2. Looking Closely

2.1.

Methodological Justifications

Why close readings? One of the proponents of the close-reading approach to digital literature, Roberto Simanowski, founder of the online publication *dichtung-digital*, enthusiastically welcomed the publication of Jan Van Looy and Jan Baetens' *Close Reading New Media: Analyzing Electronic Literature* (2003):

After years of terminological and theoretical debates this book is aiming at providing case studies long overdue. It does not insist on asking whether we should talk of digital, electronic, interactive, or ergodic, of hypertext-, net-, cyber, or code literature but rather asks how we can read this literature. (SIMANOWSKI, 2007, p. 43)

The sheer conviction that terminological and theoretical debates are by no means finalized would prevent me from sharing in this celebration. Nevertheless, I do partake in the enthusiasm accompanying new critical approaches. That theorists and critics have chosen to refocus their studies on *how* we can read digital literature and, more importantly, how to enmesh aspects of digitality with the larger discourse of literary theory seems indicative of a larger epistemic shift – one in which the ontology of the language of new media is no longer challenged (unless it is to formulate theory). For the purposes of these introductory remarks, I would submit the following hypothesis: case studies (i.e., close readings) – which, in the case of this thesis, will translate into methodological strategies of coupling theoretical premises with descriptive analyses of concrete examples – *constitute* the theoretical debates in digital theory.¹

¹ Description here is meant to counter, or problematize, purely interpretative (hermeneutical) approaches (Cf. GUMBRECHT, 1997).

Van Looy and Jan Baetens substantiate the scarcity of critical approaches to digital literature with three principal justifications. I shall follow in their footsteps as a means of: (a) introducing the difficulties with which digital literature was inimically and initially faced, and (b) offering possible counterpoints which help justify my own theoretical interest in the field. Firstly, there was a widespread conviction amongst literary theorists that digital literature was "unworthy" of serious theoretical scrutiny: indeed, that "[critical attention was] not appropriate to works belonging to a medium which has as one of its primary principles the absence of – literally – fixed meanings" (LOOY & BAETENS, 2003, p. 7). Simanowski offers an excellent response to this claim by pointing out that the fact that digital literature is predominantly open should not threaten literary theory, which has had to cope with indeterminacies in the past as per the case of concrete poetry, demanding conceptual adjustments from literary theory and criticism and transferring predicative processes to the "non-linguistic realm" (SIMANOWSKI, 2007, p. 43).²

Secondly, literary critics and theorists operated in accordance with the presupposition that hyperfiction constituted a marginal genre – one indeed literally born "on the margins of a medium, the computer, which [was] still considered a number cruncher" (LOOY & BAETENS, 2003, p. 8). Clearly dated (digital media can hardly be labeled subsidiary), this objection can now be easily overcome – regardless of whether or not one agrees with theorist Espen Aarseth in his assertion that emerging technologies matter not in themselves, but should be studied because of their potential to frame human communication (AARSETH, 1997). For my part, I do believe that, at the level of operations, technologies do forge communications. Insofar as I understand literature as a byproduct of literary communication, I would therefore argue that a study of digital literature should account for the ways in which new technologies inform the principles of aesthetic communication. The fact of the matter is that literature in the 21st century is "computational," as N. Katherine Hayles very precisely puts it in her *Electronic Literature: New Horizons for the Literary*

² It is interesting to note, however, that Simanowski opts to speak of hermeneutic approaches without problematizing such notions. For our purposes, it seems essential to remark that Looy and Baetens' subsequent phrase in the quote reads: "We must add 'literally,' since we should not forget that in the traditional view, close reading does not aim to produce *the* meaning of *the* text, but rather to unearth all possible types of ambiguities and irony" (LOOY & BAETENS, 2003, p. 8).

(2008). Consequently, both print and electronic works are deeply "permeated by code," the distinction being that while in print the reliance on the digital occurs simply on the level of production – print taken to be a particular "output of an electronic text" –, in digital literature the inevitability of code dictates that the text itself cannot be accessed until it is performed in accordance with the rules of processing. This is to say that works of digital literature *emerge* only out of *concrete* user interaction, constricted by the specific set of algorithmic parameters pre-assigned by the programmer. Because interaction occurs at a level that precedes cognitive apprehension and literary *semiosis*, the acknowledgment of the "immediacy of code to the text's performance" becomes nothing short of an epistemological premise and ontological given of digital aesthetics (HAYLES, 2008, p. 5).

If the medium's brief history has taught us anything it is that technology dictates drastic aesthetic change. Hypertextual objects of the 1980s have today given way to dynamic, high-speed, immersive, interactive experiences, defying notions of authorship/readership, readability and perception. Categories such as Espen Aarseth's cybertext and ergodic literature must be revisited under these lights. Digital literature's intrinsic ability to play with signs, morph both plot and characters and explore time-based production complicates notions of semiosis, fiction and form - let alone crystallized theories of textuality. Therefore, it should come as no surprise that certain genres figuring in the "canon" of electronic or digital literature have come to be known by the software used to create them. For instance, Afternoon: A Story (1987) by Michael Joyce and Shelley Jackson's *Patchwork Girl* (1995) can be seen as prime examples of early hypertext fiction, the latter being the culminating work for what Hayles deems "the classical period" of electronic literature (Ibid.). Both written in Storyspace, a hypertext authoring tool first developed by Michael Joyce, Jay David Bolter and John B. Smith and later licensed to Mark Bernstein of Eastgate Systems, they are distributed as stand-alone objects, available on CD for Macintosh and PC platforms. This becomes significant when one wants to concoct a conceptual topology to orient and navigate the several sub-genres of digital literature – hypertext fictions, based on linking structures, being one of the first in a series of possible

hybridizations.³ Though Storyspace has continued to exert some influence in the field, its limitations are not to be ignored, especially vis-à-vis the ever-changing nature of the Web itself (HAYLES, 2008) (Fig. 1).

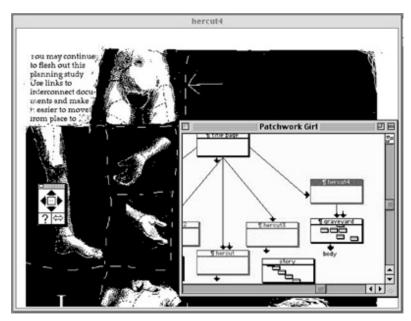


Fig. 1. Screenshot from Shelley Jackson's Patchwork Girl (1995).

To speak of the rapid mutability of the Web brings us back to Looy and Baetens' enumeration of reasons for the shortage of critical attention veered towards digital literature: "we often hear this argument that hyperfiction has not yet produced enough interesting works to justify a turn towards a more literal and literary tackling of the material" (LOOY & BAETENS, 2003, p. 8). The authors counter-argue this statement with the following contention: "even if there is not yet any 'high literature,' its works can be significant" (LOOY & BAETENS, 2003, p. 8). From a literary studies standpoint, their argument seems to beg a few obligatory remarks. On the one hand, the authors' strategy to overlook the fact that notions of *high* and *low* in both literature and art have been copiously questioned for at least the past century can be deemed problematic in itself. On the other hand, to dismiss their counter-argument outright could constitute an act of theoretical myopia. If there is one word most

³ More importantly, they are early examples of Espen Aarseth's celebrated nonlinearity, a feature that initially caught the attention of scholars such as Robert Coover and George Landow, who both write about the implications of these linking structures to literary theory.

critics would agree upon whilst describing the Web it is that it is classless, democratic. Suffice it to say that in terms of the high and low culture divide, my point is that the discussion is not only dated but also symptomatic of philosophical and political naïveté. To evoke one instance alone, one could cite Leslie Fiedler's 1969 essay "Cross the Border, Close the Gap," – a forerunner of postmodern manifestos, to be sure – originally featured in the December issue of the unquestionably low-brow Playboy magazine and currently included in practically every "definitive" anthology of literary criticism:

(...) To turn High Art into vaudeville and burlesque at the same moment that Mass Art is being irreverently introduced in the museums and libraries is to perform an act which has political and aesthetic implications: an act that closes a class, as well as a generation gap. The notion of one art for the cultured i.e. the favored few in any given society – in our own chiefly the university educated, and another sub-art for the 'uncultured' i.e., an excluded majority as deficient in Gutenberg skills as they are untutored in 'taste', in fact represents the last survival in mass industrial societies (capitalist, socialist, communist – it makes no difference in this regard) of an invidious distinction proper only to a class structured community. (FIEDLER, 1999, p. 287)

One could argue that the cultural setting described by Fiedler, wherein artists have become the de facto critics, is really not unlike the theoretical and critical landscape Looy and Baetens, Simanowski and Hayles are themselves recounting as they struggle with the institution of adequate terminology with which to describe the relatively new phenomenon of digital aesthetics. The question Fiedler asks in 1969 remains entirely opportune, particularly so in the case of digital literature:

Why not then, invent a New New Criticism, a Post-Modernist Criticism appropriate to Post-Modernist fiction and verse? It sounds simple enough – quite as simple as imperative – but it is, in fact much simpler to say than do; for the question which arises immediately is whether there can be any criticism adequate to Post-Modernism. (FIEDLER, 1999, p. 271)

I shall revisit the issue of postmodernism as it applies to the larger discursive framework of digital aesthetics. In his criticism of Looy and Baetens' third point, Roberto Simanowski admits that the lack of quality in digital literature productions constitutes a tangible difficulty: "The editors correctly object to this argument" (SIMANOWSKI, 2007, p. 43). Indeed they do so by resorting to theorist Marie-Laure Ryan, who argues that the importance of the electronic movement lies in its

capacity to challenge the limits of language (RYAN, 2001). I would concede that, as long as literature pertains to the larger discursive network of culture, it will permanently respond to significant cultural changes, here regarded as recursive systemic interferences (LUHMANN, 1995). It is, thus, only adequate that the emergence of mass media and, adopting theorist Lev Manovich's terms, "new media language" (MANOVICH, 2001), should promote systemic disturbances, which are then resolved internally – which is to say, operationally and semantically – through self-descriptive refashionings, and that these in turn should impart change in mediation processes. That digital literature has yet to produce a grand masterpiece is a valid – albeit debatable – statement, but it can never serve as justification for a dismissal of theoretical exercise. The objection, therefore, is not to Looy and Baetens' observation per se, but to the usage of such problematic terminology as high and low art. Simanowski hypothesizes that even works of questionable quality – "and perhaps precisely these" – can clarify the way in which digital literature can tackle its newfound materiality (SIMANOWSKI, 2007, p. 43). More adequately, in view of these scenarios, I am reminded of Fiedler when he affirms that the intrusion of pop culture into the citadels of high art afforded critics with the necessary freedom to pass judgment on the "goodness" and "badness" of art irrespectively of the constrictive and politically charged binary distinction, "high"/"low" (FIEDLER, 1999).

The development of digital literacy is far from an intuitive process. In his 2011 book *Digital Art and Meaning: Reading Kinetic Poetry, Text Machines, Mapping Art, and Interactive Installations*, Simanowski comments on the increasing importance of digital media in all areas of social and cultural life. That which is now being discussed both academically and extra-academically under the heading of "digital literacy" and "digital humanities" can be split, the author suggests, into two distinct (though arguably intersected) strands of analysis. (SIMANOWSKI, 2011, manuscript). On the one hand, there is a sociological trend in scholarship concerned with the impact (both societal and individual) of new media technologies on culture and behavior – on this side, one would expect to find studies on new phenomena such as "identity tourism," the sociological impact of mass media, "online democracy" and

"the digital divide". On the other end of the analytic spectrum would lie studies and assessments of the aesthetic potentials of new media. In this sense, not only does digital literacy infer familiarity with both these fields of study but also denotes digital competency – understood here as encompassing basic knowledge of processing and programming (SIMANOWSKI, 2011).⁴

Evidently, processing is a topic deserving of further investigation. For our purposes, I shall limit the scope of the discussion to epistemological conjectures, which is to say, I will not speak of code or programming, but will acknowledge that the materiality of new media presents itself as a fundamentally paradoxical issue. Katherine Hayles has spoken of "flickering signifiers" in her seminal *How We Became Posthuman: Virtual Bodies, Cybernetics, Literature, and Informatics*, 1999. Extrapolating from Jacques Lacan's notion of "floating signifiers," Hayles writes that for Lacan, "a doubly reinforced absence is at the core of signification" (HAYLES, 1999, p. 31). To be sure, Hayles is not alone in detecting a reference crisis. Derrida has made similar inferences in his rejection of the binary Saussurean schema (signifier/signified). The introduction of the concept of "flickering signifier" stems from a reconfigured technological paradigm marked by constant processes of intermediation:

Foregrounding pattern and randomness, information technologies operate within a realm in which signifier is opened to a rich internal play of difference. In informatics, the signifier can no longer be understood as a single marker, for example a mark on a page. Rather, it exists as a flexible chain of markers bound together by the arbitrary relations specified by the relevant codes. (...) A signifier on one level becomes a signified on the next-higher level. (HAYLES, 1999, p. 31)

Once the ontology of the linguistic sign is concretely questioned, the degree of contingency usually afforded to literary communication increases. In order to explore the necessary disturbances within the theoretical framework – which occur as a consequence of what linguist Ludwig Jäger has characterized as an epistemology of disruptions (JÄGER, 2010) – one must find solutions descriptively and recursively. This is rooted in a belief in the process of close reading as a means of understanding

⁴ See Noah Wardrip-Fruin's 2010 book *Expressive Processing: Digital Fictions, Computer Games, and Software Studies* (WARDRIP-FRUIN, 2010).

new phenomena. Because close readings do presuppose interpretation, I should clarify that I shall adhere to them peripherally. Put differently, insofar as digitality mandates that "the sign to a certain degree [lodge] itself in epistemological relation of self to world as a constitutive moment of 'disruption'," (JÄGER, 2010, p. 73), the problem of reference is intensified.⁵ For the purposes of uniting presence theory (GUMBRECHT, 1997; 2004), – which requires materiality⁶ – and digital literature – which posits opposite mandates concerning what is to be deemed "material" – I submit that communicative processes must be addressed descriptively, rather than hermeneutically (Cf. GUMBRECHT, 2007).

A frequent theme in the writings on new media theory is self-referentiality. Once mediation becomes central (i.e., computer-based literary models), epistemological problems (i.e., problems of self-description) tend to be addressed recursively. In a comparative study of digital literature and comparative literature, theorist John Zuern argues that though both disciplines have had very different theoretical agendas, both have been at some point induced to look inwards; that is, compelled to redefine the concept of literature self-referentially (ZUERN, 2010). I believe this is precisely the state of affairs now as I produce my own "flickering signifiers" on the computer screen. The hypothesis that digital literature refers only to digitally-born texts requires an investigation into the ontological conditions of digital birth. In Simanowski's introduction to *Reading Moving Letters: Digital Literature in Research and Teaching*, the author revisits this very question.

It should be underlined that the condition of "digital computation" is not fulfilled by the banal way of being created on the computer. (...) The condition of "digital birth" points to the more existential characteristic of carrying the features of the "parents" such as connectivity, interactivity, multimediality, non-linearity, performativity and transformability. (SIMANOWSKI, 2010, p. 15)

This statement has two inevitable implications: (a) the exclusion of any and all texts or alphabetically-oriented visual experiments that originate in print and are later

⁵ See Jäger: "Epistemology of Disruptions: Thoughts on the Operative Logics of Media Semantics" (2010).

⁶ A word of caution before I proceed: one must not forget that materiality itself constitutes an ambivalent concept. As Karlheinz Bark writes in his "Materiality, Materialism, Performance," materiality's inherent obscurity is indicative of a "need for tentative questioning of its meaning and for new kinds of experience" (BARK, 1994, p. 259).

transferred to the screen, and (b) the assumption that genuine digital literature is ontologically indebted to digital media. Needless to say, the category of digital literature excludes print literature that has been digitized. Hayles notes that the Electronic Literature Organization, whose mission is to "disseminate works of digital literature" (http://eliterature.org/), has framed a definition wherein digitalized works are excluded. Nonetheless, neither Simanowski nor Hayles seem oblivious to the fact that though the notion of digital birth will suffice for the differentiation between digital literature and digitalized literature, it does not account for the second term in the phrase digital literature, namely to the qualities which render it literary in the first place. I shall re-assess this issue in greater detail at a later point in this thesis when I address a revised notion of literariness. For our purposes, the establishment of an interrogative pattern of investigation should prove quite fruitful. It is, after all, curious that, as Francisco J. Ricardo observes in his 2009 book Literary Art in Digital Performance: Case Studies in New Media Art and Criticism, theorists will go to all manner of lengths in order to circumvent ontological thinking: "So while the idea of literature and art, fully distended for novel practices, is held up, one also perceives a reaction against insinuations of universals as might underlie electronic works and media" (RICARDO, 2009, p. 5).

Having edited his book in a way that allows for what he calls "post-chapter dialogues," Ricardo begins his introduction entitled "Juncture and Form in New Media Criticism" by drawing a parallel between art and literary criticism, claiming that while both disciplines have offered articulations for processes of figuration and representation, they have done it in entirely distinct ways. While literature functions with a reliance on semiosis, visual arts operate according to the cognitive possibilities of optical perception. When we come to speak of digital literature, with its intermedial amalgamation of linguistic and visual signs – let alone aural and interactive –, the natural implication is that the processes of figuration and reception should include conflicting modes of signification. Furthermore, it should be of interest to those who study new media, and, specifically, digital literature, to observe how these technological transformations and convergences evolve and (eventually) subvert the boundaries that separate art from literature (RICARDO, 2009). The fact

that electronic media has made possible the coupling of "the entirely participatory and the entirely receptive" not only amounts to important normative and epistemological inquiries, as the author is keen to point out – i.e., "what, in a work that is as visual as it is literary, does it mean to speak of art, or literature?" (RICARDO, 2009, p.2) –, but also to novel practices in close readings, which, I would submit, are conducive to new forms of theorization about the body (*res extensa*), its performative dynamics, its status as interface and external reference, its mergers with machine, its leap into cyborg status.

The challenge lies not in the reformulation of deeply entrenched notions of hermeneutics⁷ so as to encompass the trope of "eventilization" (to borrow from Katherine Hayles' terminology) or the reflection on the fluid materiality embodied in these new sensory aesthetic objects, but to adequately account for the expansion of literary communication into the realms of physicality (Cf. HAYLES, 2006). In this context, it seems appropriate to note that in his "Reading Digital Literature: A Subject Between Media and Methods," Simanowski refers to Josette Féral's 1982 essay "Performance and Theatricality: The Subject Demystified" to draw evident parallels between the emphasis on the "phenomenal body" – the performing body which resists narrativity – and the issue of meaning in performance art and immersive mixed-media digital installations (SIMANOWSKI, 2010a, p. 25). As a proponent of meaning, Simanowski solves this theoretical dispute by claiming that while performance art aims at frustration through semiotic refusal, interactive art produces "space-times" of "inter-human experiences," thus rendering the issue of meaning secondary or subjacent to the interactive process (SIMANOWSKI, 2010a, p. 25). In the specific case of digital literary objects, this sensory-sensitive turn is aided by – or perhaps exists because of – an intrinsic predisposition manifest in digital works to minimize legibility and favor performatic potentialities. Rather than be read, digital signs instigate a preconscious desire to be played with (Cf. HAYLES, CAYLEY, WARDRIP-FRUIN). As my chapter on concrete and digital poetry shall demonstrate, this is a recurring theme in discussions on digital/kinetic poetry.

⁷ In his *Interfictions: Von Schreiben im Netz* (Frankfurt: a. M. Suhrkamp, 2002), Roberto Simanowski speaks of the development of a hermeneutics of deep information that must include a hermeneutics of interaction as the integral factor in the constitution of signs (121).

In an essay entitled "Text as Event: Calm Technology and Invisible Information as Subject of Digital Arts," Simanowski quotes Lev Manovich's 2001 The Language of New Media, to argue that literacy appears to be on the decline: "The notion of the decline of the printed word tradition is in line with assumption that electronic media, computer and the Internet undermine the authority and cultural supremacy of the word" (SIMANOWSKI, 2010b, p. 1). In his commentary on the increasing pervasiveness of cinematic language, Manovich does draw a parallel between the printed word tradition and pictorial semiotics, detecting a tendency in contemporary culture to convey information "in the form of time-based audiovisual moving image sequences, rather than text" (MANOVICH, 2001, p. 78). That cinematic language has gained currency in today's cultural discourse is almost a truism. Thus, that the semantics of new media theory – and of literary theory by extension – is informed by fundamentals derived from the pictorial turn is a recursive response to a historicallyspecific cultural climate. In light of these altered cultural configurations, Hayles' concept of eventilization (HAYLES, 2006) - invoked by Simanowski in his aforementioned essay – is entirely apropos (SIMANOWSKI, 2010b). The notion of digital text as eventilized instantiation speaks to the tension between the distributed materiality of digital texts and their reception (one may reductively call it reading) as post-linguistic objects. As we shall see in radical instances such as Camille Utterback's Text Rain (1999), which I address in detail at a later stage in this thesis, immersive mixed media installations facilitate discussions on the double status of the verbal mark as it is morphed into post-alphabetic object.

2.2.

Going Overboard

(...) Till human voices wake us, and we drown. (T.S. Eliot, 1917)

While John Cayley and Giles Perring's Overboard presents a less radical example of "text as event" - to borrow Simanowski's phrase -, it suits these introductory purposes. Overboard is a gallery piece; specifically it is a "dynamic linguistic 'wall-hanging,' an ever-moving 'language painting'," as the artists put it in descriptive that accompanies the installation the text (CAYLEY, http://www.dichtung-digital.org/2004/2-Cayley.htm). The work operates according to what Cayley deems "ambient time-based poetics"; that is, an algorithmically produced effect that promotes the replacement of letters by means of "iterative transliteral morphs between related texts" (Ibid.).

My investment lies in the belief that relatively simple algorithmic manipulation of basic low-level, parasemantic linguistic systems is able, significantly, to yield rhetorical and, indeed, aesthetic effects which can be correlated with their programmatological generators. (CAYLEY, http://www.dichtung-digital.org/2004/2-Cayley.htm)

Cayley's expectation is that by structuring morphs between stylistically similar typographical objects, "abstracted underlying structures" will become visible, thereby shedding light on "higher-level" articulations between texts (Ibid.). By underlying structuring, Cayley means to address concrete interrelationships between algorithmic processing and signification mechanisms. *Overboard* consists of a stable text that sways between visibility and erasure by the illusion of constant movement of the letters "sinking" and "rising" to the surface. Schematically and descriptively, it is possible to subdivide it into two grids, one textual and the other imagetic, each consisting of multiple processual layers split halfway on a rectangular display. On the linguistic side, the fixed underlying text is set out with verse and stanza breaks "in the manner of poetic form" (CAYLEY, 2004, p.1). As "surfacing" algorithms scan the underlying text (first layer), letters slowly emerge on the screenic surface (second

layer), gradually accruing enough textual mass as to form "the textual field" (CAYLEY, 2004, p. 1). Cayley explains that the text is purposefully set in a fixedwidth font so that letters in the textual grid can be constricted to regular positions. The non-linguistic side of the screen displays thematic "visual correlatives" of the text in the form of algorithmically-generated cropped fragments of photographic images of the sea's surface. These micro-images are positioned in correspondence with the textual processing occurring on the linguistic side (Ibid.) (Fig. 2). Cayley elucidates the operative logics of *Overboard* as follows: because the surfaces of the text are distorted as a function of legibility, in "a 'surfacing' state, literal points (points on the surface where letters may appear) will tend to 'rise' and touch the screenic surface of visibility such that it will spell out the underlying given text" (CAYLEY, 2004). Conversely, in a "drowning" or "sinking" phase, letters are programmed to recede from the screenic surface of visibility - complementary to "surfacing," in the "sinking" phase the letters either interchange or are morphed to blank space (Ibid.). Finally, in the "floating" state alphabetical text is algorithmically altered so as to appear on the visible surface in an intermittent fashion, "producing a quasi-legibility, a linguistic shimmering on the screenic reading surface" (CAYLEY, 2004). This oscillation, directly affecting legibility, affords *Overboard* with a double status, operating as both digital art and digital literature.

Overboard illustrates a trend in the discussions on digital literature that problematizes the fluid boundaries between art and literature and raises the question of how to talk about literature – presumably identifiable by linguistic markers (HAYLES, 2008) – when the typographic sign is transformed into post-alphabetical object.

I wanted to make a piece that was unambiguously literary but that might perhaps hang on a wall-mounted flat screen, like a kinetic literary painting. The viewer or reader would see a textual image with a recognizable underlying form, but this would change constantly by way of its minimal letter substitutions, ideally such that the changes would be barely perceptible. The piece would seem not to change and yet always to be different, whenever it was given any attention. (CAYLEY, 2004)

In his reading of the piece, Simanowski describes the redundancy of theme and form as remnant of the strategies deployed by concrete poets in the past. Indeed "rising" and "sinking" letters emulate and reenact the experience of drowning as spelled out by the subjacent (fixed) verse:

... in a mighty storm a man came above board and was thrown into the sea

but he caught hold of the halyards which hung over board and held his hold though he was many fathoms under water

till he was hauled up to the brim of the water ...

(Transcription by CAYLEY, 2004)

In light of concrete poetry debates as well as historical interrelations between pictographic representations and script, the correlation of "linguistic message" and visual reenactment strikes me as primarily a matter of acknowledgment, rather than full-fledged controversy. Overboard is, thus, a case in point insofar as processual protocols impose semantic minimizations. One could argue that these minimizations are indicative of the "flickering" ontologies of discrete lexical electronic units (HAYLES, 2006). Evidently, the employment of the term *ontology* requires that one address the concept of materiality. In his "Materiality, Materialism, Performance," Karlheinz Bark speaks to the conceptual obscurity engrained in term by pointing towards discrepancies between perception and cognition (BARK, 1994, p. 258). If one considers linguistic materiality to always be, to some degree, a result of mediation, which is to say that media-free cognition is an impossibility (JÄGER, 2010), then the discussion is shifted from a normative debate – which would place digital literature in a separate sphere from its print counterpart – to a heuristic inquiry, wherein one would gauge varying semantic and material granularities of particular objects.

In *Overboard* the intermittence of visibility/legibility unveils the need for reception processes that privilege contingency – in Cayley's example, expressed as algorithmic morphing. Evidently, this is not to undermine the highly probable hypothesis that because materiality in digital media is, of necessity, processual

(HAYLES, 2006) it is conducive to self-reflexive loops which lead digital objects to comment on their materiality. In the words of K. Hayles, the "distinctive materiality" of electronic media lies primarily in its "distributed existence spread among data files and commands, software that executes the commands and hardware on which the software runs" (HAYLES, 2006, p. 181). Consequently, on the issue of materiality proper, while I believe *Overboard* does present a strong case for what can be dubbed the "physical turn" in computing, I maintain that physicality is never a stable entity in the digital realm and has evident ties with Gumbrecht's concept of presence.



Fig. 2. Image of *Overboard* by John Cayley. In the above picture, whilst the first verse sinks, verses 2 and 3 are at different degrees of reappearance.

2.3.

Intermediations

In his early writings Roberto Simanowski (Interfictions: Vom Schreiben im Netz, 1999) employed the term interfictions to classify objects created by digital media and meant to be experienced only within digital media. While the prefix inter alludes to the relevance of the Internet – or at least to the genre's intrinsic reliance on the computer's feedback processes, that is, to intermediality and interactivity –, the term *fictions* points to a multimedial structural order common to literary works -i.e., the combination of visual, aural, kinetic and textual elements for fictive purposes. The author has since abandoned the term interfictions in favor of the broader denomination digital literature (2007), basing his decision on the fact that while the range of digital literature is vast, it does presuppose certain fundamental characteristics – the term digital refers to the medium of its production and not to the "semiotics of its material". By basing the characterization of digital literature on the technological facet of the medium and not on its semiotic mandate, Simanowski claims to resolve the objection one might encounter with regards to the binary distinction between digital literature and non-digital literature – the operative assumption being that the characterization of the term digital literature is informed by its dependence on the technological medium, or by what Simanowski describes as the "genuineness of the medium" (SIMANOWSKI, 2007).

The term digital literature seems to offer least occasion for misunderstandings. It does not refer to concrete individual characteristics of digital literature like interactivity, networking, or non-sequentiality as do the terms interactive literature, net literature or hypertext. It rather designates a certain medium, which I am describing as digital and not as electronic in order to ensure the differentiation from other electronic media like cinema, radio or television. (SIMANOWSKI, 2007, p. 47)

Due to the nature of my investigation, I opt to focus on epistemological debates rather than discussions pertaining to the specifics of medial mechanisms of distribution. Suffice it to say that I concur with Jäger when he affirms that there are no neutral media: "each transmission/transfer of meanings registers silenced semantic processes of constitution (...)" (JÄGER, 2010, p. 79). Complex meaning attribution disputes aside, I claim that the emphasis on production does not solve the problems of reception, where distinctions and differentiations become considerably more problematic. Granted, Simanowski does integrate reception into his triadic topology – interactivity, intermediality and performance⁸ – announcing a shift from "linguistic hermeneutics" to a "hermeneutics of intermedial, interactive, and performative signs" (SIMANOWSKI, 2007, p. 48). According to this reasoning, one should focus not on the meaning of a word but on its performance, be it on a screen, as a hologram or as projection on the interactor's body. Insofar as readers can be deemed collaborators or interactors, they become integral parts of the composition – be it by reacting to pre-programmed interactivity (hypertexts), to networked projects or simply by being physically engaged in the digital surface of the work. Reception then requires performance and production anticipates these requirements processually.

The concept of *interactivity* begs the oft-cited topic of the dissolution of authorship. Reader-response criticism and reception aesthetics have made significant contributions to what Gumbrecht describes as "the ascension of the reader to the apex of a hierarchy of concerns" (GUMBRECHT, 1992, p. 15). The advent of hypertext has sparked new life into these discussions. In 1999 Simanowski makes the explosive claim that "while the author is not dead [as he sets up the connections and therefore predetermines the reader's associations] it is perhaps more appropriate to announce the death of the reader" (SIMANOWSKI, 1999). An analogously radical solution can be found in George Landow's literal interpretation of Michel Foucault

⁸ In his 1999 text entitled "Towards an Aesthetics of Digital Literature," after pointing out the necessity of an aesthetic evaluation of digital literature, Simanowski formulates a few criteria to evaluate digital pieces. This he does by identifying a few typical characteristics common to all (most) digital literary works. They are as follows: "(1) Multimediality; (2) Technical aesthetics; (3) Performance; (4) Links; (5) Navigation; (6) Screen Aesthetics" (SIMANOWSKI, 1999. p. 2). In a later essay, the author condenses these categories into three main groups: interactivity, intermediality and performance (SIMANOWSKI, 2007). According to the author, the purpose of this list is primarily to state that the mere existence of a text on a computer monitor is not sufficient to afford it the status of digital literature – encoding not being enough, one must look for the aesthetic interplay of these characteristics in a work of digital literature.

⁹ The term *interactor* was coined in 1992 by Kristi Allick and Robert Mulder with respect to interactive theater (GIANNETTI, 2004).

and Roland Barthes' seminal texts on the death of the author. 10 In Chapter 4 of his Hypertext 2.0: The Convergence of Contemporary Critical Theory and Technology, George P. Landow reedits the controversy begun by Michel Foucault and Roland Barthes on the deconstruction of authorship by announcing the emergence of an intrusive reader: "Hypertext, which creates an active, even intrusive reader, carries [the convergence between reading and writing] of activities one step closer to completion; but in so doing, it infringes upon the power of the writer, removing some of it and granting that portion to the reader" (LANDOW, 1997). 11 One could read these claims as reifications of Umberto Eco's concept of the open work (ECO, 1989) as well as Wolfgang Iser's asymmetry between text and reader (ISER, 1978). Drawing from Gumbrecht's aforementioned revision of reception aesthetics, I will limit my present claims to the following assertions: critical and theoretical discussions of literature can no longer afford to speak of models based on adequacy, "motivated by the idea of perfectibility in which an ideal reader is supposed to converge with the correct meaning" (GUMBRECHT, 1992, p.15). Rather, literary communication must be seen as a highly contextual "reconstructive effort under which various meanings of a given text are generated by readers whose receptive dispositions have differing historical and social mediations" (p. 15). I shall further elaborate on these claims when I address Espen Aarseth's ergodic models of cybertextuality.

Within the context of these augmented hermeneutics, Simanowski's model of *Intermediality* poses a certain measure of difficulty. Basing his terminology on Jürgen Müller's analysis of intermediality, the author claims that the concept marks the conceptual integrative connection amongst expressive media, drawing attention to the distinction between intermedial and multimedial – the former encompasses the actual integration/cooperation between two or more types of media, whereas the latter refers to their assemblage in the act of performance, (distinguished from an act of conceptual collaboration) (SIMANOWSKI, 2007). The epistemological

¹⁰ Cf. Landow in *Hypertext 2.0* on the "intrusive reader."

It should be noted that in "Qu'est-ce qu'un auteur?" Michel Foucault draws a crucial distinction between the individual author of flesh and blood and the "author-role" – inexorably linked to a discursive network inscribed in a cultural system.

considerations do not easily translate into practical examples. A case in point is Alex Gopher and Antoine Bardou-Jacquet's *The Child* (1999), a fringe experiment consisting of a video clip that makes aesthetic use of animated text and sound synchronicity. If the ultimate decision lies in the eye of the beholder – "the decision whether a TV documentary or a photo-novel is intermedial or multimedial will depend on the decision of the viewer" (SIMANOWSKI, 2007, p. 46) –, then it becomes clear that distinctions between digital and digitalized literature are only functional on the level of receptive interaction.

In his own reading of Gopher and Bardou-Jacquet's piece, Simanowski inquires:

And what about a work like Antoine Bardou-Jacquet's video *The Child* (1999) for Alex Gopher's song *The Child*, which not only dynamizes the text and parallelizes it with sound and a sample by jazz legend Billie Holiday but also uses text simultaneously as a linguistic and visual sign in the tradition of concrete poetry? Should we grant medial authenticity to such a work? (SIMANOWSKI, 2007, p. 47)

If *genuineness*, as previously explained, is to be determined by the piece's reliance on digital media, then by necessity (and not by fact), in order to exist at all, a genuine work of digital literature must unfold entirely within the confines of the digital medium. By unfold, I mean it should require digital mediation in both the production and reception stage. From this formulation, it follows that even though *The Child*'s aesthetics are clearly informed by computer technologies and despite its clear use of such technologies in the process of production, the output differs very little (or not at all) from a conceptual video clip. Simanowski states that "media relevance" must take precedence over "genuineness," but even genuineness is a complicated matter as he will admit when reminding the reader of Espen Aarseth's argument in his *Cybertext: Perspectives on Ergodic Literature*, namely, the notion of cybertext precedes digital (electronic) mediation.

Using Alex Gopher's *The Child* as a tutor-text, I wish to shed further light on the notion of media relevance. As the term *digital* in digital literature relates to the medium of production and not to the semiotics of the material, a few inferences can be made. Since language is naturally discrete, one could argue, as many scholars in the field do, that literature is always the output of digital encoding. Hence, insofar as

digital literature ought to be different from print literature, it must transcend semiotic digitality. Simanowski mentions semioticians' objections to the expansion of the term language adding that a distinction between the technological and the semiotic notion of the medium allows us to answer questions as to what "non-digital" might mean in contrast to "digital literature" (SIMANOWSKI, 2007, p. 61). 12 In other words, digital literature must connect non-discrete signs (visual, aural and performative elements) to discrete ones (alphanumerical code). Moreover, by stressing the medium of production rather than emphasizing particulars of reception, the term digital literature reduces complexity by establishing larger parameters of Without imposing restrictions framed according to the specific distinction. characteristics of digital works, the term becomes a highly pliable concept, applicable to a number of intensely diverse examples. But what constitutes a work of digital literature? The problematic case of Alex Gopher and Antoine Bardou-Jacquet's *The* Child might offer a few provisional answers. The piece's premise and narrative are trite at best: we, the viewers, follow a woman in labor and her partner speeding through Manhattan to get to the hospital. The innovation lies in the replacement of images for linguistic signifiers. As the camera zooms into the Manhattan skyline one realizes the buildings are not really buildings but vertically written text in the shape of skyscrapers (Fig. 3). To an extent, this transmedial operation could be deemed a disguising mechanism for the very triteness I criticize.

¹² CF. SIMANOWSKI, 2007 & HIEBEL, 1997: Hans H. Hiebel proposes a distinction between primary digitality (discrete-distinctive signs) and secondary digitality (digitalization of signs as consequence of the computer) (HIEBEL 1997, p. 8 apud SIMANOWSKI, 2007, p. 61).



Fig. 3. Alex Gopher and Antoine Bardou-Jacquet's The Child (1999) - Screenshot (1).

As the camera approaches a particular window, whose shape is composed of the word "WINDOW," one sees the outline of a woman formed by the words "BROWNHAIR/PRETTYFACE/WOMAN/PREGNANT/REDDRESS/SNEAKERS" Next to her is the husband: "BLACKHAIR/PLEASANTFACE/HUSBAND/LITTLEMAN/DARKSUIT." They go down the "LIFT" in a hurry and, as the man calls out for a taxi, the words "DREADLOCKS/RASTAMAN/CABDRIVER" invade the screen (Fig. 4).



Fig. 4. Alex Gopher and Antoine Bardou-Jacquet's *The Child* (1999) - Screenshot (2).

One would be hard pressed to deny that the strength of Gopher and Bardou-Jacquet's work lies primarily in its conceptualization. When Simanowski asks why we are deprived of information on the sex, ethnicity, build, etc. of the cab driver, he enforces the hypothesis that The Child, differently from Jeffrey Shaw's Legible City (1989-91) (Fig. 5) "does not tell an invisible story behind walls, but rather reduces the visible objects to their momentary meaning for an unspecified narrator" (SIMANOWSKI, 2007, p. 49). Objects being reduced to their transitory meanings should come as no surprise to the literary scholar relatively versed in the foundational resources of post-structuralism – i.e., one need only recall Derrida's semiotic twist on the concept of différance to understand the deferred nature of correspondence between signifiers and signifieds. In *The Child's* case, that these meanings will, of necessity, be determined by one's (the spectator's) interpretation not only constitutes proof of the permanent possibility of semantic deferral, but also serves as evidence of typically cinematic processes of identification. On the issue of interactivity, or lack thereof, it should be noted that *The Child* – unlike Jeffrey Shaw's *Legible City*, where the interactor is allowed to roam this digitized world and thus fabricate his own multiple narratives – functions very much like a film in that the spectator's gaze is

pre-determined. In this regard, it is only predictable that a Cadillac stretch limousine holding up traffic should only appear endlessly long if you are trying to reach a maternity ward – particularly if the "you" in question is "you," the spectator undergoing a full-fledged process of identification with the parents' point of view.

For comparative purposes, it should also be noted that in *Legible City* interactive allowances are limited. Created at the *Institut für Neue Medien* in Frankfurt/M., Shaw's piece offered interactors a simulated bike ride through the streets of Manhattan, Amsterdam and Karlsruhe. Seated on a stationary bicycle, the interactors were made to "move" through streets projected onto a surface in front of them, only instead of the images of the cities, they were faced with letters replacing buildings. Not unlike *The Child*, *Legible City* does not respond to the user's interactions per se, rather, as new media artist Camille Utterback observes, it "inserts the user's point of view via computer-generated linear perspective into a dimensional space made entirely of text" (UTTERBACK, 2004, p. 223).



Fig. 5. Jeffrey Shaw's Legible City (1989-91).

From a post-hermeneutic stance, the question to be addressed is not whether "by casting everything into language" *The Child* truly speaks of the birth of meaning, as Simanowski would have it (SIMANOWSKI, 2007), but whether by doing so (and

assuming that it does not speak of its death by equating signifier with signified) it renders the piece literary. This will be one of the most challenging – albeit arguably open-ended – debates to be faced in the pages to come. I am reluctant to either agree or disagree with Simanowski's strictness when he states that though *The Child* might appear to be an excellent example of digital literature for "its [exciting] meta-reflexivity," it does not qualify as genuine digital literature. It should be observed that *The Child* was a video clip shown in movie theaters as Clip Cult Vol. 1 – Exploding Cinema by the Cologne distributor Rapid Eye Movements in 1999 (SIMANOWSKI, 2007). Is physical interactivity a contributing factor to the definition of digital literature or should it be deemed a definitive rule with excluding prerogatives? In the words of Ricardo,

(...) interactivity has produced the consequence of work that often performs neither as literature nor as art, but beyond both; something neither entirely predetermined nor entirely random, but beyond both; and that dwells neither in a single place nor everywhere, but beyond both. (RICARDO, 2009, p. 2)

Perhaps it would be productive to find pragmatic reasons for assigning *The Child* to "the realm of digital literature – just like the text films by David Knoebel and Young-Hae Chang Heavy Industries" (SIMANOWSKI, 2007, p. 50). In light of this inconclusiveness, I can only find solace in the words of Ricardo that due to the "variegated nature of what comprises electronic art and literature" (RICARDO, 2009, p. 2), the premise of intermediation requires that one address the current cultural climate interrogatively (Ibid.). With this in mind, I move on to the pre-history of the genre.

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