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Metacommentary

Do Cyborgs Dream of iPhone Apps? The Body and Storytelling in the Digital Imaginary

Illya Szilak

The digital imaginary is a zone where cyborgs, “chimeras ... theorized and fabricated hybrids of machine and organism,” (Haraway 150) dwell and create. With the proliferation of digital technologies for communication, the digital imaginary has become the ground for cyborg narrative production. Moreover, as human bodies have become machine-extended, a concomitant shift in consciousness has occurred. The individual sense of self, once sited in the physical body, has become a networked, digital entity that operates in multiple spaces and times.

Following McLuhan, *“putting our physical bodies inside our extended nervous systems, by means of electric media, we set up a dynamic by which ... all such extensions of our bodies, including cities, will be translated into information systems,”* (McLuhan 57), in this essay, I will argue that, for cyborg bodies, the change is less material than epistemological: how we process information and how we write and read the world and our identities is fundamentally changing.

Emojis, avatars, thumbs up and down, the swipe, the pinch, the spread, little hearts are ways of commodifying, standardizing, and making legible, complex aspects of human communication that computers cannot process accurately or easily make profitable. Although not all the artworks discussed in this book are overtly political, by utilizing the affordances of digital technology, all reveal the constraints of the machine-based communication systems that they creatively co-opt. The artworks here are hybrids: human and machine, truth and fiction, content and form. It is the reader, moved by desire or memory or simply rules of the game, who, through her interaction, sets the dynamo in motion. Thus, the digital imaginary is an intrinsically political space. As Haraway suggests

in her manifesto: “... the relation between organism and machine has been a border war. The stakes in the border war have been the territories of production, reproduction and imagination” (Haraway 150).

What is at stake here, as David Clark’s *The End: Death in Seven Colors* intimates, is nothing less than the concept of “human.” One person whose death *The End* describes is computer scientist Alan Turing. The so-called Turing test, which attempts to answer the question “can machines think,” does not unequivocally define human intelligence. Rather it relies on an elaborate logocentric mimesis for a litmus test. For Turing, a computer does not have to “be” human, it only has to pass. Human-ness is a relation between sender and receiver, defined by the ability to imitate recognizably “human” communication patterns. At the time Turing devised the test, this consisted of text typed on a computer keyboard. Today, artists like those featured here are exploring a wider range of modalities for cyborg communication (Turing).

To understand the emergent language of the digital imaginary, it is important to consider what is meant by “information.” The Macy Conferences on Cybernetics, held between 1946 and 1953, the purpose of which was to provide the foundations for a “general science of the workings of the human mind,” provided the foundations for what we know today as information theory. During that conference Claude Shannon’s definition of information, which completely disregarded the importance of meaning-making, won out. Shannon explains,

The fundamental problem of communication is that of reproducing at one point either exactly or approximately a message selected at another point. Frequently the messages have meaning; that is they refer to or are correlated according to some system with certain physical or conceptual entities. These semantic aspects of communication are irrelevant to the engineering problem. (Shannon, 3)

Because he was primarily concerned with increasing signal to noise ratio in communication, Shannon privileged machine intelligence over conventional human intelligence. British physicist Donald MacKay, another prominent Macy Conference attendee, objected, arguing that information was related to the change that occurred in the receiver with receipt of the message. In other words, signal and noise are relative. Information is dependent upon the operating characteristics of the receiver and the effect a message has on her. As MacKay famously stated: “Information is the distinction that makes a difference” (Floridi).

The body and its senses are where many of these distinctions originate. Although mostly discussed in relation to virtual reality, “presence,” that feeling

of being in a particular time and space, is relevant to all works emanating from the digital imaginary. Presence is in many ways a primordial epistemological process, a way of organizing incoming sense data into useful knowledge. Although dependent upon sensory stimulation, the organization of sense data is also related to meaning-making and emotion. The process can also be modified, and perhaps even overwritten by memory. According to neuroscientists, presence is, in fact, a core consciousness, one that helps animals distinguish self and other, internal and external. Interactivity, especially action upon the world, is critical to facilitating this. Through interactivity, the sense of presence allows an organism to create a motor-map of the universe. This allows it to plan future actions in the light of past knowledge (Ijsselsteijn and Riva).

A century prior to these theories, French philosopher Henri Bergson placed a similar emphasis on the body in information processing:

Everything thus happens for us as though we reflected back to the surfaces the light which emanates from them, the light, which, had it passed on unopposed, would never have been revealed. The images which surround us will appear to turn toward our body the side, emphasized by the light upon it, which interests our body. They will detach from themselves that which we have arrested on its way, that which we are capable of influencing. (Bergson 36)

As linguists Lakoff and Johnson have shown, at least in English, textual and verbal language are themselves spatially oriented and originate with embodied existence. They argue that orientational metaphors containing terms like “up/down,” “front/back,” “light/dark,” and “warm/cold” are the most basic metaphors, grounded as they are in physical, sensual experience. Many cultures also tend to correlate these sensory-motor concepts with emotions, such as the idea that sadness is “down.” Thus, they argue, orientational metaphors are the most basic way that humans organize their conceptual thinking about the world (Lakoff and Johnson).

But, what happens to language with the advent of telepresence and telecommunication? What happens when the body can be made virtual or change its form or point of view? In other words, what organizes information for cyborg bodies if it is no longer the physical body and its senses?

As our patterns of communication change and our own legibility alters, it is not surprising that the emerging shapes of immersive, narrative, and database arts reflect this radical epistemological shift. The essays and interviews in this volume bring to the fore a variety of ways in which artists are creating through and about new forms of information processing and storytelling, including:

- a shift from logocentrism to spatiality
- a move from linear narrative to database
- a shift from narrative with plot and character development to alternative asymmetries that fulfil consumer desire
- a move from story to game with an emphasis on form or process over content
- a shift from a single authorial voice to a collaborative or multi-perspective story-telling

Although cyborg bodies have loosened their tether to conventional material reality and humans spend more and more of their lives online, the centrality of an individual body, albeit at times a virtual or abstract one, remains. This is not surprising. The very concept of human and world depends upon it. As geographer Yi-Fu Tuan suggests:

Man and world denote complex ideas. At this point, we also need to look at simpler ideas abstracted from man and world, namely body and space, remembering, however that the one not only occupies the other but commands and orders it through intention. Body is "lived body" and space is humanly construed space. (Tuan 35)

In the digital imaginary, there is a shift from reading as processing of words, "man," "space," to reading as an experience, particularly an experience of moving through space. Sharon Daniel's overtly references this in her interview. Eschewing character-driven narratives, Daniel instead pictures the work as a space that the reader traverses.

I see the set of issues or social problems, like mass incarceration, as a site or territory, say, 100 square miles, and I want to map that territory by populating with the testimony of those most impacted. Then I want to provide access to that territory and testimony, but instead of moving you, the viewer or audience, from point A to point B to point C, in a kind of narrative arc, I want to drop you into that territory and let you find your own way through it, and hopefully have a transformative experience that is like the transformations I experience myself in my encounters with the people who share their stories with me.

In the digital imaginary, it is the journey of a machine-extended body that constitutes the "story," not a singular set of time-ordered events strung one after another like pearls on a string or words in a sentence. Stuart Moulthrop summarizes this in his commentary:

... (T)he cybertextual turn seems to imply a shift from a certain logocentrism— the regime of the definitive sentence – to what we might call lococentrism: an entry into story space, the composition not of statements but of maps and territories. Though in fact lococentrism is not the right word at all, since the main effect of this transformation is not re-centering but de-centering, an at least ostensible forswearing of hierarchies.

The fundamental questions for the creator of digital narratives are who or what transverse these territories, what mechanisms move visitors through, how does the “visitor” process information she finds, and what engines (conscious and subconscious, internal and external) direct and propel the journey?

Moulthrop goes on to substitute perilocality, “indicating not a dominion of focus but unconstrained distribution” for “*lococentrism*” and this relates to Lev Manovich’s theory of database:

As a cultural form, database represents the world as a list of items and it refuses to order this list. In contrast, a narrative creates a cause-and-effect trajectory of seemingly unordered items (events). Therefore, database and narrative are natural enemies. Competing for the same territory of human culture, each claims an exclusive right to make meaning out of the world. (Manovich)

Håkan Jonson and Johannes Helden’s *Encyclopedia* which “parasitically” feeds on an existing online database to create and bring to extinction chimerical creatures provides a good example of this shift from linear narrative to database. Negotiating the tension between material and virtual, real and fiction, the work does suggest that materiality itself is an ordering dynamic, one that is intrinsically tied to the ecology of the earth and its inhabitants and one that resists the democratizing logic of the database.

Developing his theory around the same time as Manovich, cultural critic Hiroki Azuma describes a shift from narrative consumption to database consumption as a move from a repository of “grand narratives” or world views to “grand non-narratives”—popular characters and settings (Azuma 55). Whereas in the modernist era, personal fictions could be related in depth to a grand story about the meaning of human life, now, there is a lateral move in which multiple small stories are spawned from the same database. These small narratives do not refer back to some greater or universal theme, but are simply vehicles for invoking strong feeling or fulfilling consumer desires. Azuma writes, “... there is no longer a narrative in the deep inner layer, beneath works and product ... it is only characters that unite various works and products. Here, the individual

products are the simulacra and behind them is the database of characters and settings” (Azuma 53).

In *The Anime Machine*, Thomas Lamarre critiques Azuma’s theory of database consumption arguing that Azuma is so intent on a non-hierarchical flattening of data that he forgets the materiality inherent in the formation of a database and its interface. For Lamarre, affective asymmetries create subjective asymmetries resulting in the notion a “character” where a vaguely human form is retained as visual/emotional marker. Moreover, repetition/habit mediated by how information is accessed, consumed, circulated, and reproduced creates asymmetries of form and autopoiesis. Lamarre sees the database not as a static repository, but as a distributive machine—one whose very operation creates and reproduces asymmetries (Lamarre).

In light of this, Samantha Gorman’s structuring of *Pry* is especially interesting. In this work, Gorman creates a tension between freedom/chaos/noise and structure/story/meaning as evidenced most obviously by a combination of automatic writing and more scripted writing and video. Moreover, underlying the multimedia database which users explore, there is a structured, but largely invisible asymmetry. She explains:

Segments of different videos that have structured odds of following after each preceding video, so it switches and it just sort of goes off. It has carefully authored and crafted tangents, so it’s both randomized and authored in some way. This question also speaks to a literal archive because this one chapter has 45 minutes total of video below a surface that is archived as different clips with different weights and preferences.

Thus, *Pry* shows that the database, even if collective or multimodal, is never neutral but reflects certain aesthetics or values. Moreover, all information processing is intrinsically political. Gorman says at much in this statement: “I think writing and reading are so violent ... inscribing something, you’re forcing upon the world, and you’re also, you’re making the reader try to reconcile and understand and generate their own meanings for what you’re writing.”

Gorman suggests the machine extended body is not immune to assault. As evidenced by the pinching, pulling motions the reader uses to access information, in *Pry*, “the whole process as a writer and as a reader is a sort of violence, a sort of forcing whether it’s—you know, you’re asking someone to pry into this very intimate space.”

Although many artists can write their own code, most (like Gorman) do not eschew the conventions of commercial interfaces. Software can be thought of as the grammar of the digital imaginary. It is what lends form to information. Although, as *Pry* beautifully demonstrates, the digital imaginary liberates narrative from the restraints imposed by the “page,” in other ways, most commercial platforms such as Facebook and Twitter normalize and delimit how information is accessed and processed.

Software does “hide” in a most direct way. The algorithms which control which updates from your friends you will see on Facebook, the algorithms behind Google Search, or the algorithm controlling your car GPS—none of them are accessible. In the recent couple of years, media and academics started to discuss the politics of the few selected algorithms (such as Google search)—but there are millions of other places where algorithms control things and we just take it for granted, because “things work.” Software also “hides” in a more indirect way. Even when the code is available, it can be too big to analyze it and discuss its “politics” in any meaningful way. Last but not least—as you said, software also “hides” because certain “species” (certain interface techniques and conventions) are completely taken for granted. They become naturalized, and then they become invisible to most people.” (Szilak, interview with Lev Manovich)

The machine-extended body no longer requires a physical panopticon to regulate its behaviors. We live our lives online, sharing what we eat, how much we sleep, what we do with our friends and huge corporations alike. The panopticon exists, not as a physical space, but digitally in places like Instagram and Google—popular sites of information transfer. As Foucault presciently noted decades ago, “It (the panopticon) is an important mechanism, for it automatizes and disindividualizes power. Power has its principle not so much in a person as in a certain concerted distribution of bodies, surfaces, lights, gazes; in an arrangement whose internal mechanisms produce the relation in which individuals are caught up” (Foucault 202).

Donna Leishman’s *Front* both mimics and disrupts the constraints of contemporary information systems, especially Facebook. In creating the work, she finally decided to create a mock Facebook page rather than use the actual site because, “... some of the things I want to do will contravene perhaps Facebook’s rules and regulations and it would be shut down or it could change or fall out of their system. In short my creation would be overly limited” (Leishman).

Leishman’s choice is revealing. Like *Front*, works by the artists in this book reflect new ways of processing information through computer technology and,

at the same time, often disrupt the mechanisms by which information gets processed and distributed, or act to reveal the reader's complicity in this process.

As the interviewers point out, in the interview with Håkan Jonson and Johannes Helde, their work *Encyclopedia* not only manifests the limits of ... "our technical ability to account for, describe, and catalog species, including ourselves," it also reveals the fact that "the interactor is complicit or potentially complicit, or at least has a responsibility for constructing the work but also in that sense for exterminating the species."

Sharon Daniel's work, the most overtly political among those discussed, utilizes a different tactic. *Inside the Distance* allows the user to access multiple points of view and, in this way, as the interviewers say, "the database constructs fiction that is not necessarily individual-centered narratives but allows for multiple-centered stories that in a way have a political value." Structurally, too, Daniel eschews individual character by using the same actor for different characters in an interview, which, as the interviewers note, "makes us think of positions, right, in the system rather than the way we identify a character as an actor." Combining stylized enactments with the nuances and paralinguistic realism of historical audio recordings and using the recurrent motif of a table to structure these enactments, Daniel not only overtly reveals her authorial hand, she suggests that there are rules, systems, and structures embedded in the abstract notion of "justice."

Daniel's table can be thought of as a kind of magic circle. A place where the boundaries are set and immovable, a form that persists and informs whatever content (dialogue) that comes across it during the mediation process. This neutrality of form offers the readers permission to access information polyvalently according to the mechanisms of interaction Daniel provides. Although considering the difference between rule (of a game) and law is especially applicable to Daniel's work, it is also pertinent to a more general discussion of information processing and narrative production in the digital imaginary. Ludic narratives emerging from the digital imaginary do not claim access to an absolute truth, rather they allow for multiple end-points.

Baudrillard suggests that what distinguishes the rule of a game from law is the fact that the rule does not attempt to universalize meaning and value: "*It is the Law's transcendence that establishes the irreversibility of meaning and value. And it is the rule's immanence, its arbitrary, circumscriptive character that leads, in its own sphere, to the reversibility of meaning and the reversion of the Law*" (Baudrillard 34).

Encyclopedia is another work in this book that demonstrates the ludic turn of the digital imaginary. As Lisa Swanstrom notes in her commentary, it is the sheer absurdity of some of the creatures that proclaims the rules of the game that underlie their making. Moreover: “it is its very specificity that makes it legible, offers some measure of order and control—and, perhaps most importantly, a small measure of levity—to conversations about extinction that are often overwhelmingly bleak in their visions of the future” (Swanstrom). Interestingly, Donald MacKay in defining information suggests that information processing is intrinsically a rule-based process;

Information can now be defined as that which does logical work on the organism's orientation (whether correctly or not, and whether adding to, replacing or confirming the functional linkages of the orienting system.) Thus we leave open the question whether the information is true or false, fresh, corrective or confirmatory and so on. (MacKay 95-96)

The meaning of information is relative and depends upon its context and receiver memory, desire, and orientation. This loss of absolute meaning and the diminished hegemony of “grand narratives” means that form, process, and effects upon the user are as important, or may even supersede the importance of content in narrative design.

MacKay's definition of information cited above becomes more interesting if we exchange “object” for “information.” In the digital imaginary things act as strange attractors. They can reorganize not only sight lines but also meaning. Citing Clark's and Daniel's works, Stuart Moulthrop suggests that “reeling from agoraphobic uncertainties of inside-out cyberspace, our sensibilities turn inevitably these days toward objects.” But, as N. Katherine Hayles points out,

... for information to exist, it must always be instantiated in a medium ... The point is not only that abstracting information from a material base is an imaginary act but also, and more fundamentally, that conceiving of information as a thing separate from the medium instantiating it is a prior imaginary act that constructs a holistic phenomenon as an information/matter duality. (Hayles 24)

Objects then are a specific kind of information, one closely associated with the sensual, embodied experience, “real life,” which digital existence to some extent disavows.

... (Y)ou cut your finger on a sheet of paper, you trip over some toy, you get bopped on the head by a falling nut. These are occasions outside the scene of

phenomenological attention that nonetheless teach you that you're 'caught up in things' and that 'the body is a thing among things.' (Brown 3)

Objects are not only a marker for our waning experience of the material world, their immediacy and haecceity is just what resists taxonomy and capture. An early scene in *Pry* beautifully illustrates this. In this video piece, the main character James collects and organizes personal objects prior to leaving for military service. Writes Lisa Swanstrom in her commentary,

He treats the album as a showcase of taxonomic specimens, evidence of his life ... The photo album provides an archive of his present, allowing him to curate the physical objects he will want to refer to in order to maintain his ties to his home when he is away from it. ... It is a touching attempt to control, via ordering, what will turn out be a volatile and violent environment.

As our bodies become machine-extended, networked and fragmented, the concept of self that arises from a perception of the body interacting with the world, also expands. Embedded in James' attempt at ordering is a need to fix an idea of himself in a place "home" even as he departs it. In the digital imaginary the fixed site of the body has been replaced by a journey which the traveler marks or commemorates with artifacts— muscle-memories of real lived life and "proof" of his existence and identity. "I was there. 'I did that."

Concomitant with this evolving notion of self in the digital imaginary, we find works which, although they might maintain conventional narrative with its emphasis on plot and character development, offer users freedom in the form of a crowdsourced or collaborative authorship. For Kate Pullinger—character and plot offer a structure around which she and her multiiple collaborators work. As noted by Anastasia Salter in her commentary:

This is not the model of the writer as originator, absent from the making; instead, Pullinger is present as the work is being imagined and embodied, allowing for meaningful transdisciplinary co-creation This co-present, collaborative approach is the essence of Pullinger's redefinition of the authorial voice for the multimodal context of electronic fictions.

In this essay, I have tried to show some of the ways in which authorial voice and narrative form emerge from the digital imaginary. Although diverse in form and content, these works as a whole reflect the changes in the way machine-extended humans process information, as well as the untethering of those processes from the physical body.

As Stuart Moulthrop poetically suggests in his commentary: “Once upon a time we told stories. We dreamed about a magical place called cyberspace. Then we turned it inside out, and got it all over ourselves, and now we find ourselves at play in various sandboxes, in the world as database.” With the flattening of information in a database, the interface itself imparts certain kinds of momentum, sight lines, and trajectories to the traversal of that territory. Artists then are the ones who create not new content per se, but new forms and ways of processing the information contained in that database. They are the ones who produce the rules or lack thereof for the game.

Just as information is not neutral, the processing of that information creates asymmetries in the database of human knowledge that have political, social, and cultural implications. As Geoffrey Bowker suggests in his commentary, the works presented in this book are powerful, not merely because they find “new ways to say old things; nor even new ways to say new things,” it is because they have the power to change, reproduce, and redistribute “who we are in the world.” He explains:

It's hard to look out from within Flatland and imagine the world of spheres. Similarly, it is difficult to imagine what new forms time and space might take if we had a radically new knowledge technology. All that is certain is that we need one and that we will be different people once we have it.

As Bowker correctly points out, information processing and world building are closely related. Moreover, with new technologies such as virtual reality with its uncanny ability to mimic and invoke the real, there is a danger that, in communicating through certain sensations, beyond or in lieu of written language, the material conditions underlying the experience will be effaced. There is a danger that the world and its objects will appear as a given in their “sensuous certainty” (Ahmed 163).

One way to contest this sensuous certainty is through writing. All writing is, in a sense, overwriting—a projection of words onto the world of sensuous experience. Writing and reading do not have the immediacy of images. They slow down our processing of information. They create a space, an abstraction, a void between perceiving subject and object. Thus, although certainly image especially video has increased importance in narratives produced in the digital imaginary, writing remains important for just this reason.

As Turing showed us, the definition of what it means to be human is relational, not fixed. Moreover, the written word, which for centuries was held as the

quintessence of human communication, is not what it used to be. But, perhaps, as philosopher Giorgio Agamben suggests: “*Homo sapiens ... is neither a clearly defined species nor a substance; it is rather, a machine or device for producing the recognition of the human*” (Agamben 26).

Perhaps, too, the works that emerge from the digital imaginary are not clearly defined as a species: visual art, literature, film, but are all, in their own way, little machines for helping us recognize the human.

Works Cited

- Agamben, Giorgio. *The Open*. Stanford University Press, 2004.
- Ahmed, Sara. *Queer Phenomenology*. Duke University Press, 2006.
- Azuma, Hiroki. *Otaku Japan's Database Animals*. University of Minnesota Press, 2009.
- Baudrillard, Jean. *Seduction*. trans. Brian Singer, St. Martin's Press, 1990.
- Bergson, Henri. *Matter and Memory*. Zone Books, 1988.
- Brown, Bill. “Thing Theory,” *Critical Inquiry* 28, no. 1 (2001).
- Foucault, Michel. *Discipline and Punish: The Birth of the Prison*. trans. Alan Sheridan, Vintage Books, 1995.
- Harraway, Donna. “A Cyborg Manifesto: Science, Technology and Socialist-Feminism in the Late Twentieth Century,” *Simians, Cyborgs, and Women: The Reinvention of Nature*, Routledge Press, 1990.
- Hayles, N. Katherine. *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics*. University of Chicago Press, 1999.
- IjsselsteinJ, Wijnand, and Giuseppe Riva. Being There the Experience of Presence in Mediated Environments, effetsdepresence.uqam.ca/upload/files/articles/being-there.pdf.
- Lakoff, George, and Mark Johnson. *Metaphors We Live By*. University of Chicago Press, 2008.
- Lamarre, Thomas. *The Anime Machine: A Media Theory of Animation*. University of Minnesota Press, 2009.
- MacKay, Donald. *Information, Mechanism, and Meaning*. MIT Press, 1969.
- MacKay, Donald. quoted in *The Philosophy of Information*. Luciano Floridi, Oxford University Press (USA), 2011.
- Manovich, Lev. “Database as Symbolic Form,” *Millennium Film Journal*, no. 34 (Fall 1999), http://www.mfj-online.org/journalPages/MFJ34/Manovich_Database_FrameSet.html, accessed 1/7/19.
- McLuhan, Marshall. *Understanding Media: the Extensions of Man*. MIT, 1994.

- Shannon, Claude. "A Mathematical Theory of Communication." *ACM SIGMOBILE Mobile Computing and Communications Review* 5, no. 1 (January 2001): 3.
- Szilak, Illya. "Software Takes Command: An Interview with New Media Theorist Lev Manovich, Part 1." *Huffington Post* (December 16, 2013), https://www.huffingtonpost.com/illya-szilak/software-takes-command-an_b_4449999.html. accessed 1/7/19.
- Tuan, Yi-Fu. *Space and Place*. University of Minnesota Press, 1977.
- Turing, Alan M. "Computing Machinery and "Intelligence," *Mind* 49: 433–60, 1950.
- Summary: The Macy Conferences. American Society for Cybernetics, www.asc-cybernetics.org/foundations/history/MacySummary.htm.