(Electronic) Literature and the (Post)human Condition

Electronic literature exists in a perpetual state of flux, due to its reliance on digital technology; with the rapid progression of processing power and graphical abilities, electronic literature swiftly moved from a reliance on the written word into a more diverse, multi-modal form of digital arts practice. The literariness of early electronic literature is manifest: the work was primarily textual, the centrality of reading paramount. The current crop of electronic literature-- with its audio-visual, multimodal nature--calls into question the literariness of this work, however, as is evidenced by this year's call for papers. I propose that this ambiguity as regards literariness and written textuality in electronic literature disadvantages the field, in both academic circles and in the search for a wider reading audience. If electronic literature as field is to assert and validate its position within the greater literary tradition, links between electronic literature and past literary achievements need to be uncovered and illuminated. So how might the authors and critics of electronic literature work to properly define its borders and boundaries? As it stands, the literary element exists on the periphery of most works of electronic literature. Before we even acknowledge this issue, we have to acknowledge the difficulty inherent in defining the literary element, no matter the medium it is instantiated in. Literature has always resided in between the covers of the bound book, and much like Potter Steward defining pornography, we simply knew it when we saw it. With electronic literature, that intangible quality is harder to believe in, and this leads to frustration when the uninitiated encounter new works of electronic literature.

In what follows, I would like to turn the attention of the electronic literature community to the philosophical and theoretical framework of posthumanism, as it is deployed by both Cary Wolfe and Katherine Hayles. Posthumanism can be brought upon electronic literature in a

manner of ways. Firstly, posthumanism can be used as a theoretical framework for understanding how electronic literature as a genre operates as a system, implicated and imbricated within the greater system of literature in a historical sense. Following Wolfe's lead, systems theory will be used to draw borders and boundaries for electronic literature, just as Wolfe argues for a more defined conception of animal studies. It is my contention that this necessary defining of the field will lead to more productive engagement with literature departments, leading to a greater reading audience.

Secondly, posthumanism as a philosophical undertaking seeks to challenge the conception of the autonomous liberal subject as defined by humanism in the Enlightenment era. I argue that this autonomous subject is intricately connected to the novel; not only is the novel seen as a definitive, autonomous object, but for much of its history the novel has been used to perpetuate the autonomous liberal subject. Works of modernism and postmodernism finally challenged this notion of subjectivity, dovetailing with critical theories of poststructuralism and deconstruction. Posthumanism, growing out of work in deconstruction and postmodern theory, can help us make connections between electronic literature and previous movements in the literary tradition. Again, this is all done to gain a foothold within literary departments, in an effort to encourage a wider reading audience.

Finally, posthumanism can be employed as a theoretical framework for understanding works of individual creativity, as another tool of literary criticism. N. Katherine Hayles work in How We Became Posthuman (1999) and My Mother Was a Computer (2002) are illustrative works of how posthuman theory helps us to read individual works of (electronic) literature. In particular, Hayles reads Shelley Jackson's influential work of elit Patchwork Girl. Ultimately, posthumanism as literary criticism has mostly lent itself to use with works of electronic literature

which are concerned themselves with issues of technology and the human body, the rights of animals, and matters of ecological importance. Can posthumanism be used as criticism for any and all works of literature? I will attempt to answer this question in the following pages.

Before we get any deeper with posthumanism, we must pause and reflect on the way in which it has been used by both Katherine Hayles and Cary Wolfe. Even though both writers use the term posthumanism, they do so in very different ways. For us to better understand how we might use posthumanism to define electronic literature, we must illuminate how it has been used by Hayles and Wolfe. Hayles work Howe We Became Posthumanism attempts to provide a historical analysis of how a writer like Han Moravec can claim that one day human beings will be able to download consciousness on to a computer server, effectively doing away with our finitude and our embodiment. Hayles is adamant that we must never eschew our embodiment, as that is what defines us as human beings. Despite this insistence, Hayles' book explore the historical changes in though that have led us to questioning our embodiment, through a detailed explanation of the Macy Conferences and cybernetics. Hayles outlines how information was characterized as a free-flowing entity, privileging informational pattern over material instantiation. Human beings, and specifically the workings of neurons, were then seen as information processing units, thereby linking human beings with machines. Ultimately, this led to the view that our bodies were more accidents of evolution that biological necessities, merely a pitstop on the question for information to be free. The posthuman view, then, "thinks of the body as the original prosthesis we all learn to manipulate, so that extending or replacing the body with other prosthesis becomes a continuation of a process that began before we were born" (Hayles, np). This view of the posthuman has now been referred to as transhumanism, the desire to transcend our own material corporeality.

Cary Wolfe advances on posthumanism from an alternative route than Hayles. Rather than confront posthumanism in terms of its transcendental, after-embodiment method, Wolfe takes an animal studies approach, encouraging us to extend the ethical and moral sphere to include that of nonhuman animals (which Wolfe prefers to call nonhuman subjects), in What is Posthumanism? (2010). Wolfe writes,

> Hayles's use of the term, in other words, tends to oppose embodiment and the posthuman,   whereas the sense in which I am using the term insists on exactly the opposite: posthumanism in my sense isn't posthuman at all—in the sense of being "after" our embodiment has been transcended—but is only posthumanist, in the sense that it opposes the fantasies of disembodiment and autonomy, inherited from humanism itself, that Hayles rightly criticizes. (xv)

Drawing on Luhmann's systems theory and Derrida's deconstruction (and defference), Wolfe outlines the ways in which the human-animal divide is no longer a useful or purposeful distinction, as many of the characteristics we associate with human subjectivity have largely been proven false from developments in scientific research. This paper is not the place for an in-depth overview of how Wolfe reaches the final destination of nonhuman subjects, but what is pertinent to our discussion is the way in which Wolfe articulates the need for animal studies to properly define itself as an autonomous discipline.

Wolfe is drawing on Luhmann primarily to make a point about interdisciplinarity and animal studies. He's calling for a very well-defined conception of animal studies that does not strive for a chaotic transdisciplinarity but that works instead to define its limits. His argument, following Luhmann, is that closed systems, through their discrete organization, are more capable of complex interactions with other systems. Here is where he gets to the point:

Crucial to a posthumanist understanding of disciplinarity, then – and to posthumanism in

general, I would argue—is the fundamental principle of "openness form closure" that

Luhmann's work helps us theorize: that taking seriously the phenomena of self-reference

and autopoietic closure in disciplinary systems leads not to solipsism but, quite the

contrary, to the ability for the system to increase environmental contacts and, in the

process, produce more environmental complexity for other systems, which in turn

challenges other disciplines to change and evolve if they want to remain resonant with

their changing environment. " (71)

Anyone working in electronic literature at this moment can identify with the need for defining

the field. I argue that this lack of definition within the field is a detriment, as it makes it difficult

for new readers to identify readily apparent literary elements. Electronic literature, needs to work

at defining its border in order to find the "openness from closure" so important to Luhmann's

systems theory and Wolfe's posthumanism. As it stands, electronic literature is more of an

umbrella term, under which all production of digital arts is found. My initial reaction was to limit

works of electronic literature which were not focused on written textuality, as I argued during

last year's ELO conference, but I have since realized that this is not a productive direction for the

field. Rather, we need to find a useful and pragmatic mode of discourse which works towards

defining the different modes of literary production in digital environments.

Wolfe is able to make a call for rigid disciplinarity thanks in part to his focus on systems

theory. Furthermore, systems theory provides the theoretical framework for moving closer to

animals, to denying the distinction between animals and humans propagated by the

Enlightenment era's liberal human subject. Systems theory allows us to look at any matter or

object as a self-defined autopoietic system, thereby creating similarities among a wide range of

objects and things in the world. Human beings are seen as autopoietic systems, as well as dragon flies, automobiles, and thermostats. Wolfe again:

> Long before the historical onset of cyborg technologies that now so obviously inject the post- into posthuman in ways that fascinate the transhumanists, functional differentiation itself determines the posthumanist form of meaning, reason, and communication by untethering it from its moorings in the individual, subjectivity, and consciousness. Meaning now becomes a specifically modern form of self-referential recursivity that is used by both psychic systems (consciousness) and social systems (communication) to handle overwhelming environmental complexity. (xx)

Animal studies as a discipline, then, can define itself and engage with other disciplines more productively by closing itself off from environmental complexity, working to define its own meaning. Electronic literature, following Wolfe's animal studies, stands to profit from this same "openness from closure," which would allow transdisciplinarity while at the same time maintaining rigid borders through which we can shape the field.

Posthumanism, and specifically Wolfe's employment of systems theory, provides us with a theoretical framework through which we can analyze individual works of electronic literature, as well as the field as a whole. In their extremely useful paper "Electronic Literature as an Information System," authors Juan B. Gutierrez, Mark C. Marino, Pablo Gervas, and Laura Borras Castanyer outline their approach to classifying works of electronic literature as a 3-tiered information system. These tiers include data (the textual content), process (computational interactions) and presentation (on-screen rendering of the narrative). The authors state that this framework will "allow us to treat content and processing independently, thus creating a distinction between works of literary merit and works of technological craftsmanship. . . .

Secondly, we claim that this approach provides a unified framework with which all pieces of electronic literature can be studies" (3/12). Despite some questionable terminology (not every work of electronic literature renders a narrative), the authors use a systems theory approach in order to productively define the production of literary output.

In fact, the authors display an uncertainty about the field, as they discuss the rapid acceleration of digital technology and the assimilation of textuality by other modes of digital production (such as audio and visual components). Indeed, the authors ask the question, "To what extent does the "novel" requirement of electronic literature (as the field is currently defined) de-emphasize a textual investment in exploring the (post)human condition ('the literary')?" (2/12). I believe that this is the question that we must always have in mind as we work towards defining the field, both in terms of rigid closure from other disciplines and in creating classifications and categories within the e-lit field itself. Digital arts practice is a wide-ranging mode of production, and electronic literature cannot simply be an enormous tent to store it all under. Rather, the literary components can be more forcefully brought out in works of elit by creating distinctions and categories. Ultimately, this will lead to new readers finding the types of works they are after more easily. Wolfe's posthumanism and systems theory may just be the answer to finding a greater reading audience for electronic literature.

In utilizing systems theory to understand electronic literature, we must be careful to not lose sight of the human body in this equation, as Hayles insistence on embodiment reminds us. Placing the human body at the center of digital media studies is a fairly common occurrence; indeed, in Bodies in Technology (2002), philosopher Don Ihde reminds us of the "anthropological invariant" in media discourse: no matter the direction or speed of technological progress, the human body (in both its phenemonological and social/cultural forms) must always

remain at the center of the event. Similar to Ihde's anthropological invariant, Mark B.N. Hansen places the body in the position of framing device in his notable book, New Philosophy for New Media (2006). Hansen's work quite clearly opposes the work of theorist Friedrich Kittler, who believes that "media determine our situation," and is interested in studying discourse and media networks as autonomous systems, void of human interference. Hansen, then, seeks to place the body in the center of said media networks, through his employment of the work of Henri Bergson. In fact, Bergson's notion of the perceiving body as a "center of indetermination" is one of Hansen's guiding motifs in his analysis of contemporary new media artworks. The readings of skulls and video projects and digital portraits fleshes out his notion of affectivity: "the capacity of the body to experience itself as more than itself, and thus to deploy its sensorimotor power to create the unpredictable, the experimental, the new." Hansen argues that Kittler's decoupling of information from communication means that the human must be revalued as the purely contingent by-product of a preparatory phase in the evolution of information toward truly autonomous circulation." Kittler relies on Shannon's information theory, while Hansen's recourse is to follow McKay's alternative approach to information which places the embodied receiver at the center of the exchange.

Keeping the body at the center of our discourse, then, allows us to connect posthumanism and electronic literature in such a way that we consider how electronic literature shapes our understanding of what it means to be a (post)human. In Technics and Time 1: The Fault of Epimetheus (1998), Bernard Stiegler provides an account of the history of human beings, always are constituted and shaped by technology. Relying on anthropological and archeological research, Stiegler claims that human being have always been technical creatures. Drawing on the work of the anthropologist Leroi-Gourhan, Stiegler states that the moment our apelike ancestors

stood up to become bipedal creatures, essentially freeing the hands and mouth, we became humans. Indeed, the freeing of the hands led to the use of tools, while the freeing of the mouth from its grasping functions led to the development of language. Stiegler writes,

> Hominization is for Leroi-Gourhan a rupture in the movement of freeing (or mobilization) characteristic of life. This rupture happens suddenly, in the form of a process of exteriorization which, from the point of view of paleontology, means that the appearance of the human is the appearance of the technical. Leroi-Gourhan specifies this as the appearance of language. The movement inherent in his process of exteriorization is paradoxical: Leroi-Gourhan in fact says that it is the tool, that is, tekhne, that invents the human, not the human who invents the technical. Or again: the human invents himself in the technical by inventing the tool—by becoming exteriorized techno-logically. (141)

In his writing, Stiegler insists (unlike Leroi-Gourhan) that the relationship is symbiotic and paradoxical, the the human is invented by the technical at the very same time that the technical invents the human. Dovetailing with this connection between techné and humans is the appearance of language at the same time. Leroi-Gourhan writes that humans "can make tools as well as symbols, both of which derive from the same process, or, rather, draw upon the same basic equipment in the brain. This leads us back to conclude, not only that language is as characteristic of humans as are tools, but also that both are the expression of the same intrinsically human property" (Qtd. in Stiegler, 164). Language and technics, for Stiegler, is what invents the human and, in a strange twist of logic, we are always already posthuman. This relationship between humans, language, and technology will allow us to make inroads into the

philosophical understanding of electronic literature, but not before we quickly turn our attention to Martin Heidegger and his understanding of language and technics.

Martin Heidegger was fundamentally concerned with the nature of humanity, particular in relation to technology. In essays like "The Question Concerning Technology" and "The Turning" Heidegger posits a fundamental schism in the nature of technology brought upon us with the rise of modern technology. It is in his lecture Parmenides, from 1942-43, that Heidegger explores humanity's relationship to writing. I am unable to adequately summarize Heidegger's text at this time, but Timothy C. Campbell's Improper Life: Terchnology and Biopolitics from Heidegger to Agamben (2011) provides an excellent summary of Heidegger's work. Campbell writes that "Heidegger posits a fundamental ontological distinction between a proper writing, a Festschrift or "handwriting," and another thought against (and through) the example of the typewriter" (3). Heidegger believes that the hand is closer to humanity's true nature of Being as, along with the word, it is that which separates us from animals. Thus, writing with the hand is ontologically closer to Being than dictating to (or through) a typewriter. Leaving the ontologically distinctions between man and animal (which Wolfe most certainly takes issue with), it is the very act of writing with which I am interested in. If Heidegger observes a rupture in Being in relation to the technics we use to write, how might our understanding of the (post)human condition be altered as we move towards a writing fundamentally infected with machinic code? This is the direction of a philopshical investigation of electronic literature.

In My Mother Was a Computer: Digital Subjects and Literary Literary Texts (2005), N. Katherine Hayles touches on this link between natural language and machinic code. Hayles writes that "the creative writing practices of 'codework,' practiced by artists such as MEZ, Talan Memmott, Alan Sondheim, and others, mingle code and English in a pastiche that, by analogy

with two natural languages that similarly intermingle, might be called a creole" (60). This line of

thinking follows Heidegger's trajectory of writing, from the proper form with the hand to the

improper writing of the typewriter. No longer is the machine merely a tool for dictation, but the

computer is necessary and crucial to enact the code of electronic literature. It is this line of

thinking which begs us to consider how electronic literature is the preeminent example of

posthuman literature. This posthuman literature blurs the borders between humans and machines,

as natural language mixes with computer code in meaningful ways; from this point, we begin to

consider new ways in which our literature helps us explore the posthuman condition.

Works Cited

Guiterrez, Juan B., Mark C. Marino, Pablo Gervás, and Laura Borrás Castanyer. "Electronic Literature as an Information System." Hyperrhiz: New Media Cultures 06 (2013): np.

Hansen, Mark. New Philosophy for New Media. Cambridge, MA: MIT Press, 2006.

Hayles, N. Katherine. How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics. Chicago: U of Chicago Press, 1999.

---. My Mother Was a Computer: Digital Subjects and Literary Texts. Chicago: U of Chicago Press, 2005.

Heidegger, Martin. The Question Concerning Technology and Other Essays. Trans. William Lovitt. New York: Harper Perennial, 1982.

Ihde, Don. Bodies in Technology. Minneapolis: U of Minnesota Press, 2002.

Stiegler, Bernard. Technics and Time 1: The Fault of Epimetheus. Trans. Richard Beardsworth and George Collins. Stanford: Stanford University Press, 1998.

Wolfe, Cary. What is Posthumanism? Minneapolis: U of Minnesota Press, 2009.