys, and the human characters look as much as possible like live-action film. (Bolter 2000, 68).

The necessary caveat here is that Disney's characteristic "illusion of life" was never precisely about replicating the look of the live-action film. Objects and characters in Disney's films are often exaggerated and distorted in various ways; indeed, the ninth of Lasseter's principles of animation is exaggeration. "The animator must go to the heart of anything or any idea and develop its essence, understanding the reason for it, so that the audience will also understand it. If a character is sad, make him sadder; if he is bright, make him shine; worried, make him fret; wild, make him frantic" (Lasseter 41). However, as this quotation indicates, exaggeration is used in Disney's films, paradoxically, to heighten the verisimilitude of the depicted scene, to create effects of hyperrealism and cinematism.

Wells defines the hyperrealism of Disney films essentially in terms of verisimilitude and resemblance to live-action cinema. His criteria for hyperrealism include "The design, context and action within the hyper-realist animated film approximates with, and corresponds to the design, context and action within the live-action film's representation of reality" and "The characters, objects and environment within the hyper-realist

Playthings Who Dream It for Us," *Children's Literature Association Quarterly* 31.2 (2006): 109–131, for an application of Brown's theories to the first two *Toy Story* films.

animated film are subject to the conventional physical laws of the 'real' world" (25).

Hyperrealism, therefore, is animation that seeks to mimic live-action film's representation of reality.⁴ By making characters three-dimensional but still recognizably *not* flesh-and-blood physical actors, Pixar takes animation one step closer to live-action film, thereby increasing the effect of hyperrealism. Similarly, Lamarre defines cinematism in terms of movement into depth, in contrast to the lateral, sliding movement which he sees as characteristic of "animetism":

Cinematism tends to put your eye on the point of the speeding bullet [...] It is a voyage *into* the landscape, which entails a push for greater mobility and velocity, for the ability to turn on a penny or to stop on a dime. Animetism is different, however [...] animetism is not about movement *into depth* but movement *on and between surfaces*. (7)

Wells proposes that Disney's multiplane camera, which allows for camera movement into or out of the image, brings animation closer to cinematism (25), although "even Disney's use of the multiplane camera falls short of cinematism" because it doesn't fully erase the gaps between planes of the animated image (30). Computer animation erases this problem, enabling camera movement that mimics that of live-action cinema; an article on "The Making of *Toy Story*" discusses how "the time-tested methods of camera motion and real life film lighting are mimicked in the simulated world" (Henne et al. 1996). Thus, "the illusion of movement into depth, especially at high speed, has become a staple of American digital animation, exemplified in the action sequences of Pixar productions – which is where hyper-Cartesianism dovetails with hypercinematism" (Lamarre 126).

⁴ It's not clear what sort of live-action cinema Wells is thinking of when he refers to "the live-action film's representation of reality." If Wells is thinking of the classical Hollywood cinema, then it should be noted that the influence between Disney and Hollywood probably goes in both directions; it is likely that the way in which Disney films represent reality has had at least some influence on the way in which Hollywood films do so.

The trouble here is that hyperrealism is not value-neutral. Wells takes the term from Eco, who uses it to describe something more sinister than more-true-than-true verisimilitude. For Eco, the hyper-real is that which, *though entirely fake, presents itself as superior to actual reality*; the specific example he cites is the ersatz boulevard of Main Street, U.S.A. in Disneyland. Disney, for Eco, is the classic example of artifice that fraudulently presents itself as real, at the expense of actual reality. The hyperreal is the negative form of transparency in its most sinister form. It offers a superior alternative to a messier, less conceptually-rigorous real life, with the consequence, often intentional, of distracting the consumer from paying attention to real-world problems. Baudrillard uses the term “hyperreal” in a similar sense, defining it as a simulation detached from the real which simulates nothing, covering up its lack of any referent. “It no longer needs to be rational, because it no longer measures itself against either an ideal or negative instance. It is no longer anything but operational. In fact, it is no longer really the real, because no imaginary envelops it anymore. It is a hyperreal” (2). Because the hyperreal in this sense functions as a tool of distraction and deception, Disney’s promotion of a hyperreal aesthetic is often used as evidence for various critiques of Disney as (for example) antifeminist, colonialist, or anti-liberal.⁵ Similarly, Lamarre’s thesis is that cinematism is associated with a way of “thinking technology” in terms of Cartesianism and Western modernity.

As a means of producing real images without referents, digital animation is obviously open to such critiques of hyperreality. Digital animation seems at risk of becoming pure hyperrealism in Eco’s sense, creating artificial worlds which trump the

⁵ See the sources cited in Chapter 2, footnote 31, as well as Andrew Ross, *The Celebration Chronicles: Life, Liberty, and the Pursuit of Property Value in Disney’s New Town* (Verso, 2000).

real one and thus facilitating a purely escapist mode of spectatorship at best, or serving as a means of indoctrination at worst. Perhaps the clearest evidence for such a critique is a film like *Avatar* (James Cameron 2009). This film is set on an alien planet, Pandora, and its title refers to a technology which allows Jake Sully, a human paraplegic, to transport his mind into an artificial body based on those of the Na'vi, the nonhuman inhabitants of Pandora. Jake's Na'vi body is not only fully abled but also taller and more attractive than his "real," "proper" body, and its superiority is presented as fully compensating for its unreality.⁶ Similarly, the film itself promises to transport viewers into the world of Pandora, which is better looking, less ecologically spoiled, more internally coherent, etc., than the real world, and which can also be seen in (a hyperreal) three dimensional format if screened in an appropriately equipped theater. As presented in the film, Pandora is *so much* better than Earth that no rational person could possibly prefer the latter to the former; the film's villains, Earthlings who seek to exploit Pandora's natural resources, are necessarily entirely unsympathetic. What *Avatar* celebrates about Pandora is its *organic*-ness, in the sense of both its unspoiled natural beauty and the cohesiveness with which everything in the world is linked to everything else. All this is contrasted to the ugly and lifeless technology employed by the humans.⁷

In an article on *Avatar* and Neoplatonism, Ken Hillis succeeds to a surprising degree in recuperating this reading of the film as politically useful. Without engaging

⁶ For a far more nuanced treatment of the same theme, see Alan Moore and John Tottleben's *Miracleman: Olympus*.

⁷ See Hillis 2010 for a more positive view of the film's combination of technology and organicism. While Hillis does a better job than I would have thought possible of recuperating the politics of this film, something about his argument still leaves me unconvinced.

with this claim, I simply suggest that such a discourse of technology as hyperreal is not logically consistent with Pixar's emphasis on handwriting. The desire for the hyperreal exists in a state of tension with nostalgias for handwriting, inasmuch as the former depends on transparency while the latter depends on non-transparency. At the same time that Pixar explicitly and implicitly stresses its commitment to handwriting, its technological apparatus seems to militate in the direction of hyperrealism. Its public statements often confirm its commitment to the latter; the abstracts of Pixar's technical papers often draw attention to how technologies described in these papers help to make films more realistic. (For example: "Hair is one of the crucial elements in representing believable digital humans." Or: "One of the major technical challenges in the animated film *Ratatouille* was creating a believable rat colony.") In their first three feature films, as well as in *Cars* (2006) – which I would characterize as a regressive work – Pixar often tries to conceal this tension between handwriting and hyperrealism. In later works, this tension is reduced, but Pixar becomes willing to confront it directly. It is only then that Pixar's work becomes reflective.

Pixar and Restorative Nostalgia

The earliest Pixar films don't explicitly deal with the question of nostalgia for the past or for old media. However, they continue the project of restorative nostalgia which was begun by the Disney Renaissance films of the late 1980s and early 1990s. M. Keith Booker explains:

[I]t means one thing to make *Snow White* in 1937 and something entirely different to remake it half a century later. Thus, the element of nostalgia for an earlier and presumably more authentic time that was already present in the earlier films becomes significantly stronger in films like *The Little Mermaid*, *Beauty and the Beast* (1991), and *The Lion King* (1995), because these films now have the added element of being nostalgic for the earlier films. (37)

He also mentions “the tendency in the Disney universe to make nostalgia a quest for authenticity” (37). Booker goes on to suggest that Pixar has typically used nostalgia in similar ways: “Pixar films have consistently tended to convey an ideology that is rather similar to the mainstream ideology of Disney films, especially in their emphasis on the importance of naturalness and authenticity” (78). Thus, Pixar films tend to be replete with nostalgic references to American culture, specifically American culture of the 1950s, and often express a longing for this time period. Moreover, a central theme in most of Pixar’s films is the gradual disappearance of the past, which is imagined as a lost moment of plenitude. *Toy Story* is primarily an exciting adventure story, but as Booker observes, the film’s underlying concern is “the obsolescence of commodities [...] [T]he obsolescence suggested here becomes particularly poignant because we are dealing with children’s beloved toys. Among other things, the obsolescence of toys can be taken as a marker of the fleeting nature of childhood itself” (79). Buzz threatens to replace Woody in Andy’s affections both because of Buzz’s greater recency (as indicated by the superior penmanship of the ANDY on Buzz’s shoe) and because of Buzz’s technological superiority: in contrast to Woody’s wood, leather, and cloth, Buzz’s body is plastic and battery-powered.

Toy Story, however, deals with questions of obsolescence and transience simply by pushing them aside. The film ends in typical Disney fashion, as Andy’s love for Woody survives the arrival of Buzz. The fact that Andy will eventually grow up, and that his toys will eventually break or that we may lose interest in them, is not directly confronted.

In *Toy Story 2*, however, obsolescence and transience – the factors that create the conditions of possibility for nostalgia – do become explicit themes. At the beginning of the film, Woody’s arm is badly damaged, and Andy’s mom comments, “I’m sorry, honey, but you know, toys don’t last forever.” This point was never made explicit in the previous film, where the principal danger to toys was intentional destruction by cruel children. Through a series of misadventures, Wally becomes the property of an unscrupulous toy collector, and encounters a female cowboy doll, Jessie. There follows one of the most emotionally powerful sequences in the Pixar canon, as Jessie reminisces on her separation from her previous owner, to the tune of Sarah McLachlan’s “When Somebody Loved Me.” Idyllic scenes of Jessie being played with by her former owner, Emily, are accompanied by the lines:

When somebody loved me / Everything was beautiful / Every hour we spent together / Lives within my heart. // And when she was sad / I was there to dry her tears / And when she was happy, so was I / When she loved me. // Through the summer and the fall / We had each other, that was all / Just she and I together / Like it was meant to be.

But in the next shots, Emily’s cowgirl paraphernalia is replaced by cosmetics, and Jessie is abandoned under Emily’s bed: “So the years went by / I stayed the same / But she began to drift away / I was left alone.” When a much older Emily retrieves Jessie from under the bed, it is only in order to donate her to charity.

This is one of the emotional high points of Pixar’s films, because it combines the evocation of a former plenitude with the knowledge of the irretrievable loss of that plenitude. Yet something about this scene seems disingenuous. The lost plenitude whose disappearance is being lamented, is lost because of the *same* teleological ideology of progress that informs the technology being used to mourn its loss. Emily’s growth is what causes the severance of her bond with Jessie, and this growth is subtly

analogized to the steady progress of technological development when Emily acquires a car at the end of the scene. But technological progression, in the sense of teleological advancement from less to more advanced means of representation, is what makes this scene and its stunning emotional impact possible.

An even clearer demonstration of this point is offered by a similar scene in *Cars*, when Sally tells Lightning McQueen how the creation of the interstate highway system destroyed the traditional community of Radiator Springs, located on the old Route 66:

Forty years ago, that Interstate down there didn't exist. [...] Back then, cars came across the country a whole different way. [...] Well, the road didn't cut through land like that Interstate. It moved with the land, you know? It rose, it fell, it curved. [...] Cars didn't drive on it to make a great time. They drove on it to have a great time.⁸

We see a series of idyllic scenes of small-town life, depicted in slightly faded tones so as to mimic the appearance of old photographs, and James Taylor's "Our Town" plays: "Long ago, but not so very long ago / The world was different, oh yes it was / You settled down and you built a town and made it live / And you watched it grow / It was your town." Lightning asks what happened, and Sally replies, "The town got bypassed just to save ten minutes of driving." The song continues, as we see the crowds vanish and the shops go out of business:

Time goes by, time brings changes, you change, too / Nothing comes that you can't handle, so on you go / Never see it coming, the world caves in on you / On your town / Nothing you can do. // Main street isn't main street anymore / Lights don't shine as brightly as they shone before / Tell the truth, lights don't shine at all / In our town

⁸ It is probably no coincidence that both *Cars* and *Who Framed Roger Rabbit* depict the interstate highway system as having destroyed traditional American urban communities. For a detailed examination of the interstate highway system from a cultural studies perspective, see Cotten Seiler, *Republic of Drivers: A Cultural History of Automobility in America* (University of Chicago Press, 2008).

The scene ends on a note of explicit restorative nostalgia, as Lightning comments, “How great would it have been to see this place in its heyday!” and Sally replies: “Ohh. . . I can’t tell you how many times I’ve dreamed of that. But one of these days, we’ll find a way to get it back on the map.” The logic of technological development is here portrayed in negative terms, as a force that destroys traditional notions of community and renders authentic experience impossible. The solution, implicitly, is to reject the logic of efficiency that informs the interstate system – just as Sally gave up her fast-paced life as an attorney in order to live in Radiator Springs – and to seek ways of returning to the state of plenitude that existed in the past. And the ending of the film suggests that such a restoration of the object of nostalgia is actually possible. Lightning gives up his chance to win the Piston Cup (the film’s equivalent of the NASCAR Sprint Cup, formerly the Winston Cup) in order to assist an injured opponent, thus affirming that communitarianism and respect for others is more important than competitive success and expediency. Having become famous for this act of sportsmanship, Lightning capitalizes on his fame by moving his racing headquarters to Radiator Springs, thus putting it “back on the map.” The ending of Jessie’s story in *Toy Story 2* seems similarly restorative, as Jessie anticipates becoming the favorite toy of Andy’s baby sister Molly. (This reading, however, needs to be nuanced, and I will do so below.)

The implicit message here is that you *can* return to the past – that, as Sven Birkerts suggests with respect to handwriting, it makes logical sense to imagine a future in which the direction of technological progression is reversed, allowing for the return of obsolete technologies and the restoration of the utopia associated with them. But the obvious trouble here is that *Cars* is itself a product of the very ideology of progress it

critiques. Like all Pixar films, *Cars* is a showcase for Pixar's state-of-the-art technology. "Computers used in the development of the film were four times faster than those used in *The Incredibles* [the previous Pixar film] and 1,000 times faster than those used in *Toy Story*. To build the cars, the animators used computer platforms very similar to those used in the design of real-world automobiles" (Wikipedia, "Cars [film]"). In particular, *Cars* was "an ideal testing ground and showcase for the ray tracing functionality" that Pixar was then adding to its RenderMan software (Christensen et al. 1). *Cars* was ideal as a demonstration of Pixar's mastery of ray tracing because, for example: "Real cars are usually shiny, and the reflections are an important visual cue to the shape and material of the car." The ray tracing technique allows for maximally accurate depiction of reflections, including interreflections where shiny objects reflect other shiny objects (n.p.). In order to depict the nostalgic story of *Cars*, then, it was necessary not only to take advantage of a vast technological apparatus, but also to make state-of-the-art improvements to the apparatus. Or rather, the direction of causality was the opposite. For all its nostalgic evocation of a vanished past, *Cars*'s very existence is the result at least in part of Pixar's need to make its technological apparatus more efficient and transparent through the inclusion of ray tracing. Pixar added ray tracing functionality to RenderMan "at the request of our external customers" (Christensen et al. n.p.). *Cars*'s use of restorative nostalgia therefore seems profoundly disingenuous.⁹ More specifically, Sally praises the old Route 66 for promoting less goal-

⁹ It's also worth noting here that *Cars* was Pixar's most successful film in terms of merchandising, having generated over \$8 billion in merchandising revenue (Szalai n.p.). Probably at least in part for this reason, Pixar has developed a sequel to *Cars* (to be released in June 2011), even though the first film was poorly received relative to Pixar's other films. If *Toy Story* may be viewed cynically "as nothing more than a thinly disguised commercial hawking toys to youngsters" (Litwak), then the same critique applies to *Cars*.

oriented, more reflective uses of time. Yet computer animation tends to be chosen over traditional animation precisely because it saves time and labor costs, just as the primary advantage of typewriting or word processing over handwriting is greater efficiency. Moreover, Sally observes that Route 66 followed the natural contours of the landscape, perhaps in the same way that handwriting follows, and authentically records, the natural physical movements of the hand that produces it. The use of a James Taylor song for this scene is also a mark of naturalness or authenticity, in that his voice exhibits a high degree of what Barthes calls “the grain of the voice”: hearing a James Taylor song, one instantly recognizes it as such, and feels that one is in the (phantasmal) presence of a singer with an absolutely unique, irreducibly embodied performance practice. And yet, all of these signifiers of embodiment, of tenor-of-trace, coexist with digital animation, which is often critiqued precisely on the grounds that it strips out the unique, embodied, authentic properties of its creator.

Therefore, there is something highly disingenuous about the evocation of nostalgia in *Cars*, and also in the first two *Toy Story* films. (This is why *Cars* deserves to be discussed alongside the earlier Pixar films, despite having been released as late as 2006.) But *Toy Story 2* contains hints of a different relation to nostalgia. Although the film is emotionally manipulative in much the same way as *Cars*, it also suggests that obsolescence, transience and technological and medial progression are not simply reversible, and that, therefore, restorative nostalgia represents a dishonest way of confronting the past.

Reflective Nostalgia in *Toy Story 2*

The villain of *Toy Story 2* is Al, an unscrupulous toy collector who seeks to complete a collection of toys related to the fictional TV series *Woody’s Roundup* –

including Woody himself – so that he can sell them to a toy museum in Japan. Al's desire, like that of his Japanese colleagues, is to preserve toys in amber, to keep them in an immaculate state so that they can serve as permanent symbols of a vanished past. When we first see Al's apartment building, the camera focuses on a NO CHILDREN ALLOWED sign outside the door, suggesting that Al's obsession with preserving the playthings of childhood is incompatible with actual childhood.

Jessie, who was traumatically separated from her child owner, and Stinky Pete, a toy who was never removed from his original packaging and has thus never seen actual children, are sympathetic to Al's mission. They want to remain forever as cherished signifiers of nostalgia. Stinky Pete convinces Wally to agree with his position by reminding him that he himself is transitory, as the damage to his arm indicates, and that Andy will eventually grow up and forget him: "How long will it last, Woody? Do you really think Andy is going to take you to college, or on his honeymoon? Andy's growing up, and there's nothing you can do about it. It's your choice, Woody. You can go back, or you can stay with us and last forever. You'll be adored by children for generations." Woody's acceptance of this position is signified when a toy restorer paints over the ANDY on his boot. As in the previous film, the ANDY handwriting is a symbol of Andy's authenticity and naturalness. But it also stands for the transitory, momentary nature of that authenticity. The faded quality of the crayon, as well as the childishness of the handwriting, remind us that Andy is already no longer the person he was when he signed his name on Woody. This handwriting is the symbol of a former presence, the trace of someone who no longer exists. By not resisting when the name is painted over, Woody signals his rejection of the transience that the name implies.

But that, of course, is not the end of the film. When Woody explains his decision to go to Japan, Buzz retorts, “Somewhere in that pad of stuffing is a toy who taught me that life’s only worth living if you’re bein’ loved by a kid.” Buzz presents transitoriness as something which must be accepted, because it is necessary for authentic experience. The transitoriness of such experience is what makes it *experience*, which is necessarily time-bound. As Graeme Gilloch observes:

Play, for the toys, involves confronting risk in various forms: the risk of accidental or deliberate damage, the risk of obsolescence, the risk of falling out of favour [*sic*], the risk of ending up discarded and buried. But such risks are worth taking because they are life itself, because, as Buzz observes: “Life is only worth living if you’re being loved by a kid.” And at the end of *Toy Story 2*, what Woody chooses is the uncertainty and transience of life with Andy rather than the living death of museumified, mummified immortality, “infinity and beyond.” (10-11)

Therefore, Woody scrapes off the paint on his boot, revealing the name ANDY. Woody accepts the fact that Andy is already a much older child than when they first met, and that Andy will soon be an adult. At the end of the film, Jessie and her horse, Bullseye, proudly display the name ANDY written on their boots (or horseshoes in Bullseye’s case). (Figure 5-2). Meanwhile, Buzz asks Woody if he’s still worried, and Woody responds, “About Andy? Nah, it’ll be fun while it lasts.”

Booker describes this as “a fairly simplistic, conventional, and sentimental resolution that ignores the reality of the film itself” with respect to the issues of the commodification of toys and the postmodern unmooring of images from their historical contexts (84). He continues: “Childhood itself, the message seems to be, should be a happy time, the enjoyment of which should not be marred by the fact that it is inevitably temporary. The question of what will happen to Woody and his cohorts after Andy grows up is left open” (84). This reading makes less sense now than it did when Booker’s book

was released, as the book predates *Toy Story 3*, which poses that very question. However, I think Booker's reading is still unsatisfying even independently of *Toy Story 3*, as it fails to give due weight to the fact that unlike its predecessor, *Toy Story 2* at least acknowledges the importance of nostalgia. It gestures to the what is known in Japanese as *mono no aware*, the awareness that the beautiful object one is presently enjoying is destined to be irrecoverably lost.

Yet there is still a step missing here. *Toy Story 2* still assumes that even if the object of nostalgia is not recoverable after its loss, that object of nostalgia still unequivocally exists, and actually does possess all the cherished properties with which it is retrospectively invested. It ignores the question of how the object of nostalgia is rewritten or reimagined, or how it gets changed by the very process of remembering it. Moreover, although handwriting plays an important symbolic role in *Toy Story 2*, it doesn't play a central role; *Toy Story 2* can't be characterized as a film "about" handwriting or drawing. For a more direct exploration of these themes, we have to turn to the next Pixar film, *Monsters Inc.* (Pete Docter, 2001).

Monsters, Inc.: The Monsters and the Kiddies

***Monsters, Inc.* and Imagination**

Monsters, Inc. is set in Monstropolis, the city of monsters. As depicted in the film, monsters are much like humans except that they use human children's screams as a source of power.¹⁰ The eponymous company employs "scarers" who venture into human children's closets via transdimensional doors in order to scare children and harvest their scream energy. Because monsters believe – falsely, as it turns out – that

¹⁰ The film does not explain how children's screams can be used as an energy source. It's scarier and funnier that way.

human children are deadly, scarers are the bravest and most respected citizens of Monstropolis (at one point, the film parodies a famous shot from *The Right Stuff* and thus compares scarers to astronauts).

This premise seems to provide an entirely mundane, prosaic explanation of why monsters scare children, as Richard Stamp notes: “the film feeds off childhood fears of the dark by first assuring us that there *really are* monsters in the closet; and then reassuring us that it’s nothing personal – it’s just business!” (72) The premise that monsters are afraid of children appears to be motivated by a similar logic: the monsters seem more human when we understand that they are as afraid of us as we are of them. But the reason why the premise of *Monsters, Inc.* is interesting, especially from the perspective of this discussion, is because the monsters feed on *imagination* – specifically *children’s* imagination.

The monster in the closet, like the essentially identical trope of the monster under the bed, is scary because it’s *unseen*. Much like the grue (discussed in chapter 2), the monster in the closet inhabits a space withdrawn from direct visual access. Moreover, the monster typically operates at night, when sources of light and visual stimuli are minimized. As the child protagonist of Bill Watterson’s *Calvin and Hobbes* comic strip once remarked, “I think nighttime is dark so you can imagine your fears with less distraction” (77).¹¹ Because it is not visible, the monster can be imagined as anything at all. Its appearance is potential or virtual rather than actual, and this makes it scarier than if it were fixed into one precise form. When monsters under the bed are depicted in popular culture, their invisibility is often emphasized. Or rather their non-visibility,

¹¹ For a Lacanian reading of imaginary-ness in *Calvin and Hobbes*, see Sandifer 2007.

because these creatures are not intrinsically invisible, like, say, H.G. Wells's invisible man; they *could* be seen under ordinary viewing conditions, except that they conceal themselves from sight. Thus, in Phil Foglio's comic "Monster Under the Bed," the eponymous monster tells two women who are sharing his bed: "Can't let you see me. Them's the rules" (n.p.).¹² In Batton Lash's comic "Words Don't Do IT Justice," a child's parents sue the monster under his bed for personal injury. The monster spends the trial hiding under the defense table, and is never seen directly. Of course, in *Monsters, Inc.* the monsters *are* visible. However, they still exist in an environment of limited visibility (they visit children at night, by teleporting into their closets). And, as I will explain below, each actual monster is, in a sense, ontologically preceded by a hypothetical monster that the child imagines into existence.

Moreover, again as with the grue, traits of the monster in the closet must be filled in by *imagination*. Because the monster is not visible, it needs to be *visualized*; the child can perceive it only by imagining it. This is why the monster in the closet appeals to children, and why, in *Monsters, Inc.*, scream energy can only be generated by children. Conventional wisdom holds that children are imaginative and suggestible. Children have an incomplete understanding of borders between reality and fantasy. They have a greater power of imagining the unseen. With adolescence and adulthood, the child becomes more aware of distinctions between reality and fantasy – or, as developmental psychologist Paul L. Harris suggests, more willing to deploy such distinctions when evaluating fictional material (79). Thus, the emotional impact of fantasy decreases with age: "[W]e can reasonably expect emotional engagement with an imaginary creature,

¹² However, the "rules" permit him to inhabit the space under the covers, and the rest of the story writes itself.

whether it is fear of an encounter or distress at its absence, to decline with age as children become more adroit at recruiting an appropriate strategy whenever their emotional reaction becomes too intense” (79). The trope of the monster that removes itself from sight is thus related to another common trope, the creature that can only be seen by children. This trope goes back at least to Goethe’s 1782 poem “Der Erbkönig,” in which a boy, riding with his father late at night, sees a mysterious crowned creature – the Erbkönig, meaning “alder king” or “elf king” – and hears the creature enticing and then threatening him. The boy’s father denies that Erbkönig exists, telling his son that the creature is merely a wisp of fog and that its voice is only the wind. However, it turns out that the father may have been wrong, as the poem ends with the boy’s unexplained death (Wikipedia, “Der Erbkönig”). The logic here appears to be that the child’s superior imaginative capabilities allow him to perceive things which adults rationally dismiss. As the poem’s tragic conclusion indicates, however, an active imagination is potentially harmful as well as beneficial; the Erbkönig boy might have survived if he had been able to ignore the Erbkönig as his father did. Pixar’s films often tend to sidestep the fact that children’s imaginative abilities may have traumatic effects, and that imagination is sometimes an uncanny process. However, the conclusion to *Monsters, Inc.* does confront this fact, as we will see below.¹³

¹³ See the TVTropes page “Invisible to Adults” for various other fictional examples of phenomena only perceptible by children. A clever example not listed there occurs in *Dragon Quest V* (1992/2009), in which only children can see fairies. Early in the game, the then six-year-old protagonist encounters a fairy, who the player is able to see. Later in the game, when the protagonist is an adult, his eight-year-old son encounters a fairy, but the fairy does not appear on screen. This is a game which insists upon the connection between the player and the protagonist, and one example of this is that the protagonist’s ability or inability to see fairies apparently also extends to the player. Another example, which is interesting in light of footnote 10 above, is the unauthorized *Calvin and Hobbes* sequel “Hobbes and Bacon,” in which Calvin can no longer see Hobbes as a real tiger, but his daughter can.

In other words, as children get older, they become less afraid of monsters because they become capable of applying their rational knowledge that monsters are not real. This is presumably true even if, as in *Monsters, Inc.*, monsters *are* real; in the world of the film. If an older child or an adult saw a monster, it is likely that he or she would refuse to believe it was real, or would find it silly or cute rather than scary. Or, if an older child or adult did scream on seeing a monster, he or she would do so out of a purely pragmatic fear for his or her own safety. Thus, in the *Monsters, Inc.* comic, when an adolescent human villain is apprehended by the monsters, he is afraid of them because he thinks they're going to eat him. A child's fear of monsters is much more disinterested. As Harris argues, children, to a greater extent than adults, can become emotionally involved in experiences without regard to whether those experiences are real or imaginary: "an event can be independently analyzed for its ontological status on the one hand, and appraised for its emotional implications on the other" (66). Children are afraid of monsters not for purely pragmatic or self-interested reasons, but also because for children, events carry an emotional charge which is independent of their practical significance. This is why children are the only viable source of scream energy – both because children are more willing to imagine, and because children, compared to adults, are more effective at investing emotionally in their imaginative experiences. Moreover, as children grow older, they become more focused on real-world concerns and less attentive to imagination. "From the age of 7, however, public imaginative play progressively declines. By this time, school achievement starts to gain prominence in the child's life, and open utterances of imaginative play are often discouraged by parents and teachers" (Valkenburg 122). The *Toy Story* films explicitly indicate that this

is why children stop playing with toys as they grow up. With increasing age, children simply have less time to make their toys come to life. At the same time, children are discouraged from engaging in fantasy play, which is seen as incompatible with the practical attitude toward life required of adults and proto-adults.

As the above references to scientific sources indicate, there is practical evidence that imaginative ability, along with emotional investment in imaginary phenomena, diminishes with adulthood. However, independently of whether this claim is actually true, it is a central tenet of Pixar's narrative logic. The core premise of *Monsters, Inc.* is the same as that of the *Toy Story* films: that imagination is specifically linked to childhood.

***Monsters, Inc.* and Visualization**

Like *Toy Story*, furthermore, but to a still greater extent, *Monsters, Inc.* insists on a link between childhood and handwriting or drawing. To this extent, *Monsters, Inc.* can be characterized as a text that deploys fantasies of handwriting.

As explained in a TV commercial shown at the beginning of the film, the scream generation process is personal and idiosyncratic:

The future is bright at Monsters, Incorporated. [...] We're part of your life. We power your car. We warm your home. We light your city. [...] *Carefully matching every child to their ideal monster* to produce superior scream refined into clean, dependable energy. Every time you turn something on, Monsters, Incorporated is there. (emphasis mine)

The scream generation process depends on a careful matching of each child to her or his "ideal" monster. The word "ideal" here implies that the child has a certain preconceived notion of ideal scariness, predating any encounter with the monster that matches that ideal. The accompanying images depict a little boy being shown multiple monsters in rapid succession, each of which elicits a bored reaction (Figure 5-3). At the

words “ideal monster,” one last monster appears and roars at the boy, causing him to scream; this causes a canister of scream energy to fill up (Figure 5-4).

Why did this final monster succeed in scaring the child when none of the others did? Because this particular monster matched the child’s concept of an “ideal monster.” How was that concept formed? Presumably by the process described above: given an unseen space and a healthy imagination, the boy visualized what might be in there. Monsters, Inc. then located a scarer that matched the boy’s preexisting visual concept of a monster. In a figurative sense, the boy actually “created” the monster by imagining it into existence – just as the Pixar animators did, as I will discuss below. Moreover, and crucially, the boy’s concept of the ideal monster is specific to him: another child might have been scared by one of the monsters presented earlier, while remaining indifferent to the monster that scared the boy. Imagining a monster is an *idiosyncratic* process – analogous to handwriting. In a sense, the child writes the monster into existence, and does so in a way which is specific to him or her, creating his or her own “ideal monster.” Perhaps the way in which the child imagines the monster is even an index of the child’s personality: our private, idiosyncratic fears testify to who we are, just as our private, idiosyncratic desires do.

Moreover, for a child the ability to imagine monsters in a personal way might be seen as an index of the acquisition of a certain sense of individualistic thought and creativity, and thus, the arrival at a certain stage of selfhood. A child who can imagine things specific to himself or herself is also capable of understanding himself or herself as an individual, as someone with an interiority inaccessible to others. The ability to draw in an idiosyncratic style is indicative of the same developmental milestone. Thus,

in the film, the principal child protagonist, Boo, is pre-verbal, but she nonetheless emerges as a distinctive, individuated character thanks to her playful and affectionate interactions with Sulley¹⁴ and Mike, the monster protagonists. Boo's intersubjective connection with Sulley helps us see her as a distinct individual. Moreover, Boo actually uses drawing to help the monsters perceive her as a person, rather than a "thing" or a "killing machine" (as Mike calls her). As Mike is proposing ways of disposing of her, Boo draws a picture of herself and Mike and holds it up to the camera (Figure 5-5). This action serves to humanize her, or rather, since it is the monsters' perspective which is at issue, to "monsterize" her.¹⁵

Monsters, Inc. and Drawing

Speaking of this drawing, Harley Jessup observes: "Ironically, this sketch, made by my 4-year-old son, is the only drawing that actually appears on screen" in *Monsters, Inc.* (180). Even though this drawing plays a pivotal role in the plot of the film, *Monsters, Inc.* itself is of course not a "drawn" film. However, by saying that the lack of onscreen drawings is ironic, Jessup implies that *Monsters, Inc.* is informed by drawing on other, non-literal levels. In the first place, the way in which the children in the film create monsters by visualizing them, is clearly analogous to what Pixar's animators did in order to create *Monsters, Inc.* Publicity for the film emphasizes that since monsters don't actually exist, their visual appearance cannot be researched. According to Lasseter and

¹⁴ Not to be confused with Jake Sully, the protagonist of *Avatar*.

¹⁵ This is not just a pun: in the second half of the film Boo does dress up as a little monster, and the theme of children as monsters is significant to the film. Stamp comments: "The inversion is a neat one: kids are really the ones to be scared of, they're the *real* monsters. In this sense, this is very much a film made *by* parents *for* parents, whose fear and horror of their offspring, of the responsibility that comes with them, runs deeper and lasts longer than the child's perplexed powerlessness before the adult world" (73).

Docter's introduction to the book *The Art of Monsters, Inc.*, released in tandem with the film:

When we start to develop a film at Pixar, we like to do a lot of research. For *Toy Story*, we spent lots of time in toy stores. (It was hard work, but someone had to do it.) For *A Bug's Life*, we crawled under plants and burrowed through biology books, studying insects and how they live. Monsters are harder to come by, and hours of sitting in the closet and lying under the bed yielded nothing but dust bunnies in our hair. (6)

According to this account, the production team surveyed children about monsters and researched historical depictions of monsters, but finally: "given the choice between serious study and just making it up. . . We decided to just make it up" (7). The monsters are therefore purely imaginary, and in many respects whimsical, creations. According to a 2001 Animation World Network article, supervising animator Glenn McQueen "said that none of the monsters were based on recognizable animals. Why should they be familiar looking when there are so many 'tantalizing ideas' of what the characters could be [*sic*]" (Cohen 6). This is partially contradicted by the *Art of Monsters, Inc.* book, which claims "ultimately, we were inspired by real animals and by kids' impressions of what they thought monsters look like" (45). Similarly, Lasseter was quoted as explaining that Sulley was a composite of the features of various animals (Mills n.p.) In either case, however, the monsters are imagined into existence, whether by creating them completely *ex nihilo*, or by using diverse real creatures as a basis for their visual appearance. The *Art of Monsters, Inc.* book quotes Jessup as claiming: "Designing the monster world was the hard part. It's a place based purely on imagination" (12).

Pixar's animators not only imagined the monsters, but did so specifically by *drawing* them. Like the Jessup article mentioned previously, *The Art of Monsters, Inc.* volume reprints many pieces of hand-drawn or hand-painted concept art that were used

to visualize the appearance of the monsters and their world. This book insists on the hand-drawnness of the artwork it includes; every piece reproduced is annotated with the name of the conceptual artist, the medium used, and the size of the original.

Surprisingly, the book includes almost no computer-generated artwork. The effect of this extended paratext is to emphasize *Monsters, Inc.*'s origins in a series of acts of handwriting and hand-drawing, both mental and physical, and to downplay the computer-generated nature of the finished film. Although *Monsters, Inc.* is ultimately the product of computerized technologies of spectacle, it claims to be, at bottom, the product of its animators' hands. It appeals to the fantasy of handwriting.

But which kind of fantasy of handwriting – restorative or reflective? Both answers seem possible when we look at the film's title sequence, the first such sequence to appear in any Pixar film. It was designed by Geefwee Boedoe, much of whose work appears in *The Art of Monsters, Inc.* It begins by depicting a series of abstract shapes that move in response to the background music, recalling the work of Oskar Fischinger or Norman McLaren. The shapes then assemble into a closet door, which opens once to reveal the normal contents of a child's closet, then closes and opens again to reveal a monster. Next, a series of pink and purple doors appear, each of which opens to reveal one letter of the phrase "Walt Disney Pictures" (except the lower left door, which opens once revealing a giant eye, then closes and opens again revealing the letter P). A monster's arm comes out of another door and writes the word "Presents" with a stick of chalk. Yet another, much larger door appears, and a larger monster arm emerges out of this door and collects all the other doors as well as the chalk inscription that reads "Presents" (Figure 5-6). The stick of chalk metamorphoses into a door, and the letters of

the words “a Pixar Animation Studios Film” spill out of this door. Four monsters, resembling snakes with Venus flytrap mouths, come out of four other doors and devour all of the letters, except the lowercase M in “Film,” which metamorphoses into an uppercase M and defends itself bravely before being carried off by the last monster (Figure 5-7). Next, a number of other doors open and deposit a heap of letters. Four more monsters, all different from each other, come out of four more doors and arrange the letters into the words ONSTERS, INC. The snakelike monster from before comes out of another door with the letter M in its mouth, depositing it at the start of the word ONSTERS. Exiting, the monster whacks the words with its tail, causing them to transform into the familiar logo of the film. The title sequence ends as we zoom through one last door into the black space beyond.

This title sequence is notable, first, for its experimental aesthetic and its divergence from the hyperrealist ethos that governs the rest of the film. As Deborah Allison argues, the title sequence in Hollywood film is often a site where the dominant codes of classical cinema can be safely transgressed:

Already appealing to the audience directly by virtue of the title lettering, and by the promotion of extratextual features, some films seek to make the most of the opportunities offered by the impossibility of showing only a diegesis and to make a feature of their exhibitionism instead. Such an attitude has helped to render the title sequence a site in which the usual ‘rules’ of mainstream film do not apply, in which “anything goes.” (n.p.)

Accordingly, novelty title sequences by artists like Saul Bass often exhibit self-reflexive uses of materiality and problematize the illusion that the screen is a window into a three-dimensional world existing behind it. As John Cayley observes:

In his most innovative work Bass used the paratextual features of letter and word forms both to define graphic space and to dwell and move in and over the surfaces of the illusionistic naturalism within the already well-developed

visual rhetoric of narrative cinema. He recast the surfaces on which he 'wrote' and rendered them complex." (n.p.)

The usual strategy of the classical Hollywood film is to conceal its own constructedness; it presents the screen as a transparent window into an independently existing diegetic world and denies the status of the screen as a material support for writing or images. The title sequence is a space in which this ethos need not be respected. This, as Georg Stanitzek argues, is because of its peculiar position: it is a paratextual threshold to the main film, but it must also be a film in its own right. The title sequence exists primarily for the purpose of introducing and explaining the film proper, yet it must not simply repeat the film proper. The challenge implicit in the title sequence is "the effective combination of redundancy and variety," and "the problem is met with such artistry that even the most conventional of Hollywood movies entails, in this space, a miniature experimental film" (50). This "combination of redundancy and variety" is why *Monsters, Inc.* does not feature a digitally animated title sequence. In a featurette included on the DVD of the film, Boedoe observes: "The film itself is a very, you know, lush, three-dimensional film. To do that again with the title sequence would almost, I think, be redundant. So I think it seemed like a great way to have a nice contrast."

Thus, the *Monsters, Inc.* title sequence is strikingly different from the film proper. It includes letters that act like living things, moving around and being rearranged – letters that *do stuff*, that take on an existence independent of the (unseen) hand that drew them. Letters in this title sequence are material objects, in the same sense in which Felix and his quotation marks and exclamation marks are material objects. This sequence creates the same illusion of materiality we saw in *Felix*, giving us to believe that the letter M is a real object, a construct of ink and paint on celluloid which has an

auratic link to the animator's hand (although, of course, it is actually just an image of the same, and is severed from the animator's hand by several layers of mediation). In this sense, the letters in the title sequence, as well as the drawn monsters, seem very different from the monsters in the film proper. The monsters in the title sequence are modeled in two dimensions only, and seem only weakly realistic. The monsters in the film proper are rendered in three dimensions and are intended to look more real, to have the weight and solidity we associate with real objects; this is the point of the hyperreal aesthetic as Wells defines it. Paradoxically, in a physical and material sense the monsters in the film are *less* real than the monsters in the title sequence. The latter originated as physical constructs of ink and paint on celluloid; the former originated as magnetic valences within a computer's memory. That is, there is an *indexical link* between the images of monsters appearing in the title sequence and the material, auratic drawings on which these filmic images are based; by contrast, the monsters in the title sequence have no such indexical link to any similarly material or auratic piece of original art.¹⁶ Furthermore, although the monsters in the title sequence are clearly not "real," neither do they *look* real, in that they lack realistic mass or volume; they don't pretend to be mimetic images of actual monsters. By contrast, the monsters in the film

¹⁶ As defined by Charles Sanders Peirce, indexicality is the property by which a sign "points to" or "indicates" its referent. Indexicality is currently a topic of much interest in film theory, as Mary Ann Doane explains: "One might go so far as to claim that indexicality has become today the primary indicator of cinematic specificity, that elusive concept that has played such a dominant role in the history of film theory's elaboration, serving to differentiate film from the other arts (in particular, literature and painting) and to stake out the boundaries of a discipline" (129). In film studies, indexicality is often understood specifically as the property by which film, by means of chemical processes, records the reality of the profilmic event. Doane observes, therefore, that "animation, for some, would be the most striking counterexample" to the claim that film is always indexical (132). However, Marion's theory of *teneur en trace* implies that animation is indexical in the sense of "pointing" deictically to the hand of the animator. (Doane critiques the claim that animation is nonindexical on other grounds [148–149].)

are intended to seem more real than they actually are – this is what hyperrealism means.

The title sequence thus emphasizes its own divergence from the film proper by highlighting differences between cel and digital animation, and in so doing, it nostalgically identifies digital animation with the disappearance of the material, manual properties of cel animation. By virtue of its stylistic contrast with the film proper, the title sequence gives the viewer a sense of anxiety for the fate of hand-drawing; it makes the viewer afraid of the possibility that hand-drawn animation might vanish, taking with it the fantasy of handwriting. At the same time, of course, the title sequence is also meant to “set the tone” for the film to come. In the featurette mentioned above, Docter states that the film originally began with the sequence in which some trainee monsters attempt to scare a simulated child, but:

What we were realizing was, this is the first part of the film, it's really setting the tone for the film, and a lot of the things that were happening later were not funny to people because they were reading this as, this is gonna be a spooky, dramatic movie. So we had the idea to back up from there: do a little title sequence that just sets the tone and says, this is going to be fun [...]

The title sequence is meant to reassure the viewer that *Monsters, Inc.* is a fun movie, not a scary one. But such reassurance wouldn't be necessary unless there was also something scary and anxiety-provoking about the film. *Monsters, Inc.* proper works in much the same way as the title sequence: it creates a sense of anxiety (about handwriting and the values handwriting represents) in order to replace that anxiety with reassurance. In this sense, *Monsters, Inc.* comes close to the sort of restorative invocation of the fantasy of handwriting that we see in *Cars*. However, I will argue that

the anxiety never quite goes away, and that for this reason, *Monsters, Inc.* transcends *Cars* by offering a more reflective view of handwriting.

The central conflict of *Monsters, Inc.* involves an energy shortage. Scream energy is becoming steadily scarcer, threatening the Monstropolitan way of life. The TV commercial, quoted above, continues: “We know the challenge. The window of innocence is shrinking. Human kids are harder to scare.” The accompanying image displays a child staring with a glazed expression at a TV set which appears to be showing some sort of violent news or entertainment. Screams and police sirens can be heard coming from the TV. After a moment, the child falls face-first into his bowl of what we assume to be sugary cereal (Figure 5-8). Implicitly, the reason children are getting harder to scare is because of the violent and frightening phenomena represented in popular media, television in particular. The voice-over track highlights the fact that the “window of innocence is shrinking”, suggesting that television makes children unscarable by exposing them to real things which are scarier than (imaginary) monsters. However, this in itself does not explain why the media interfere with the scare process. According to the logic I outlined above, children are ideal scream producers because they have active imaginations. Therefore, if the rise of the modern childhood media ecology has created a scream crisis, this can only be because visual media deaden children’s imagination. By providing children with ready-made, transparent and vivid images of scary things, television – as well as related media like video games and, yes, CGI films – supposedly weakens children’s ability to imagine things, scary or otherwise, on their own.

This claim follows the same logic as Calvino's argument in the "Visibility" essay (see above, p. 112). Calvino warns of "the danger we run in losing a basic human faculty: the power of bringing visions into focus with our eyes shut, of bringing forth forms and colors from the lines of letters on a white page, and in fact of *thinking* in terms of images." As explained above, "bringing visions into focus with our eyes shut" is exactly what children do when they imagine what might be lurking in the closet. The ability to do this, or so *Monsters, Inc.* suggests, becomes more rare as children's personal imagination is increasingly interfered with by products of the mass media. Valkenburg refers to the claim "that television hinders imaginative play and creativity" as the "reduction hypothesis," and observes that there is empirical evidence for it: "The majority of studies suggest that television in general and television violence in particular have a reductive effect on imaginative play and creativity" (124). Teresa Belton also cites empirical data to the same effect, and explains that television "captures" children's imagination but does not "feed" or "fire" it; i.e., television does not stimulate children to creative imaginative activity. She cites earlier sources which blame this effect on "television's ready-made visual images, which leave little room for the recipient to create his or her own images. A number of writers have drawn attention to the ready-madness of screen images and contrasted this with an implied onus on readers and listeners to create their own images" (814). Belton further argues that imagined images are not directly comparable to televisual images, but the difference is such as to actually prove the point just cited:

My visualizations are much less formed and more fluid and dreamlike than the continuous, hard-edged, detailed and finished pictures of the screen. Jonathan Miller (1995) [...] observes that it is possible to conjure up in the mind, 'a completely indeterminate image which doesn't seem incomplete.' It

is conceivable that the less concrete quality of personal, imagined images, is as critical to the creative process as their self-generation. (814)

The logic here is that a less completely rendered image is more evocative; it has the potential to support a wide field of potential images, without settling into a definitive form as any particular one of those images. The more realistic an image is, the more interference it exercises with the power of imaginative “handwriting” (for a justification of my use of this term, see chapter 2).

Of course, the “reduction hypothesis” is by now a rather trite (and contested) argument, and is frequently presented in a much less nuanced and specific form than in Calvino’s essay; it tends to be encountered in the context of reactionary critiques of visual media. For example, in *The Dumbest Generation: How the Digital Age Stupefies Young Americans and Jeopardizes Our Future*, a book whose polemical commitments are obvious from its title, Mark Bauerlein complains that excessive exposure to screen-based media “conditions minds against quiet, concerted study, against imagination unassisted by visuals, against linear, sequential analysis of texts” (95).¹⁷ This is the same general mentality that lies behind the restorative fantasy of handwriting. It implies, not only that old media were superior to newer media, but also that a reversal of the direction of technological progress is possible and even necessary. The reduction hypothesis is not necessarily even supported by Pixar’s own films. Early in *Toy Story 2*, we discover that Andy has acquired a video game console (recognizable as a Super Nintendo), but it doesn’t seem to interfere with his imaginative abilities. This could of course be because his imaginative potential was already well-developed before video

¹⁷ Bauerlein’s book is a sort of response to Steven Johnson’s *Everything Bad is Good for You: How Today’s Popular Culture is Actually Making Us Smarter* (Riverhead, 2005), which argues for the positive cognitive effects of contemporary media.

games had a chance to interfere with it. Furthermore, on a practical level, it would be unwise for Pixar to display overt negativity toward video games since their own intellectual properties are often repurposed for that medium.¹⁸

But a more serious difficulty with Pixar's invocation of the "reduction hypothesis" is that it threatens to involve the film in a self-contradiction. If modern media are harmful to children's imagination, then surely this critique must extend to *Monsters, Inc.* itself. The imaginary monster in the closet looks more like the drawn monsters in the title sequence than the CG-rendered monsters in the film proper, and by contrast, the latter interfere with the viewer's imagination to a greater degree than the former. Elizabeth Freeman makes this point explicit: "the situation of the monsters is not unlike ours as professors when we complain that our students, with their iPods and cell phones and hyperlinks, just don't appreciate the nuances of a long Henry James sentence like they used to" (88). Anecdotally, a Google search for "parenting," "monsters under the bed" and "Monsters, Inc." turns up numerous examples of parents using *Monsters, Inc.* to calm their children's fears of monsters. If Monstropolis actually existed, then *Monsters, Inc.* would contribute significantly to the scream crisis – in the first place, by demystifying monsters, and in the second place, by providing children with a ready-made, one-size-fits-all image of the monster under the bed, thereby making it harder to match children to monsters that appeal to their personal fears. (Probably Randall would have to scare all the children.)

¹⁸ There was in fact a *Toy Story* video game for the SNES. Though that system was already obsolete by the time *Toy Story 2* appeared, video game adaptations of the latter film were released for the PlayStation, the Nintendo 64, and other systems.

Moreover, *Monsters, Inc.* is itself deeply invested in notions of transparency and immersion, which, according to the film's own logic, are the principal means by which contemporary visual media interfere with imagination. Like *Cars*, *Monsters, Inc.* serves as a showcase for Pixar's latest technologies. The film might be considered an extended demo of Pixar's achievement in rendering realistic cloth and hair, which had previously presented a problem for digital animation, as George Avgerakis explains:

Hair and clothing are still major concerns in animation art because they require complex motion to appear realistic. While a character's arms and legs move, they usually do so according to a rather simple set of rules (except for an octopus). An human elbow joint, for instance, can move about 175 degrees on only one axis in one dimension. [...] But hair? A single strand of hair can move like a snake, with infinite axes, rotating nearly 360 degrees in three dimensions. Clothing gets even more complex when you consider that the surface of clothing is like a patchwork of hair strands (82).¹⁹

Accordingly, *Monsters, Inc.*'s protagonist is a creature covered entirely with hair, and one of its other principal characters spends the entire film dressed in a loosely fitting nightshirt. More generally, part of the appeal of the film, as with other Pixar films, derives from its realistic depiction of phenomena which are neither visible nor photographable; the promise this film makes is to show the viewer what the monster in the closet would actually look like.

In order to avoid simple disingenuousness, then, the *Monsters, Inc.* creators need to explain why the film's critique of contemporary media does not apply to the film itself. In *Monsters, Inc.*, the Pixar creative team is ideologically committed to arguing that *Monsters, Inc.* – and Pixar generally – is not *that* kind of media (in the same sense in

¹⁹ Compare Disney's *Tangled* (Nathan Greno and Bryon Howard, 2010), another film whose plot seems motivated by the desire to demonstrate new technologies for graphically rendering hair, which are surprisingly realistic.

which Sulley is not *that* kind of monster). The film must therefore present itself as a more creative, personal, and “handwritten” version of computer graphics, as a text that uses computer graphics for the purpose of “firing” or “freeing” the imagination rather than supplanting it. The title sequence may be read as an attempt to present this claim. As Stanitzek notes, any title sequence needs to be “redundant” in a sense: it must act as an effective introduction to the film, and must therefore communicate the same message as the film proper, albeit in a different way. The title sequence is formally distinct from the film proper, but similar to it on what we might call a spiritual level.²⁰ Under the dominant model established by Saul Bass and continued by designers like Kyle Cooper, “the opening title sequence, in ‘doubling’ the movie, anticipates its agenda in a paradigmatic way, an agenda that the narrative to come will carry out syntagmatically” (Stanitzek 54). It acts as a key to the major preoccupations of the film to come. That suggests a deeper connection between film proper and title sequence, in which both gesture toward the same themes using different styles.

Accordingly, the viewer of *Monsters, Inc.* may be expected to understand the title sequence as anticipating some attributes or messages of the film. The title sequence posits that letters and representations of monsters are ontologically and materially equivalent – that there is something “letter-like” about monsters and vice versa. Since the title sequence is thematic summary or anticipation of the film as a whole, the viewer is then supposed to understand that the monsters *in the film proper* have a comparable

²⁰ The title sequence is comparable in this respect to video game box art, especially the box art for interactive fiction games, which is often quite elaborate; see for example the cover to Infocom’s *A Mind Forever Voyaging* (1985), reproduced at http://en.wikipedia.org/wiki/File:A_Mind_Forever_Voyaging_Coverart.png. Even in graphical video games, packaging design often features a visual style that differs strikingly from that of the game. A notorious example is *Mega Man* (1987), in which the box art displays a character who looks nothing at all like the game’s protagonist.

ontological equivalence to letters. The fact that the title sequence is hand-drawn suggests that Pixar has not forgotten about traditional animation or about the values with which it is (retroactively) associated. The fact that the title sequence is presented alongside the film proper suggests that there is a certain stylistic affinity between the one and the other.²¹ The title sequence reassures us that even though these versions of Sulley, Mike, Celia, Roz, Randall and Waterhouse are made of magnetic valences rather than ink and paint, they are lovingly hand-crafted in the same way as the hand-drawn monsters in the title sequence. The monsters in the film may be purely computational constructs, but they are products of imagination filtered through manual creativity, just like the monsters and letters in the title sequence. We are expected to believe that these digitally animated characters are handcrafted in the same way as traditionally animated characters, only with different tools.²²

Therefore, *Monsters, Inc.* sets up a conflict between, on the one hand, a package of positive values that includes imagination, hand-drawing, and childhood, and, on the other hand, a package of negative concepts that includes modern media, transparency, violence, and premature adulthood. And the viewer of *Monsters, Inc.* is asked to understand *Monsters, Inc.* itself as belonging to the former side of this binary opposition rather than the latter. This conflict is staged most clearly in the struggle between the film's heroes and villains as to how to resolve the scream crisis. The film's villains, Mr.

²¹ This logic doesn't necessarily apply literally to all title sequence (if Preston Sturges's *The Lady Eve* includes an animated title sequence, then should we assume that there's something "animated" about *The Lady Eve*?). However, as already explained, there is ample evidence that Pixar wants viewers to see their films as *figuratively* or *ideologically* hand-drawn or as comparable to hand-drawn animation, and we can therefore conclude that the *Monsters, Inc.* title sequence participates in this same effort.

²² The ambiguity between the two meanings of "character," discussed by Ault and Miller, is obviously relevant here.

Henry Waterhouse and Randall Boggs, invent a “scream extractor,” a giant apparatus which artificially extracts scream energy from children, at the expense of traumatizing them. As Richard Stamp observes, the struggle over the scream extractor reenacts the tension “between Disney – venerable father of the animated feature film and innovator of a Fordist model of industrial production in Hollywood – and its increasingly more successful, lauded *heir*, Pixar Animation Studios” (76). The scream extractor itself is a figure for “the de-humanizing power of technology” (77), which is visible in Disney’s Fordist production methods. More specifically, the scream extractor does what I often suspect Disney of doing: it employs state-of-the-art technology (comparable to Disney’s multiplane camera) to manipulate viewers’ emotions. And it probably does this by the means that Disney employs. Although we aren’t told how the scream extractor works, it seems reasonable to conjecture that it works by presenting its victims with horrifying visions, which they take to be real, or which have the power to affect the victim’s emotions despite the victim’s knowledge of their unreality. This is much like what happens to me when I watch the Pleasure Island sequence in *Pinocchio* (Ben Sharpsteen, 1940).²³ Nor does the scream extractor require any emotional involvement or active effort on the part of the victim. It encourages the same position of passive spectatorship as exhibited by the TV-viewing boy at the beginning of the film. It provides an emotional experience which is sensuously complete (like *Avatar* pretends to be), lacking any gaps that need to be filled in by the viewer’s active intervention.

Thanks to his friendship with Boo, Sulley is appalled by this scheme, and he and Mike eventually succeed in apprehending Waterhouse and Randall, and Sulley inherits

²³ On Disney’s use of deliberate emotional manipulation in a different context, see Raz.

the leadership of the company. Meanwhile, Sulley accidentally discovers that children's laughter is more powerful than children's screams, while also realizing that scaring children is an ethically questionable means of generating energy. Therefore, Sulley reinvents Monsters, Inc. as a company focused on community and respect for its employees, whose primary activity is making children laugh. As Stamp comments, the new Monsters, Inc. is analogous to Pixar, where "they call work 'The Fun Factory'" (76).

This ending has always struck me as a little disappointing; it offers an excessively clean resolution, an excessive degree of what Susan Napier would call reassurance (469). Stamp agrees on slightly different grounds: "[t]he oppositions peddled in the film, if taken *as such*, are in fact false. Always false because the *apparent* opposition between values of community and the inhumanity of capital, like that between the human and the monster, is the product of the failure to recognize their structural *complicity*" (77). I would suggest, however, that the ending is not purely *restorative* in my sense, insofar as it does not simply recreate a previous condition of *handwrittenness*. The scream crisis is not solved, only circumvented. Monsters, Inc. can't go back to scaring, and Sulley and his fellow scarers lose their exalted position as the linchpins of the Monstropolitan economy. To this extent, the ending of *Monsters, Inc.* is closer to that of *Toy Story 2* than to those of *Toy Story* or *Cars*, and *Monsters, Inc.* can be seen as a transitional work anticipating later Pixar films with explicitly bittersweet endings, as I will discuss below.

Moreover, the ending of *Monsters, Inc.* doesn't cancel out the uncanny nature of the film's treatment of handwriting. *Monsters, Inc.* demonstrates that *handwriting is uncanny*. For me at least, a large portion of the appeal of the film comes from its

uncanny combination of the cute and the scary. As Stamp observes, the “reassuringly furry” Sulley is much *less* scary than the film’s primary villains, Waterhouse and Randall (75).²⁴ And yet Sulley is certainly no Bambi; his appeal as a protagonist comes from his combination of “cute” traits (fur, purple polka dots, compassionate eyes) and “scary” traits (claws, horns, fangs). In this, *Monsters, Inc.* differs radically from most traditionally animated Disney films, where characters tend to have either cute or scary traits but not both, and where heartwarming and frightening moments are carefully demarcated. Contrast, for example, *Pinocchio*, or *The Princess and the Frog* (Ron Clements and John Musker, 2010), where even the alligator character is in no way frightening (Figure 5-9). Sulley is more spiritually akin to the title character of Hayao Miyazaki’s *My Neighbor Totoro* (1988), whose cuteness is balanced by his/its alien nature (Figure 5-10). Although the creatures in *Totoro* are more cute than scary, this character is not that dissimilar to the spirits in Miyazaki’s *Spirited Away* (2001), which reverse the ratio of scariness to cuteness. Moreover, as cute as Sulley, Mike or Celia may be, these characters are not versions of actually existing animals, whose cuteness or scariness is a matter of interpretation; they are *monsters*, i.e., creatures whose defining property is that of being scary and bizarre. Moreover, the central joke of the film is that the monsters are at once so bizarre and so much like us – a striking example of this occurs in the first shot that features Sulley, which juxtaposes his perfectly-normal looking bed with the bizarre creature sleeping in it (Figure 5-11). The reassuring ending of the film does not erase the emotional impact of its promotion of an uncanny aesthetic – especially considering that this film, in the age of DVD culture, may be viewed multiple

²⁴ Randall, in particular, is probably the creepiest villain in any Pixar film.

times, and that its paratextual materials, like *The Art of Monsters, Inc.* or the Boom! Studios comic books, emphasize the uncanny parts of the film as much as the reassuring parts. Uncanniness contributes significantly to the appeal of the film.

I suggest that this is the *same* sort of uncanniness on which the fantasy of handwriting relies, and which only the critical fantasy of handwriting acknowledges. It is no accident that in this exploration of fantasies of handwriting, we keep encountering monsters – Joey Ellis’s monstrous letters, the “medical creature” in *Earl Grey*, the grue. Jeffrey Jerome Cohen’s third thesis in *Monster Theory* is: “The Monster is the Harbinger of Category Crisis” (6). He continues:

This refusal to participate in the classificatory “order of things” is true of monsters generally: they are disturbing hybrids whose externally incoherent bodies resist attempts to include them in any systematic structure. And so the monster is dangerous, a form suspended between forms that threatens to smash distinctions.

Because of its ontological liminality, the monster notoriously appears at times of crisis as a kind of third term that problematizes the clash of extremes – as “that which questions binary thinking and introduces a crisis.” (6)

The monster resists established categories, it combines both halves of binary oppositions, it crosses gaps. This is why the fantasy of handwriting is so appealing, as I argued in the introduction – because it reconciles the oppositions or gaps between the living body and the dead letter, and between the arbitrary signifier and the concrete referent. But the fantasy of handwriting, the written or drawn image that comes to life, also *violates* that opposition; it refuses to respect the principle of the arbitrariness of the signifier, or the gap between the animate and the inanimate. In this sense, we can conclude that *handwriting is monstrous*. It combines things which we feel more comfortable keeping at arms’ length.

But if handwriting is uncanny because it juxtaposes things we would prefer to keep separate, it is also uncanny for the opposite reason: it reminds us of the existence of difference where we would prefer to see identity. As we have seen throughout this dissertation, by virtue of its incomplete success, the fantasy of handwriting often ends up calling attention to the constitutive gaps in handwriting – the gaps between the writer’s hand and the page, or between ordinary handwriting and its technological remediation – at the same time that it claims to overcome those gaps. The fantasy of handwriting becomes restorative when it acknowledges its uncanniness in both these senses – that is, when it acknowledges that it cannot fully bridge the gap between the body and its writing, and that therefore, the possibility that it *could* do so is potentially disturbing rather than reassuring.

***Up* as Reflective Fantasy of Handwriting**

In its more recent output – including, roughly speaking, the four films released after *Cars* – Pixar has tended towards more reflective uses of the fantasy of handwriting. I focus here on only one of these more recent films, *Up* (Pete Docter, 2009), for reasons of space and because it is this film that most clearly frames the problem of nostalgia in terms of handwriting. However, analogous arguments could be made about *Ratatouille* (Brad Bird, 2007), *WALL-E* (Andrew Stanton, 2008), and *Toy Story 3* (Lee Unkrich, 2010).²⁵

²⁵ Although *Monsters, Inc.* and *Up* were both directed by Pete Docter, I don’t necessarily believe that Docter’s involvement is the primary reason for any thematic or visual continuities between the two films. I prefer to think of Pixar films as collaborative or collectively authored works rather than single-authored works.

As in *Toy Story*, *Up* begins with a sequence in which handwriting plays a prominent role.²⁶ The film begins with a newsreel sequence describing the deeds of explorer and adventurer Charles Muntz, apparently based on Charles Lindbergh. The newsreel is in black-and-white and features prominent film grain and scratches, which call attention to its materiality and associate it with an earlier period of cinema.²⁷ We then see the film's protagonist, Carl Fredricksen, as a 9-year-old, watching with rapt attention. The shot of Carl's rapt face dissolves into a shot of Carl racing down the street, pretending to be Charles Muntz in his blimp, the "Spirit of Adventure." Carl carries a balloon on which the name "Spirit of Adventure," is written, apparently in marker; for a moment, the clumsily handwritten text fills the screen (Figure 5-12). Passing an abandoned house, Carl hears another child's voice shouting Muntz's motto, "Adventure is out there." Entering the house, Carl sees "Spirit of Adventure" written on the door, again in childish lettering. He follows the voice and finds the speaker, Ellie, a girl his own age. As Ellie pilots her pretend blimp, she stands in front of a drawing or watercolor of Paradise Falls (an exotic location in South America; as explained in the newsreel, Muntz has gone there to capture a live specimen of the "Monster of Paradise Falls," whose fossilized skeleton he was accused of fabricating). (Figure 5-13). In the next shot we see a cardboard box which Ellie has painted with lights and radio dials; other drawings or paintings are faintly visible on the walls.

²⁶ See Metz 2010, especially pp. 65–66, for a discussion of how this sequence relies upon intertextual references to classic Hollywood films.

²⁷ Film grain is often cited as an example of the sort of material properties of film that vanish when cinema becomes digital. Similarly, the digital simulation of film grain is a standard example of a way in which digital cinema attempts to replicate the sensuous material aspects of photographic film. For example, Markos Hadjioannou observes: "Of course, digital programming has created a substitute for this texture by adding a grain effect to digital images so they can look more photo-realistic. But such an act cannot replace the erratic quality of change – of life in motion – that film grain expresses" (131).

Carl subsequently breaks his arm while trying to recover the “Spirit of Adventure” balloon (at Ellie’s insistence) and the next scene shows him reading in bed. The balloon floats through the window, and Ellie, climbing in after it, shows Carl her “Adventure Book.” Besides various memorabilia of Muntz, the book contains an engraving of Paradise Falls, with a childish drawing of the abandoned house taped to it; I will call this the clubhouse drawing (Figure 5-14). The next page reads “STUFF I’m Going TO DO” (*sic*) in crude handwriting (Figure 5-15), and the remaining pages are blank: “I’m saving these pages for all the adventures I’m going to have!”

In this scene, handwriting takes on many of the same metaphorical associations it has in *Toy Story*. Ellie’s handwriting is highly specific and recognizable, testifying to her possession of a forceful, highly developed sense of selfhood. Ellie’s unrestrained creativity and her passion for adventure seem to both be manifestations of her exuberant lust for life. Moreover, Ellie’s handwriting and painting are childish in a positive sense, in that they testify to her innocence, her imagination, and her lack of disillusionment. The following sequence, a montage of Carl and Ellie’s adult lives, shows that Ellie retains her creativity and naïveté well into adulthood, and succeeds in drawing the shy Carl out of his shell and infecting him with her passion for adventure. Carl and Ellie marry and move into the abandoned house where they met. Ellie paints “Carl and Ellie” on the mailbox. Admiring her handwriting, Carl accidentally leaves a handprint in paint on the mailbox, to which Ellie adds her own handprint (Figure 5-16). This literal version of “handwriting” is all the more personal and unmediated since it is a direct registration of their bodies and doesn’t involve the mediation of a writing tool. It establishes an intimate link between Carl, Ellie, and their house, identifying the latter as

the symbol of their shared personalities and ambitions. As the scene continues, they paint the house so that it matches the clubhouse drawing. They plan to have a child, and Ellie paints a picture on the wall of the nursery (Figure 5-17).

But contrary to what was suggested in *Toy Story*, the values of childhood and creativity are not necessarily sustainable. Ellie loses the baby. Carl and Ellie try to react to this trauma by rededicating themselves to their childhood dreams: Carl comforts Ellie by showing her the Adventure Book, and the next shot shows Ellie painting a picture of the house resting on Paradise Falls – the same image as in the house drawing, but in a more mature style. Carl and Ellie start adding money to a jar with a handwritten “Paradise Falls” label, but subsequent shots show how they keep having to use the money in the jar for more practical concerns. Carl’s physical appearance reflects his growing loss of flexibility: according to technical director Steve May, “Carl’s character is based on someone who, as a young man, was vivacious and adventurous. But as he grew older, his small house became more and more surrounded by buildings, and ‘it’s like his world has compressed him into a square’” (Terdiman n.p.), and this is signaled by the transformation of Carl’s head from a ovoid to a cube. Finally, Carl and Ellie have grown old together – still happily married, but without having achieved the adventures they dreamed of. Eventually Carl looks at photos of himself and Ellie as children, then looks at the Paradise Falls painting, and decides to buy plane tickets to South America. But just before he can show them to Ellie, she is hospitalized with a terminal illness. In a reversal of the second scene, Carl floats a blue balloon into Ellie’s bedroom (significantly, there is no visible “Spirit of Adventure” lettering this time), and Ellie puts the Adventure Book in his hands. The opening sequence concludes by showing Carl

attending Ellie's funeral, still holding the balloon, and then returning home disconsolately.

This part of the opening sequence leaves the impression that, to paraphrase *Les Misérables*, life has killed the dream they dreamed; the positive values associated with handwriting and childhood – adventure, creativity – are unable to survive realities of adult life. Technological progress also plays a role in the destruction of Carl's dreams. In the next sequence we see Carl, now 78 years old, using an elaborate, poorly functioning motorized chair to get down the stairs, and when he walks outside his house, we discover that all the surrounding land is now occupied by construction sites on which ultramodern skyscrapers are being built. As Carl leaves the house, he affectionately touches Ellie's handprint on the mailbox. This gesture emphasizes the importance of the tactile aspect of handwriting to this film: by making physical contact with Ellie's handprint, Carl is able to maintain a connection with her, even though she herself is gone. Moreover, the handprint is a symbol of the intimate association between Ellie, her handwriting, and the house, which is the site of her and Carl's shared memories and their dreams of adventure. Over the course of the film, the house takes on metaphorical associations with all of these values – handwriting, childhood, adventure, memory.

Thus, when a construction vehicle knocks over the mailbox and a construction worker, Steve, clumsily tries to repair it, Carl shouts "I don't want you to touch it!" Touch is again the crucial issue here. Steve is only trying to help, but for Carl, his indelicate contact with the physical trace of Ellie's presence is a symbol of the outside world's indifference to everything Carl associates with that handwriting. Thus, Carl proceeds to

hit Steve with his cane, injuring him. For this offense, Carl is committed to a nursing home, and his severance from the world of imagination represented by Ellie's handwriting seems complete.

Of course, since this is a Disney film and since that film has only just begun, we may reasonably expect that Carl's subsequent adventures will vindicate his faith in childhood, handwriting, and adventure. This assumption is reinforced because the opening sequence also introduces Russell, an enthusiastic 8-year-old "Wilderness Explorer" who obviously echoes the young Carl and Ellie. Thus, instead of passively accepting his fate, Carl attaches a giant bunch of balloons to the top of the house and flies it to Paradise Falls, inadvertently bringing Russell along (Figure 5-18).²⁸ On arriving there, Carl does in fact encounter his childhood hero Charles Muntz, and the restorative fantasy seems to be complete: despite having lost Ellie, Carl has succeeded in achieving his childhood dream of adventure.

But the film doesn't end there. Muntz proves to be a cruel villain; his singleminded pursuit of the Monster of Paradise Falls, which he has sought unsuccessfully for seven decades, has driven him to murder every previous visitor to the area. Before meeting Muntz, Carl and Russell have already encountered the Monster, a giant bird who Russell named Kevin, and therefore Carl and Russell are forced to flee from Muntz in order to protect Kevin. I'd suggest that the problem with Muntz is not just his wanton cruelty but, more specifically, his inability to let go of childhood. According to Docter,

²⁸ The animation of the balloons is the most obvious technical challenge involved in making this film, and therefore the most obvious way in which the film serves as a demo of Pixar's latest algorithms. There are over 10,000 balloons, and the movement of each balloon is dependent on that of the others. Therefore, animating each balloon independently would have been impossible, and Pixar instead developed an algorithm for simulating the behavior of the balloons. Other important but less obvious technological achievements included the realistic rendering of Carl's suit and the bird Kevin's feathers.

Muntz was only 23 when he was accused of faking the Monster's skeleton.²⁹

Presumably, in order to have achieved worldwide fame at such an early age, Muntz must have been gripped by his all-consuming passion for adventure since childhood. Therefore, in his singleminded pursuit of the Monster, Muntz is pursuing his childhood dream to the exclusion of all else, with disastrous consequences. Muntz's example indicates that the threshold between childhood passions and unhealthy obsessions is all too easily crossed.

Subsequently, Carl himself crosses the same threshold. After an exciting chase sequence, Muntz captures Kevin in a net, but as Carl is trying to cut the net, Muntz sets his house on fire. We briefly see the Paradise Falls painting, then the scene cuts to Ellie's photo falling off the wall, reminding us that this house symbolizes Carl's childhood dreams. Carl stops cutting the net in order to put the fire out, allowing Muntz to capture the bird. Russell is shocked at this betrayal, but Carl declares, "Whether you assist me or not, I am going to Paradise Falls if it kills me!" Carl successfully reaches Paradise Falls with the house, and looks at the clubhouse drawing, which has now become a reality. However, Russell interrupts his moment of triumph by throwing down his Wilderness Explorer sash and going off alone to rescue Kevin, suggesting that Carl's victory is a hollow one; in trying to make Ellie's handwritten vision real, Carl has lost sight of more important principles.

²⁹ This explains the implausible premise that Muntz is still alive during the main time frame of the film, which takes place almost 70 years after the events depicted in the newsreel. Before reading Docter's explanation, I assumed that Muntz was taking some sort of immortality elixir. Note also that with regard to Kevin, the film seems to be using the term "monster" in a purely colloquial sense. Kevin is too cute to qualify as a "monster" in the sense in which I used the term above. However, Kevin's confusing gender identity (Russell gives the bird a masculine name, then discovers her to be a female) does make her the site of a mild category crisis.

The climax of the film comes when Carl finally understands this. Reentering the house, Carl sits down on his old armchair, next to Ellie's empty armchair. He opens the Adventure Book and returns the clubhouse drawing to it. He had earlier put it in his pocket to protect it from being touched by Russell – again, as demonstrated in the mailbox incident, Carl is fiercely protective of traces of Ellie's presence. Carl reads the next three pages, which are decorated with numerous examples of Ellie's handwriting and drawing, as well as souvenirs related to the theme of adventure (Figure 5-19). Finally, reaching the "Stuff I'm Going to Do" page, Carl touches Ellie's handwriting, sighs, and begins to close the book. Carl has achieved his and Ellie's dream, but Ellie is not there to share in his triumph. In accordance with Derrida's theory of handwriting, Ellie's handwriting testifies only to her *former* presence and to her present *absence*; it reminds Carl that the hand responsible for it is no longer a living hand.

But as Carl closes the book, he notices that the rest of the pages are no longer blank. Turning the pages, Carl discovers photographs of himself and Ellie at various stages of their life together. Pictures of Carl and Ellie as children are juxtaposed to pictures of them as elderly people. These photographs are on traditional photographic film and feature highly visible film grain (cf. p. 468 above), but despite these visible signs of an obsolete materiality, these photos emphasize the importance of the future rather than the past. Looking at these photos, we realize that Ellie, unlike Muntz or Carl, was able to accommodate her childhood dreams to the realities of her adulthood, by understanding everyday life as another kind of adventure. To return to vocabulary introduced in the last chapter (p. 272), Ellie was able to negotiate her transitions between the *ipse-selves* of her childhood, adulthood and old age, because she was

able to understand them all as incarnations of a singular *idem*-self. (Muntz, on the other hand, seems to have understood his *idem*-self as entirely identical with the *ipse*-self of his youth; this led him to waste most of his life pursuing the desires of his youth, and to kill anyone who he saw as interfering with those desires.)

The scene concludes by altering the symbolism of handwriting in order to accommodate this new understanding of Ellie and of adventure. Below the last photograph, which shows an elderly Carl and Ellie in their armchairs, is a handwritten note: “Thanks for the adventure – now go have a new one! Love, Ellie” (Figure 5-20). Notably, the elderly Ellie’s handwriting looks nothing like that of the child Ellie. If her handwriting symbolizes her personality, then contrary to the graphological view of handwriting, that personality was not stable or fixed but was capable of evolving and changing throughout her lifetime. More importantly, Ellie’s handwriting functions here not as a symbol of her presence but of her absence. We can’t forget that this is the handwriting of the dead. Merely by virtue of being read, it testifies to its author’s inaccessibility, as Ellie did not expect Carl to see this message until after her death.³⁰ Carl gets the message. He caresses Ellie’s handwriting, but in the spirit of bidding Ellie goodbye rather than fetishistically seeking to hold on to the traces of her former presence. Picking up Russell’s sash, which had been lying on Ellie’s armchair, he crosses his heart (which Ellie taught him to do) and goes out to help Russell.

After the typical extended action sequence, Carl and Russell succeed in defeating Carl and saving Kevin, and Carl becomes a surrogate grandfather to Russell. The film ends by showing Carl and Russell sitting on the curb outside Fenton’s ice cream store,

³⁰ This is a particularly powerful example of the popular culture trope that TVTropes.com calls “Dead Man Writing,” in which a person writes a message intended to be read after his or her death.

eating ice cream and counting red and blue cars. This is what Russell said earlier that he missed doing with his father, who left him and his mother for another woman. But this ending, although relatively happy, is not purely restorative. At the end of the film, Ellie is still dead and Russell's father, who never appears in the film, is still gone; at the ceremony where Russell receives his Senior Wilderness Explorer award, Russell is the only awardee whose father is absent.³¹ Instead of recovering the object of nostalgia, Carl and Russell learn to cope with its absence. The ending of *Toy Story 3* is a variation on this same theme: a now 17-year-old Andy plans to take Woody with him to college, but ends up giving Woody and his other toys to a little girl, Bonnie. Both endings suggest that the desire to infinitely retain the symbols of the past (i.e., restorative nostalgia) is not psychologically healthy. Although the films display a sympathetic understanding of this desire, they ultimately argue that this desire must be recognized as unsatisfiable.

We can clearly interpret this as an allegory for Pixar's media politics – or, more reductively and along the lines of Stamp's treatment of *Monsters, Inc.*, as another staging of the polemic between Pixar and Disney. As Booker argues (cf. p. 303 above), Disney has used digital technology merely as a way of preserving the hand-drawn aesthetic of their pre-digital films. Disney used digital tools like the Computer Animation Production System merely to create computer-animated films that looked like their traditionally animated films, with extra bells and whistles. As I suggested above, Pixar started out doing the same thing, using 3D technology to create digital versions of

³¹ As Kate Flynn observes (440), the fact that this ceremony is exclusively for fathers and sons is an example of how this film takes place in an almost exclusively male milieu. The film's principal female characters are Kevin, a nonhuman, and Ellie, who is less a character than a structuring absence. The scarcity of adult women in Pixar films is a hotly debated topic, a full discussion of which is outside the scope of this chapter.

Disneyesque films. With a film like *The Princess and the Frog*, Disney's approach to digital technology became explicitly restorative, as Disney deliberately made a 2D film which eschewed the advances in hyperrealism made possible by 3D technology.

Animator Andreas Deja commented

that the former notion of competing with CGI by making hand-drawn characters look a little more like CGI has been abandoned. "I always thought that maybe we should distinguish ourselves to go back to what 2D is good at, which is focusing on what the line can do rather than volume, which is a CGI kind of thing. So we are doing less extravagant *Treasure Planet* kind of treatments. You have to create a world but [we're doing it more simply]. What we're trying to do with *Princess and the Frog* is hook up with things that the old guys did earlier. (Hetherington and Desowitz n.p.)

The commercial and critical success of *The Princess and the Frog* indicates that this approach can work, but one has doubts about its intellectual honesty.³² This sort of restorative nostalgia does not sit well with Disney's usual reliance on a hyperreal aesthetic, which relies on what Harpold calls the logic of the upgrade path: hyperrealism demands the development of ever-newer technologies in order to make animation more transparent. For Pixar, restorative nostalgia involves even more of a contradiction, as one specific function of each Pixar film, *Up* not excepted, is to demonstrate the hyperrealist potential of Pixar's new technologies. The desire to retain the object of nostalgia – which, in this case, is the 2D style of traditional animation – leads only to disingenuousness, to unacknowledged contradictions.

Disney and the early Pixar were like Muntz or like Carl before his epiphany, refusing to abandon traditional animation despite clear evidence that it was no longer the most effective means of achieving the purpose (i.e., hyperrealism) that it was

³² Disney's return to traditional animation in some ways echoes Studio Ghibli's deliberate refusal of computer animation, but to develop this comparison further would take me too far afield.

supposed to serve. The late Pixar is like Ellie or like Carl after his epiphany, acknowledging the legitimacy but also the unsatisfiability of the desire for traditional animation. In my opinion, this is an intellectually consistent position, and the ending of *Up*, if less happy than the ending of *Toy Story*, is for that precise reason more honest. *Up* relies on the fantasy of handwriting to the extent that it acknowledges the importance of handwriting and the values it connotes, but its fantasy of handwriting is one which acknowledges both the gaps in the logic of handwriting itself, and the tensions that exist between that logic and the logic of the digital.

Scott Pilgrim vs. the Restorative Fantasy of Handwriting

However, *Up* still only evokes or “quotes” handwriting. The film is made entirely in a 3D graphical style, and all the drawings and handwritten texts that appear on screen are of an infradiegetic nature. The film is about handwriting without itself *looking like* handwriting. Therefore, the film seems to suggest that the graphical and the handwritten are not compatible, that a binary opposition exists between these two medial logics. As we observed in the previous chapter, this is not necessarily true. These two logics are often structured in remarkably similar ways, and the difference between them is more one of degree than of kind, insofar as computer graphics software may be viewed as merely a more complicated type of writing tool. The question then becomes, is it possible to make a digital film with a handwritten ethos, but without triggering the restorative fantasy of handwriting? Can digital and handwritten visual styles be set in dialogue visually as well as thematically? My last case study, *Scott Pilgrim vs. the World* (Edgar Wright, 2010), suggests that the answer is yes.

Scott Pilgrim vs. the World is an adaptation of the series of graphic novels discussed in the last chapter. The film is relevant to the present context, and deserves

to be discussed independently of the comics, because it uses comic book visual devices in such a way as to invoke the fantasy of handwriting. The film mimics the visual style of comic books in numerous ways. Split-screen shots, recalling the appearance of panel borders, are used on numerous occasions. On at least one occasion, the gutter between the split screens takes the form of a lightning bolt (Figure 5-21). The frame occasionally contracts or expands horizontally, mimicking the way in which comic books vary the size of panels for dramatic effect (see again Figure 5-21). The film uses textual captions for purposes which in other films, even those based on comics, would be served by voiceover narration. When characters first appear, they are usually accompanied by a caption box stating their name, age, and additional relevant information. Many scenes begin with a narrative caption (RAMONA COME CLOSER, ABOUT TO E-X-P-L-O-D-E), and these captions are depicted in an instantly recognizable font, consisting of blocky capital letters (Figure 5-22). In a few instances, a voice-over narrator reads these captions aloud, but this is the exception rather than the rule and is used primarily for extra dramatic effect. (Notably, the voiceover narrator has the same voice as the narrator in the *Ninja Ninja Revolution* video game that Scott plays with Knives.)

More importantly, the film includes many typographically-figured sound effects: when a phone rings, the word RIIIIIIING appears; DING DONG appears when a doorbell rings; PAF appears when the ninja Roxy Richter vanishes in a puff of smoke (Figure 5-23). As in the comic, these sound effects sometimes don't even represent actual sounds: other sound effects include GLARE and ONE! TWO! THREE! FOUR! Finally, the film makes extensive use of emanata – i.e., nondiegetic images intended to

depict emotions or other non-visual phenomena. Purple hearts spill out when people kiss. When musicians play, rays of light emanate from their instruments, as well as symbols such as skulls, hearts, stars, and the letter D (Figure 5-24).

This effect mimics the use of onscreen sound effects in the 1960s *Batman* TV show, but in that show (and the feature film based on it), the sound effects typically occupied the entire frame, which separated them from the live-action world of the characters. When the sound effects did share the frame with the characters, they appeared to have been pasted on (Figure 5-25). In Figure 5-25, the BAP! visibly belongs to a different world from the people in the frame. A shadow is added under the letters in an evident attempt to give them a minimal appearance of three-dimensionality, but it doesn't work; the letters look two-dimensional, and therefore appear to be floating on top of the three-dimensional world depicted in the image. In *Scott Pilgrim*, the special effects team specifically sought to avoid this effect:

"In the Patel fight there were words like 'Krowww' and 'kpok' directly taken from the graphic novels," said [special effects director Frazer] Churchill. "We'd take hi-res versions from Photoshop into Shake and split them out into different colour [*sic*] channels and re-combine them into slight offsets so that the edges of the graphics had a slight rainbowy aberration to them with slightly reduced opacity. You feel the set lights shining through the graphics that appear on the screen. They're depth cued and we tried not to make it feel like they were just laid on top. (Failes n.p.)

Accordingly, the sound effects and caption boxes never seem merely to be floating above the diegetic world; they have solidity and occupy material space in the storyworld. At the beginning of the film, Scott walks in front of the caption box announcing his name, suggesting that the caption box exists in the same three-dimensional space as his body. When Knives Chau spies on Scott through a window, there are several successive shots of her face from progressively closer perspectives.

In each shot, the caption box next to Knives's face ("Knives Chau / 17 years old") changes scale in the same ratio as everything else in the shot. On two occasions in the film, Kim Pine pretends to shoot herself using her hand as a gun. A "BLAM" sound effect appears next to her head, then the letters of the word BLAM disintegrate into smaller chunks (Figure 5-26). Most spectacularly, when Knives tells Scott she loves him, the word LOVE emanates from her mouth as a gaseous vapor, and Scott literally brushes her off by waving his hand to make the word-cloud dissipate (Figure 5-27).

This is a classic example of the fantasy of handwriting, in that it involves handwritten letters that have weight and solidity, that *do stuff*, that have as much solidity as any other objects. However, a crucial difference between *Scott Pilgrim* and other texts that invoke this form of the fantasy of handwriting – e.g., *Felix* – is that in *Scott Pilgrim*, such effects also occur with letters that are *not* handwritten. Handwritten text and hand-drawings do appear on screen at numerous points in the film. Several times during fight scenes, artwork by Bryan Lee O'Malley is superimposed over the live-action footage, and Ramona's narrative of her relationship with Matthew Patel is narrated using drawings (Figure 5-28). When the narrator tells us that Scott's last haircut "took place exactly 431 days ago, three hours before his big breakup", an unseen hand draws a picture on the screen showing Scott after that haircut (Figure 5-29). When Scott dies (temporarily), an unseen hand writes DEAD on the screen, followed by an arrow pointing to his corpse. However, these handwritten texts are not assigned any special privilege relative to the other types of onscreen texts in the film. There is no suggestion

that any of these texts are more “real” than the others, and the film often subjects computer-graphical imagetexts to the same treatment as handwritten imagetexts.³³

For example, in Figure 5-27, “LOVE” is clearly not handwritten; the three-dimensionality of this word, and the way its letters shift and shimmer, indicates that it couldn’t have been drawn by hand. Other obviously typographic texts appear on the screen throughout the narrative. Every time a fight starts, a pixelated FIGHT logo appears, mimicking the start of a round in a fighting game. Whenever Scott defeats an enemy, jaggy lettering is used to depict the amount of points he had earned in the fight. These digital imagetexts typically have the same degree of materiality and solidity as the handwritten imagetexts described above. Early in the film, when Scott goes to the bathroom, a “pee bar” is displayed over his head. This graphic device is taken directly from the comic (as mentioned in the last chapter), but in the film, the pee bar is reflected in the bathroom mirror.

Finally, if written texts in the film take on the qualities of real objects, then the reverse is true: the characters in the film are more than a little textual. The film repeatedly associates Ramona’s seven evil exes, whom Scott has to defeat, with the letter X. When Ramona gives Scott her phone number, she writes seven X’s under it. Scott initially misinterprets as representing kisses, but his roommate, Wallace Wells, informs him that they actually represent seven evil exes. In the following scene, Scott walks outside and finds himself surrounded by seven evil X’s (Figure 5-30). They hover around him ominously, echoing Scott’s persecution by the seven evil exes. Each of the exes, moreover, is closely associated with his or her number in the sequence of

³³ I use W.J.T. Mitchell’s term “imagetexts” here as a convenient shorthand way of referring to both texts and images.

Ramona's exes. For example, Todd Ingram is the third evil ex, in terms of both the order of their romances with Ramona and the order in which they fight Scott. Todd Ingram wears a shirt with "3" on it, and when he punches Scott through a wall into an alleyway, Scott lands on some trash cans decorated with a graffiti 3. Similar prominent uses of numbering occur in each of Scott's fights with the evil exes. The theme of letters and typography even comes up in more subtle ways. In an unsuccessful attempt to impress Ramona with his knowledge of video games, Scott tells her that the classic arcade videogame *Pac-Man* was originally titled *Puck-Man*, but that the name was changed for the game's American release because of the possibility that people might turn the P into an F.

It's also important to note that neither the handwritten nor the graphical imagetexts have a visible writer. Handwriting simply appears on the screen without being referred back to any particular source or point of origin. The handwritten imagetexts are in the characteristic style of Bryan Lee O'Malley, but O'Malley himself is entirely absent from the film. We can only attribute these texts and images to the figure that André Gaudreault calls the filmic narrator, the figure responsible for those of the film's communicative effects that derive from manipulation of the filmic apparatus.³⁴ This narrator, however, is a disembodied and hypothetical figure who cannot necessarily be identified with the aforementioned voice-over narrator. What we have here is handwriting without a source, handwriting that doesn't serve as evidence of the subjective identity of its writer.

³⁴ Gaudreault distinguishes the narrator from the monstrator, who is responsible for those effects that derive from manipulation of the profilmic elements of the film. He subsumes both of these figures under the overarching figure of the mega-narrator. For Gaudreault, the privileged activity of the filmic narrator is editing (84), but clearly the narrator must be responsible for the appearance of text on the screen which is not part of the profilmic scene.

And yet the film is not uninterested in the association between handwriting and personality. Handwriting is prominently featured at various points in the film. As noted above, Ramona gives Scott a handwritten card with her phone number and seven (evil) X's, which later prove significant. Early in the film, Scott has become infatuated with Ramona but doesn't yet know her name. At a party, he encounters Michael Comeau (his first name is only mentioned in the comic), who, according to an onscreen caption, "knows everyone." Scott shows Comeau a crude drawing of Ramona's face, and Comeau recognizes it and tells Scott that the drawing is of Ramona and that she is at the party. It would certainly be an exaggeration to claim that Scott summons Ramona into existence by drawing her, but it seems notable at least that Scott chooses to identify her with a drawing rather than a verbal description. On two different occasions, Scott's bandmate Stephen Stills produces drawings, in Bryan Lee O'Malley's characteristic style, of their upcoming opponents in the battle of the bands. Most importantly, at the point in the film when Scott reaches his lowest ebb – when Ramona tells him "You're just another evil ex-boyfriend waiting to happen" – Ramona leaves him with a glimmer of hope by giving him a handwritten list of her seven evil exes. The presence of this physical trace of Ramona's presence serves to remind Scott that she hasn't given up on him, and provides him with an incentive to continue his battle with the evil exes.

The film therefore invokes handwriting frequently, sometimes in ways that gesture to the graphological view of handwriting. However, it cannot be said that handwriting is uniquely privileged above computer graphics, or drawings over CGI images. To the extent that the film subjects computer-graphical imagetexts to the same sort of

manipulation as handwritten imagetexts, this sort of manipulation does not indicate that handwritten imagetexts are externalizations of the writer's subjective identity, as is the premise behind the fantasy of handwriting. Or alternately, the implication could be that graphical imagetexts can function as externalizations of subjective essence in the same way that handwritten imagetexts can. But by the same token, the film does not uniquely privilege computer graphics as a means of achieving transparency, immersion or hyperrealism. The use of CGI in the film tends to be highly non-illusionistic. Typical examples of the film's CGI style include the sword made of pixels that Gideon wields in the last battle (Figure 5-31), or the creatures made of pure sound that Sex Bob-Omb and the Katayanagi twins use to fight each other (Figure 5-32). Handwritten imagetexts and graphical imagetexts have equal importance in the film's visual style. This indicates that, again, both these types of imagetexts are equally subject to manual manipulation; ultimately, Wright is not particularly interested in the fact that the tools used for this manipulation are different in each case.

I would suggest, then, that in *Scott Pilgrim* Wright successfully invokes the fantasy of handwriting without hypostatizing handwriting as a uniquely privileged means of access to subjectivity. He succeeds in doing so because he treats the difference between the manual and the digital as one of degree rather than kind. And this works because the viewer's phenomenological experience of these two types of texts is the same. From the viewer's perspective, handwritten imagetexts have the same ontological status as graphical imagetexts; both types of imagetexts are simply components of the filmic image. As Lev Manovich observes:

Once live action footage is digitized (or directly recorded in a digital format), it loses its privileged indexical relationship to pro-filmic reality. The

computer does not distinguish between an image obtained through the photographic lens, an image created in a paint program or an image synthesized in a 3D graphics package, since they are made from the same material — pixels. (254)

This same logic can be applied to handwriting and graphics: from a viewer's perspective, handwritten and graphical imagetexts are ontologically equivalent, since both consist of pixels or projections thereof.

However, this claim does not imply that the processes of *producing* handwritten and graphical imagetexts are equivalent – only that these texts, once produced, can be *made* equivalent in terms of their materiality, ontology, or phenomenological appearance. Therefore, the strategy of equating handwriting with graphics is not guaranteed to work in texts that are given to be *played* rather than read. If the recipient of a text is asked to *produce* handwritten and/or graphical images, rather than merely looking at them, then might the differences between the two types of texts become significant to his/her gamic experience? That's the question I'll explore in my final chapter.



Figure 5-1. Still from *Toy Story* (John Lasseter, 1995). Note the childish handwriting.



Figure 5-2. Still from *Toy Story 2* (John Lasseter, Lee Unkrich and Ash Brannon, 1999). Note the more mature handwriting.

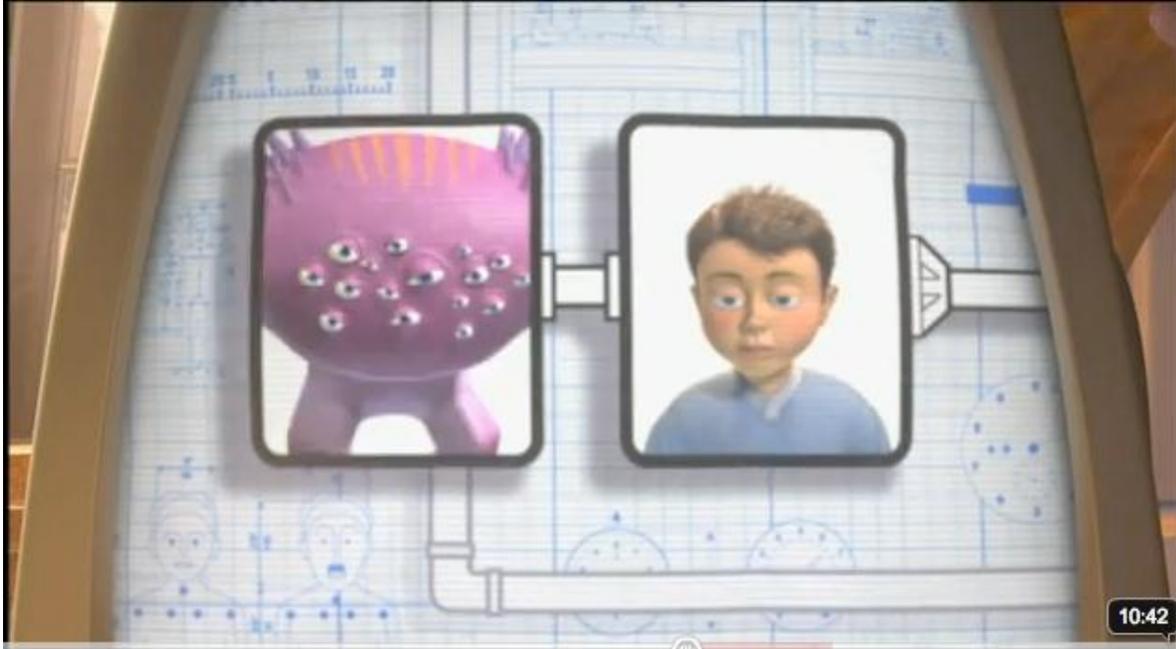


Figure 5-3. Still from *Monsters, Inc.* (Pete Docter, 2001). The child is indifferent to this monster because it's not his "ideal monster".

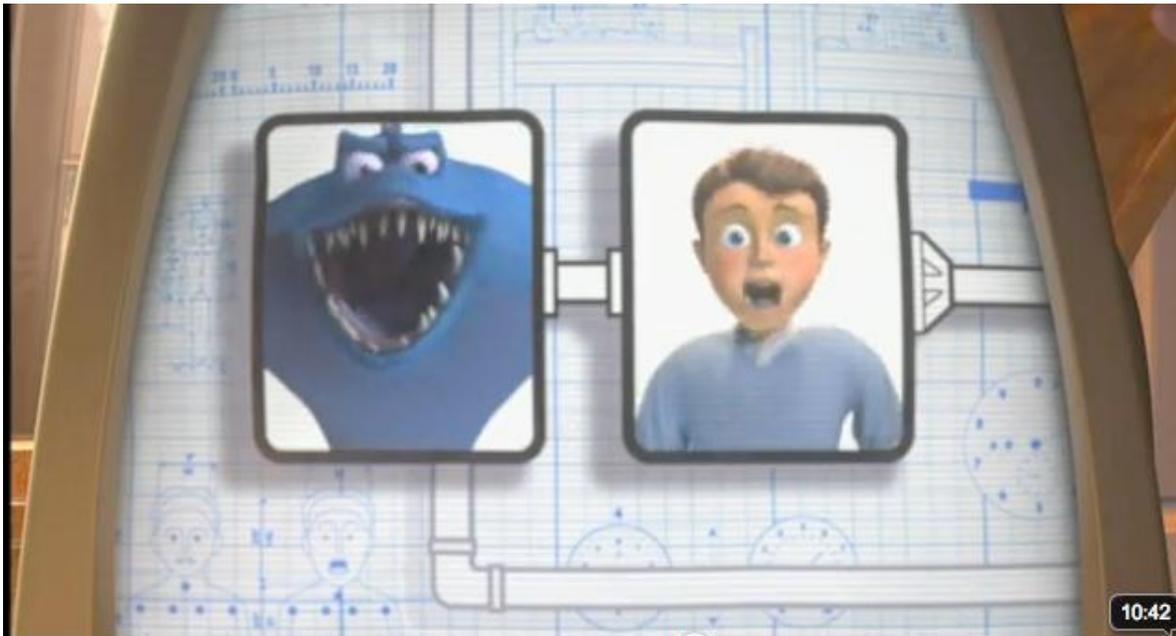


Figure 5-4. Still from *Monsters, Inc.* This one, however, is.



Figure 5-5. Still from *Monsters, Inc.* Boo's self-portrait with Sulley was actually executed by Harley Jessup's four-year-old son.



Figure 5-6. Still from the title sequence of *Monsters, Inc.* showing a monster interacting with letters.



Figure 5-7. Still from *Monsters, Inc.* showing a battle between a monster and a letter.

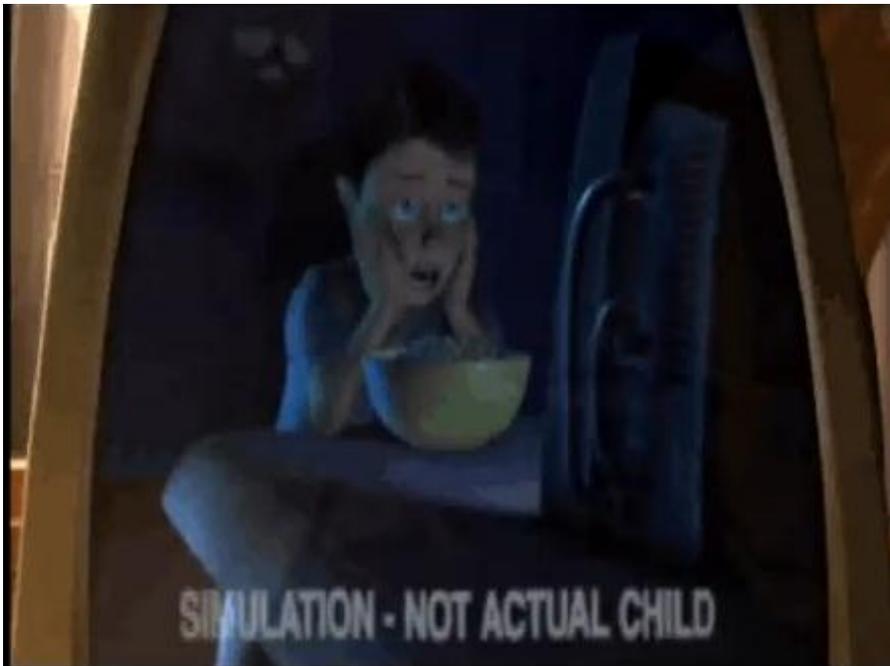


Figure 5-8. Still from *Monsters, Inc.* suggesting the effects of television upon children's imaginations.



Figure 5-9. Still from *The Princess and the Frog* (Ron Clements and John Musker, 2010). Note the utter lack of scariness.



Figure 5-10. Still from *My Neighbor Totoro* (Hayao Miyazaki, 1988). Note the uncanny combination of cuteness and scariness.



Figure 5-11. Still from *Monsters, Inc.* Note the incongruity between the normal bed and the monster in (not under) it.



Figure 5-12. Still from *Up* (Pete Docter, 2009). Note the childish lettering.



Figure 5-13. Still from *Up*. Note Ellie's childish painting of Paradise Falls.



Figure 5-14. Still from *Up*. Note Ellie's childish drawing of the house.

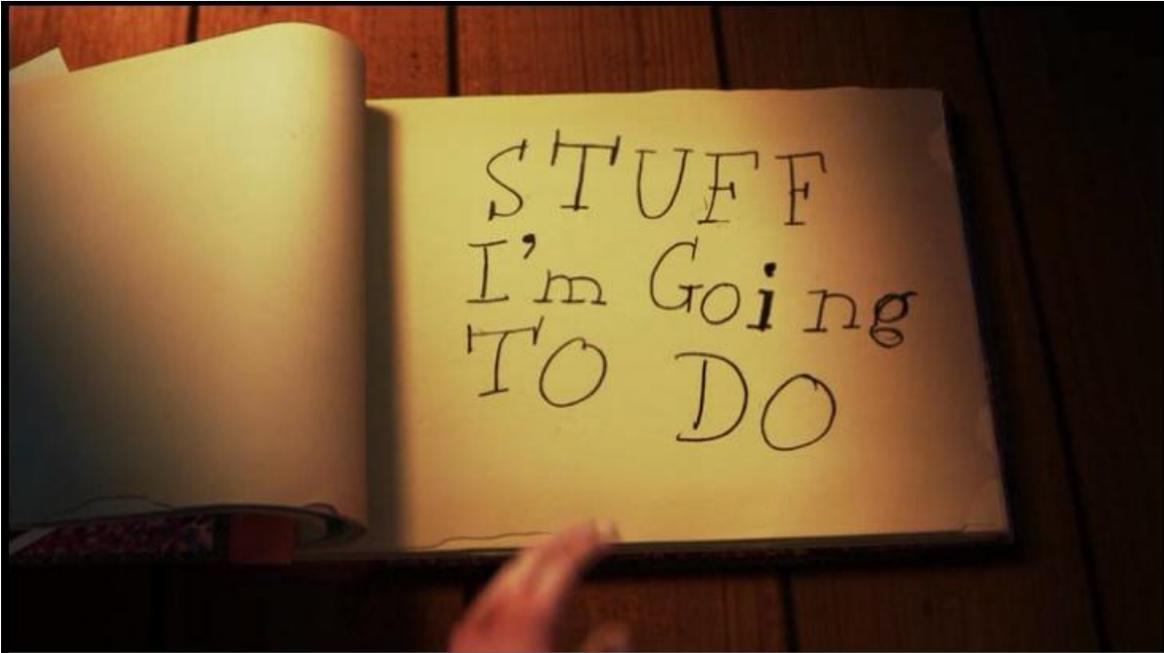


Figure 5-15. Still from *Up*. Note the childish lettering and inconsistent capitalization.



Figure 5-16. Still from *Up*. The apotheosis of “hand”-writing.



Figure 5-17. Still from *Up* showing another act of hand-drawing.



Figure 5-18. Still from *Up*. The giant bunch of balloons was the major technological showpiece of the film.



Figure 5-19. Pages from the Adventure Book combining handwriting, hand-drawing and photography.

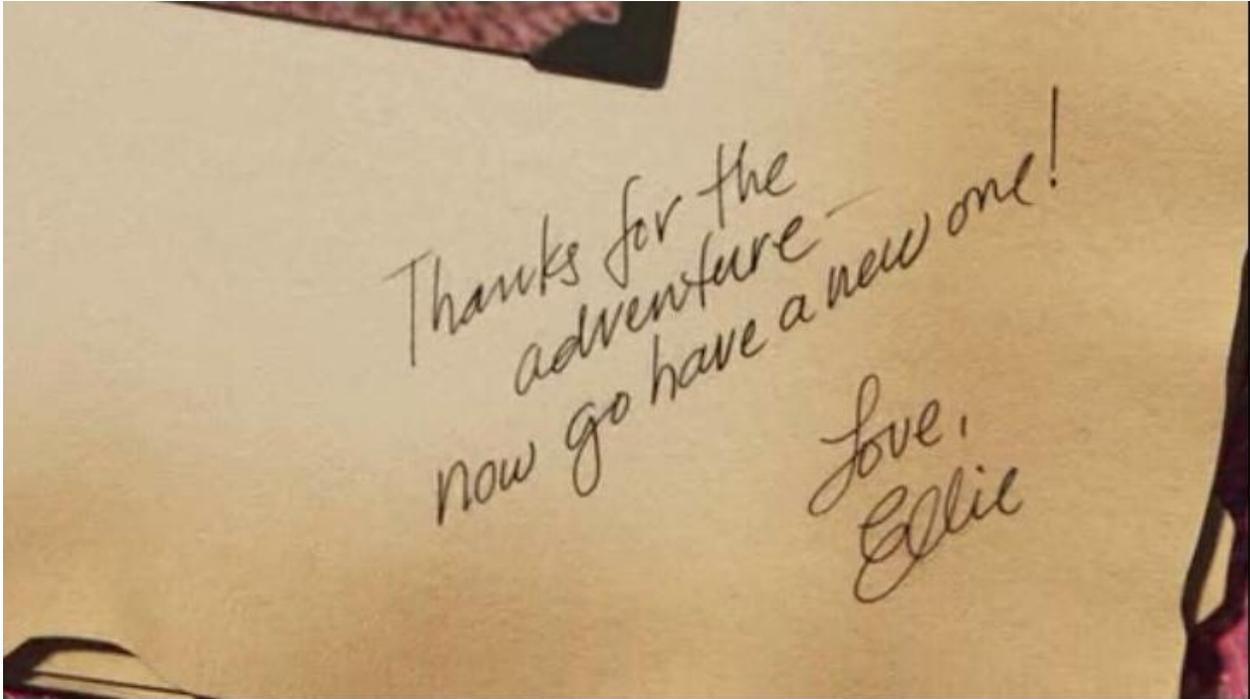


Figure 5-20. Handwriting from beyond the grave. Compare Ellie's handwriting in this image to that in Figures 5-15 and 5-19.



Figure 5-21. Still from *Scott Pilgrim vs. the World* (Edgar Wright, 2010). Note the internal, apparently hand-drawn, panel borders.

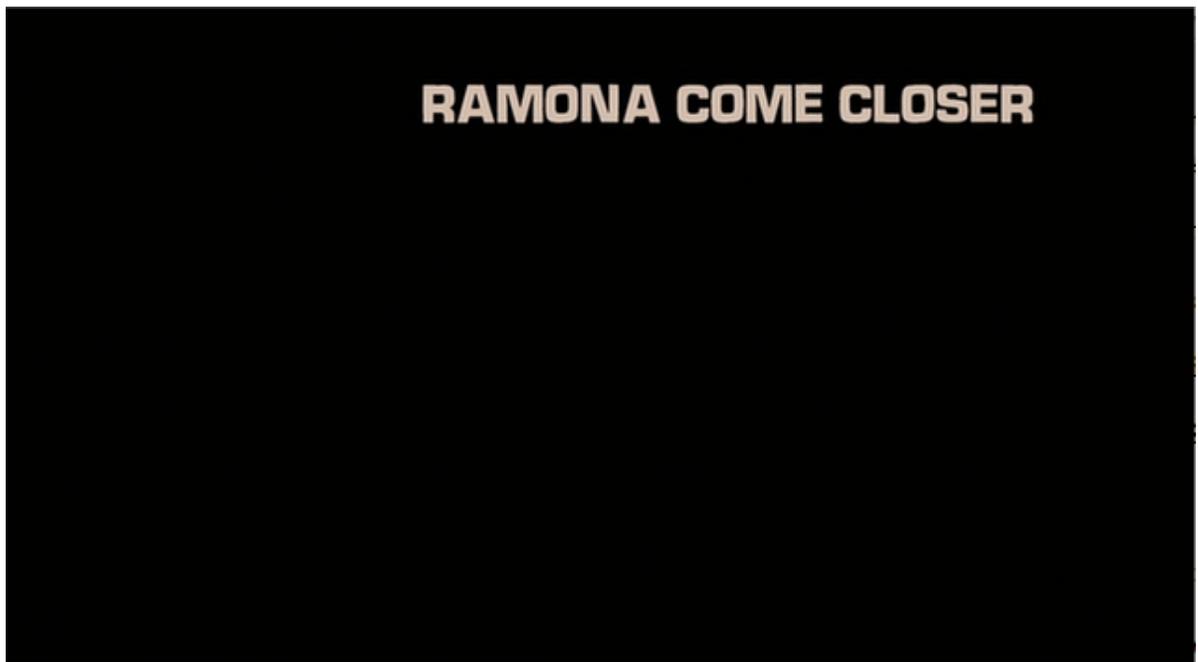


Figure 5-22. Still from *Scott Pilgrim vs. the World*. This font resembles one used in the graphic novels.



Figure 5-23. Still from *Scott Pilgrim vs. the World*. Note the apparently hand-lettered sound effect.



Figure 5-24. Still from *Scott Pilgrim vs. the World*. Music is here represented as symbols emanating from instruments.



Figure 5-25. Still from *Batman* (Leslie H. Martinson, 1966). Note the obvious incongruity between the sound effect and the live-action footage; the former seems to float above the latter.



Figure 5-26. Still from *Scott Pilgrim vs. the World*. Although the same sense of incongruity exists, the viewer is meant to perceive the BLAM! as existing on the same ontological register as Kim's body.



Figure 5-27. Still from *Scott Pilgrim vs. the World*. Scott physically interacts with the word LOVE.



Figure 5-28. Still from *Scott Pilgrim vs. the World*. This image is part of a flashback sequence narrated with static drawings rather than live-action footage.



Figure 5-29. Still from *Scott Pilgrim vs. the World* showing the juxtaposition of live-action footage with handwriting and hand-drawing.



Figure 5-30. Still from *Scott Pilgrim vs. the World*. Seven evil X's.



Figure 5-31. Still from *Scott Pilgrim vs. the World*. The pixelated sword is an example of the film's non-illusionistic style of graphics.

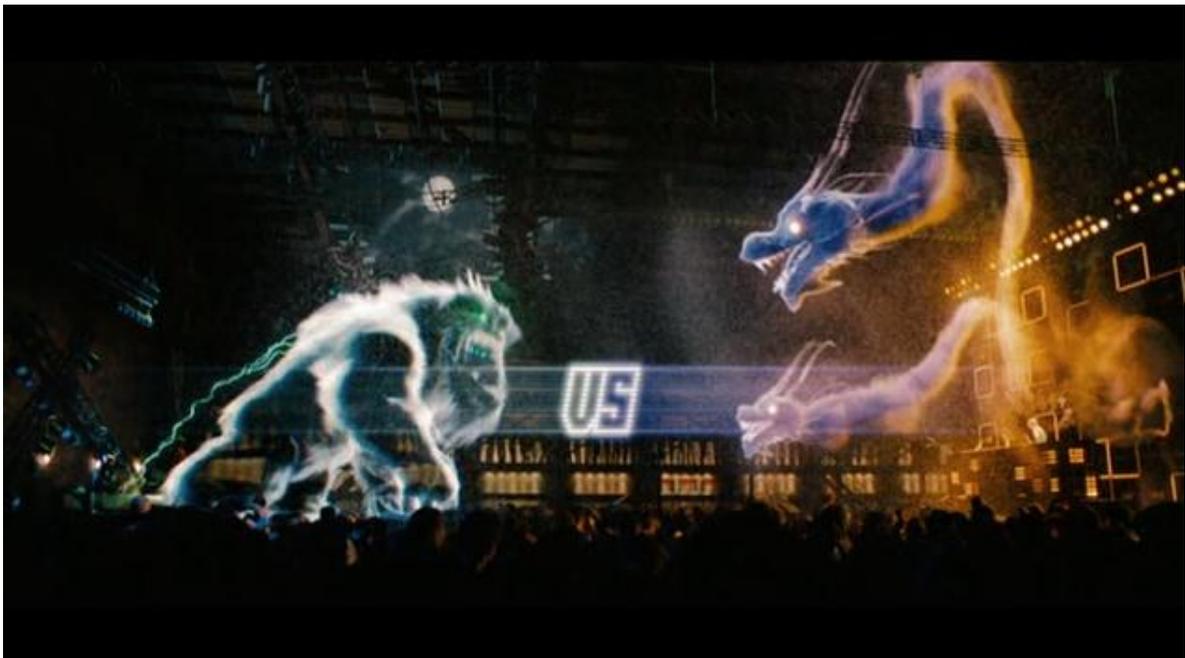


Figure 5-32. Still from *Scott Pilgrim vs. the World*. Another example of the same.

CHAPTER 6
FORWARD TO THE PAST: NOSTALGIC FANTASIES OF HANDWRITING IN VIDEO
GAMES

Video Games and Transparency

Video Games and the Desire for Transparency

In the previous chapter, I argued that digital cinema may rely upon the reflective fantasy of handwriting. However, I ended by raising the possibility that its ability to do so might be contingent on its non-participatory nature. Because both digital and handwritten imagetexts in a film have the same phenomenological status (from the spectator's perspective, both are components of a single 2D image), film is capable of manipulating digital imagetexts in ways that I have associated with the fantasy of handwriting. However, the question arose as to whether the gap between digital and handwritten imagetexts might become significant if the player were actually called upon to produce such texts, rather than simply observing them. In this chapter I will explore this question by discussing a class of video games that make use of a handwritten interface. As its name indicates, the purpose of the handwriting interface is to mimic the phenomenological experience of handwriting, and video games that employ this interface often claim to also be able to reproduce the cherished properties of handwriting. However, when video games make this claim in an uncritical way, they often fall into the trap of the restorative fantasy of handwriting. In order to invoke the fantasy of handwriting in a reflective way, video games need to acknowledge the gap between ordinary handwriting and its digital remediation.

I explained in chapter 2 that in the IF era, gaming involved both physical and metaphorical handwriting. As suggested in Montfort's citation of Tracy Kidder (above, p. 157), in a typical gaming session an IF player might have had recourse to handwritten

notes and maps, as well as engaging in the metaphorical act of “handwriting” necessary to visualize the world. Even after complex graphics became the norm in video games, the video game experience continued to involve various embodied acts of writing. In terms of reception, mapping the gameworld on paper was still often necessary even when the gameworld was visually rendered. For example, in *Wizardry* (1981), the dungeons were designed so as to be mappable on graph paper, and “[t]he manual offers detailed instructions on making such a map and lets player [sic] know that ‘mapping is indeed one of the most important skills that successful *Wizardry* players possess’” (Barton 71). Players of such games also used paper in order to keep track of other relevant information not tracked automatically by the game. In games like *Wizardry* and *Ultima* (1980), players often relied on paper “notes, records and ledgers of their individual game experiences” (Myers 17). In this respect these games mimicked the non-electronic genre from which they were descended: the “paper-and-pencil” RPG (Myers 16), whose very name comes from the fact that it employs handwriting as a system of record-keeping. Finally, in what is an interesting coincidence if nothing else, *Mystery House*, the first graphical adventure game, featured graphics rendered with a crude light pen, and the images rendered in this way included several representations of handwritten notes (Kirschenbaum 131–132). *Mystery House* symbolically represents the end of one tradition of video gaming that depended on metaphorical handwriting, and yet it depends crucially on remediations of actual handwriting.

As I have also suggested, an orthodox reading of video game history would suggest that the literally and metaphorically handwritten aspects of video games were shunted aside as video games achieved greater graphic complexity. The increasing

visual richness of the gameworld deprives the player of the need or desire to imagine it. A game like *Myst*, for example, offers the player little if any opportunity to “draw” the gameworld in his or her mind, because that world is already prerendered in immense detail.

¹) Figuratively, as graphics become more transparent, one of the conditions of possibility of handwriting, the existence of a blank writing surface, is lost. An analogous development was the introduction in the late 1980s of automapping, where areas of the gameworld were automatically added to an in-game map once the player had visited those areas. This feature made games easier and more user-friendly and made the gaming experience more self-contained, but also deprived players of the (supposed) pleasure of rendering the gameworld on paper.

This (conventional) narrative implies that graphical video games are devoted primarily to the logic of transparency – that the primary purpose for which commercial games use graphics is to create the illusion of a three-dimensional, immersive gameworld. I accepted this assumption temporarily in chapter 2, and I believe that in the case of the most popular, state-of-the-art, big-budget video games, this assumption generally holds; it shapes predominant popular and critical discourses associated with these games. Games of this type tend to be characterized by large three-dimensional environments, photorealistic graphics, frame rates of 30 fps or more, stereo sound, etc. Video games typically offer what I described in Chapter 3 as a fantasy of transparency, in which the game promises to present an experience as compelling as that of the real world, if not more so.

¹ This is ironic, as the premise of *Myst* is that one can transport oneself into other worlds by *writing* about them, and the infradiegetic texts in the game are handwritten.

The fantasy of transparency also implies the desire to experience the gameworld in a maximally direct and unmediated fashion, without the interposition of reminders of the mediated nature of the gameplay experience, such as extradiegetic onscreen texts. For example, some recent games have attempted to eliminate the heads-up display (HUD), the onscreen textual overlay that provides game-critical information. (In a shooter, for example, this might include the player's remaining health and ammunition. Scott Pilgrim's "thirst" and "cash" bars, discussed in Chapter 3, are examples of an HUD.) In the 2008 third-person shooter game *Dead Space*, the HUD is integrated into the body of the avatar. The avatar's life bar is replaced by an indicator on his body armor, the amount of ammunition remaining in a weapon is indicated by a display located on the weapon itself, and so on (Figure 6-1). In a 2009 presentation, Nicholas Ware described this as "diegetic gameplay," implying that this treatment of the HUD is an example of recapture (see above, p. 145). For Ware, the purpose of this was to increase the suspension of disbelief, to make the game experience "more cinematic" (n.p.), and to make the game experience more chaotic and horrifying – or, in summary, to augment the effect of immersion.

After the HUD, the next extradiegetic parameter of the video game experience to vanish was the controller. Microsoft's Kinect, a peripheral for the Xbox 360 which was released in November 2010, allows users to interact with games using hand motions. It thereby eliminated the need to communicate with the system via a material proxy. According to a 2009 article, the development of the Kinect was motivated by Microsoft's effort to better market the Xbox 360 to non-gamer audiences (i.e., to users other than the stereotypical video game demographic of young males). Early publicity for the

Kinect was therefore targeted toward families and children.² For Microsoft, the Kinect was capable of appealing to non-gamers precisely because the controllerless interface was (it was claimed) more “natural,” and was therefore more appealing and user-friendly:

The effort aims to attract a broader audience to Microsoft’s console. Most of the 30 million Xbox 360s sold since November 2005 have been snapped up by avid young males drawn to complex shooter or adventure games such as Halo and Gears of War. [...] The company’s trademark green controller features 12 buttons and two joysticks, far too many . . . for the novice user. "The controller is still a barrier," [Microsoft executive Shane] Kim said. "But once you remove the controller, what do you replace it with? So we came up with a way people can play games by doing what they do naturally – by moving and talking." (n.p.)

The Kinect is therefore the result of Microsoft’s drive for greater “naturalness,” for greater transparency and immersion, which presupposes a corresponding desire on the part of video game audiences. Both of the other two major gaming consoles, the Nintendo Wii and the Sony PlayStation 3, now have peripherals which perform functions similar to that of the Kinect: the Wii MotionPlus debuted in June 2009, and the PlayStation Move in September 2010. *Popular Science* included the latter on its list of the 100 notable innovations of 2010, calling it the “most immersive game controller.” The impression one gets from all this is that a desire for naturalness, immersivity, etc., is the principal motive force to which the contemporary gaming industry caters, and that to do so, it must erase those aspects of the video gaming experience that are more closely associated with the scriptural and the handwritten.

² See <http://www.youtube.com/watch?v=g_txF7iETX0>.

Gaming and Fundamental Paradoxes of Transparency

According to this account, gaming history is an example of what Terry Harpold calls the conceit of the upgrade path:

Because technical innovation in popular computing is driven more by the allure of expanding markets than by something so quaint as a sense of responsibility to historical continuity, commercial discourses of the upgrade path will inevitably promise consumers new and more satisfying interactions, and encourage them to see the older ones as outmoded or no longer relevant. (3)

The first problem with such discourses of the upgrade path is that, empirically, they don't work; some segments of the consumer base typically resist viewing older modes of interaction as "outmoded or no longer satisfying." Resistance to the discourse of the upgrade path is the very definition of nostalgia, and nostalgia is an important force in the contemporary video game industry, as explained in depth in Zach Whalen and Laurie N.F. Taylor's edited anthology on this subject. Of course, video game nostalgia is often reflective in nature, merely arguing that old gaming technologies were better than newer ones. "As game technology has improved and as daily life becomes more saturated with media technology . . . early video games have also become objects of nostalgia in that their low-resolution aesthetics have come to be perceived as a retrospective ideal" (Whalen and Taylor 7). Video game nostalgia becomes reflective rather than restorative when game creators acknowledge that earlier video games are retroactively altered in the process of remembering them. Reflective nostalgia can even be aided by the use of the same new gaming technologies that made the old ones obsolete; the superior affordances of new video gaming technologies can be used to open up ways of rethinking and reimagining older gaming genres and technologies. For example, *Retro Game Challenge* (Namco Bandai Games, 2007/2009) offers a collection of eight video

games that parody or pay homage to various NES games of an earlier era. Although it depends on nostalgia for games of the past, this game also takes an ironic attitude toward those games, and is possible only because of the same technological advances that rendered older gaming genres obsolete; for example, it takes full advantage of the superior storage capacity of DS data cartridges in comparison with NES cartridges. Similarly, as I will suggest in the main section of this chapter, contemporary DS games often employ nostalgia for handwriting in reflective (as well as restorative) ways.

But a second problem with the video game version of the conceit of the upgrade path, which helps to explain the first problem, is that this upgrade path is necessarily asymptotic; it can never reach its own logical conclusion. As we learned from “Glenn Ganges in *Pulverize*,” the notion of a completely transparent video game, or a completely transparent media experience of any kind, is a contradiction in terms. Such an experience would be indistinguishable from actual, non-mediated experience, and would therefore cease to be enjoyable as a media experience. Speaking of one famous fictional example of a fully transparent media experience, the Holodeck of *Star Trek*:

The Next Generation, Harpold writes that

its spatial and computational limits are homologous with the crude backlighting and plaster-of-Paris boulders of the “classic” *Star Trek* soundstages: the viewer grasps on the evidence of each that a real limit of the representation is encountered within the obvious mediality of the television or theatrical presentation. Her pleasure in the representation depends on this encounter; without it, she would be confronted by a true *mise en abyme*, more likely to induce anxiety than pleasure. (123–124)

When Glenn realizes that he is beginning to confuse the world of *Pulverize* with the real world, he reacts precisely as Harpold suggests. In order to avoid such a vertiginous collapse of the user’s ability to distinguish between real and mediated experience, the boundaries of the latter need to be carefully delimited, and the player or viewer is made

aware of this in some way. To put it another way, there need to be gaps in the media experience.

We've encountered this argument before, but in the specific case of games, it takes on a further level of importance because of the need for meaningful interaction. In film, transparency operates on one level, that of the representation of the diegetic world. In games and other strongly interactive media such as graphical user interfaces, transparency operates on two levels, that of representation and that of interface. A maximally transparent interface is one which minimizes its own visibility as an interface, providing the user with at least as much interactional freedom as s/he would enjoy if s/he were interacting with the real object (e.g., a file system) of which the media object is a simulation. As Bolter and Grusin observe: "What designers often say they want is an "interfaceless" interface, in which there will be no recognizable electronic tools – no buttons, windows, scroll bars, or even icons as such. Instead the user will move through the space interacting with the objects "naturally," as she does in the real world" (23). One implication here is that the goal of a user interface is to allow the user to interact with the same *freedom* s/he would enjoy in "real world" interactions; a "natural" mode of interaction in this sense is one which is minimally *constrained*. Whether this is true in the case of non-game user interfaces is a question beyond the scope of this chapter, although I suspect the answer is no. However, in the context of games, maximally free and minimally constrained interaction is not a desirable goal, because it involves another contradiction in terms. The game experience depends on gaps in what the player character is able to do.

For example, as I observed in chapter 2, IF pretends to offer complete interactional freedom in the sense that any verb which the player might type is at least potentially understandable by the parser. IF therefore seems less constrained than graphical adventures, which restrict the player to a pre-given set of actions. However, this is not actually true; as Barton observes (above, p. 121), IF games only ever understand a very limited subset of the verbs in the English language. Even for those verbs that IF games do understand, they sometimes fail to respond to those verbs appropriately. Moreover, IF games often implement only one or a few solutions to each puzzle, failing to recognize alternative solutions even when those solutions are logical and expressible in language the game understands. As Barton observes, this is a common source of frustration for players (27). But suppose there were an IF game that understood every verb in the English language, provided meaningful responses to every such verb in every possible game state, and accepted every conceivable solution to every puzzle. This is an obviously unrealistic assumption since the source code of such a game would have to be larger than the universe. But even if that such a game could exist, what would be the point of playing it? If a player could take any action whatsoever, then s/he would have no way of evaluating whether to take one action rather than another. And if every puzzle accepted every imaginable solution, then where would be the pleasure in finding a creative or original solution?

Recognizing this difficulty, Karen and Joshua Tanenbaum argue that player agency in games needs to be reconceptualized in terms of “commitment to meaning” rather than freedom (1), because absolute interactional freedom is incompatible with the game situation (see above, p. 122). “Most formal definitions of games rely on the

presence of rules and constraints in order to define and bound the play experience” (3). Those rules and constraints are what the game designer is responsible for, and thus a related problem with a concept of agency based on freedom is that it “does not help us understand the pleasures of interacting with authored content” (3). As I discussed in Chapters 2 and 3, the pleasure of reading is often understood (e.g., by Schwenger and McCloud) as deriving from the reader’s creative interaction with an authorial framework, and the same must be true of the gaming experience, even if the relative proportions of the reader’s and the designer’s contribution are different. In a video game context, then, the fantasy of a perfectly transparent interface is neither achievable nor desirable. Such a fantasy is both self-contradictory, and incompatible with the particular type of pleasure offered by games. It’s worth noting that a similar logic applies to the fantasy of perfect handwriting. The physical parameters of the handwriting experience, such as the writing medium, writing surface, and writing tool, necessarily impose constraints of one sort or another on the ability of the writing hand to express itself. In the absence of any such constraints, handwriting would be unthinkable; for example, given a sheet of paper of infinite length and width, how would one decide where to start writing? At a certain level, the fantasies of handwriting and transparency start to blur together.

In a metaphorical sense, then, the video game experience necessarily involves a certain degree of “handwriting” – i.e., personalized, expressive interaction. At the same time, this handwriting is never perfectly free and unconstrained, and games that promise complete handwriting are bound to disappoint. I now examine some games that employ handwriting in a literal sense.

Handwriting in Video Games

Representations of handwriting and drawing are of course quite common in video games, going back at least to *Mystery House*. Space does not permit me to cover the history of such representations fully. One game which is worth discussing, as an example among many others, is *Comix Zone* (Sega Technical Institute, 1995), a side-scrolling action game for the Sega Genesis. *Comix Zone*'s premise is that the hero, cartoonist Sketch Turner, is transported into the pages of the comic book he is drawing. Thus, each section of the game takes place within a comic book page, and each of the game's scenes occupies a separate panel (Figure 6-2). Since the world is made of paper, powerful attacks cause the paper to rip, and Sketch can even tear out a piece of the background and use it as a paper airplane. When enemies appear, they are drawn into existence by an artist's hand (Figure 6-3). (This hand belongs to Mortus, the principal villain of the game, who escaped from the comics page to the real world when Sketch traveled in the opposite direction.) Thus, on a thematic level, *Comix Zone* is a perfect example of the fantasy of handwriting. Its characters and objects are both drawn and real; Sketch's enemies and allies can move independently without losing their status as traces of the hand that drew them. The game even comes close to the critical fantasy of handwriting in that it suggests the frightening possibilities of a scenario in which handwriting is brought to life. The fantasy of handwriting usually serves to affirm the self of the writer: the fact that handwritten creations can come to life and move around is proof of the creative power of the writer responsible for them. In this case, however, the fantasy of handwriting has the opposite effect: Sketch's handwritten creations try to kill him and usurp his place in the real world. If the player achieves the optimal ending, then the game resolves this conflict in a restorative fashion: Sketch kills

Mortus and escapes the comics page along with Alissa Cyan, a character from the comic book, who becomes Sketch's girlfriend in the real world. However, if the player takes too long to win the final battle against Mortus, then Alissa dies and the comic book is destroyed. Sketch is then faced with the dilemma of whether to redraw the comic book in order to bring Alissa back to life, at the risk of also resurrecting Mortus.³

Comix Zone therefore raises fascinating issues about the materiality of the video game experience and the relation of the writer-artist to his/her handwritten creation. However, these issues are staged entirely on a thematic rather than a procedural level. The central conceit of *Comix Zone* (i.e., that the game takes place in a comic book) has little if any effect on gameplay. This is partially the result of the premise that Sketch stops being the *creator* of his comic book when he becomes a character in it. Like Daffy in *Duck Amuck* (and in contrast to Felix in *Comicalamities*), Sketch knows he is a character in a drawn text, but this knowledge does him no good, because the person who is (currently) drawing that text is his enemy. In terms of its core mechanics⁴, *Comix Zone* is simply an example of the very common beat-em-up genre, and not a particularly effective example at that; the game is so difficult as to not be particularly fun.⁵ The game's use of tropes of comics and handwriting is therefore a gimmick, a way of distinguishing itself from dozens of other formally similar games. It makes no use of

³ Therefore, this ending challenges the player to restart the game in hopes of achieving the good ending.

⁴ "A core mechanic is the essential play activity players perform again and again in a game" (Salen and Zimmerman 316). For example, "[i]n Donkey Kong the core mechanic is using a joystick and jump button to maneuver a character on the screen" (316), while in baseball, the "core mechanic is composed of a collection of batting, running, catching, and throwing skills" (317).

⁵ Sketch only has one life, the combat system is very difficult to master, healing items are scarce, and the player is often forced to take damage in order to make progress. Also, *Comix Zone* is disappointingly short; a successful playthrough of the entire game might take less than 40 minutes.

handwriting or drawing as an interface or as a means of control. This is particularly disappointing since, according to the plot, Sketch is a comic book artist, and it therefore seems odd that he never takes advantage of his artistic ability. Although Sketch is trapped in the world of a comic book, he certainly has the ability to affect the physical substrate of that world – such as by tearing the paper background, as Felix does at the end of *Comicalamities*. Therefore, logically it seems he should also be able to draw useful objects into existence, like Felix or like Harold with his purple crayon, and yet Sketch apparently never thinks of trying this.

None of this means that *Comix Zone*'s invocation of the fantasy of handwriting is irrelevant. I certainly don't advocate the extremist ludological claim that the graphics and story of a game are irrelevant, and that analysis of a game should take into account only its formal and procedural aspects. However, the example of *Comix Zone* does raise the question of what it would mean for a game to invoke the fantasy of handwriting on a procedural as well as a narrative level. What would a game look like if it enabled the player to actually write things into existence, instead of merely interacting with things supposedly written into existence by someone else? I'll begin to examine this question with the case of *Ōkami*.

Ōkami as Naïve Fantasy of Handwriting

Cel-Shading

Clover Studio's *Ōkami* (2006) was released in 2006 for the Sony PlayStation 2, and was ported to the Nintendo Wii in 2008, without the involvement of the original developer.⁶ Differences between the two versions will be discussed below, although

⁶ Like several other games discussed in this chapter, *Ōkami* was developed in Japan and was originally marketed to Japanese audiences. As the present dissertation is principally concerned with the

here I will focus primarily on the PS2 version. The game is important in this context because of its implementation of handwriting recognition technology in the context of a commercial video game. Whether *Ōkami* was the “first” game to do this successfully is a matter of opinion⁷, but an analysis of *Ōkami* will give us an idea of both the reasons why a handwriting interface is appropriate in a video game, and the challenges of implementing such an interface in a way which respects the fantasy of handwriting.

Ōkami is most obviously similar to the *Legend of Zelda* series, particularly the 3D *Zelda* games beginning with *The Legend of Zelda: The Ocarina of Time (OoT)* (1998). *Ōkami*'s director, Hideki Kamiya, has said “I’m a *Zelda* freak -- it’s no overstatement to say that I created *Ōkami* because of *Zelda*” (Davies, para. 2). At the time of its release, *OoT* represented a major advancement in video game transparency and immersion; it featured realistic graphics and sound and permitted the player to explore a series of unique environments rendered in three dimensions (Figure 6-4). The success with which *OoT* deployed the immersive aesthetic can be measured by the degree of disappointment that greeted the initial announcement of *The Legend of Zelda: The Wind Waker (TWW)* (2003), which replaced photorealistic graphics with “cel-shaded” graphics that imitated the visual aesthetic of 2D animation (Figure 6-5). As Tom Hurlbutt has observed in an unpublished undergraduate paper, this decision led to a massive fan backlash which “most likely arose from the existing photorealistic rendering

operation of fantasies of handwriting in North American culture, in this chapter I will consider Japanese games like *Ōkami* primarily in terms of their reception by North American audiences. To explain *Ōkami* in terms of the differences between Japanese and Western notions of handwriting would take me too far afield.

⁷ *Ōkami* may in fact be the first game for a commercial video game system that used a handwriting interface. I have not been able to identify any earlier examples, although this by no means implies there weren't any, as my project is not primarily of a historical nature. I say “for a commercial video game system” in order to exclude something like *Giraffe* (1997) a game which was packaged with the Palm Pilot PDA and whose purpose was to train users to master that device's handwriting interface.

representation of Link, which fans where [*sic*] quick to use as a ruler for comparison to the NPR [i.e., non-photorealistic rendering] style” (15). The realistic gameplay and immersive three-dimensional environments of *OoT* seemed to demand depiction in an equally realistic graphical style.

The difference between the three-dimensional photorealistic style of *OoT* and the cel-shaded style of *TWW* might be framed as a difference between “handwritten” and “transparent” styles, and such a comparison makes sense given the history and the stylistic qualities of the cel-shading technique. Cel-shading, as its name implies, is directly inspired by traditional cel animation. The key distinguishing feature of the technique is that in place of three-dimensional modeling of light and shadow, cel-shading renders objects in a limited range of flat colors. Optionally, cel-shaded objects may be rendered with dark outlines. In short, then, cel-shading produces objects that appear to have been drawn with ink and paint, rather than rendered algorithmically.

The close connection of the cel-shaded style with drawing is emphasized in one of the first important games that used this style, *Jet Set Radio (JSR)*, released for Sega’s Dreamcast system in 2000.⁸ The game’s introductory sequence, which is presented in comic book fashion, posits that the player characters in this game are members of the Rudies, rollerblade-equipped “street punks” who “roam the streets” of Tokyo “and cover the city with their personal graffiti, claiming that it is their way of expressing themselves to their world.” However, “the Metropolitan Government and the financial conglomerate, the Rokkaku Group” have started to crack down on this subversive behavior. Therefore,

⁸ This game was released in North America under the title *Jet Grind Radio*. A sequel, *Jet Set Radio Future*, was released for the Xbox in 2002, and a Game Boy Advance port of the original game appeared in 2003; this latter is the only version of the game I have actually been able to play.

in each of the game's levels, the player skates around the streets of Tokyo collecting spray cans and using them to tag buildings and objects, while running from police officers and members of rival gangs. *Jet Set Radio* depicts "tagging" as both an expressive and a subversive act, as a way of maintaining one's distinctive identity in the face of authoritarian repression.⁹ The game's emphasis on creativity and expressivity is reflected in its graphic style and its interface. Since the game's plot revolves around a non-realistic means of visual representation, its use of a non-photorealistic graphic style is clearly an appropriate choice, as Brett Nicholls and Simon Ryan observe:

The aesthetic style of this game sets it apart from the realist-orientated visual regime to be found in many contemporary simulation games. [...] The graphic style of *JSRF* has been a point of contention in on-line discussions, and noted in interviews with the game's producer, Takayuki Kawagoe, as "driving towards a very different feel of gaming". . . . The cel-shaded graphic style resists graphic realism and simulation, and serves as a visible marker of the messiness of thirdness (n.p.).

In cel-shading, then, lack of transparency is not a bug but a feature. Rather than trying to achieve immersive realism, the cel-shaded style celebrates the expressive act of drawing.

***Jet Set Radio* and the Handwriting Interface**

Jet Set Radio is also comparable to *Ōkami* and its successors in another important way. Its interface attempts to simulate the creativity of tagging by allowing the player to engage in creative and expressive behaviors comparable to those of the player characters. All three versions of the game include a "tag editor", which allows the player to use a crude paint program-like interface to design the tags displayed during

⁹ However, the game is careful to specify that this is only true in the gameworld and not in real life. The GBA version begins with a disclaimer that states "Graffiti is art. However, graffiti as an act of vandalism is a crime [...] Sega does not condone the real life act of vandalism in any form."

gameplay. The Dreamcast version originally allowed players to share tags via an online service, thereby exposing their creative acts to a wider audience, although this functionality has now been discontinued (“Jet Set”).

However, the game’s simulation of the experience of writing graffiti is less successful. To explain why, I invoke Alexander Galloway’s notion of the “expressive act.” Along with move acts, expressive acts are one of two types of “diegetic operator acts,” which are one of the four “moments” or categories into which Galloway classifies gaming acts. The definition of the expressive act is that it “exert[s] an expressive desire outward from the player character to objects in the world that are deemed actionable” (Galloway 24). In other words, the expressive act is a specific action that the avatar performs upon some object in the gameworld; typical examples include shooting enemies, opening doors, talking to non-player characters, etc. In order to direct the avatar to perform an expressive act, the player interacts with the game’s control mechanism in a particular predefined way, such as by pressing a button or moving the joystick. Thus, the expressive act has two components: an act performed by the avatar within the gameworld, and an act performed by the player in the real world, which prompts the performance of the avatar’s act. “[W]hile there is an imaginative form of the expressive act within the diegesis of the game, there is also a physical form of the same act” [Galloway 2006 25]. Often a game’s control mechanism will be designed in such a way that the “physical form” of an expressive act resembles or simulates the “imaginative form” of that act. As a simple example, the light gun shooter game *Duck Hunt* (Nintendo, 1984) was packaged with a controller in the shape of a toy gun, so that the avatar’s act of firing a gun at a duck (imaginative form) was prompted by the

player's physical act of pulling the trigger on the toy gun. Similarly, driving games often feature a controller shaped like a steering wheel. Often, however, the physical and imaginative forms of the expressive act have much less in common. For example, in very many games the player is asked to press buttons in order to direct the avatar to perform acts which are entirely dissimilar to pressing buttons, e.g., jumping, punching or kicking.

All versions of *JSR* involve a similar disjunction between the physical and imaginative forms of the expressive act of tagging. The player of *JSR* executes tags by performing various motions with the analog stick, which become increasingly complex as the game progresses. In the version for the GBA, which lacks an analog stick, the player instead inputs commands with the directional pad (D-pad). This means that the physical form of the act of drawing a tag is much less complex than, and physiologically dissimilar to, the imaginative form of that act. Therefore, the handwriting interface is not the core mechanic of the game but merely a recurring minigame, and the player spends the bulk of the game time skating and avoiding police. Moreover, drawing a tag involves little if any actual expression on the part of the player, since in order to draw a tag, the player simply has to perform predetermined analog stick or D-pad movements in a predetermined order. Whereas tagging, according to the game, is an act that expresses the unique personality of the tagger, the game's tagging interface offers no opportunity for the player to express any individual uniqueness. Even if the player is drawing a tag s/he designed, the player has no ability to affect the way in which that tag is executed.

Thus, although *JSR*'s plot emphasizes creativity and self-expression, its handwriting interface is not implemented in a way which is consistent with those values.

This is not a crippling problem because handwriting is not the core mechanic of *JSR*; it's essentially a skating game, in the mold of the *Tony Hawk's Pro Skater* series, which uses handwriting as a gimmick or as a non-optional minigame. However, this game's minimal handwriting interface provides a useful model against which we can measure other attempts to simulate handwriting in a video game context. The first such attempt I will discuss is *Ōkami*.

***Ōkami* and the Celestial Brush.**

As noted above, *Ōkami* resembles a 3D *Zelda* game in its gameplay and in the style of its environments. The player character of *Ōkami* is Amaterasu (nicknamed "Ammy"), the Shinto sun goddess incarnated as a wolf. Her¹⁰ mission is to defeat the demons plaguing the land of Nippon (日本), and to repair the damage that the demons have inflicted upon the land. In *Ōkami*, as in *OoT*, the player spends most of the game exploring three-dimensional environments (divided into dungeons and overworld areas), fighting enemies, collecting treasure, solving puzzles, and interacting with NPCs.

However, like *TWW*, *Ōkami* employs the cel-shaded style, and it does so in a particularly distinctive way. While the game's environments are three-dimensional, objects and characters in those environments are two-dimensional. Walking around them does not reveal different perspective views of them. Objects and characters tend to have thick black outlines (Figure 6-6), which contributes to the perception that they

¹⁰ Amaterasu's gender is a matter of much confusion. The mythological Amaterasu is unambiguously female, but the designers of *Ōkami* have explicitly stated that the Amaterasu of the game is genderless. In the English version of the game, Amaterasu's gender is typically glossed over. The character is occasionally referenced with female pronouns, but this is an artifact of translation, since gender-specific pronouns are harder to avoid in English than in Japanese. Again, in *Okamiden* (discussed below), Amaterasu is clearly identified as female and "her" "son" Chibiterasu as male, but this may be another artifact of translation. For convenience, I will refer to Amaterasu as female and Chibiterasu as male, but I do so under erasure.

are *drawn* rather than rendered in 3D – and that they are drawn in ink, which is a traditional medium of both painting and writing in Japan. More generally, the graphics are inspired by the traditional East Asian art of ink painting, known in Japan as *sumi-e*, a highly non-photorealistic style of artwork. The game augments this effect of two-dimensionality in its extensive use of nondiegetic imagery and text and in its emphasis on the visual similarities between words and images. Not only is there a heads-up display, but word balloons, thought balloons, and emanata frequently appear over characters' heads, and banners bearing the names of adjacent areas can be seen in the sky. When characters are seen from afar, a thought balloon containing the henohenomoheji symbol appears above their heads (Figure 6-7). This traditional Japanese symbol consists of seven hiragana characters arranged in the shape of the face; its name comes from the pronunciation of the characters. The seven characters making up the henohenomoheji symbol are meaningless in this context – they don't spell anything when arranged in this order – and so the henohenomoheji employs these characters purely on account of their graphic properties. Other Japanese characters often appear onscreen. When the player successfully executes a brush technique, this is indicated by the appearance of a giant Japanese character (5-8). In combat, other Japanese characters when a player deals or receives damage or when an enemy successfully blocks an attack. For players like myself who cannot read Japanese, these characters are semantically meaningless. Yet Capcom chose not to replace them with English words for the North American localization, perhaps because the graphic appearance of the characters is more important than their meaning. And indeed these characters are visually striking; they appear to have been rendered with great care (cf.

Figure 6-8). Sometimes, such as when the player is executing attacks quickly, the characters flash by too quickly to be seen, yet they still contribute to the overall aesthetic of the battle.

One final way in which *Ōkami* resists transparency, and gestures toward handwriting, is by creating the impression that the gameworld is literally rendered with ink on paper. As noted above, the game's environments and characters look as if they were painted with ink, largely because of their heavy black outlines. A paper filter is applied on top of everything in the gameworld, giving all the game's objects the texture of rice paper. This filter is especially visible during blank loading screens and on white surfaces, including the protagonist's fur.¹¹ In the sequence that plays before the game's title screen, a brush held by an offscreen hand literally draws the village of Kamiki into existence: as the brush draws buildings and other objects, they take on solid form. Explicit references to paper appear throughout the game. One minor villain, Tobi, is an animated slip of paper, which gets erased after being defeated by Ammy. Another minor character, the dragon god Yomigami, is partly real and partly a drawing: its tail emerges out of a paper scroll on which a tail is drawn (Figure 6-9). One optional subquest involves a little girl who draws pictures on the ground and a kimono maker who is in need of new designs. When Ammy gets some charcoal for the girl to use in her artistic efforts, she creates patterns which Ammy can then give to the kimono maker. Finally, drawing plays a crucial role in the climax of the game. In the final battle, Ammy is defeated by the final boss, Yami. Meanwhile, however, Ammy's sidekick Issun has been distributing drawings of Ammy to all the people of Nippon. Seeing the drawings, the

¹¹ One of the significant differences between the PS2 and Wii versions of the game is that the paper filter is much less prominent in the Wii version.

people realize that Ammy is the goddess Amaterasu and pray to her, providing her with the strength she needs to defeat Yami. In Amaterasu's world, drawing is the ultimate source of power and salvation.

This is also true in a more literal sense, as we will see when we examine the other aspect that distinguishes *Ōkami* from *OoT*: the Celestial Brush. When the player holds the R2 button, the screen is covered with a paper-like overlay. The player can then use the right analog stick to draw on the screen with an ink brush – the so-called Celestial Brush – and the player's drawings have various effects on the gameworld (Figure 6-10). As the game's narrative progresses, the player acquires various "brush techniques," each of which allows the player to influence the gameworld in some specific way by drawing a particular pattern on the screen. For example, the Power Slash technique allows the player to slash enemies or cut stationary objects in half by drawing straight lines across them. The Bloom technique enables the player to make plants grow by drawing circles around them. Other techniques allow the player to manipulate fire, water and electricity, create paths up sheer walls, turn day into night and vice versa, etc.

The Celestial Brush differs from an actual ink brush in many ways, as will be discussed below (including, notably, the impermanence of the designs it creates: when the player executes a drawing that doesn't correspond to any of his/her brush techniques, the ink simply falls off the screen). Taken at face value, however, the purpose of the Celestial Brush is to emulate or simulate an actual ink brush, which, in East Asian culture, is the most traditionally privileged tool of both writing and drawing. Instead of being a simple remediation of an ink brush, however, the Celestial Brush is a sort of fantastic apotheosis of the ink brush. Its drawings have even greater power,

persistence, and materiality than actual ink drawings, because they exact concrete effects on the gameworld. This, however, does not indicate that the Celestial Brush is different in kind from an ordinary ink brush. The player is supposed to see the Celestial Brush not as a drastic alteration of the functioning of the normal ink brush, but as an unleashing of a magical potential that was always already latent in the normal ink brush.

Let me explain how exactly this works. When the player uses a brush technique successfully, he or she leaves a *permanent trace* on the game's diegetic world, a trace which often remains visible for the remainder of that playthrough of the game.¹² In *Zelda*, when the player uses a bomb to destroy a wall, s/he is merely manipulating an item that already existed in the gameworld. In *Ōkami*, by contrast, the player accomplishes the same effect by drawing a circle on the wall with a slash through it (the Cherry Bomb brush technique), creating a bomb which then explodes and destroys the wall. By drawing on the gameworld, the player changes it. This is a standard example of the fantasy of handwriting. In *Ōkami*, the illusion is that the player's drawings physically affect the world. Instead of being merely inert traces of ink on paper (or, really, not even that), the player's drawings *do stuff*, adding new objects to the world or changing the world permanently in other ways. Compared to *Felix* or *Harold and the Purple Crayon*, *Ōkami* invokes the fantasy of handwriting in a slightly less literal sense. Instead of actually coming to life, the player's drawings exert a more indirect form of influence on the gameworld. For example, when Cherry Bomb is used, the drawing itself does not explode (as would presumably happen if Harold drew a bomb). Instead, the drawing

¹² Sometimes. Some brush techniques have permanent effects; for example, when a player uses Cherry Bomb to blow up a wall, for example, the hole in the wall persists for the remainder of that playthrough. Other effects, however, are more temporary; for example, when the player destroys objects using Power Slash, those objects are often restored almost immediately.

summons a bomb into existence, one which resembles the drawing but is not identical therewith. In *Ōkami*, drawings *cause* things to happen rather than actually *being* things. This also implies that when a player executes a drawing successfully, the drawing itself vanishes; the magical effects produced by the drawing remain, but the drawing itself is gone. However, the game doesn't dwell on this fact; it encourages the player to think that when s/he uses the Celestial Brush, s/he is literally drawing or redrawing the world.

It makes perfect sense that this world is susceptible to being redrawn or repainted, since, as we have seen, the world of *Ōkami* is composed of ink and paper. In a world where everything is drawn or painted, the ability to redraw and repaint the world is equivalent to godhood. Appropriately, then, the hero(ine) of *Ōkami* is a goddess. Amaterasu, the game's protagonist, is the sun goddess, incarnated in the form of a wolf. The Amaterasu in the game is not precisely identical with the Shinto sun deity after whom she is named; for example, as noted above, there is no question as to the mythological Amaterasu's gender.¹³ Nonetheless, the Amaterasu in the game is explicitly identified as the paramount deity of her world: other characters address her as "origin of all that is good and mother to us all." If the world is made up of paper and ink, then to inscribe with ink on paper is literally to remake the world. Amaterasu exercises the same power that's enjoyed by Felix in *Comicalamities* and by Bugs in *Duck Amuck*: the power to remake the world by manipulating the material that composes it. Since Amaterasu is a benevolent deity, however, she doesn't use this power to the same

¹³ I am tempted to speculate that the game's designers sought to distinguish their version of Amaterasu from the "real" one in order to avoid potential accusations of blasphemy, but I have no evidence of this.

mischievous ends as Bugs or Felix (with some rare and trivial exceptions).¹⁴

Amaterasu's task is to return peace to the land of Nippon by defeating the demons that seek to conquer it. These demons have ruined the land's fertility, cursed the magical trees that protect the people, and threatened the peaceful existence of Nippon's people. Amaterasu and her sidekick Issun are called upon to defeat the demons and repair the damage they have inflicted on Nippon, and they are uniquely equipped to do so because Amaterasu possesses the power of the Celestial Brush. Both literally and metaphorically, Amaterasu's job is to recreate the world by redrawing it.

From the player's perspective, this means that the game gives the player to draw things into existence, to create objects *ex nihilo*. The game frames this act of creation as an act of writing or drawing. Japanese audiences would be expected to recognize the Celestial Brush as the characteristic tool of an artist working in paper and ink. In traditional East Asian culture, the ink brush is one of the primary tools used in the creative visual arts of calligraphy and ink painting. Western audiences may not understand the ink brush as a writing and drawing tool in quite the same way, since in Western culture the corresponding privileged writing and drawing implements are the pencil and the pen. However, the game clearly expects the player to understand the use of the Celestial Brush as a form of writing. For example, Amaterasu's diminutive sidekick, Issun describes himself as a "wandering artist," and his purpose in accompanying Amaterasu is to complete his artistic education by learning all the brush techniques. In this game, then, to use the Celestial Brush is to create or recreate the

¹⁴ *Ōkami* is therefore notable for its positive moral message. In a list of "The Top 10 Lessons Taught by Video Games," one fan put *Ōkami* in the top position, observing: "No other game comes anywhere close to portraying benevolence as *Okami*" [*sic*].

world by *painting* or *drawing* it. Moreover, in *Ōkami* there is no clear distinction between drawing and writing, between what Krieger calls “natural” and “artificial” signs. In Japanese culture the formal and cultural distinction between painting and calligraphy is far less clear than in Western culture. These two arts use similar tools and artistic techniques, and they both enjoy significant cultural prestige. The latter, in particular, is a much more privileged art form in East Asian than in Western culture, where it has traditionally been considered only a very minor art.¹⁵

However, the resemblance of *Ōkami*'s brush techniques to writing is clear. In using the Celestial Brush, the player draws on the screen, but s/he draws designs that are intended to be easily repeatable and that have only a conventional resemblance to the things they represent. For example, in order to turn day to night, the player draws a crescent shape in the sky to represent the moon, rather than a realistic rendering of the moon. Because of their weakly mimetic nature and their repeatability, the brush patterns in *Ōkami* can be understood as *letters* or *graphic characters* as well as pictures; they are more indexical and symbolic than iconic. The use of the Celestial Brush may therefore be defined as a process of handwriting, to the extent that it involves the use of a writing tool, writing surface and writing medium to create signs which are susceptible to being read, rather than purely iconic. To the extent that these signs also take on an independent existence and affect the gameworld in permanent ways, *Ōkami*'s Celestial Brush represents a *fantasy* of handwriting.

¹⁵ All these claims are effectively common knowledge. I cite them not to emphasize the differences between Western and East Asian concepts of handwriting – a topic which is outside the scope of this project – but simply to emphasize the extent to which this game blurs the distinction between writing and drawing.

***Ōkami* as Uncritical Fantasy of Handwriting: General Problems**

However, *Ōkami* presents a fantasy of handwriting which is primarily uncritical and restorative. There are crucial differences between the game's handwriting interface and actual handwriting, differences which the game does not acknowledge. Some of these differences have already been noted (e.g., that drawings made with the Celestial Brush instantly disappear, even when successfully executed), but others still need to be mentioned.

In the first place, *Ōkami* fails to allow the player to use the Celestial Brush in a genuinely personal, self-expressive way. To put this more precisely, *Ōkami* doesn't enable the expression of subjective uniqueness, which, as I argued in the introduction, is the key to the fantasy of handwriting. Instead of enabling the player to use the Celestial Brush in a way that reflects his or her personal idiosyncrasies, *Ōkami* allows the player to use it only in such ways as the game dictates. In the first place, the game's puzzles typically only have a single solution each, so the player rarely if ever gets to choose which brush technique to use in order to solve a given puzzle, and the game has no way to reward players for using brush techniques in creative ways not thought of by the developers. Moreover, not all brush techniques are equally effective in combat; the player is effectively required to use certain predetermined brush techniques to fight particular enemies. There are only two occasions in the game in which the player has complete freedom to draw anything he or she wants, and in both of these occasions the outcome is the same no matter what the player draws. In the Moon Cave, Amaterasu disguises herself with a mask made of a blank sheet of paper, and the player is given the opportunity to draw a design of his or her choice on the mask. However, the mask is equally effective as a disguise no matter what the player draws. In the village of

Ponc'tan, the player can optionally purchase a seal from an old woman named Mrs. Seal. She asks the player to provide a design for the seal, saying "This design is an expression of your inner self." This underscores the association between the infinite freedom of drawing and the subjective expression that this freedom makes possible. However, the seal has no effect on gameplay; it doesn't appear until at the end of the closing credits.¹⁶ Even in these instances, the clunkiness of the user interface made it difficult for me, at least, to draw the design I had in mind. I suggest that this factor has something to do with this game's lack of graphic creativity – in contrast to its emphasis on creation. The difficulty of executing brush techniques correctly with the analog stick may explain why the game has a fairly limited repertory of brush techniques and why the player has little choice as to which of them to use at a given moment.

In the second place, when the player uses the Celestial Brush, in a sense s/he is actually producing differential signifiers, signs which are valued according to their difference from other signifiers rather than according to their inherent, immanent properties. The particular way in which a player executes a brush technique is a matter of subjective choice. For example, when drawing an O, the player is free to make it as large or as small as s/he wants, and the O can have any shape as long as it forms a closed circle. However, such differences in individual expression generally don't have any effect on gameplay (with a few exceptions: when the player uses Galestorm, the wind blows in the direction in which the symbol is drawn, and with some brush

¹⁶ Purchasing the seal has literally no effect in the Wii version, since the closing credits were removed from that version of the game entirely. According to a Capcom spokesperson, "The credits were removed because they were a pre-rendered movie that contained the Clover logo. We have no legal right to use the Clover logo in a game they were not involved with directly. We also didn't have the source to the credit movie itself, so we couldn't just use it and remove the Clover logo" (qtd. in Purchase n.p.). In a game so deeply concerned with authorship and self-inscription, this absence of credits is deeply ironic, and designer Hideki Kamiya publicly expressed regret that the credits were removed (Remo).

techniques, a larger drawing produces a more powerful effect at the expense of consuming more of the player's ink reserves). There are any number of ways to execute the Galestorm design, but ultimately all the game checks for is whether or not the image drawn by the player was sufficiently similar to the Galestorm pattern stored in the game's memory; if so, then the Galestorm effect is produced, and if not, nothing happens. Individual idiosyncratic touches that the player adds to the design are not relevant to the success of the drawing, or to subsequent gameplay.

Although I am unable to determine precisely how *Okami's* handwriting recognition works, I assume it operates on the same general principles as other handwriting recognition systems. According to two experts in the field, handwriting recognition is “the task of transforming a language represented in its spatial form of signifying marks into its symbolic representation” (Plamondon and Srihari 64). It operates by recording the temporal and spatial parameters of handwritten traces, preprocessing them to eliminate noise, and then comparing them, by one or more of various methods, to a set of predefined letterforms stored in memory.¹⁷ Its purpose is to extract the semantic value of a handwritten message, precisely by abstracting out the excessive and idiosyncratic qualities that make handwriting an object of nostalgia: “[H]andwriting recognition and interpretation are processes whose objectives are to filter out the variations so as to determine the message” (64). In *Okami*, then, the player appears to be creating immanent, material signs/things, but from the game's perspective, all the player is doing is producing differential signifiers. *Okami's* handwriting interface is far more robust than that of *Jet Set Radio*, and plays a far more important role in gameplay,

¹⁷ On the specific algorithms that handwriting recognition systems use to identify handwritten characters, see Tappert et al. 791–793.

but ultimately the two interfaces both exert similarly restrictive effects on the player's ability to express his or her idiosyncratic uniqueness.

This is a fundamental property with digital handwriting recognition, which we will return to throughout this chapter. In order for handwriting to be used as a source of input for digital processes, it has to be digitized, which involves stripping out its immanent, idiosyncratic aspects and reducing it to an example of a differential pattern. This doesn't mean that digital attempts to remediate handwriting are necessarily doomed to failure; it does mean, however, that a fully reflective approach to the digital fantasy of handwriting must somehow take into account the gap between the handwritten and the digital. *Ōkami* fails to do this and can therefore be categorized as an uncritical example of the fantasy of handwriting. Despite its praise of creativity, it ultimately ignores the ways in which handwriting interfaces are constitutively unable to completely satisfy the desire for creativity.

***Ōkami* as Uncritical Fantasy of Handwriting: Specific Problems.**

Again, this problem is perhaps inherent to the technology of handwriting recognition, and is therefore not unique to *Ōkami*. However, there are also specific issues with *Ōkami*'s remediation of handwriting. Compared to other games that will be discussed below, *Ōkami* offers a less effective means of digitally simulating the experience of handwriting.

The first problem with *Ōkami*'s remediation of handwriting is that it tries to balance two-dimensional and three-dimensional modes of interaction, and doesn't completely succeed; tensions often exist between the two-dimensional handwriting interface and the three-dimensional interface used for exploration and combat. *Ōkami* is an example of the tenth category in Mark J.P. Wolf's taxonomy of video game modes of spatiality,

the “interactive three-dimensional environment” (65). The view displayed onscreen at any given moment is only one of many possible 2D perspectives on a 3D landscape, and the player can freely rotate the camera at any moment to display a new perspective. However, when the player presses R2, the world becomes frozen into a static 2D configuration. The player can still rotate the camera while R2 is depressed, but this option becomes unavailable as soon as the player starts drawing. The conceit of “drawing” on the surface of the world implies a physical connection between the drawn line and a (conjectural) surface of inscription, and this connection requires the writing surface to be immovable (since *Ōkami* doesn’t take advantage of the exciting possibilities John Cayley explores in “Writing on Complex Surfaces.”) This means that brush techniques can only be executed successfully when the object that needs to be drawn upon is within the camera’s visual field. In other words, in order to execute a brush technique, the player needs to find a camera angle from which s/he can see the object to be drawn upon, or both of the objects in the case of the multiple brush techniques that involve drawing lines between two objects. Finding the right camera angle is often challenging, especially when one of the objects that needs to be connected is unusually small, and the game often has to take control of the camera away from the player in order to ensure that a brush technique can be executed correctly. In rare but annoying cases, executing a brush technique properly requires using a camera angle which is suboptimal for the task the player is trying to accomplish. In *Okamiden*, the DS version of the game (to be discussed below), these problems are dealt with by removing the player’s ability to control the camera. For most of the game, the camera moves automatically and only when the game directs it to do so. This

means that the camera angle is always appropriate for whatever the player is trying to do. But it also means that *Ōkamiden* offers a less three-dimensional experience of space than its predecessor, since it removes the player's ability to determine the perspective from which s/he views the gameworld. In both games, the screen functions simultaneously as a two-dimensional writing surface and as a window into a three-dimensional world, and these two functions of the screen are often at odds with each other.

In the second place, the *Ōkami* interface is a highly abstracted, schematized simulation of writing with an ink brush, to the extent that it strips out the specific material features of the writing medium, writing surface, and writing tool. In *Ōkami*, the writing medium, the "ink", is entirely two-dimensional and immaterial. Being composed merely of pixels on a screen, it has none of the specific physical properties of real ink; it has none of the individual properties that distinguish one kind of ink from another, such as thickness, viscosity, texture, shininess, etc. Although these properties of ink might seem negligible, they play a crucial role in both the sensuous experience of the writing process and the quality of the finished product, and a professional calligrapher would pay careful attention to such physical parameters in choosing which brand of ink to use. (The quality of the inkstone, the surface on which the solid ink is mixed with water, is also of immense importance.) In *Ōkami*, all these physical parameters of the writing medium are abstracted out. The game similarly abstracts out the materiality of the writing surface. The paper in *Ōkami* is a purely two-dimensional surface with only one side and no thickness. Because of the paper veneer (mentioned above), the screen *looks* like a sheet of paper, but it lacks the tactile and haptic features of paper. There is

no haptic feedback when the player moves the Celestial Brush; the PS2 DualShock controller does have the capacity to supply vibration feedback, but the game neglects to use this functionality to simulate the feedback that results when a brush is moved across paper.

Finally, the Celestial Brush is a very different sort of writing tool from an actual ink brush. Clover Studios does succeed in making the Celestial Brush *look* like an ink brush. As the player moves the Celestial Brush, the brushstroke becomes lighter and coarser. With a real ink brush, the thickness of the stroke varies according to how many of the bristles are in contact with the paper. *Ōkami*'s Celestial Brush behaves in the same way, and this is an impressive visual effect; it gives the player an active sense of the physicality of the brush. On the other hand, it's equally clear that this effect is a mere simulation of what happens with actual ink and paper, because there is no actual physical contact between the brush and the rice paper. Moreover, again, there is no haptic feedback. In using the Celestial Brush, all the player is doing, essentially, is moving a cursor around on a screen.

A more serious problem, however, is that the physiological process of manipulating the Celestial Brush is very different from that of using an actual ink brush. The brush in *Ōkami* must be controlled with the left analog stick whatever the player's handedness. This is necessary because the buttons on the right-hand side of the PS2 controller are needed to control the brush, but it forces most (i.e., right-handed) players to draw with the non-dominant hand. More significantly, the left analog stick is controlled by the thumb, whereas an actual brush or pen is typically held between the thumb and either the index finger or the first two fingers. In contemporary controller practice, the

traditional function of the thumb is to press buttons. The ubiquity of mobile phones in present day Japan has resulted in a notable development and refinement of this function, as Sadie Plant observes:

The gentle touch involves holding the mobile in one hand and accessing the keypad with the thumb. These users are nimble, even ambidextrous, and often so proficient that they barely need to look at the keys as they make their rapid entries: their knowledge of the layout has become second nature. . . . Tokyo's keitai kids are known as oya yubi sedai, or the 'thumb generation': 'It's not only on the keitai (mobile phone) that they use them,' says one man in his early 20s, to whom today's teenagers are already alien creatures: 'they even point at things and ring doorbells with their thumbs.'

Because the thumb is usually assigned the function of exerting pressure, mobile phone users and video gamers use the thumb to send series of discrete signals by pushing buttons – in other words, to generate digital input. It could be argued, somewhat whimsically and reductively, that digital culture is “thumb culture,” to quote the title of Plant's study.¹⁸

What the thumb can't do is hold an object in a pincer grip, which is required in order to exercise the fine motor control required for handwriting. Because the Celestial Brush is controlled by the thumb alone, it can't be manipulated with the same precision as an actual brush or pencil. The PS2 analog stick is so short that the thumb can only exert a limited amount of leverage on it: the thumb can move only a limited distance before running into the palm of the hand. The limited responsiveness of the analog stick is a problem not only in *Ōkami* but also in other games such as first-person shooters

¹⁸ In that case, the culture of handwriting could be labeled as “between-my-finger-and-my-thumb culture.” I borrow this phrase from Seamus Heaney's poem “Digging,” which emphasizes the physical and laborious nature of handwriting and compares the poet's act of handwriting to his father's and grandfather's acts of digging with a spade. It begins “Between my finger and my thumb / The squat pen rests, snug as a gun” (Heaney 3).

(FPS), where precise control is essential.¹⁹ The analog stick has certain limitations as a tool for precise movement and control, especially when compared to the mouse and keyboard, which are the preferred control mechanism for desktop FPS games. Richard Ham, the developer of the FPS game *Brink*, said in an interview: “No matter how hard we work on it to make the perfect analogue [*sic*] stick controls – and as an aside we have got really good analogue stick controls – it is a poor man’s mouse at the end of the day” (Sterling). This is probably because the analog stick is anchored to the controller, whereas the mouse’s trackball or optoelectronic sensor is physically separate from any surface, meaning that the player has greater freedom to move it in any direction.

In *Ōkami*, the analog stick’s lack of responsiveness makes it difficult to execute intricate drawings. For example, it’s hard to draw diagonal lines at the correct angles, to make the endpoint of a line coincide with the start point, or to make parallel horizontal lines line up with each other, as is required by the Veil of Mist and Whirlwind techniques. When I try to use complicated techniques like Inferno (an infinity symbol) or Whirlwind (three parallel horizontal lines), I fail about half the time. The problem is exacerbated by the fact that I’m controlling the Celestial Brush with my non-dominant hand. I’m far from the only person who has these kinds of difficulties with *Ōkami*’s controls: on the popular TVTropes website, *Ōkami* is the first example given for the trope “Some Dexterity Required,” which describes the phenomenon whereby games demand an unfair level of physical dexterity from players.²⁰ All of this makes it difficult to

¹⁹ In fact, a company called KontrolFreek has introduced a product, the FPS Freek, that’s specifically designed to address this problem. The FPS Freek consists of a second pair of analog sticks that attach to the tops of the analog sticks of the PS3 or Xbox 360 controller, thereby doubling the lengths of the sticks and providing more leverage.

²⁰ The games criticized on this page also include several Nintendo DS games that make extensive use of stylus controls, such as *Trauma Center: Under the Knife*, *The Legend of Zelda: Phantom*

use the analog stick to execute intricate drawings, which is probably one reason why even the more complex of *Ōkami*'s brush techniques are fairly simple – especially in comparison to certain English-language letters, let alone Japanese characters.

In summary, then, *Ōkami* represents a specific, digitized, videogame-bound version of the traditional artistic technique of writing and painting with ink. In enabling the player to use this technique, *Ōkami* draws upon the association of the ink brush with creation and, less significantly, with creativity. However, *Ōkami* can't succeed in completely reproducing the effect of ink painting, because of the clunkiness of *Ōkami*'s interface, and because of certain inherent differences between ink painting and its digital remediation. If this does not render *Ōkami* an unsatisfying gaming experience, it's because the fantasy of handwriting is not the entire point of the game. It invokes the fantasy of handwriting not simply for the sake of doing so, but as a component of a more complete gaming experience. In other words, the player's satisfaction with *Ōkami* does not depend on the success or failure of its evocation of the fantasy of handwriting, i.e., of its effort to convince the player that s/he is actually writing objects into existence. This is because the game also provides other sources of satisfaction that are independent of the fantasy of handwriting, such as the satisfaction of exploring spaces and collecting treasures. *Ōkami* can't fully satisfy the desire to practice the fantasy of handwriting, both because of the specific inefficiencies of its handwriting interface and because of the intrinsic ways in which digital handwriting interfaces are generally unable to satisfy this desire. Nonetheless, it still offers a successful gaming experience; the

Hourglass, and *The World Ends with You* (to be discussed later). This is anecdotal evidence that analog control systems often require unusually high levels of precise dexterity – just like handwriting.

gaps between its handwriting interface and the fantasy of handwriting do not destroy the player's enjoyment of the game.

However, these gaps might become more significant if the fantasy of handwriting were presented as the entire point of the game – that is, if a game presented itself in such a way that its success or failure was predicated on whether it enabled the player to enact the fantasy of handwriting. This is exactly what occurs in *Scribblenauts* (5th Cell, 2009), a game for the Nintendo DS. In the next section we will see how this game invokes a restorative fantasy of handwriting in a video game context, and thereby reveals the inherently unsatisfying nature of such fantasies.

III. Scribblenauts: Write Anything*, Solve Everything

***Scribblenauts* and Handwriting**

Scribblenauts was released in 2009 to immense hype, becoming one of the DS's great commercial successes. Its popularity was such that a sequel, *Super Scribblenauts*, was released for the same platform a year later. Whereas the remediation of writing is only one part of *Ōkami*'s appeal to its audience, *Scribblenauts* explicitly presents itself as a game *entirely* about writing. The fantasy of handwriting is foregrounded in the game and in its paratextual materials, to such an extent that the player is invited to judge the game on the basis of whether this remediation succeeds or fails. *Scribblenauts* invokes the fantasy of handwriting in a brilliant and provocative way, and the game's commercial and critical success testifies to the power of the fantasy of handwriting among North American gamers. However, the game's presentation of the fantasy of handwriting is incompletely satisfying, insofar as that the game places limits on the player's ability to write objects into existence and to do so in an idiosyncratic,

unique way, and to this extent *Scribblenauts* ultimately reveals the contradictions inherent in the restorative fantasy of handwriting.

Scribblenauts revolves around a premise which is brilliant in its simplicity. When the player writes the name of any object, within certain limits, that object is created. In other words, if the player writes anything from “scissors” to “sewing machine” to “Cthulhu” (using either an onscreen keypad or a handwriting interface), that object appears in the gameworld. The player can then move it around with the stylus, and it can interact with other objects and with the player character. This simple premise creates the possibility of an arbitrarily large number of object interactions and puzzle solutions. *Scribblenauts*'s lexicon includes tens of thousands of words, so any common object the player can think of is quite likely to be included, creating the impression that the player's freedom of action is limited less by the game's lexicon than by his or her imagination and vocabulary.

The power to create objects by naming them is not unique to *Scribblenauts*. Every object-oriented programming language, by definition, gives the programmer the ability to define a class and then create instances of that class.²¹ Thus the core mechanic of *Scribblenauts* is one that is already implemented in numerous other software applications, most of which aren't games. *Scribblenauts* is relevant in the present context, however, because it frames the act of generating objects in terms of *writing* and specifically *handwriting*. The *Scribblenauts* player doesn't just create objects, but *writes* objects into existence.

²¹ On object-oriented programming, see Barnes, D. J, and M. Kölling, *Objects First With Java: A Practical Introduction Using BlueJ* (Pearson Prentice Hall, 2006).

This is evident in the name of the game, in its paratextual materials that show the player writing, and in the game's interface. In the first place, the *Oxford English*

Dictionary definition of "scribble" is:

1. trans. To write hastily or carelessly. **a.** To write in an irregular, slovenly, or illegible hand through haste or carelessness; also, to produce (marks, a drawing, etc.) or portray (an object) by rapid and irregular strokes like those of hurried writing. **b.** To write hurriedly or thoughtlessly, so that what is written is faulty in style or worthless in substance.

"Scribbling" can be done with any writing technology, and the verb can also refer to the content rather than the materiality of writing: the second *OED* definition reads in part "To write something hastily or carelessly, either as to handwriting or composition." However, the word clearly connotes writing by hand, and doing so in a carefree, enjoyable way. A *scribblenaut*, then, is one who writes quickly and playfully, by hand, as a means of exploration – or, by analogy with "astronaut," one who explores the realm of scribbles. In the second place, the game's paratexts make numerous references to handwriting. The player's avatar, Maxwell, is often shown holding a pencil (Figure 6-11). The game's logo is set in a font that is either handwritten or designed to emulate handwriting, as indicated by the fact that the two instances of the letter B look significantly different (cf. Figure 6-11). The game's packaging and the cover of the Prima Official Game Guide use the handwriting-based Comic Sans font, which mimics the stereotypical style of comic book letters. Finally, in the game itself, the visual motif of wide-ruled notebook paper, which appears on the handwriting interface screen, alludes to elementary school handwriting exercises (Figure 6-12).

Scribblenauts thus connects handwriting with childhood, and thus promises to return the player to an idyllic former state when handwriting represented a new way of expressing oneself both visually and linguistically. The DS itself is often denigrated as a

system for children, perhaps due to this very association of its handwriting interface with childhood (more on this in a moment) as well as to its large library of educational software. *Scribblenauts* seems to accept this characterization and to turn it into something positive, as indicated by one artistic response to the game (Munroe 2009). (Figure 6-13) Rather than disputing the male stick figure's claim that *Scribblenauts* is a "DS kids game" or his equation of "DS" with "kids," the female stick figure accuses him of pretentiousness. The point is that *Scribblenauts* is a "kid's game" in a positive sense. It partakes of the optimism of childhood and reminds the player of the moment of learning to write, which represented a breakthrough in the player's capacity for creative agency and self-expression. (This is, of course, restorative nostalgia, as it ignores that the study of handwriting is usually stigmatized in American culture as tedious busywork, and may only be remembered fondly in hindsight.) To put it another way, *Scribblenauts* presents itself as being fun for the same reasons that handwriting is fun; accordingly, one interviewer observed: "I think for the journalists specifically, it has to do with everyone at least on some level enjoying writing" (Sheffield).

***Scribblenauts* and the DS as Handwriting Interface**

Scribblenauts's association with handwriting is reinforced by the operation of the game's interface, which takes advantage of the unique platform-specific properties of the DS. A portable gaming system released in 2004, the DS is unique among such systems in that it features two screens (Figure 6-14). The top screen is a conventional LCD screen, while the bottom screen is overlaid with a resistive touchscreen which accepts input from a stylus or other pointing device. A resistive touchscreen consists of two sheets of electrically resistive material with a gap between them. When the stylus makes contact with the surface of the screen, the two sheets are compressed together,

creating an electrical impulse, and the X and Y coordinates of the location of the impulse are registered, allowing them to be used as input for various processes (“Capacitive or Resistive”).

Not all DS games require the use of the stylus at all. For example, *Final Fantasy IV* (2008) and *Dragon Quest V* (2009) use the stylus only for optional minigames. In some DS games – e.g., *The Legend of Zelda: Spirit Tracks* (2009) or *Dragon Quest IX* (2010) – the stylus is used merely as a pointing device, and the player uses it only to perform acts that Galloway would characterize as nondiegetic operator acts (e.g., selecting items from menus) or move acts (i.e., telling the avatar where to go) (Galloway 12, 22). In other DS games, however, using the stylus represents a more specific expressive act. The action expressed by using the stylus is often the act of using a tool, and the stylus often *represents* this tool, in the sense in which a theatrical prop sword “represents” a real sword. This is a crucial difference between the DS stylus and other video game control mechanisms. As we have seen, players always engage in some form of material engagement with the game’s control mechanism in order to direct their avatars to perform expressive acts; that is, the expressive act always has a physical as well as an expressive component. However, we have also seen that in most games, including *Jet Set Radio* and *Ōkami*, these two components of the expressive act are clearly differentiated: the player typically performs one type of physical act (e.g., pushing a button) to make the avatar execute a very different type of physical act (e.g., swinging a sword). By contrast, with the DS stylus, the physical form of an expressive act often resembles its imaginative form much more closely, because the player uses the stylus – an elongated, hand-held tool – to simulate an act that is performed using

just such a tool. A literal example of this occurs in *Trauma Center: Under the Knife* (Atlus, 2005), where the player uses the stylus as a scalpel, simulating the act of making an incision by “cutting” along a line drawn on a patient’s body. As a slightly less literal example, in *Grand Theft Auto: Chinatown Wars* (Rockstar Games, 2009), the player hotwires a car by using the stylus to unscrew the ignition switch. The player draws a circle on the screen, simulating the act of turning a screwdriver.

Other contemporary gaming systems – the Nintendo Wii, the Sony Move, the Microsoft Kinect – make similar use of analog control mechanisms in order to erase the gap between the physical and the imaginative form of the expressive act. For example, in *Kinect Sports* (2010), the player plays table tennis using his or her hand as a paddle, or throws a javelin by making the appropriate arm motion. However, the DS differs from these three platforms in that it requires physical contact with a two-dimensional control surface. Using the Wii, Kinect or Move entails making gestures in the air, whether with a control device or without. Using the DS entails making inscriptions on a surface. This makes the DS uniquely appropriate for the simulation of physical acts that involve engagement between a hand-held tool and a flat surface – and one principal example of such an act is *writing*, which I have defined in terms of the production of inscriptions on a surface by means of a hand-held tool. More generally, using the DS stylus *feels* like handwriting. This perception is reinforced by the material qualities of the system itself, which is about the size and shape of a small paperback volume. Some games (e.g., *Hotel Dusk: Room 215* [Cing, 2007] or certain sequences in *Mario and Luigi: Bowser’s Inside Story* [Nintendo, 2009]) even ask the player to hold the DS sideways, so that the

player feels he or she is holding a small datebook or planner in one hand, and writing in it with the other.

The DS is thus particularly well suited to the simulation of handwriting and the promulgation of fantasies of handwriting, and *Scribblenauts* uses the DS for exactly this purpose. In *Scribblenauts*, in order to name an object, the player can choose between two interfaces: an onscreen QWERTY keyboard or a handwriting interface. When using the latter interface, the player writes letters by inscribing them one at a time on the touchscreen, which displays an image of a sheet of notebook paper (cf. Figure 6-12). *Scribblenauts* thus insists on the resemblance of the stylus-touchscreen interface to the older writing technology of pen and paper, emphasizing that the former interface is a remediation of the latter. Ironically, in *Scribblenauts* the handwriting interface is less user-friendly than the keyboard interface. Writing letters one at a time is far slower than selecting letters from an onscreen keypad, and this problem is compounded by the game's poor handwriting recognition. Certain letters are very difficult to execute correctly, and this is made worse by the game's lack of instructions on how to draw each letter. Therefore, the game doesn't successfully encourage the player to use the specific writing technology that the DS seems uniquely equipped to enable. Nonetheless, even if *Scribblenauts* does not effectively support the handwriting interface, in some sense the presence of that interface is what makes *Scribblenauts* thinkable. In developing *Scribblenauts*, 5th Cell's designers were undoubtedly motivated by the unique affordances of the DS platform, including its capacity to simulate handwriting. Interviews with *Scribblenauts* director Jeremiah Slaczka testify to this. In an

interview about his previous DS game, *Drawn to Life*, which asks the player to draw on the screen, Slaczka said:

Well, we wanted to come up with a game that really utilized the DS's main features, and the touch screen was the obvious choice. From there, we kept coming up with different ideas that used the touch screen in a unique way until, finally, we came up with the thought, "What if what you draw, comes to life!" (Jensen n.p.)²²

Scribblenauts, where what you *write* comes to life, is obviously the next logical step. Even if *Scribblenauts* does not make the most effective use imaginable of the DS's capacity to remediate handwriting, the existence of this capacity is what makes the game possible.

Of course, *Scribblenauts* offers the player something more than handwriting itself provides, since it turns handwriting into a means of generating magical effects. However, the suggestion is that the differences between actual handwriting and the *Scribblenauts* interface are differences of degree rather than kind. If *Scribblenauts* gives the player the magical power to summon objects into existence (or the same level of existence enjoyed by the other preexisting objects in the gameworld), then this is precisely what handwriting does, according to the classic fantasy of handwriting. In such fantasies, handwriting means writing *things*, creating written signs that are also objects and that have the ability to *do stuff*. *Scribblenauts* therefore enacts the same fantasy scenario we have seen in texts like *Felix, Harold and the Purple Crayon* or *Ad Verbum*.

²² I'd like to discuss *Drawn to Life* in a future revision of this project, but space limitations prevent me from addressing it here. At the time of its release, *Drawn to Life* was praised for being innovative, but reviewers held that its handwriting interface was overly restrictive and poorly implemented (Navarro n.p.). Moreover, unlike in *Scribblenauts*, the player's choice of what to draw doesn't significantly affect gameplay; *Drawn to Life* is effectively a platformer (in the style of the 2D *Super Mario* games) that uses drawing as a gimmick, and therefore it teaches us much the same lessons about the handwriting interface as *Ōkami* does. Compared to *Drawn to Life*, *Scribblenauts* features a handwriting interface which is both more integral to gameplay and offers greater opportunities to creativity, and therefore *Scribblenauts* represents a more significant test case for the question of whether the DS can successfully invoke the fantasy of handwriting.

In *Scribblenauts*, as in *Ōkami*, this scenario is presented not as an uncanny transformation of the nature of handwriting, but as a liberation of the magical potential that was always latent in handwriting to begin with.

Again as in *Ōkami*, handwriting in *Scribblenauts* is not exactly identical to object creation; there is a temporal gap between the act of writing an object's name and the appearance of that object. For example, when the player writes "shovel," each letter of the word vanishes from the screen once written (the game's handwriting interface allows the player to write only one letter at a time), so the handwritten word never even exists as a complete entity, and all of its constituent letters are already gone by the time the shovel appears. The inscription of the object's name and the creation of the object itself are two separate events, despite being causally linked to each other. However, the game's basic conceit is that these two events are actually one – that the name of an object is *identical* with that object. For example, when the player writes "shovel," a simulated shovel comes into existence and, within the diegetic world, has at least as much solidity and permanence as the written word "shovel" would in the real world. The game suggests that this simulated object does not merely replace, but is instead *identical* to, its handwritten name. By toggling an onscreen magnifying glass icon, the player can tap any object to see its name. When this is done with a player-created object, the game displays the name that was used to create that object, even if it has other possible names. For example, if I write PACHYDERM, then toggle the magnifying glass and click on the creature, I see the name PACHYDERM, even though the beast itself looks more like a RHINO. If I then write a RHINO and use the magnifying glass to

see its name, it remains a RHINO – even though it looks identical to the PACHYDERM, since both beasts are represented by the same sprite.

As we've already seen (e.g., in *Ad Verbum* or *WordWorld*), this scenario represents another variation on the fantasy of handwriting. In normal contexts of writing – that is, actual-world contexts of writing – there is a clear-cut distinction between the written sign and its referent, as suggested by Saussure's famous example of the word "tree." To write "tree," as I just did by typing its characters, is not to make or plant an actual tree. The materiality of writing is distinct from the materiality of that which is written about. In *Scribblenauts*, however, words are *identical* with their referents. To write a word is to bring into existence the thing that the word designates.²³ And vice versa: to make a thing is also to inscribe the name of that thing. Ian Bogost gestures to this point when he observes that "the game does much more than just recognize terms: it translates each typed word into an object with different properties and behaviors" (n.p.). In *Scribblenauts*, words are *operationally, literally* things – somewhat like the question marks in *Felix*, which operate as both expressions of affects and objects that can be manipulated within the storyworld. Every object in *Scribblenauts* has a unique name which is inextricably linked to the object, to the extent that the object literally *is* the name and vice versa.²⁴ Thus, to transform an object is also to transform its name.

²³ Obviously, "words" in this context are limited to nouns. *Scribblenauts* does not recognize verbs, adverbs, prepositions, etc. "Write Anything" should be understood as "Write *Anything*." *Super Scribblenauts* adds the option of writing adjectives.

²⁴ Another video game that employs a similar mechanic is the Squaresoft role-playing game *Rudra no Hihou* (1996, fan-translated as *Treasure of the Rudras*), in which the player creates magic spells, or "mantras," by entering words of up to 12 letters into a "grimoire." Every word of 12 or fewer letters is a mantra and has some sort of effect when used in battle. However, most of the possible mantras are useless, so the player has to learn what mantras are actually useful by reading in-game texts, or by writing down the mantras that enemies use. See also Andrew Plotkin's *The System's Twilight*, which features puzzles that require the user to change objects into other objects by subjecting them to various linguistic operations that alter the letters of their names. As a simple example, in one such puzzle the

Although *Scribblenauts* doesn't give the player the option to rename objects, it does allow the player to do the reverse, transforming objects into other objects, and when the player does this, it also changes the name displayed when the magnifying glass icon is used. Watering an ACORN turns it into a TREE; using a BRUSH to interact with a CANVAS turns it into an ART.

In *Scribblenauts*, then, to write is to create *things*. Moreover, *Scribblenauts* promises the player that by writing objects into existence, s/he can express his or her idiosyncratic existence and uniqueness; therefore, *Scribblenauts* represents an example of the restorative fantasy of handwriting. *Scribblenauts* appeals to the graphological understanding of handwriting as the external manifestation of the internal idiosyncracies and compulsions of the self. As with the IF interface (see above, p. 121), the *Scribblenauts* player has the ability to write any word at all, which creates the illusion, at least, that the player has unlimited interactional freedom. The game's slogan, "Write anything. Solve everything", explicitly makes this claim. Of course, as in IF, there is merely an *illusion* of total interactional freedom: the *Scribblenauts* lexicon explicitly excludes certain categories of words (e.g., proper nouns, vulgarities, and references to drugs and alcohol, and even those words that *Scribblenauts* does include are not always implemented. However, the illusion of interactional freedom is even stronger in *Scribblenauts* than in a typical IF game, since *Scribblenauts* contains vastly more nouns than even the largest IF game has verbs.²⁵ It is unlikely the player will be able to think of

player is given the word FISH, but some unruly outlaws demand to see a FIST in order to let the player by, so the player has to subject the word to an operation that turns H's to T's.

²⁵ This is probably because nouns are much easier to implement than verbs. In *Scribblenauts*, adding a new noun to the game merely entails designing a sprite for the object represented by the noun, and assigning properties to the object. In an IF game, adding a new verb requires defining the verb's

a noun that doesn't belong to one of the proscribed categories but isn't recognized. Indeed, when the game was demoed at E3 in 2009, the staff of joystiq.com "developed ten words we were certain would stump the game's seemingly infinite vocabulary" (McElroy). It turned out that nine of the ten words were included, and the 5th Cell staff promised to include the tenth word, PLUMBOB, in the finished game (this promise was kept). Again as in *IF* – and, if anything, to a much greater extent – this perception of total interactional freedom creates the further perception that whatever the player writes is absolutely specific to him or her.

Moreover, the player's choice of what objects to create is actually relevant to gameplay. In *Ōkami*, the player is usually constrained to use the Celestial Brush only in such ways as the game dictates, but in *Scribblenauts*, the player has much more leeway as to what objects to create. All of the game's puzzles have multiple solutions, so players are encouraged to find solutions that involve lateral thinking or that reveal their personal preferences. (As a simple example of the latter type of solution, suppose a puzzle requires a player to kill an enemy. Some hypothetical player might choose to do so by summoning CTHULHU, simply because she is a fan of Lovecraft.) Indeed, the game even actively rewards creativity and lateral thinking. After each of *Scribblenauts*'s levels is completed once, it can be replayed in "Advance Mode," which challenges the player to complete the level three times without reusing any words. By challenging the player to find multiple ways of meeting a given constraint, Advance Mode promises to

interactions with all the types of objects in the game. See Nelson and Short 308-309 and 351 for examples of the effort required to define new verbs in *Inform 7*.

activate the player's creativity. It challenges the player, not just to solve the puzzle, but to solve it in ways which are specific and idiosyncratic to him or her.

Scribblenauts therefore promises to offer the player the freedom to express his or her unique creative potential, and it reinforces this promise by drawing on the preexisting association of handwriting with subjective uniqueness. The objects the player creates in *Scribblenauts* are linked to the player in two ways: they are created through the player's act of handwriting, and the player's choice of what objects to write is a subjective, idiosyncratic choice. Therefore, *Scribblenauts* claims that it's not just an object-oriented programming system; its interface claims to be a tool with which the player can literally write himself or herself into the gameworld, creating objects that partake of his or her subjective uniqueness.

***Scribblenauts* and Barriers to Creativity**

Scribblenauts therefore promises to satisfy the fantasy of handwriting on two levels, through its handwriting interface and through its provision of puzzles with multiple solutions. On both levels, however, *Scribblenauts* doesn't completely satisfy the desire for handwriting, because it fails to acknowledge the ways in which this fantasy is at odds with the practical requirements of the gaming situation. To this extent, *Scribblenauts* is an example of the restorative fantasy of handwriting.

As noted, *Scribblenauts* offers two different interfaces: a handwriting interface in which the player writes one letter at a time, and an onscreen keypad. Of these, the handwriting interface is more compatible with the game's paratextual emphasis on handwriting, and was originally envisioned as the game's primary interface. "The original design of *Scribblenauts* called for writing letters, with the stylus to serve as the main method of word input--we loved the visceral feeling of writing and watching an

object appear” (Tringali n.p.). Ideally, *Scribblenauts* would have provided the same pleasure as handwriting, only in an even more magical form. It would have drawn on the player’s enjoyment of writing and watching letters appear out of nowhere, but would have provided a still more pleasurable experience, by allowing the player to write and watch *objects* appear out of nowhere. Accordingly, 5th Cell used the keyboard interface only as “backup” while designing custom handwriting recognition software. However: “Eventually we realized that no handwriting recognition software could operate faster than a keyboard. We still spent time refining the letter recognition, but it was clear keyboard input would be the primary input method for *Scribblenauts*” (Tringali n.p.).

Greater speed is the primary affordance of the keyboard interface in *Scribblenauts* over the handwriting interface, and indeed, of typing over handwriting more generally. Despite the best efforts of pedagogues like Austin Norman Palmer, handwriting can’t compete with the mechanical efficiency of typing. Indeed, this is one major *reason* for the contemporary privileging of handwriting. For Arts and Crafts calligraphy revivalists, handwriting was valuable because it represented conscious, thoughtful craftsmanship, in contrast to the soulless efficiency of the machine (Thornton 179-181). This valuation of handwriting as a sign of individual creative labor is closely allied to *Scribblenauts*’s ideological project. In keeping with the nostalgic fantasy of handwriting, *Scribblenauts* seeks to return the player to a moment when handwriting provided him or her with a tactile, bodily means of expressing creativity. It nostalgically draws upon the player’s memory of handwriting and the player’s preference of handwriting to newer writing technologies. Yet as a fast-paced action game, *Scribblenauts* cannot afford the loss of gameplay speed that handwriting entails, and it gives the player no incentive to use the

handwriting interface rather than the keyboard. The properties on account of which handwriting is cherished – its slower speed, its decreased efficiency, its greater labor-intensiveness – are the same properties that make handwriting an inefficient gaming interface.

It would obviously be premature to conclude from this that touchscreen technology is incapable of replicating the “personal” or “embodied” properties of handwriting – if this is true, it’s only true insofar as those properties are only ever incompletely present in handwriting to begin with. We can, however, conclude that the DS’s handwriting recognition technology is *not intended* to preserve the player’s subjective traces. The DS’s handwriting interface is a component, not of a dedicated artistic tool like a Wacom tablet, but of a gaming interface. It therefore has to enable *both* player agency, which includes creativity, and *efficient* interaction – which often operate at cross purposes, as demonstrated when 5th Cell ceased development on the *Scribblenauts* handwriting interface. When 5th Cell used the DS to present a DS-specific version of the fantasy of handwriting, they failed to do so in a satisfying way, because they invoked the fantasy of handwriting in a restorative way, ignoring the gap between DS handwriting and ordinary handwriting. That is to say, the differences between DS handwriting and ordinary handwriting are essential or necessary, rather than accidental to or contingent upon *Scribblenauts*’s particular implementation of the handwriting interface. In the case of *Scribblenauts*, the particular difference that matters is the difference between handwriting as an autotelic phenomenon and as a gaming control mechanism. (Other differences also exist between DS handwriting and ordinary handwriting, including

some that are inherent to any handwriting interface and others that are specific to the DS's handwriting recognition technology; these differences will be addressed below.)

Similarly, at the level of *Scribblenauts's* gameplay, tensions exist between the fantasy of handwriting and the need for meaningful play. What *Scribblenauts's* creators do not acknowledge is that as Tanenbaum and Tanenbaum define it, gaming involves interaction with an authored framework, meaning the gamer has to work within the contours of constraints which were not of his or her creation. Therefore, absolute and unconstrained creative freedom is not compatible with the gaming context.

The game's title screen literally does offer the player absolute creative freedom. On the title screen, the player has access to the writing interface, and Maxwell is invulnerable to being killed. Thus, the title screen acts as a sandbox in which the player can experiment with objects and object interactions. The trouble is that the title screen is not a *game*, because it offers the player no goals to achieve. Definitions of the concept of game typically specify that a game must have a definable outcome. Of the eight definitions of games collected by Salen and Zimmerman, five of them include the property of goal-orientedness, as does Salen and Zimmerman's own definition of games (73–81). For example, Chris Crawford argues that a system which is used “in an unstructured fashion, without pursuing an explicit goal” is a toy rather than a game (7).²⁶ This definition rules out the title screen of *Scribblenauts*, where no goals are made

²⁶ Crawford goes on to distinguish between games and puzzles on the grounds that puzzles lack identifiable opponents. I do not agree with this distinction, which, as Crawford goes on to note, has the effect of excluding many things that are commonly thought of as games (8).

explicit, other than user-defined ones such as finding ways to kill Maxwell on the title screen.²⁷

In order to understand how *Scribblenauts* integrates the fantasy of handwriting with gameplay, therefore, we have to consider the game proper. *Scribblenauts* includes 220 levels, each of which challenges the player to obtain a McGuffin object called a Starite by creating and manipulating objects. These levels are divided into puzzle levels, in which the player must satisfy certain conditions in order to make the Starite appear, and action levels, in which the Starite is already present and the player's goal is to guide the avatar to it. Thus, both types of levels require the player to satisfy certain constraints in order to obtain the Starite. The player's goal is to satisfy these requirements by generating the appropriate objects. As Tanenbaum and Tanenbaum argue (above, p. 122), the existence of constraints on player behavior is necessary in order to transform a software toy into a game. In order to be enjoyable, a game must provide constraints that encourage the player to exercise agency in interesting ways. A successful game is one that forces the player to engage in meaningful behavior in order to satisfy its constraints. As a combination of a game and a handwriting mechanism, *Scribblenauts* attempts to satisfy this requirement while also permitting the player to exercise creativity. It tries to balance these competing requirements by providing constraints that can be satisfied in many different ways, so as to provide players with the opportunity to find and implement their own solutions.

²⁷ In *Super Scribblenauts*, the player earns "merits" for doing clever things (e.g., attaching six objects together or riding a creature that's normally hostile), and these can be earned on the title screen as well as during normal gameplay. However, the player can continue using the title screen even after earning all the merits, so it can't be claimed that earning merits is the "goal" of the title screen.

Unfortunately, *Scribblenauts* does not fully succeed in achieving this delicate balance. The strength of *Scribblenauts*'s emphasis on the association of handwriting with creation and creativity is precisely why many players found it disappointing as a game. Reviewer Josh Schwartzman complained: "The title screen alone offers up more fun than the missions portray," and he was not alone in feeling that the non-gamic component of *Scribblenauts* was more fun than the gamic component. *Scribblenauts* and its paratextual materials arouse a desire for the expression of subjective uniqueness, but the complete satisfaction of this desire is impossible in the gaming situation, which is defined by the existence of barriers to absolute creative freedom.

Perhaps the most common cause of players' dissatisfaction with *Scribblenauts* was the game's poor controls.²⁸ The game's control problems were merely the result of shoddy implementation, and were satisfactorily resolved in *Super Scribblenauts*. A much more serious objection to the game was that its range of possible actions was arbitrarily limited. Especially in Action Mode, the game asks players to perform a relatively narrow set of tasks: killing enemies, flying, hauling objects, breaking ice, digging through dirt, etc. Only a limited subset of the words in the game are required to accomplish these tasks, only and an even more limited number of words can accomplish them efficiently. For example, the game's lexicon includes many objects that Maxwell can use to fly, but only some of these objects are actually useful; others, like SPACESHIP, are too bulky to manipulate properly. Therefore, when I play the game I often end up overrelying on words like WINGS, WINGED SHOES, and JETPACK.

²⁸ For example, the camera would automatically snap back to Maxwell's position after a couple of seconds, and the physics model was inaccurate, so that ropes and similar objects were much heavier than they logically should have been; attaching a rope to something resting on the edge of a cliff would cause both the rope and its attached object to fall off the cliff.

(Notice also that the name of an object can limit its usefulness, because an object with a long name is cumbersome to write.) Similarly, many Action Mode levels require the player to collect a Starite at the bottom of a body of water. There are only a few logical ways to do this – drain the water, attach a buoyant object to the Starite, fish the Starite out with a ropelike object, or have Maxwell dive underwater to get it. In my own gameplay experience, I couldn't find a way to carry out either of the former two solutions, so I had to rely on the latter two, and there are only a limited number of words that can be used as fishing rods or underwater breathing devices. Besides DIVING BELL, SNORKEL and SCUBA, I can't think of anything else that's more compact than a submarine and that allows Maxwell to breathe underwater. Over the course of the 110 Action Mode levels, the player is asked to do tasks such as this repeatedly. Thus, the player ends up overrelying on certain words, creating a repetitive gameplay experience.²⁹ It may not even be possible to complete the game in Advance Mode without reusing any object, and one player allegedly completed all the Action Mode levels using only six words.³⁰ Although he did this by exploiting several glitches, the fact that such an achievement is even possible is evidence of the repetitive nature of the tasks *Scribblenauts* assigns the player. Furthermore, many of the game's objects are

²⁹ As a final example, the player often has to pull a lever that Maxwell is unable to reach. I can only find two ways to do this: shock the lever with electricity, causing it to switch positions; or summon an ENGINEER, MACHINIST, MECHANIC or ELECTRICIAN, the only non-player characters who can pull levers.

³⁰ The objects were AIR VENT, METAL BOX, ORNITHOPTER, SHRINK MAGIC, PLASMA and NAVAL MINE. The latter two were only used on a total of three levels. See <http://www.gamespot.com/ds/puzzle/scribblenauts/show_msgs.php?login=true&msg_id=m-1-577371913&pid=955689&topic_id=m-1-51428760>. Another player managed to complete all but one of the Puzzle Mode levels with only nine objects, although one of those was SANTA, who has the ability to generate objects randomly. The other eight were COW, PICK AX, AIR VENT, UFO, MUSICAL SAW, COFFIN, LIGHTNING and GAUZE. See <<http://www.gamefaqs.com/boards/955689-scribblenauts/52975652>>. Such feats would probably not be possible in *Super Scribblenauts* because its puzzles tend to require more specific solutions.

functionally identical to each other and therefore redundant. For example, it's possible to kill fish by dropping an electrically conductive object into their water. In this context a TELEVISION and a HAIR DRYER are functionally identical. It's therefore possible to solve a puzzle three times using three objects that have different names but produce the same effects in the storyworld. If I do this, I've satisfied the Advance Mode restriction, but I hardly feel as if I've engaged in a creative process. Notably, in *Super Scribblenauts* this problem was solved by removing Advance Mode from some of the action levels. In other words, *Super Scribblenauts* contains levels where the player is not rewarded for coming up with multiple solutions, because there is only one reasonable solution or class of solutions, and it would not be fun to solve such puzzles three times in three trivially different ways. By making this change, 5th Cell deprived the player of opportunities for creative thinking in the interest of avoiding repetitive gameplay, thereby acknowledging that a necessary tradeoff exists between the game's two goals: to provide meaningful gameplay and to offer the player opportunities to write creatively. Tom McShea's negative review of *Super Scribblenauts* testifies to the same tension between creativity and meaningful play: "One of the problems with the original Scribblenauts was that the levels were so open ended you could use just about anything to complete them. Players could rely on the same words over and over, such as using wings to reach a high ledge, which made it an easy and repetitive game" (n.p.) In other words, McShea's problem with the original *Scribblenauts* was that it offered too much creative freedom, meaning that puzzles were trivially solvable and therefore not meaningful. However, in McShea's view, *Super Scribblenauts* goes too far in the opposite direction: in order to make puzzles meaningful, it arbitrarily limits the number of

solutions to each puzzle.³¹ That is, it fails to give the player *enough* creative freedom; it restricts the player's freedom to write.

The game is more genuinely innovative in the Puzzle Mode levels, precisely because these levels often involve tasks significantly different from those required in Action Mode. These tasks include retrieving a cat from a tree, providing a farmer with livestock, cleaning up a city park, and making a flower grow. These levels are more satisfying because they offer the player opportunities to engage in creative thinking, to do things that no other level requires him or her to do. When *Scribblenauts* succeeds, then, it succeeds because it provides the player with a novel and meaningful constraint or framework within which to exercise his or her creative agency; conversely, it becomes unsatisfying when it fails to do this. When the game isn't satisfying, the reason why not is because it doesn't provide meaningful constraints within which the player can exercise creativity. And I suggest that this is what must be done in order to accommodate the fantasy of handwriting to the gaming situation. Absolute, unconstrained creativity is not compatible with the writing situation.

In *Scribblenauts*, the opportunity to enact the fantasy of handwriting – to write things into existence, and to do so in an innovative and idiomatic way – is the primary reason the player is offered for wanting to play the game. The massive critical and commercial success of this game suggests that among contemporary North American gaming audiences, such appeals to the fantasy of handwriting have great persuasive power. (Prior to its release, *Scribblenauts* won several “Best of Show” awards at the

³¹ One of McShea's examples of this problem is as follows: “In a different stage, you have to recruit teachers to work at a college. You have to fill a wide pool of subjects, but only the most obvious, general disciplines are accepted. A math teacher is all well and good, but don't even think about being able to make a Spanish or chemistry teacher” (n.p.).

2009 E3 show. It was the best-selling third-party DS game of 2009 and fifth best-selling overall, won three Interactive Achievement Awards, and was listed by *Time* as the seventh best video game of 2009 [Wikipedia, “Scribblenauts”].) At the same time, *Scribblenauts* fails to fully satisfy the player’s desire for handwriting, not only because of the inefficiencies of its particular implementation of the handwriting interface, but also because of inherent incompatibilities between the gaming situation and the restorative fantasy of handwriting.

In order to become reflective, the gaming version of the fantasy of handwriting must take these gaps into account. What would a game look like if it did this – if it invoked the fantasy of handwriting under erasure, with full knowledge of the tensions that necessarily exist between handwriting and gameplay? To answer this question I examine the final case study of this dissertation.

Handwriting Begins with You

Fantasies of Handwriting in *The World Ends with You*

Developed by SquareEnix and Jupiter, *The World Ends with You* (*TWEWY*) was released in Japan in 2007 under the title *Subarashiki kono sekai* (“It’s a Wonderful World”), and was released in America and Europe the following year. The game resembles a traditional SquareEnix role-playing game (RPG) in many ways.³² It features separate interfaces for combat and for exploration. Outside of combat, *TWEWY* employs a standard graphical adventure interface in which the gameworld is modeled as a series of two-dimensional spaces with static camera setups. The avatar moves through these locations, talking to people and examining objects.

³² See Barton 208-228 for an account of the history and distinctive features of this genre.

However, *TWEWY*'s combat interface is radically innovative, taking full advantage of both of the distinctive features of the DS: the touch screen and the dual screen. In combat, the player controls both screens at the same time, using one hand to manipulate the stylus and the other hand to press buttons. The player's avatar, Neku, appears on the touch screen, which is the bottom screen (Figure 6-15). Over the course of the game, Neku acquires numerous objects called "pins," most of which give him the ability to use magical powers – or "psychs" – when equipped in combat. Each psych is triggered by performing a specific action with the stylus.³³ These actions include touching an enemy, slashing an enemy (i.e., drawing a line across it), drawing a circle on the screen, picking up and dragging onscreen objects, and rubbing the screen repeatedly. Neku's partner (he acquires three different partners over the course of the game) appears on the top screen. The player uses either the D-pad or the action buttons, depending on his or her handedness, to make the partner attack either to the left or to the right and to fly or descend to the ground. Unsurprisingly, it takes some time to learn to play on two screens at once, but in practice, the top screen typically requires much less attention than the bottom screen. Moreover, when the player successfully executes a combo (i.e., a series of hits) on one screen, a "light puck" is passed to the character on the other screen. The light puck multiplies the damage output of attacks, and if the player executes a successful combo with the character holding the puck, then the puck passes back to the other screen with its power further increased. The effect of this mechanic is to encourage the player to use both screens, and to indicate which

³³ The exception is several pins that are activated by shouting or breathing into the DS microphone. The DS microphone raises an interesting complex of ontological issues which do not take up here. I would simply note that I find it difficult to use the microphone, because to do so, I have to hold the DS so close to my face that it's hard to see the screens. In at least one DS game, *The Legend of Zelda: Spirit Tracks*, this fact produces significant control issues.

screen the player should be focusing on at any given moment. Because the DS has four action buttons arranged in a cross shape, it's possible to assign identical functions to the action buttons and the D-pad, and this enables the player to use both the buttons and stylus at once, without needing a third hand. In other DS games, the player typically uses one of the methods of control almost exclusively, or uses the two methods of control at different times.³⁴

Playing on the bottom screen is functionally similar to writing or drawing, even though the game does not explicitly use these terms to describe this action. The game refers to “stylus actions” rather than to pen strokes, but the player controls Neku using the same physiological actions that he or she would use to write with a pen. To control Neku the player draws lines, circles and dots, or drags heavy objects over enemies, as if using a pencil eraser. Controlling the bottom screen is a matter of writing or drawing on it. Although the game does not stress this connection explicitly, it does so implicitly through its emphasis on the theme of creativity. In *TWEWY*, the use of the stylus is not coded as writing or drawing to the same extent as in *Scribblenauts*. In the game's jargon, being killed is referred to as being “erased,” but there are few other explicit indications that using the stylus constitutes writing or drawing. However, the game implies a connection between stylus use and handwriting through its constant insistence on the themes of design and creativity. *TWEWY* is set in the Tokyo district of Shibuya, the fashion capital of Japan. Shibuya is characterized in the game as a battleground, a space where different fashion styles clash and compete and interact productively.

³⁴ For example: In *The Legend of Zelda: Spirit Tracks*, the player uses the stylus almost exclusively; the buttons only play a peripheral role. In *Final Fantasy IV* and *Dragon Quest V*, the buttons are used almost exclusively. In *Grand Theft Auto: Chinatown Wars* and *Mario and Luigi: Bowser's Inside Story*, the buttons are used most of the time, but the stylus is frequently used for minigames. In the *Phoenix Wright: Ace Attorney* series, the stylus and the buttons have identical functions.

Shibuya is a space where Neku and the other protagonists are free to define their own styles, to make their visual appearances express their personal idiosyncrasies.

Themes of creativity are also heavily emphasized in the game's narrative. Neku's first partner, Shiki, is an aspiring fashion designer. One of the game's major non-player characters, Sanae Hanekoma (a.k.a. CAT), is a graphic designer whose style is characterized by exuberant individuality. For precisely this reason, CAT is Neku's personal hero.³⁵ Creativity is the guiding principle of the game's heroes. Graphic creativity is also evident in the game's visual style. Rather than employing three-dimensional environments and objects, *TWEWY* features two-dimensional sprites and backgrounds which are rendered in a classic manga or anime style. Two-dimensional graphics are almost required by the game's control system. For purposes of interaction the touchscreen is a perfectly flat surface. In order to be touched, objects must have flat surfaces and the player must have an unobstructed view of them. Therefore, objects can't exist in a three-dimensional virtual space behind the screen, or else the player would be unable to touch them. In order to be touched, objects must have two dimensional surfaces. The art style of Japanese animation is appropriately suited to this requirement because, as Lamarre argues, it emphasizes animetism, or the movement of two-dimensional layers relative to each other, rather than cinematism, or ballistic movement into depth. Moreover, the 2D style emphasizes expressivity and graphic style rather than transparent immediacy, as *TWEWY*'s designers comment:

³⁵ Neku: "I thought I'd never respected anyone, until I saw CAT's mural and discovered a new philosophy." Joshua: "'Do what you want, how you want, when you want it,' was it?" Neku: "Yeah. It blew me away. CAT was living the life I always wanted to, but never thought I could. 'Finally, someone who gets me,' I thought. Enjoying the moment's about freedom. I just need to do my own thing like CAT. Forget about other people and just enjoy my life..." Crucially, however, Neku goes on to criticize this philosophy on the grounds that it leads to intolerance of other people. This point will be discussed in detail below.

Modern settings are rare for Square Enix titles, so we had to make sure our art style would stand out from other titles – and to keep the entire game in 2D. Most games go for the 3D approach, but we felt we couldn't fully *express ourselves* on the DS if we went the polygonal route. 2D graphics can really "pop" on the DS's small screen, and we wanted to have lots of wildly shifting and morphing monsters (Arakawa et al. n.p.).

Here expressivity is highlighted as one of the key requirements for *TWEWY*'s graphic style. As discussed in Chapter 3, expressivity, or what Marion calls *teneur en trace*, is also a hallmark of comics and animation, to the extent that comics critics often place a higher value on *teneur en trace* than on the creation of a convincing representational illusion. *TWEWY*, therefore, draws upon the conventional association of handwriting with creativity.³⁶ It also invokes the *fantasy* of handwriting to the extent that in this game, as in the two games discussed above, handwriting has effects; handwriting *does stuff*. In *TWEWY* the player uses handwriting to attack enemies, not to create objects; handwriting is more destructive than creative in the literal sense. Nonetheless, in this game handwriting has physical effects within the diegetic storyworld. Handwriting causes things to happen. Handwriting has physical power. To this extent, *TWEWY* invokes the fantasy that to write is to write oneself into the world.

***TWEWY* as Reflective Fantasy of Handwriting**

However, again like the other games discussed above, *TWEWY* features an idealized version of handwriting which is different in many ways from ordinary handwriting. First, as indicated above, actual handwriting is a three-dimensional phenomenon. Paper and ink have a thickness which is not negligible. For example, the appearance of a handwritten line changes according to the amount of pressure with

³⁶ At least it does so for an American player. Again, I am not prepared to argue whether such conventional associations exist in Japanese culture.

which the pen is applied to the surface of the paper. Although the three-dimensional thickness of a written sign does not have semantic value in most contexts of printing (a normal letter A, an embossed letter A and an intaglio letter A are all understood as having the same semantic value), it can be used to distinguish multiple instances of the same letter. For example, Lidia Fogarolo, a practitioner³⁷ of graphology, argues that “the pressure exerted by a writing hand is tightly related to the need of showing material evidence, felt by the personality as necessary to itself.” For example, “an essentially light pressure (Filiform sign) indicates that personality needs to avoid, as much as possible, conflicts on a material plan [*sic*], as it is more interested in subtle energy movements” (n.p.). I don’t suggest that these claims should be taken seriously, but they do indicate that handwriting is performed in a three-dimensional space of interaction between the body of the writer and the material substrate of the writing surface. The three-dimensional depth of a pen stroke is as much a part of that pen stroke as its two-dimensional shape. This, however, is an element of handwriting that the DS does not reproduce. The DS features a resistive touchscreen, which is one of the more widely-used touchscreen technologies for handheld devices, along with the capacitive touchscreen. The DS touchscreen consists of two sheets of electrically resistive material with a gap between them. When the stylus makes contact with the surface of the screen, the two sheets are compressed, generating an electrical impulse, and the DS registers the X and Y coordinates of the location of the impulse. The touchscreen can only detect one touch at a time, meaning that the DS does not have multi-touch capacity. Resistive touchscreens have pressure sensitivity: a harder touch creates more

³⁷ Used under erasure as graphology is of course a pseudoscience.

compression between the sheets and therefore sends a stronger impulse. (Conversely, capacitive touchscreens, the other common variety, operate by detecting the electrical signal sent by the touching finger; thus, they support multi-touch but not pressure sensitivity [“Capacitive or Resistive?”].) Therefore, the DS is at least theoretically capable of simulating the pressure-sensitivity of paper. However, the DS’s pressure sensitivity has never been significantly exploited in any commercial game. When a 2008 homebrew painting application called *Colors!* included support for pressure sensitivity, many people reacted with surprise (see for example “DS touchscreen”). There are unconfirmed claims that Nintendo has refused to allow pressure sensitivity to be used in commercial DS games, because it was not possible to guarantee that all DS models would be equally pressure sensitive; it is also rumored that pressure sensitivity was removed from the DSi, the most recent version of the DS console, because of concerns about damage to the screen. Thus, although the DS technically does have the capacity to detect pressure, this capacity is almost never exploited, and the vast majority of games treat the DS touchscreen as if it were a purely two-dimensional surface. Moreover, the touchscreen does not preserve the visible traces of what’s written on it. When a line is drawn on a touchscreen, it’s recorded as stroke data which may be permanently stored in memory, yet the line itself soon disappears. Finally and most crucially, *TWEWY*’s handwriting interface, like other such interfaces, is digital rather than analog. *TWEWY* only detects whether the player has correctly executed the stylus action corresponding to the pins Neku is wearing, and ignores the idiosyncratic aspects of the player’s handwriting. This becomes obvious, for example, when Neku wears two pins that require similar stylus actions, such as “touch” and “tap rapidly.” The game has

trouble distinguishing between these actions because both are represented by the same patterns of stroke data.

Where *TWEWY* crucially differs from *Scribblenauts* is that it *acknowledges* this gap between DS writing and ordinary handwriting. It doesn't present the touchscreen as an uncritical restoration of handwriting. It makes few explicit references to handwriting, except that it uses the euphemism "erased" for "killed." Its touchscreen commands are not called penstrokes but "stylus actions." The similarity between handwriting and playing *TWEWY* is not foregrounded. *TWEWY*, then, is not constrained by the ideological project of producing a replica of fantasized handwriting. Its success or failure as a game is not measured by the similarity or dissimilarity of its writing system to the fantasized version of handwriting. Instead of trying to literally recreate handwriting, SquareEnix was able to simply seek to create a system that offers the characteristic pleasure of handwriting: the expression of creative agency through embodied interaction. Combat in *TWEWY* is not handwriting, but it's fun for the same reasons that handwriting is fun. It engages the hand (both hands, in fact) and the rest of the body, whereas combat in other SquareEnix titles is often a boring process of repetitive button-mashing. It allows one to immediately view the results of one's actions, although these results come in the form of damage to enemies rather than permanent inscriptions. Moreover, *TWEWY* offers the player genuine freedom of play style, since many different pins are available and the player can therefore choose the pins that suit his/her personal play style. Unlike *Scribblenauts*, *TWEWY* doesn't claim that this freedom is unlimited or that the player can "draw anything." Rather than trying to uncritically satisfy the desire for handwriting – a project which is impossible because this desire is based

on a constitutive lack – *TWEWY* uses digital processes to evoke the memory of handwriting. It is therefore able to open up a space for critical reflection on what handwriting meant and on how our memory of handwriting might inform our engagement with the post-digital world. This is in keeping with Boym’s definition of reflective as opposed to restorative nostalgia (cited above, p. 22). Rather than simply trying to revive handwriting (and inevitably failing), *TWEWY* invites the player to notice the gaps between its interface and handwriting, and to reflect on what these gaps might mean.

TWEWY further encourages such reflection by means of its story, which, as with most SquareEnix games, is heavily foregrounded. The *TWEWY* player uses the handwriting interface not only for its own sake, but also as means of progressing through a story in which the values associated with handwriting – creativity and individuality – play crucial roles. (By contrast, *Scribblenauts* effectively has no story; the game never explains who Maxwell is, why he is able to write objects into existence, or what his motivation is for collecting Starites.) *TWEWY*’s story appeals to restorative nostalgia for handwriting by arguing that creativity and idiosyncrasy are threatened by various repressive forces. However, it also appeals to reflective nostalgia for handwriting by showing that these values are not absolute. Taken to an extreme, the desire to assert and express the embodied self leads merely to narcissism, to a neglect of the socially situated nature of the self. In order to make productive use of the qualities that handwriting stands for, the writer must realize that handwriting is useless in a vacuum; it only works because of a constitutive gap between the self and the other. In

order to function, handwriting requires the absence of the writer and the presence of the reader.

As noted above, *TWEWY*'s plot emphasizes the value of creativity; it also suggests, however, that creativity is currently under threat (a theme which we have seen often throughout this dissertation; cf. Birkerts and Calvino). Creativity is precisely what's at stake in the game's narrative; it's what the game's villains seek to destroy. In one of the game's episodes, the villains open a noodle restaurant, ominously named Shadow Ramen, and bribe a popular blogger, Eiji Oji (a.k.a. the Prince), to write a good review of it. As expected, Shadow Ramen is mobbed by the Prince's readers. As revealed in a conversation with one of the Prince's fans, his readers go to Shadow Ramen simply because the Prince says so, not because they genuinely like the food there. Instead of following their personal culinary preferences, they let the Prince's critical decisions replace their own.³⁸ Meanwhile, by taking a bribe for praising Shadow Ramen even though he dislikes its food, the Prince surrenders his capacity for self-expression in exchange for financial rewards. As a final consequence, Shadow Ramen steals business from an older, neighboring noodle restaurant, Ramen Don, whose guiding principle is individuality. Ramen Don's ramen is delicious precisely because, as the owner Ken Doi says, "I just serve up the kind of ramen I'd want to eat." However, due to the competition from Shadow Ramen, however, Ken Doi abandons this philosophy and starts looking for the "the next big thing in ramen." Instead of following

³⁸ Joshua: "But it's pretty new, right? How did it get this big this fast?" Mina: The Prince wrote about it on his blog. I mean, he F'd it! How can I resist food this fabulous? The 5,000-yen price tag is a little painful, but... After this, I can tell all my friends I ate here! Ooh, I should snap a photo and mail them!" Joshua: "I see..." Neku: "So how's it taste? Good?" Mina: "Totally! The Prince said it was great. For 5,000 yen, it must be. Just look at the photo!" [...] Joshua: "So where else do you go for ramen?" Mina: "Huh? For ramen? Umm... I dunno, noodles aren't really my thing. I barely ever eat ramen."

his own creative instincts, he tries to appeal to the desire for novelty and shock value that motivates the Prince's readers. This unhappy situation is resolved when Neku discovers that the Prince is possessed by Noise (the game's principal enemies). After Neku and his partner defeat the Noise, therefore, the Prince's emotions are elevated and he decides: "This isn't right. I can't lie to my public. I'll try talking to Mick one more time. I write my own blog. I list my own thoughts, my own feelings. . . The ramen I'd actually like to eat." The Prince retracts his positive review of Shadow Ramen, and Ken Doi's business is saved. Creativity triumphs over conformity.

The analogy between the Prince's writing and Ken Doi's cooking is obvious: both of these are methods of creative self-inscription, of literally or figuratively inscribing one's unique personality upon the world. In saving the Prince and Ken Doi, Neku wins a small battle against the forces that would seek to deny these things. This, however, is only one of the nefarious plots the game's villains use to defeat creativity, because it turns out that the destruction of creativity and individuality is their ultimate goal. Mr. Kitaniji, one of the game's principal villains, calls Shibuya "a cacophony of countless selfish wants" and claims: "As that noise swells, it turns into crime, warfare. . . All the world's ills can be traced to individuality! [...] By tearing down the differences between us, I can make the world a paradise!"

This might seem like a rather simplistic and generic argument against conformity, but there is a further wrinkle. The Prince and Ken Doi are committed to sharing their subjective self-expressions *with others*, and this suggests another of the game's central lines of argument: that individuality is important not in its own right but as a precondition for a diverse and democratic society. Early in the game, Shiki describes Shibuya as a

paradigmatic example of a space where healthy diversity results from the interaction of personal idiosyncrasies:

Shiki: “Shibuya’s so diverse. And everybody’s got their own story.”

Neku: “(Shibuya sucks. Who needs a town with this many people? All they do is get in the way and screech at each other. They’re the REAL Noise. Wish I had a giant Mute button.)

Beat: “But yo, you ever try scanning ‘em all? It’s like havin’ the radio on every channel at once.”

Rhyme: “Yeah. . . Like everybody’s values are all trying to come in the loudest. No other town compares.”

Shiki: “Shibuya’s a battlefield.”

Neku: (Yeah. . .It is kinda like that. A clash of creeds.)

Neku is unable to sympathize with Shiki’s view of Shibuya because he values only his own individuality, seeing no value in understanding that of others. Neku’s self-centered attitude is summed up in the game’s pessimistic title. Over the course of his adventures, Neku learns to appreciate other people, as indicated in the ending when the title of the game is replaced by the phrase “The World Begins with You.” When Kitaniji echoes Neku’s complaint that Shibuya is a cacophony of conflicting voices, Neku replies:

I’ll never help you! Maybe living in your Shibuya WOULD be easier. Maybe. Except one problem--it wouldn’t be Shibuya! I was never good with people. I covered my ears and blocked them out. But you know what? If I don’t clash, I don’t change. The world ends at my borders, and the best moments slip away. Shibuya’s full of people waiting for those moments, when we clash together and find something new. Here in the UG, I clashed. I changed. And now I know – Shibuya should stay just as it is!

Rather than uncritically praising creativity as *Scribblenauts* does, *TWEWY* suggests that when individuality is taken too far, it leads to solipsism. Creativity and individuality function only within a larger value hierarchy which includes respect for others. Neku’s problem is that he focuses exclusively on self-expression, and therefore has little

concern for other people; hence the game's pessimistic title. Over the course of the game he learns to collaborate productively with his partners – something which the player is forced to also learn by mastering the game's battle system, which requires simultaneous control of Neku and his partner – and in the ending the title is replaced by the phrase "The World Begins with You." *TWEWY* presents creativity not as an absolute value, but as a function of the democratic interaction of multiple conflicting subjectivities. The game demonstrates this perfectly with its mechanic of branding. The game includes 13 brands of clothing and pins, and each area in the game has a list of popular and unpopular brands. Pins receive a power boost if they belong to a most popular brand, and a penalty if they belong to an unpopular one. Thus, the player has an incentive to be a slave to fashion. However, if the player fights several battles in an area while wearing pins and clothing of a certain brand, then that brand will become more popular and its corresponding pins will become more powerful. Thus the player also has an incentive to be a trendsetter and is not discouraged from dressing the characters according to his or her wishes; however, the player is also encouraged to work at sharing his or her stylistic preferences with others. Much like handwriting, fashion is of little use unless someone else can understand it.

In summary, then, unlike *Scribblenauts*, *TWEWY* does not attempt to equate its interface uncritically with the graphological view of handwriting. What *TWEWY* offers is not handwriting, but an abstracted version of handwriting which is appropriate to the gaming situation. Nor does it present handwriting as an absolute, terminal value. Yet like *Scribblenauts*, *TWEWY* encourages the player to leave lasting traces on the gameworld and to do so in a personal and innovative way. The player does this

because it's a means of expressing creativity, and because it's fun. *TWEWY* appeals to the desire at the heart of the fantasy of handwriting: the desire to make manual contact with the surface and thereby to leave a lasting record of one's prior presence. *TWEWY* succeeds in balancing the desire for handwriting with an acknowledgement of the incomplete satisfiability of that desire – which results both from the specific needs of the gaming situation, and from the fact that handwriting does not exist in a vacuum, but functions within an intersubjective context. To that extent, *TWEWY* is a paradigmatic example of an invocation of the reflective fantasy of handwriting in a graphical video game.³⁹

The DS as Object of Nostalgia

However, games like *TWEWY* are themselves in danger of becoming objects of nostalgia. As of April 2011, the DS is rapidly becoming an obsolete system, having been superseded by the Nintendo 3DS. This system is backward compatible with the original DS, but its top screen uses revolutionary autostereoscopic technology to produce a 3D effect without the need for glasses (Wikipedia, "Nintendo 3DS"). Although the possible creative and expressive uses of this technology remain to be seen, 3D has typically been associated with transparent immediacy, cinematism, virtual reality, etc. – the very things that threaten handwriting. My fear, then, is that with the new 3D technology, the importance of the DS's touchscreen technology will decline, and that games that exploit the unique affordances of the touchscreen – games like *Scribblenauts*, *Okamiden*, and above all *The World Ends with You* – will become fewer and farther between. Of course, I hope I've been careful to argue that such fears for the disappearance of handwriting

³⁹ Another example I could have discussed is *Okamiden* (2011), the DS sequel to *Okami*, but this game was released too late to be analyzed extensively here.

are often reactionary in nature, stemming from reactionary fears of progress and from revisionary fetishizations of the past. But I've also tried to argue that the desires that lie behind these fears are legitimate desires. I may know on a rational level that my memories of the DS may be selective (I tend to remember the great handwriting-interface games and forget the bad ones, like *Hotel Dusk: Room 215* [2007]), and that video game systems, like toys, don't last forever. Yet there is still that desire to return to the moment when I first played *TWEWY*. That moment, of course, is now bound up with a whole complex of other selectively edited memories. I played that game during my first years of graduate school. As I prepare to leave graduate school and embark on an uncertain future, I can't help but feel that I would much prefer the problems I had then to the problems I have now, even though reason tells me otherwise.

In the works that most effectively deploy the reflective fantasy of handwriting – including but not limited to *City of Secrets*, “Glenn Ganges in Pulverize,” *Scott Pilgrim* (comic and film), *Up*, and *The World Ends with You* – these two realizations (that handwriting is only a desire, and that it's a desire nonetheless) are delicately balanced. The reflective fantasy of handwriting is ultimately about balancing the understanding that we *can't* externalize our innermost selves in handwriting, and that nonetheless we still *want to*. Discourses of the upgrade path should not obscure the realization that at the root of many works in contemporary American popular culture, there remains an appeal to a desire which has little to do with transparency or progress – the desire to write ourselves into the world.



Figure 6-1. Screenshot from *Dead Space* (Electronic Arts, 2008). This game omits the standard HUD. Instead, the meter on the avatar's back represents his remaining life, and the counter on his gun indicates his ammunition supply.



Figure 6-2. Map of one level of *Comix Zone* (Sega Technical Institute, 1995).



Figure 6-3. The second panel of the first level of *Comix Zone*. Note Mortus's hand drawing an enemy into existence.



Figure 6-4. Screenshot from *The Legend of Zelda: Ocarina of Time* (Nintendo, 1998). Note the three-dimensional style of graphics.



Figure 6-5. Screenshot from *The Legend of Zelda: The Wind Waker* (Nintendo, 2003). Note the two-dimensional style of graphics. Compare to Figure 6-4.



Figure 6-6. Screenshot from the Japanese version of *Ōkami* (Clover Studios, 2006). Note the thought balloon, the ink-painted appearance of the graphics, and the rice paper veneer (visible in the sky at the upper left).



Figure 6-7. Screenshot from *Ōkami*. Note the thought balloon containing a henohenomoheji symbol (a face composed of hiragana characters) at the upper left.



Figure 6-8. Screenshot from *Ōkami*. Note the giant kanji character.



Figure 6-9. Screenshot from *Ōkami*. The brush god Yomigami is partially drawn and partially real, and has a brush for a tail.



Figure 6-10. Screenshot from *Ōkami* showing the Celestial Brush interface. Note the variation in the thickness of the brushstroke.



Figure 6-11. The cover of *Scribblenauts* (Clover Studios, 2009). Note the handwriting-like font used for the title, and the Comic Sans font used for the subtitle.



Figure 6-12. Screenshot from *Scribblenauts* showing the handwriting interface, which is designed to resemble a sheet of notebook paper.

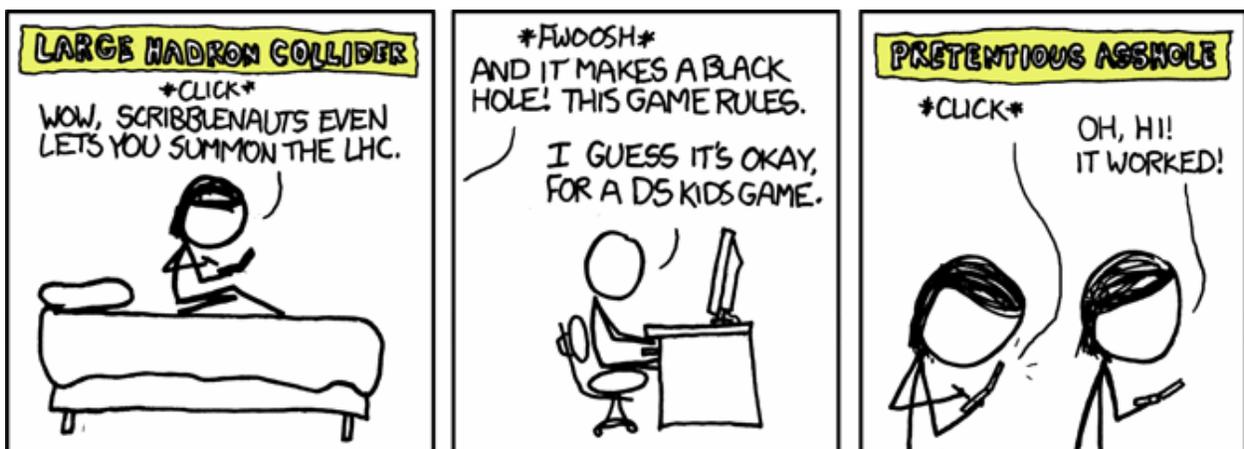


Figure 6-13. “Scribblenauts”, *xkcd* strip #637.



Figure 6-14. The Nintendo DS Lite and its included stylus.



Figure 6-15. Screenshot from *The World Ends with You* depicting the combat interface. Note the top screen, controlled with buttons, and the bottom screen, controlled with the stylus.

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BIOGRAPHICAL SKETCH

Aaron Kashtan graduated cum laude and with honors from Brown University in 2005, having majored in comparative literature and history of art and architecture. He received his Master of Arts degree in comparative literature from Dartmouth College in 2006, under the supervision of Professors Ana Merino and Beatriz Pastor. While at the University of Florida, Aaron served as the President of both the Graduate Comics Organization and the Digital Assembly and as the moderator of the international mailing list *comixscholars-l*, and was a member of the editorial board of *ImageText: Interdisciplinary Comics Studies*. He co-organized the 2009 UF Conference on Comics and Graphic Novels and edited an issue of *ImageText* based on this conference. Aaron's first peer-reviewed essay, based on Chapter 3 of this dissertation, recently appeared in *Digital Humanities Quarterly*; other essays will appear in *Digital Humanities Quarterly*, *Forum for World Literature Studies*, and an edited collection from Sheffield Phoenix Press.