Abstract

This article identifies some of the popular and historical contradictions inherent to the very notion of close reading digital literature, and puts forth an updated conception of what the author argues continues to be a vital practice of literary study. More specifically, it establishes continuities between a pre-digital historical conception of close reading and the sort of materially-conscious hermeneutics that digital textuality requires. The author applies the updated conception of close reading digital literature to Steve Tomasula’s TOC [Tomasula 2009], a self-described “new media novel.”

Contrary to the practice of reading “hypertext” in a critical vacuum as a revolutionary technology with untold implications for the production and reception of texts, it is the close analysis of actual works of digital literature — literary works written on and for the computer screen — that marks what has come to be known as a second generation of digital-literary scholarship.[1] A growing body of “digital born” literature is uniquely positioned in its ability to use new and still relatively unfamiliar tools to mobilize formal and material innovation in expressly literary fashion while using the same tools to reflect on a cultural moment of great technological change. Scholars moreover are uniquely positioned to extend contemporary literary and narrative theory given this new mode of cultural production. Nevertheless, I would argue that if there is any trouble with second generation digital-literary criticism it would be the celebration of both the practice and the very possibility of close reading works digital literature, while at the same time failing to adequately articulate what “close reading” means, or must come to mean, in digital environments.

Some attempts to address this problem have deepened it: first, close readings of digital literature have a tendency to collapse into a strictly visual semiotics — by which I refer to analyses of both pictographic material and text treated iconographically at the expense of its verbal or referential qualities. “Reading” images and animations and celebrating text-as-image is undeniably necessary when reading media-rich, visually dynamic works of digital literature; the interplay between media elements is indeed a definitive characteristic of the field. But in this view “reading skills” refers primarily to an interpretation of image and animation and comes to unnecessarily dominate an emerging conception of digital literacy. In this view, close reading elides conceptual understanding that arises from the verbal and the textual. I grant the need to employ the term and the practice of “reading” in such a way as to accommodate not only visual texts but participatory ones as well. N. Katherine Hayles, for instance, refers to textual installations in digital environments that “create an enriched sense of embodied play that complicates and extends the phenomenology of reading” (emphasis added), [Hayles 2008, 152]. “Reading in this view,” she writes, “becomes a complex performance in which agency is distributed between the user, the interface, and the active cognitions of the networked and programmable machine” [Hayles 2008, 153]. But one cannot help but notice when such an extension becomes an elision.[2] The practice of “reading” dynamic images does not need to signify the only or even the primary kind of interpretive work that is done on digital fiction and poetry, and will not, on its own, answer the question of what close reading means for digital literature.

Another reason why attempts to answer the question of what close reading means for digital literature fall short is the tendency to apply an overbroad and uncritical notion of “close reading” itself. We know that, on the surface, the popular — or what we might call the institutionalized — conception of close reading conflicts dramatically with the object in
question here: a multi-medial multi-modal digital artifact that simply refuses to stay still. And, of course, this is what makes digital literature so valuable for shaking up literary studies. But the closer we look, the more we find that close reading in the historical sense serves up an even greater set of contradictions for digital literature.

The application of an overbroad and uncritical notion of “close reading” is by no means restricted to those working in the field; the institutionalized conception has become, for better and for worse, an atomized one. But if we are going to redefine this figure in any productive way in light of digital media, we need a ground from which to work. This need to revisit and re-animate close reading is, furthermore, much more than a matter of terminology. If one agrees with Jane Gallop who argues that the practice of close reading is not only what defines literary study as a discipline and methodology, but also amounts to our single most effective “anti-authoritarian pedagogy” [Gallop 2007, 185] then literary studies would be foolish to forfeit its power to wield such a practice beyond the confines of print. In short, “close reading” demands our devout and continued intellectual oversight.

In what follows, my intention is to work through some of the prevailing popular and historical contradictions inherent to close reading digital literature, and put forth an updated conception of what is ultimately a vital practice of literary study. In the process, I'll establish some line of continuity — or perhaps more appropriately for a hypertextually-minded project — insert a link between a pre-digital historical conception of close reading and the sort of materially-conscious hermeneutics that digital textuality requires. Finally I'll use Steve Tomasula's TOC [Tomasula 2009], a self-described “new media novel,” as a model to apply such a conception of close reading to digital literature.

The Matter of Historical Close Reading

On the surface, there are good reasons to presume that New Criticism, the critical and pedagogical impulse most often associated with close reading, would be highly compatible with the enterprise of digital-literary scholarship. For one, the New Critics were open about their desire to make literary criticism, in the words of Ransom, “more scientific, or precise and systematic” [Ransom 1937]. Many of them, Allen Tate especially, even saw poetry, above and beyond science, as the only vehicle that could provide a unique and complete form of knowledge [Wellek 1995, 65]. It is clear, moreover, that they wanted to create a cohesive field, however crass Ransom’s own admittedly “distasteful” conception of “Criticism Inc.” may have conveyed itself over the years.

But, notwithstanding the inherent difficulty of speaking about any diverse group of scholars as a collective, the New Critics were under no illusion that they were going to create a positivistic discipline that could adopt the same brand of (scientific) method albeit in the service of a different brand of truth. Rather, it can be said that they were employing the very word “scientific” in a literary way; for them, close reading in particular was far from a technical endeavor [Wellek 1995, 65]. In Ransom’s own often-quoted plea for a “scientific” criticism, his own much less often quoted qualification follows: “It will never be a very exact science, or even a nearly exact one… It does not matter whether we call them sciences or just systematic studies; the total effort of each to be effective must be consolidated and kept going’ [Ransom 1937]. The New Critics were on the whole unlikely candidates for proto-technologists or budding digital humanists. Indeed, New Criticism was marked by suspicion of an increasingly industrialized and technologized society to the point of insularity. As the literary historian M.A.R. Habib writes, the New Critics “attempted to foster an elite which might safeguard culture against the technological and populist vulgarities of an industrial society” [Habib 2005, 564]. But theirs was not just a forward-looking suspicion of what industrialization and modernization would mean for literary art and criticism: they were even suspicious of what they saw as an overly technical approach to literary criticism preceding them in the Russian formalists, whose “mechanistic” quantitative methods were essentially at odds with any approach to a poetic or fictional text that involved aesthetic judgment [Wellek 1995, 65]. That the personal computer has for subsequent reactionary literary scholars and schools come to represent perhaps the most vulgar of intrusions into the humanistic realm would, in this historical light, further compound the contradiction of close reading digital literature.

An elaborate example of New Criticism's problems with scientism plays out in Richard Palmer's 1969 Hermeneutics, where he claims that despite “all its humanistic pretensions and flamboyant defenses of poetry in an ‘age of technology,’ modern literary criticism has itself become increasingly technological. More and more, it has imitated the approach of...
the scientist” [Palmer 1969, 6]. While Palmer grants that the New Critics were “essentially right about the autonomy of the literary work of art” and the pitfalls of the intentional fallacy,[7] they are here guilty by implication. And though he later provides similar qualification that New Criticism “constitutes in some ways an exception” [Palmer 1969, 225] to this technological approach, he ultimately faults their emphasis on structure and pattern in the production of “cold analyses” [Palmer 1969, 247]. He further charges that in treating the literary text as an autonomous object, it becomes an entity to be mastered, and since complete mastery or control does not equate to a complete understanding of the work, this is a false goal [Palmer 1969, 226]. Palmer concludes that New Critical readings tended to fall into either “an Aristotelian realism, organicism, or formalism” [Palmer 1969, 225–6]. It would appear that only a nebulous philosophical foundation — its status as moving target — has spared New Criticism from a more direct attack.[8]

Palmer's discussion of textual autonomy leads us to a related reason why we might expect a high degree of compatibility between New Critical close reading and close reading in the domain of digital humanities. The New Critical commitment to reading a literary work on its own terms as a literary work (not biography, not history, not cultural or political critique), along with their mantra of “the text itself,” would appear to point toward a deeper interest in the text as just that: a text, which is to say, a material artifact. Any focus on materiality would make them kindred scholars with those who would later confront the materiality of a new medium with the rise of digital culture. Their intense preoccupation with form would likewise suggest a potential affinity with theorists of digital textuality, who inevitably find themselves indulging in a new kind of Formalism when reading texts on the screen whose own internal tensions are networked and programmable.

But this sense of kindredness and affinity overlooks a crucial quality of the New Critical attitude toward their object. The text, for these scholars, was both much more and much less than the tangible product of the prevailing inscription technologies of the day. In their search for paradox, irony, ambiguity, and — above all — meaning, the site of interplay of these elements effectively became the textual object, or rather supplanted it. The body of the “text itself” was a function of what Jane Newman describes as “the fundamental Platonism” of the New Critics' conception of close reading: “The preferred 'object' of [New Criticism's] affection is in fact an abstract creation. The embrace of the Idea of the Text” [Newman 2010]. The body of the text for the New Critics was thus an abstract, dematerialized body. It is true that any hermeneutical process will involve the creation or recreation of some kind of abstract model, but the point is that for the New Critics the medium was not the message nor even a part of it. We are left with an inherent contradiction for close reading digital literature: one simply cannot close read digital text in the New Critical sense, for reading a text as a text does not work when you can no longer take the “text” to be an idealized abstract site of formal interplay.

If history presents some contradictions for close reading digital literature, then history can also surmount them. In fact, the figure who moves us out of and beyond this impasse is also the same one often positioned at the headwaters of New Criticism itself — I.A. Richards. Widely considered first among those influencing the New Critical tradition, Richards (much like his student and fellow Englishman William Empson after him) never fit comfortably in it. Richards attempted to negotiate a path between affective interpretations by readers and the formal elements that inhere in literary texts and structure a more or less appropriate or accurate interpretation. A clear example of this negotiation is his 1929 Practical Criticism, in which he conducts an experiment by asking students to respond to a series of unidentified poems (in the mold of what would come to be called Reader Response theory) then proceeds to categorize that data set using principles that reflect the New Critical method. Outside of the fortified disciplinary perimeter of literary criticism, Richards also rode the two-cultures debate with more courage and panache than most if not all of his peers, even if his attempt to instill scientific rigor in literary criticism while at the same time insisting that poetic language was non-referential and able to access only pseudo-truths was indeed having it both ways in the end.

As a literary critic, Richards certainly contains multitudes, and literary historians are quick to point out when his theories were undermined by his practice (see, for instance, [Habib 2005, 626]). He was, however, remarkably unique in the way his work — both in theory and in practice — recognized and embraced the materiality of literary texts and literary criticism. In terms of his theory, he famously meditated on the ontology of his own book, Principles of Literary Criticism, as a “machine to think with,” then did it over again in a revised preface for the same work two years later. The two prefaces differ in their choice of machine. In the first: “A book is a machine to think with, but it need not attempt to
emulate a force-pump” 1924 Preface, [Richards 1926, 1]. And in the second: “A book is a machine to think with, but it need not, therefore, usurp the functions either of the bellows or the locomotive. This book might better be compared to a loom on which it is proposed to re-weave some ravelled parts of our civilization” 1928 Preface, [Richards 1952, 1]. In both iterations, we see a distinction drawn between the machinations of literary criticism and those more crude though perhaps more precise operations of industrial machinery (his literary machine need not emulate or usurp these other functions); and, by extension, we can also see a re-inscription of Richards’ division of poetic and scientific modes of thought. In the second instance, moreover, he introduces yet another machine that offers a better analogue for the type of functions his text performs: the loom, which productively invokes the Latin etymology of “text,” from texere, to weave.

But by pushing these metaphors even further, Richards’ simple editorial exercise also lends itself to an even fuller reading along cybernetic lines. First, even though we understand Richards’ famous analogy to imply that his book is a machine that we, his readers, can think with, it is of course also something he himself is thinking with as he creates, and re-creates it. It is this process of re-creation in a slightly amended preface that enacts a kind of cybernetic feedback loop. In effect, we have a reflexive description of a system that is itself also simultaneously, and iteratively, at work: books are machines to think with, a process which in turn produces more machines to think with, which in turn… and so on.

In addition, with his slight revision we no longer simply have Principles of Literary Criticism, the work; rather, we have Principles of Literary Criticism, the network. Some would be inclined to call this bibliography or textual criticism, which would be entirely justified. Though one crucial difference remains in the fact that there is really not much point in arguing for a definitive version of the preface; the network, by definition, remains decentralized. The significance instead resides in the fact that the internal and inter-textual relations of the prefaces — of the network — are open for reading and, indeed, close reading.

In the process of feeding the concept of close reading digital literature itself through the work of New Criticism in general and Richards in particular, one furthermore encounters a sort of density of activity — or, in more hypertextual parlance, what we might describe as a significant hub in the network topology — around the year 1942. That year marked the publication of Richards’ How to Read a Page: A Course in Effective Reading with an Introduction to a Hundred Great Words, its very title indicating a deliberate attention to textual anatomies. The introduction, moreover, yields yet another revisitation of his preface, in which we are able to further contextualize his choice of machines. “Some books,” he writes, “endeavor to transport their readers or drag them passively hither and thither” (the locomotive); whereas “others aim to stuff them, with facts or other supposedly fattening matter” (the force pump and the bellows); and, finally, he adds a few more machines to the mix, including pulverizers, consolidators, and the microscope, “which can take the most familiar things and lay scraps and details of them before us, so transmuted by the new conditions under which we see them that we lose all power of recognizing or putting them together again…” [Richards 1954, 10]. In perhaps a proto-hypertextual spirit privileging reader choice, however, this time he makes it clear that readers of the present book will have to “choose for themselves which sort of machine they will compare this book to,” adding that “I do not believe a washing machine or a combination harvester is the right one” [Richards 1954, 10].

In addition, in that 1942 text, Richards began his peculiar typographical experiment of using specialized quotation marks. These meta-semantic signifiers were an attempt to redress what Richards called the “inordinately heavy task” that quotations typically take on in critical writing [Richards 1954, 67]. For example, a superscripted pair of “w’s” indicated that a word is being talked about as a word while a pair of “n’s” indicates that “the word is the name that is being used… though we may not think it is a good name” — similar to the phrase “the so called ________.” [Richards 1954, 68–9]. Insertions such as these, he had hoped, would “abridge both the intellectual and optical labor of the reader” [Richards 1954, 67]. While his readers may have found this typographical affectation curious, and his publishers certainly found it intolerable, Richards, nonetheless, in the very act of scripting meta-signification, might have been signaling a pre-historic, externalized form of HTML as well.

After all, if Richards toyed with intervening in basic typographical conventions to facilitate reading practices, hypertext technology demanded it. The standard HTML design typography for Web browsers are, of course, not in the form of superscripts but underlined and color-coded text. One would expect, for instance, underlined text that appears in a web
interface to be the site of a hyperlink, and its color will communicate further basic information to the reader: blue suggests that "you can go somewhere else from here," while purple suggests that "you've already been there." Richards' experiment, clearly, involves a circumscribed and somewhat idiosyncratic system; that is, these scripts were pointing not to some universal understanding of linguistic categories, but back to his own inescapably stylized explanations of them (hence, the very need for his own "Key"). Nonetheless, it anticipates the tension between universal typologies and a context-based pragmatics that would emerge with the varied projects of categorizing hyperlinks (as evidenced in Susanna Pajares Tosca's "A Pragmatics of Links," or, in relation to hypertext and narrative fiction, Jeff Parker's "A Poetics of the Link"). Moreover, Richards' endeavor anticipates other experiments by those scholars working in digital environments who similarly have found that the standard HTML adornments have likewise taken on an "inordinately heavy task" for critical readers and writers. In his hypertext essay "Hypertext Syntagmas," Adrian Miles, for example, uses different text link colors to refer to different strands of scholarly reference, including blue for "canonical," red for "commentary," and green for "quotation."

Some readings of Richards' intervention have been unsympathetic; Paul Fry, for one, describes them as the "equivalent of nervous italics," adding that "these warning superscripts only codify Richards' pervasively annoying habit of suppressing insoluble problems by exaggerating the difficulty of soluble ones" [Fry 2000, 190]. But when seen through what we might call the long zoom of evolving critical practices across media, Richards' experiment marks [up] a significant moment in the development of a materially-conscious hermeneutics. Joseph Tabbi's own discussion of Richards is exemplary in this regard. Discussing Richards' typography as enacting recursive "self-variations" in the text — a kind of feedback loop in itself — he goes on to suggest that hypertext may have already animated this notion ad absurdum: "In a culture of smileys, attachments, pasted text, and email replies setting off 'what you wrote'... the scare quote is the default condition of the text..." [Tabbi 2003, 5–6].

Richards undertook another important experiment in 1942. About a decade prior, his colleague C. K. Ogden proposed the idea of formalizing a pared-down, instrumentalized version of English to serve as an international second language and aid in language acquisition. He called it Basic English. Richards, during his involvement in the project, saw a potential synergy between this simplified standardized language and the affordances of contemporary mass media. He started conceiving of ways that their simplified language set (which included 850 key words along with a number of fundamental grammatical patterns) could be represented in visual form, and subsequently reproduced — or, indeed, mass-produced — in varied media forms. In 1942 he went to Disney Studios, which would assist him with the design and production of a series of stick figure drawings of people, places, and things that would eventually appear in his multi-volume Language Through Pictures, an expansion of the Basic English project [Russo 1998]. As John Paul Russo notes, "the series eventually went into record, tape, television and computer, easily adapting itself to the evolving media" [Russo 1998].[9] Here we have a multi-modal, multi-medial experiment in language acquisition and an attempt to technologize the word, no less one done in conjunction with that bastion of pop-cultural production — Disney.

Thus, 1942 provides a logical place to anchor one link that will allow us to reconcile some of the contradictions implicit in a historically minded application of close reading to digital literature, and help establish a pre-digital critical genealogy for digital literature (one that, moreover, stretches back further than a beleaguered "hypertext theory" of the early 1990s). Nevertheless, when it comes to close reading in dynamic digital environments, further modifications to methodology are necessary. How do we productively redirect a conception of the well-wrought urn toward, say, the well-wrought node, or, for that matter, the well-wrought code?

Re-animating Close Reading

In 1976, lamenting the perceived threat of technology to literary art and study, E.D. Hirsch wrote, "The jargon of the technocrat whose terms of 'input' and 'output' turn us metaphorically into machines is now part of our modern literature" [Hirsch 1976, 143]. With the advent of digital literature, today the language and logic of input and output and the cybernetic vocabulary from which it springs is no longer jargon, but part of the lingua franca of our field and, indeed, a foundational difference between print and digital textuality. Moreover, we are quite comfortable — albeit not passively uncritical — of the fact that Hirsch's description of us as metaphorical machines has in some ways crossed into the literal realm. That is, we do not have to adopt Marvin Minsky's popular reduction of the human to a "meat machine" in
order to realize that we now operate in a rich site of posthuman — and arguably posthumanist — textual activity. We become part of an integrated circuit that runs between body, text, and machine, and completes the feedback loop in a way that print literature does not.\[10\]

There is certainly no denying the complexity of the (intellectual, ethical, emotive) transaction that occurs for the reader of print literature, and it is possible to assert that Richards' own early musings on machinic textuality articulated the sort of communicative circuits at work in any media. But, as Hayles explains, "the new component possible with networked and programmable media is the cycle's completion, so that the feedback loops run in both directions — from the computer to the player and from the player to the computer" [Hayles 2008, 83]. In short, there are outcomes (or outputs) based on the perceptions and actions of the reader (or player). Hayles adds that

\[\text{[1]}\]To fully take this reflexivity into account requires understanding the computer's cascading interpretive processes and procedures, its possibilities, limitations, and functionalities as a subcognitive agent, as well as its operations within networked and programmable media considered as distributed cognitive systems. [Hayles 2008, 83]

Whether our computers augment the texts we write (via word search, spell check, or thesaurus) or, in the strong sense, we augment the texts that they write (via programs that enable dynamic generation of poetic or narrative texts), we conspicuously partake in such cybernetic reading and writing practices.\[11\] In addition, when our texts are works of digital literature, works written for and read on a computer screen that would lose something of their aesthetic and semiotic function if removed from their medium,\[12\] we need to partake in these interpretive processes in a manner that accounts for textual mobility, autonomy, and materiality in new ways.

A first step in close reading digital literature is abandoning the classical notion of organic wholeness and unity, for it is neither present as a criterion in the mode of New Criticism nor absent in the sense that poststructuralist criticism has always already "told you so." It would seem to be a fairly straightforward observation to say that the notion of the text as an autonomous and autotelic object is untenable in digital environments because the boundaries of the text itself are so often fluid, nebulous, or at least difficult to discern. Furthermore, it is difficult to determine the status of navigational tools such graphical maps (common in stand-alone hypertext applications such as Storyspace) or splash page graphics, which often double as contents pages without privileging any singular point of entry. Online texts raise even further questions given that they can potentially link to any other text on the Web, a potential realized for transgressive ends in many digital-literary works (Deena Larsen in Disappearing Rain and Lance Olsen in 10:01 among them). Clearly, digitally-mediated textual links explode Genette's concept of the paratext, those liminal devices of books that reside both internally and externally to it [Genette 1997, 1–15]. Genette divides paratexts (which include anything from titles, forewords, epigraphs, and dust jackets, to reviews, press releases, or correspondence written to or by the author) in two categories based on the relative proximity of these devices to the text. Such an exercise proves to be problematic in digitally networked texts where all nodes are experientially equidistant. There are in fact several works of digital literature online that relish the opportunity to enfold their paratexts within themselves (including 253 by Geoff Ryman and, in perhaps the most excessive example, The Unknown by William Gillespie et al., which links to reviews written by the authors about their own work).\[13\]

But despite these challenges to a traditional conception of textual form, digital literature is by no means formless. In fact, in some ways close reading digital literature requires a new mode of literary-critical Formalism.\[14\] For instance, while J. Hillis Miller has described the practice of (cartographically) accounting for wholes as an inheritance from New Criticism [Miller 1982, 17–8] and, with regard to its pursuit of panoptical perspective, adds that it "cannot be detached from its theological basis" [Miller 1982, 24], scholars of digital textuality are determined to move away from the dominant paradigm of a textual topography, and instead speak more accurately of textual topology (see [Aarseth 1997, 43] and [Berressem 2002, 29]). Given that the connectivity of points defines a digital network, not our ability to locate those points in space or map their relative distance from each other, it is more accurate to discuss the structure of networked forms of digital literature in terms of topology. Textual borders are thus not erased in digital environments; rather, they are continually renegotiated and redefined in a topological conceptualization.
Close reading digital literature also involves close analysis of the individual components that comprise its topology: hypertextual nodes. In turn, we should recognize the possibility of close reading new bibliographical units that are peculiar to digital environments. In such environments you can close read an entire novel or poem, or an entire node. You can also close read an idiosyncratic path of nodes, one that will include a reading of the links that both separate and connect them. In digital environments, you can furthermore close read images (either static or dynamic) and sound (be it music or noise) in relation to the text. Of course, you can do the same in print environments to an extent, but only to an extent, for print texts do not perform, which is to say they do not execute their code in a material sense.\[15\]

In turn, you can close read the kinetics of the digital text in relation to the text; you can close read digital literature with and against its interface / navigation;\[16\] and you can close read digital literature in relation to its application and — its ontological bedrock — programming code.\[17\] (Here again, the application of topology is apt in its concern for the movement of points in a dynamic field). The presence of a mobile material plane certainly has profound implications for how we read and interpret literary texts. Moreover, it might seem that close reading — if we are to think of it in terms of careful, deliberate, patient reading, is doomed when words and windows tend toward perpetual movement. In Richards’ own How to Read a Page, he states plainly that “[a]nything that is worth studying should be read as slowly as it will let you, and read again and again till you have it by heart”; and he chides the reader who strives for speed in the attempt to read more: “Whom are they fleeing from, these running readers?” [Richards 1954, 42]. Speed reading of course connotes both business-oriented bureaucratic skill and a bureaucratized pedagogy whereby students read for general comprehension or the “main idea.” But despite its own penchant for kinetic text that can truly test human ability to read at all (a good example would be the Flash poems of Young-Hae Chang Heavy Industries), digital literature does not necessarily require (or indeed allow) slow reading in the service of close reading. It does, however, still require that the literary work — to use Richards’ own phrase — “be read again and again” — a statement that is true perhaps now more than ever before. Michael Joyce (cited in [Sloane 2000, 129]), for one, has advocated the practice of “successive attendings” in texts that privilege multiplicity and poly-vocality, whereby we perceive coherence in terms other than that predicated on a singular organic whole, a notion that would apply across a wide range of digital fiction and poetry.

It follows then that close reading digital literature is inevitably close re-reading. Granted, close reading of any literary text involves re-reading, but narrative and poetic texts in digital environments take the practice of re-reading to a higher power or second-order. Such texts, because of their changeability, recursivity, and multi-linearity “rely on reiteration for their iteration; that is, re-reading can no longer be thought of as an epiphenomenon of reading in a network text since the re-reading of textual elements, via the recycling of nodes, is fundamental to (hyper)textual comprehension” [Ciccoricco 2007, 23]. Furthermore, although many works in print can claim to have no definitive ending at the level of discourse, many works of digital literature make the promise of return at the material level, which is to say they loop on the level of their macro-structure, customarily ending at the beginning only to begin again. Thus, the practice of re-reading is here hard-wired, so to speak. [Ciccoricco 2007, 23]

Digitally networked narrative texts, in particular, can enact meaningful re-readings in two distinct ways: (1) reading the same node in new surroundings — a new “semantic neighborhood” — can endow it with new meaning; and (2) a reader may return to a node much later on and find some of its elements foregrounded by information accumulated since first reading it, a process that can be said to augment the way memory works when reading a work of print. That is, our engagement with the interface can unexpectedly bring information back into consciousness and, unlike the first scenario, its context is recast in a strictly cognitive sense. Both scenarios demonstrate the network’s capacity to generate new meaning through a recombination of elements already read. [Ciccoricco 2007, 29–30]

The notion of re-reading has broader implications for the interpretive community of digital literature and the literary establishment it is creating, effectively, from the inside out. As Tabbi writes: “In print, the credentialing process ends when the contract is signed; in e-media, the work is vetted continuously (or could be) and lives or dies depending on the readings it attracts, the re-writings it inspires, and how these are presented” [Tabbi 2009]. Therefore, “Whatever transformations the Humanities undergo in new media, a condition for the field’s possibility has to be the ability to re-read, and the freedom to cite, the work of peers and precursors…” [Tabbi 2009].

For all these reasons, digital literature prompts a revisitation, re-articulation, and re-animation of the very concept of
close reading, one that attends to the material context of its process and product. Despite the contradictions inherent in an application of the prevailing historical and popular conception of close reading to digital literature, Richards’ own insights have already opened up that very possibility. Techno-literary criticism, however, must recognize a work of digital fiction as both a literal and a literary machine, one that is inevitably and iterably reliant on code for its execution/performance. That means critics must consider the formal, material, and discursive elements of each work as at once distinct and inseparable, each integrated toward the production of meaning.

The Practical Matter of Close Reading

Steve Tomasula’s digital narrative TOC: A New Media Novel [Tomasula 2009] offers a productive test case for what a close reading of digital literature might look like. Written by Tomasula and designed by Stephen Farrell (along with Matt Lavoy on animation, and Christian Jara on DVD authoring, programming, sound engineering, additional animation, and some narration, and a host of others contributing everything from voice work to paintings used for many of the graphics throughout the text), TOC is published by Fiction Collective 2 (FC2) under the auspices of University of Alabama Press, and is available only on DVD, playable only on computer.

As the text’s promotional material suggests, TOC is, above all, a meta-narrative about time: “the invention of the second, the beating of a heart, the story of humans connecting through time to each other and to the world.” The narrative is divided into two main sections. The “Chronos” section tells the story of one woman whose husband is horribly disfigured in a car accident, and who becomes pregnant after having sex with her twin brother during her husband's convalescence. The “Logos” section provides the prehistory of an exiled people ruled by a “Queen Ephemera” on a mythical island nation. Of course, if we were to consider this initial description as the basis for a closer reading of the text, it would remain inadequate, as it is yet to acknowledge the novel’s textual condition — its digital ontology as an internally networked and programmable artifact. What is missing so far is the recognition of an interplay between the formal, material, and discursive elements of the text — in short, something that would explain why the narrative needs a screen in the first place.

A different approach to reading of TOC might follow the trend of over-emphasizing the technical innovations of digital literature and the materiality of the textual medium. Equally problematic but for the opposite reason, such a reading might describe TOC as a dynamic visual narrative published on DVD only and read / viewed on the computer screen. It would mention that it uses QuickTime animation software for its introductory sequence, as well as subsequent animations that are interspersed among the text, images, and music. It would explain that the navigational structure stems from a central page where users can click and drag a pebble icon on top of one of two boxes, labeled “Chronos” or “Logos”; that the Chronos section will play audio narration with accompanying graphics that the user can zoom in on by clicking on them; and that the Logos section will open text segments. Such a reading might even go into forensic detail about the programming language(s) used to script the text's performance, which is important, but insufficient on its own.[18] A tendency to focus on technological prowess or the newness of new media is common in both the critical and popular writing on digital literature. But it fails, much like the first case, to recognize the vital interplay between the text's formal, material, discursive elements, and further leaves us with the simple question: what's the story here? Or, is there even one to begin with?

With reference to a single one of TOC’s bibliographical units, the node titled “Under the Influence, 1959,” we can consider what a more complete close reading might entail.
The text is displayed inside what appears to be a glass sphere or bell jar, and readers must scroll down to view the full scene, which reads as follows:

At a time when the world lived under the influence of the machine, there was a woman, who was a woman, who was a woman, who was a woman, who felt like a telescoping box of women, each birthday adding another woman that all the rest fit within like Russian dolls. When she laid them all out, looking at pictures that showed her first as a baby, then a girl, then an adolescent, then a young woman, then a middle-aged woman, she didn't know which of them to ask, "Who are you?" But then she became pregnant — and the pun became literal and it amazed her to think of the smaller her that was in her, the smaller her adding a her that could be nestled inside that her though none of them, not even herself, was really her. She thought of her own mother, a larger version of her/not-her, and her mother's mother, and her mother's mother's mother, and the larger versions of her/not-her expanding out to the garden where slept the largest her of all….

A more complete reading, then, would reflect on the text's materiality and form as it engages its verbal and conceptual complexity. Starting again with some general context, then moving to the scene in question, it might look like this:

Steve Tomasula's TOC, a “new media novel” published on DVD only and read / viewed on the computer screen, is a story about time. The story moves from an epic sibling rivalry, a fight between the twin sons of the Queen Ephemera, both potential heirs in their new island nation of exiles. Their feud is as eternal as their names would suggest: chronology itself — literally the science of time — has been split: there is Chronos, the figure for time, and Logos, the figure for logic and its essential vehicle — language. Readers must “vote” for one twin or the other in the main navigational screen by casting a pebble (via a click and drag) into a box marked Chronos, which is filled with sand, or
Logos, which is filled with water. The Chronos section will play an audio narration with accompanying graphics that tells the story of one woman whose husband is horribly disfigured in a car accident, and who becomes pregnant after having sex with her twin brother during her husband's convalescence. The Logos section will open text segments such as the one above, which provide the prehistory of Chronos, Logos, and Queen Ephemera and the people of the island nation. The text's topology is encased by a broader hierarchical structure, thus merging multi-linear reading at the local level with a linear progression that occurs globally: specifically, after exhausting the nodes at the Chronos/Logos level of the interface, readers eventually advance “up” to another level of the story, which occurs on the island itself, long after the time of the mythical twins. On this level, a menu of node titles is organized according to moons arranged around an image of the island nation.

In “Under the Influence, 1959,” a woman contemplates her own identity and what might actually constitute its persistence over time. The opening recursive refrain (“there was a woman, who was a woman, who was a woman”) recalls the refrains that appear earlier in the text during the voiceover narration in the opening sequence (“sun sets before sun rises before sun sets before sun rises”), evoking the sense of circular time. These micro-narratives also recall John Barth’s “Frame Tale” [Barth 1988] in print (“Once upon a time there was a story that began once upon a time there was a story that began...”); although here Tomasula can employ both the screen’s potential for kinetic, transient text and a seemingly spherical substrate to animate this recursion: the top of a glass globe image around which the text runs.

The same globe that appears here and in the animated prologue encases the text in all the textual nodes of the Logos interface. It is ostensibly the top of a bell jar, a standard piece of laboratory equipment. Typically used for the protection or preservation of an artifact from the elements, or simply the ravages of time, the fact that a weathered scroll is the protected artifact in this context offers a rich commentary on the evolution of writing technologies. Historically, bell jars were also commonly used as vacuum chambers for scientific experimentation; removing the atmosphere, again, fundamentally alters the effects of time. One suggestion here then is that the narrative is indeed timeless, or at least circular as in the case of the pregnant woman. But the bell jar interface is a “time machine” in yet another way. Later in the story (or earlier, depending in what order one reads) we learn that Ephemera, the Queen of Exile, has glass fingernails that are in the shape of an hourglass, as do all of her descendents. Inside those fingernails is a tiny channel of sand that runs toward their fingertips when they go about their business during the day. At night, for reasons best left to magical realism, they sleep with their arms in slings so that the sand runs back toward their palms, refilling the opposing end of their hourglass fingernails and, in turn, balancing out their nights and days. For the reader, however, the glass fingertip we see on the screen contains not sand, but rather the words on the papyrus-styled scroll. And it is only by scrolling down to the end of each segment of this digital narrative that we too are in some sense experiencing the measure of time through language.

Finally, we cannot close read this node, or any node for that matter, without close reading its title: “Under the Influence, 1959.” Even though a reading of titles (of chapters or of entire novels) is common to traditional hermeneutics, we know that nodes are not equivalent to pages and one of the plainest distinctions between the two is the fact that pages are numbered whereas nodes are titled. In fact, in any networked fiction, it is possible and often necessary to read node titles in relation to the titles that precede and follow them and in relation to the text of the node itself (a practice foregrounded in Stuart Moulthrop's Victory Garden, in which titles often complete the movement from one node to the next both grammatically and semantically).[19]

Keeping within the context of the “bell jar,” and given a scene depicting a woman’s troubled musings on her own sense of self, Sylvia Plath is certainly present. Just a few years before publishing The Bell Jar, she herself would have been “under the influence” not only of that enormous task in 1959, but also that of Robert Lowell’s poetry tutelage, not to mention the camera of Rollie McKenna, who took one of the most famous (and haunting) photographs of the writer in Boston that year. The weightiest influence for Plath, however, might have been the fact that she was then pregnant with her first child, Frieda, thus establishing the clearest connection between her and the woman with a “smaller her that was in her.” Intra-textually, the meditations of the pregnant woman moreover anticipate or, depending on the order of reading, echo the grotesque plight of the pregnant woman in the Chronos sequence, illustrating the sort of repetition and recombination typical in digitally networked fictions.
A more immediate reading of the title is of course the colloquial and somewhat comical evocation that we are all intoxicated by something, perhaps our modern technologies — “under the influence” of our machines. But for the all the machines that feature so prominently in the text, either in its discourse or its interface, from pre-history through Victorian-styled steam-punk to the present day, the most dominant machine is not a real machine at all. That is, the “Influencing Machine” evoked implicitly here in this title and explicitly elsewhere throughout was a collective hallucination reported by a number of schizophrenic patients attending the psychoanalyst Viktor Tausk during the early 1900s. (He published his findings in the *Psychoanalytic Quarterly* in 1933 with an article titled “On the Origin of the ‘Influencing Machine’ in Schizophrenia.”)

These patients suffered from a paranoid delusion whereby they believed they were being influenced — or controlled — from a distance by a machine that they could describe to some extent but whose technical operation was always beyond the grasp of their understanding, aside from the human heart at the center of the machine described, incredibly, by the vast majority of subjects. Significantly, the description of the individual parts of the machine changed over time according to the changes in the popular technologies of the time. Not surprisingly, the descriptions in the latter cases had increasingly evident parallels to television. One can only wonder how Tausk’s case studies would read if he published his article today, or for that matter, in 1959, the year indicated in the title. After all, that year marks the beginning of what is known as the “second generation” of modern computing, when improvements in transistors and circuitry crossed a threshold that made these machines much smaller, faster, and smarter. They were the first computers that could accept commands that started to resemble what I.A. Richards might have called “basic English.”

Thus, this well-wrought node has an apparent autonomy. It is, after all, a semantically self-contained unit, open to a discrete close reading in itself. But even the most devout New Critic must concede that the meaning of this text is dependent not simply on the broader narrative network in which it resides but also the material support that contextualizes our close reading project in peculiar ways. From the bell jars and glass finger nails which tell us more of the represented world, to the computer screen itself which permits the reflexive reading that positions us under the influence of the ubiquitous machines of personal computing, we cannot simply look through the interface to the language it conveys. At the same time, the language cannot be reduced to merely one mode of signification among many or, in the words of Brian Kim Stefans, a mere “participant in a recombinant universe jointly occupied by sounds, images, videos and the user's interactions” [Stefans 2005]; rather, language-driven work is crucial to the very notion of digital literature. The point is to privilege neither language nor materiality outright — it is simply to underscore the possibility of a productive communion between the literary and the machinic in our media rich culture — in much the same spirit of Theodor Nelson’s own vision of computers as “literary machines.”

In fact, if our critical consideration of machines brings us from the textual (after Richards and Hayles) to the organic (after Minsky) and back again, then perhaps the “Influencing Machine” of Tomasula's TOC can be understood as a figure for close reading itself, one that persists over time and across media. Close reading is, after all, a process by which a reader is under the influence of a textual — and indeed technical — machine, a machine that changes over time according to the changes in popular technologies of the time. Furthermore, much like Tausk’s patients, who could never wholly grasp the operation of the strange machine they saw, we too continually struggle to grasp the machines that enable digital textuality, both in the mundane sense, as users enduring hardware or software upgrades that are — if only momentarily — just slightly beyond our comprehension, and as theorists invested in understanding the varied ways in which we are drawn into the circuitry.[20]

**Techno-literary Criticism: So Close and So Far**

Such an exercise in close reading and, for that matter, the entire present essay, rests on a vital assumption: that digital media do not dispossess us of an interpretive reading practice. Close reading in digital environments still involves analyzing linguistic, structural, semiotic, intertextual, and semantic elements, but it also involves digital literacy. Digital literacy is not necessarily in place of and is in some ways in addition to interpretative practice in print, but is in all ways attendant to the materiality of the digital medium. All in all, it should come as no surprise that literary theory and criticism is becoming and must become more formalist and materialist in orientation in the midst of our digital and networked culture; and this is not just to accommodate digital texts and textuality into the fold. Book history and textual criticism is
enjoying its own revival with not only this newfound focus on materiality but also new technological tools with which to study its object. (It is also no surprise that the spike in academic interest in the history of the book coincides with the ascendancy of the personal computer. *The Society for the History of Authorship, Reading and Publishing* [SHARP], in fact, held their first conference in 1991 the same year Tim Berners Lee got his pet project off the ground). This redefinition of close reading is indeed in line with developments in the realm of print. Witnessing the fading gap between analytical methods that attend to the “text itself” versus those materials outside of it, Newman writes, “A ‘new,’ post-‘Modernist’ close reading ought to turn to the more full-bodied objects that texts always are by recognizing that, as historian-of-the-book, Roger Chartier, famously wrote, ‘to read is always to read something’” [Newman 2010]. Thus, digital literature has much to gain from recovering New Criticism’s sensitivity to language and technique along with Richards’ own sensitivity to its technical and material supports.

More broadly, the same line of inquiry has profound implications for the future of literary studies and the very conception of the “literary” itself in contemporary cultural production. I grant that the very word itself is vague, contestable, and to a large extent determined — in the Wittgensteinian sense — on how it is employed as a word. But one point that needs to be addressed — or redressed — is the fact that any close reading of digital literature needs to attend to the “literary” as composed of words; otherwise whatever is literary in the World Wide Web and digital environments more generally will — like a Flash poem that is just a bit too flashy — certainly pass us by.

**Notes**

[1] Referring to Joan Campàs’ observations about digital literature being “more often browsed than read,” N. Katherine Hayles writes, “although, recently, in what we might call the second generation of hypertext criticism as practiced by such critics as David Ciccoricco, Terry Harpold, Matthew Kirschenbaum, and Jessica Pressman, electronic literature is read, and read very closely” [Hayles 2008, 190 n31]

[2] There are sufficient examples of such elision, and any cursory survey of notable digital literature collections, such as the *Electronic Literature Organization Collection Volume I*, or the early *Electronic Literature Directory*, or even special journal editions devoted to the field, such as *Dichtung Digital’s* “New Perspectives on Digital Literature,” will tend to reflect the same situation: the number of primarily text-based or narrative-driven titles is small, compared to the number of other (generative, algorithmic, primarily visual, or video game) titles under consideration. Meanwhile, conferences and events devoted to recovering the importance of text and reading in digital art and culture can perpetuate the very elision they are trying to move beyond. For example, a 2009 conference on “Reading Digital Literature” emphasized that digital literacy “after all is still inevitably based on reading skills” [Simanowski 2009] while the analyses it elicited often concerned installation art in which, for example, “one mostly does not engage in the reading process, but rather plays with the rain of letters. The text has been transformed into visual objects,” or “if you step back from the screens and take in the installation as a whole, you’re not really reading anymore; you’re perceiving this plethora of text as part of a trance-like experience” [Simanowski 2009]. While the situation is not a problem in itself (and may indeed simply reflect the ontology of what we call digital literature), it is highly relevant in guiding our understanding and application of close reading in digital environments.

[3] Gallop frames close reading as inherently opposed to both older authoritarian models of learning and contemporary models in other disciplines that rely on a “banking model” of “depositing” knowledge directly into the student. Close reading, as inherited from New Criticism, not only affords literary studies with a transparent methodology but also enables a form of active learning [Gallop 2007, 1845].

[4] Close reading was not concomitant with the criticism that New Criticism professed; rather, as Wellek describes, “the method of close reading became the pedagogical weapon of the New Criticism” [Wellek 1995, 65].

[5] We know that the substance of close reading is somewhat sullied. The alleged myopia of the New Critics and their legacy has proved catastrophic, in this debasement narrative, for our understanding of race, class, gender and, more broadly, our deeper historical consciousness. In short defense of the debased conception of close reading, it can be said that New Criticism was wittingly blind to what has been called extrinsic textual factors so that the intrinsic factors of the text itself could have their own day in the sun. There is also no shortage of secondary scholarship that opposes the notion of the New Critics as resolutely or absolutely ahistorical. Spurlin and Fischer’s 1995 edited collection on *The New Criticism and Contemporary Literary Theory*, for one, dismantles this broad-stroke ahistoricism by either excavating evidence of historical consciousness in the New Critical oeuvre or contextualizing the more radical calls for history’s exclusion as a direct response to the “Old Historicism” that left literary criticism without a clear mandate and in need of a disciplinary home in the first place. But one does not need to offer an extended apologia for the New Critics in order to establish that close reading, and everything it stands for, has survived. It has survived both the theory boon and the New Historicism that followed it (meanwhile, we can thank Paul de Man for showing us that deconstruction never really
threatened the sanctified realm of close reading but rather "infused it with new zeal" [Gallop 2007, 182]).

[6] This insularity was perhaps epitomized in the 1930 manifesto-laden collection I'll Take My Stand: the South and the agrarian tradition, in which twelve "Southerners" penned essays celebrating rural life and traditional values while flirting with Neo-Confederatism. Despite its reactionary rhetoric, even for the day (it would not fare well under postcolonial eyes), the collection was highly influential. Many of its contributors — among them John Crowe Ransom, Robert Penn Warren, Allen Tate, and Donald Davidson — had by then already made a name for themselves as part of the Fugitive poets, writing poetry for the magazine of the same name in the early 1920s. In order to truly foster the arts, their argument went, we would need to rehabilitate an agrarian society that valued tradition, history, and self-sufficiency over the dehumanizing effects they felt bearing down on them from the growing urban economies of the North.

[7] On these points Palmer is actually much more sympathetic to New Criticism than Wellek's reframing of Palmer's position as an "indifferent scientism" would allow [Wellek 1995, 66].

[8] A more recent critique (albeit one no less reactionary on the topic of technology and the humanities) argues that despite their attempt to construct a literary safe-house within which to practice and preserve their craft, New Criticism in fact internalized the technoculture it sought to escape:

The New Critics of the 1940s and 1950s attempted to protect the verbal artifact from the pressures of historical necessity and mere utility; yet their method was a direct reflection of those pressures. New Criticism was a kind of synecdochic condensation of the technological system in its antihistoricism; its objective neutrality and treatment of the poem as a clinical specimen; its quasi-scientific emphasis on specialization and method together with a meager, mostly inconsequential theorizing; its myths of synthesis and autolechy; its metaphors for organization. The New Critics fostered a straightforward, roll-up-your-sleeves approach to criticism that valued technocratic expertise, teamwork, bureaucratized efficiency, and anonymity (though a few top stars always get the prizes). [Russo 1998]

[9] Russo's own criticism of the project follows: "While Basic offered an ideal of technological efficiency — it was supposedly quick and easy to learn — it tended to reduce language from a complex instrument of intellectual analysis into a collection of purely functional or operational phrases" [Russo 1998]. It helps to recall Richards' own dualistic understanding of literary/poetic and non-literary language in light of such dismissals, and instead consider the endeavor prescient for anticipating a problem that lies at the heart of experiments in Artificial Intelligence and natural language processing, which were then gaining tremendous momentum with advancements in modern computing.


[12] The definition is an adapted and abridged version of that put forth for "digital fiction" by the members of the Digital Fiction International Network (DFIN). That full definition includes a further description of works that "pursue their verbal, discursive and/or conceptual complexity through the digital medium" with the intention of providing some qualification of the "literary" [Bell et al. 2010].


[14] One expects certain stock objections to any critical approach that is strikingly Formalist, and digital-literary criticism is no exception. But the defense would go beyond a stock response for digital literature: one must be Formalist to an extent when talking about new forms. After all, a whole generation of theory misconstrued the form — and the materiality — of digital textuality, whether we were talking about flickering signifiers or a virtual text conceived in terms of purely light and electricity. Part of the challenge for scholars in the field is that the further they move away from their specialized circles, whether in articles or conference papers, the more they must start with very formal or definitional approaches because of the audience's lack of familiarity with not simply a given text, but its form. Either way, a focus on form is always a means to an (interpretive) end; and here we can follow art historian Yve-Alain Bois, who writes that "even one's most formal descriptions are always predicated upon a judgment and ... the stake of this judgment is always, knowingly or not, meaning ... [T]he reverse is also true: it is impossible to lay any claim to meaning without specifically (and I would say initially) speaking of form" [Bois 1996].

[15] This passage is adapted from my contribution to [Bell et al. 2010].


[17] The obvious problem for reading code, of course, is that of accessibility; as Bootz puts it, "reading does not allow one to access all of the aesthetic layers of the programmed work of a digital medium." [Boitz 2006] Some forms of digital literature — and poetry in particular — will invite the practice of reading code by conspicuously introducing programming language into the surface level of the text, making the code itself accessible or visible, and in some cases even allowing readers to alter the code themselves (see Alan Sondheim's discussion of the main forms...
of “codework”). In fact, many programmers are quite willing to endorse aesthetic notions of code itself that transcend the fundamental qualities of clarity and economy (see [Mateas and Montfort 2006]). Other, more resistant texts might require “transgressive” readings, such as exporting the individual nodes of a multi-linear text and reading them in a fixed order (as Espen Aarseth famously did with Michael Joyce’s afternoon). See [Ciccoricco 2007, 193–5] for my own — admittedly somewhat accidental — transgressive reading of the “missing” text in the code of Judd Morrissey’s The Jew’s Daughter.

[18] The adjective “forensic” invokes Matthew Kirschenbaum’s Mechanisms: New Media and the Forensic Imagination [Kirschenbaum 2001], which attends to the bibliographical specificities of software and hardware — the materiality — of cultural production in digital media. With regard to reading code in particular, it is worth noting that the practice can yield insights into how the text’s programming both enables and circumscribes interpretation. That is, if the affordances of programmable texts allow for certain functional or operational features which can in turn inform the text’s themes and meaning, the same programmability can also place certain limitations on the production of meaning. For example, responding to questions about TOC following his demonstration of the text at the 2010 Electronic Literature Conference (ELO) at Brown University, Tomasula explained that the somewhat arbitrary interactive cross-hairs function in the Logos section of the interface, which allows users to select scenes by “targeting” the colored slots in the moving image of a player piano roll, resulted from a late compromise at the level of programming; and he concedes that this compromise was “not as apt to the text’s wider themes as would be the original conception of holes in a player-piano roll that would have stood in for both the absence of sound, and that which creates sound” email correspondence with author, August 8, 2011.


[20] I am indebted to the insightful comments of one of my anonymous reviewers in expanding this passage.

[21] Scholar and theorist of digital literature Astrid Ensslin echoes the same sentiment when she writes that “we can only use the term ‘digital literature’ if and when the reception process is guided if not dominated by ‘literary’ means, i.e. by written or orally narrated language rather than sequences of images — no matter how short and allusive text chunks, or lexias, may be” [Ensslin 2010, 145].

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