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Emergence and Posthuman Narrative

...but in an age of fragmentation, interlocking subdivisions and identical restaurants, in a world that each year generates 100,000,000 Miracle Slacks™, each to be filled by – HELLO! MY NAME IS: _____ – in a country of actuary tables, and service manager uniforms (filled out by Service Managers), hip-hop fashions (filled out by Hip-Hoppers), personalized mail-order catalogs, look-a-like Sports Heroes, News Teams and other types – that is, to paint a portrait of our time, do the particulars of name matter?

What seems important is the ways in which millions upon million of interactions made of individual movements, motives, desires and fears bring into being patterns as surely as temperature, pressure and vapor form snowflakes, snowflakes form storms, and storms contribute to climates and other patterns – a *Weltanschauung*, as humans once called their cultural climate. Thus, if some Author wanted to model a world where a single worldwide chain of 5,000 department stores – call it Wall-to-Wall Mart – forms a massive hive that is continually monitoring its sales of furniture and pencils and bobbles and refrigerators and sandals and shirts, compiling 100 terabytes of information about inventory and Customers – five times the contents of the U.S. Library of Congress – a world where an outbreak of Avian Flu travels the globe as quickly as a jumbo jet, or bad loans in One-Horse, Montana cause Iceland to go bankrupt; a world where the people in Iceland or Montana are no more wedded to the noses, teeth or chemistry that they were born with than they are to their bank accounts, and find themselves taking for granted the fact that their very DNA can be edited, patented, and rearranged like any other data, *and* – when they look for love – the people who have these new chemical personalities or noses or organs no longer seduce one another face-to-face but Facebook-to-Facebook; nor do they – when they go to war – face off in linear trenches but launch attacks with pilotless drones or a *bricolage* of cell phones, ATM machines, and Wikipedia articles on bomb building: a world of tomato-fish hybrids and cow-human embryos, in short, that gives individuals the power for mass destruction once reserved to nations, and enables all of us, collectively, to make privacy go the way of the dodo bird as we co-author public portraits comprised of data dots about when we rise, and sleep; what we buy, eat, watch; where we work, travel, play; how we talk, read, click, scroll; or who we meet, tweet, or email.... To depict such a world, do the techniques of 19th

century oil painting suffice?

Optical metaphors – language from the visual arts, or cinema – have always been an attractive way for authors to describe the depictions they make of words. So looking at a time when the techniques of oil painting did suffice might shed some light on what a novel of today might look like. I'm referring here to the family resemblances between visual art and the realist novel centered on an autonomous self and dependent on the optical metaphor: Stendhal's *Mirror* traveling down the road of life, and embodied as its main character. Indeed, witness the number of novels of this era that bear the name of the main character as title – *Clarissa*, *Pamela*, *Robinson Crusoe*, *David Copperfield* – as well as the amount of sensory, especially visual, detail recorded by these protagonists: Anyone could tell, Dickens tells us, what station David Copperfield came from by the appearance of his toilet.

In fact, if a DeFoe or Flaubert or Zola or Tolstoy or Norris novel were translated into paint it might have a number of family resemblances with Adolph Northern's depiction of Napoleon's retreat from Russia (See Fig. 1).



Fig. 1: Northern, Adolph. *Napoleons Rückzug aus Russland* (Napoleon's withdrawal from Russia). Oil on canvas. 36.2 x 46.1 in. 1851.

Presented as a window on the world, Northern places a single individual, his title character, at the center of our focus. In this epistemology of the window, the central character is framed at the center of the picture plane, and accordingly, the supporting characters have been pushed to the margins, both visually, and ontologically: The composition directs our attention (if not our sympathy) towards Napoleon, not the nameless, faceless, anonymous and frozen corpses on the ground, whose

and other visualized text and data depicts the advance, and then the withering effects of winter, starvation, and river crossings, on Napoleon's Grand Army of 1812. Beginning at the left on the Polish-Russian border near the Niemen River, the thick tan flow-line shows the size of the Army, 422,000 strong, as it invaded Russia in June 1812. The width of this band indicates the size of the army at each place on the map. In September, what was left of the soldiers, 100,000 men, reached a deserted Moscow. The path of Napoleon's retreat from Moscow is depicted by the black, lower band. As indicated by the temperature scale and dates along the bottom of the chart, it was a bitterly cold winter, and many froze on the march out of Russia. The graph also shows what a disaster Napoleon's crossing of the Berezina River was for his men, and the army finally staggered back into Poland with only 10,000 men remaining. Ten thousand out of 422,000. Despite a scale that reduces individual soldiers to data points in a pattern, it's easy to agree with Étienne-Jules Marey's assessment of the graph's narrative power: it seems to "defy the pen of the historian by its brutal eloquence" (Tufte 2001: 40).

As I hope the juxtaposition of these two depictions illustrate, scale plays an enormous role in what is seen, and therefore what is said, though when it comes to the novel, scale is often given no more thought than any of the other aesthetic choices that make up what is considered to be the "natural" way to write. To study the stars, goes the unsaid logic, one must use a telescope; to study a flea, a microscope – instruments that allow us to see our subjects comfortably at the Human Scale. But it must also be true that the selection of scale determines subject – as well as what *can* be said – and this has ramifications for how we use literature to view our world.

For the novel, too, is an instrument, a lens through which we see the world: an ontological probe, or tool, for organizing seeming chaos into patterns of coherence. And as Swift demonstrates in *Gulliver's Travels*, an author can adjust its scale with more freedom than the astronomer. So rather than adopting one, and only one, "natural" way to write, consider some options: In Charles and Ray Eames's film *The Powers of Ten*, the camera is moved back by a factor of ten each time the view of two picnickers is reframed (Fig. 3). Here at the beginning the view point is at 10^0 or 1 meter away from its subject; this is the scale of the realist painting or novel, the world at a scale that would be familiar to the characters of Émile Zola, Adolph Northern or Frank Norris, for it is the scale of the every-day world where Newtonian physics work, as well as natural language, and common metaphor. It is the Human Scale of face-to-face interaction. But obviously it is not the only scale at which we humans experience the world (Fig. 4).



Fig. 3-11: Eames, Charles and Ray Eames.
The Powers of Ten. www.powersof10.com

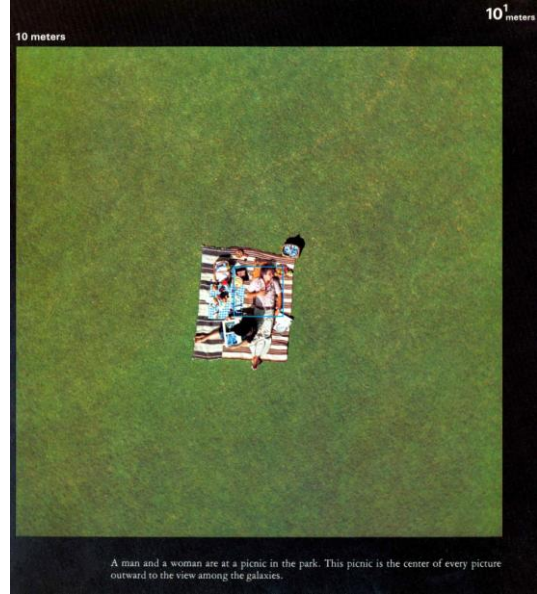


Fig. 4: 10^1 meter

Anyone who has ever been in an airplane notices that as the plane rises, the three dimensional world that is so familiar at the scale of humans becomes two-dimensional: roads, and buildings flatten, people disappear (Fig. 5). That is, as the point of view rises, the Humanist scale gives way to a scale of grander proportions – one that quickly dwarfs the individual (Fig. 6). And as the individual recedes from the scene, so do the interactions that the conventional, realist novel is so concerned with: reading the shadow of a mood come over the face of Anna Karenina, Crusoe coming upon a human footprint in the sand; the reading of love letters, or the style of clothes that reveal to us Moll’s character.

What is lost in the move from the Human Scale of Northern’s painting of Napoleon to the scale of Minard’s graph of the Grand Army is the narrative of the individual viewpoint... (Fig. 7). What takes its place is pattern and shape: the grid of a city’s streets, ribbons of highway or the patchwork quilt of farm fields (Fig. 8). Pull out even further, and even these traces of collective action evaporate, even human time, or as we might call it, Plot (Fig. 9). That is, as the scale of a point of view changes, so does the story.

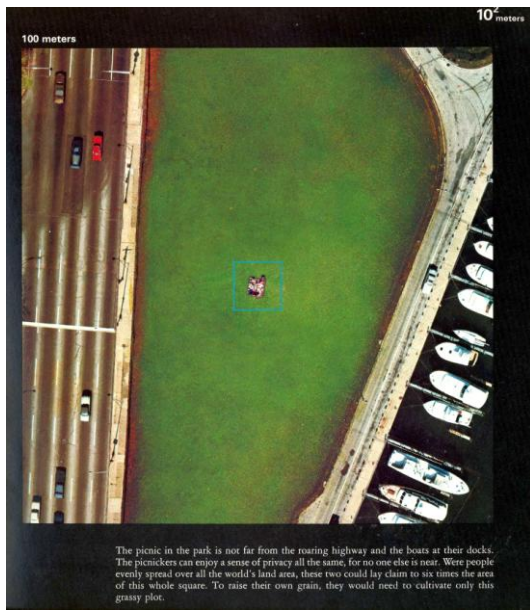


Fig. 5: 10² meters

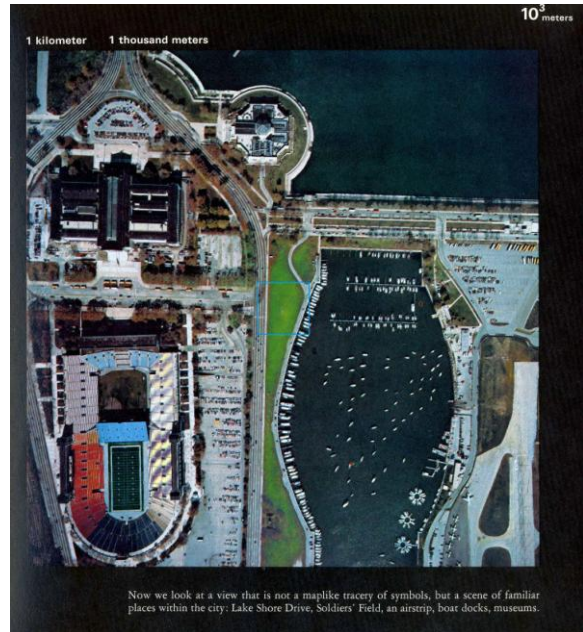


Fig. 6: 10³ meters

Anyone old enough to remember a world too big to be held in a single frame can remember how those first images taken from space of a blue, (Fig. 10) cloud-swirled globe suspended in utter darkness changed our view of the world, and therefore our stories about it, and our place in it. Like those looking through Galileo's telescope at Jupiter's moons, we felt ourselves shift a bit further from the center of the universe. The sidestep contained not a little anxiety, for as Thomas Kuhn points out, those critics of Galileo who refused to believe that the earth itself moves were not entirely wrong; up until then, "earth" – *terra firma* – was synonymous with "fixed, immovable position." Galileo was not asking people to simply employ a neutral technology. He was asking them to step off into the unknown – to ignore centuries of social contract in the form of a "shared narrative" – and to re-imagine Earth as just another planet, a minor character in a different story.

How unique and fragile that blue planet became again, 350 years after Galileo, when we were able to look back at a scale that allowed the entire globe of the earth to appear in a single frame. What we saw was a further shift from a "Great Man of History" vision embodied in Northern's painting of Napoleon – for the photo of Earth made it much easier to feel viscerally what we had already known: that all of us, including Great Men, were fellow travelers on a fragile space ship with finite space, finite resources (Fig. 11). That is, a change in scale shifted our understanding of "earth" and "human," and I dwell on scale in my consideration of the contemporary novel because even the briefest glance at our own cultural moment reveals how much easier it is to think at a scale where the

world is not only smaller than it was at the time of Zola, Northern and Norris, but is flatter: flat as a vast plain where everyone on it can see everyone else.

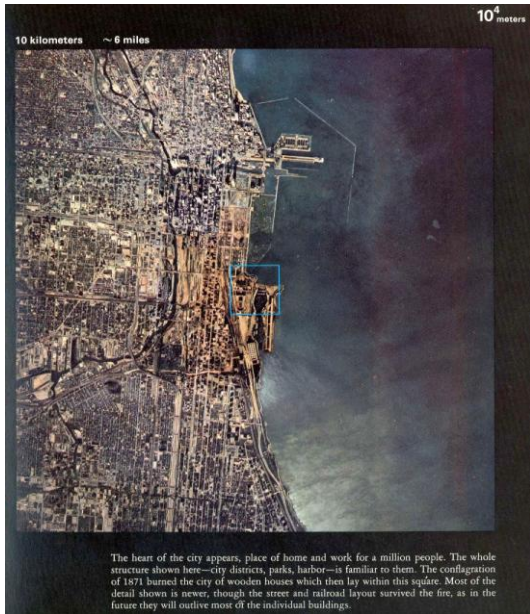


Fig. 7: 10⁴ meters]



Fig. 8: 10⁵ meters

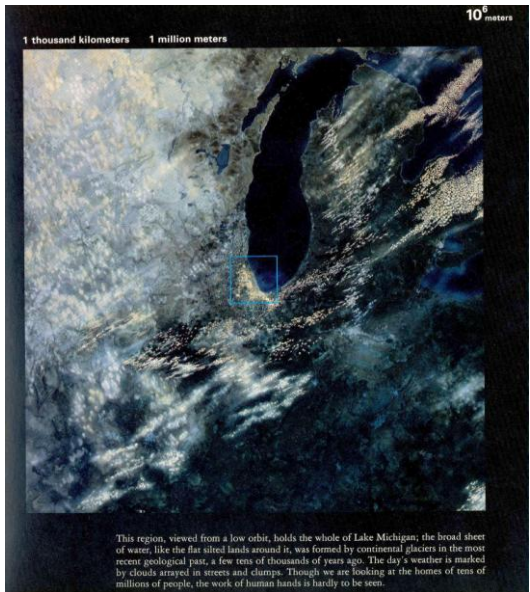


Fig. 9: 10⁶ meters

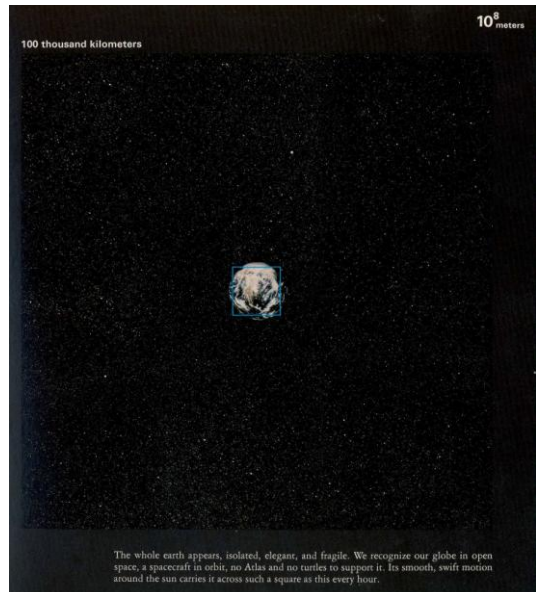


Fig. 10: 10⁸ meters

So what can this mean for the novel? Perhaps as scale expands, Stendhal's road of life shrinks into a web of pattern. Or perhaps more accurately, other patterns join it while humanist ideas of "self,"

or the “mirror” traveling down this road becomes less relevant metaphors than a map of the Internet (Fig. 12). Consider, for example, the ease with which we give up a measure of privacy in exchange for the convenience of using a charge card or email or social networking sites like one our picnickers may have met on, not to mention the increasing proportions of time spent on-line, engaged with the Facebook grid instead of engaged face-to-face. Or perhaps a rearguard response is responsible for the current resurgence in memoir or the novel as ethnic memory. The possibilities are surely multiple and overlapping, and we don’t have to choose among them.

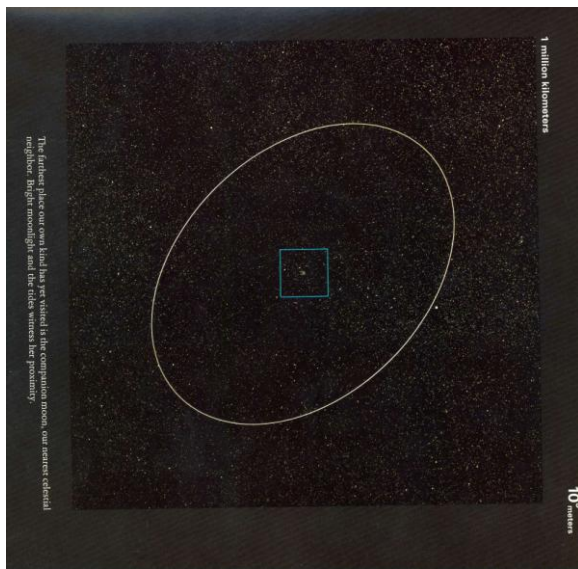


Fig. 11: 1 million kilometers

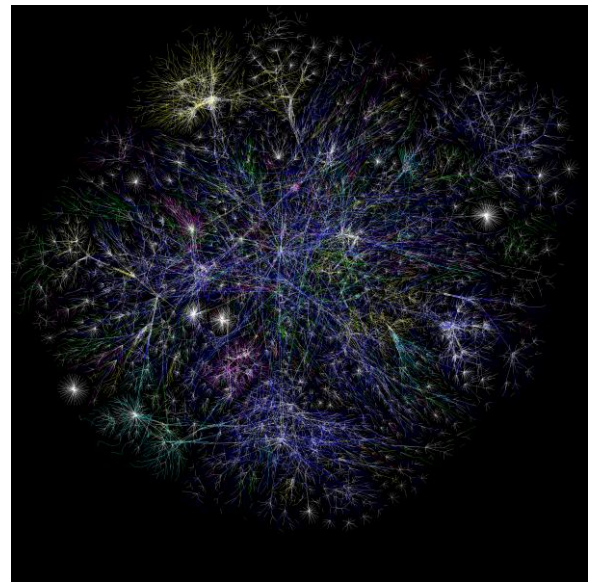


Fig. 12: Map of the Internet

My point is that the interconnected technologies that reconfigure the scales at which we experience the world today are no more neutral than was Galileo’s telescope, and are also just as inextricably linked to the paradigms by which we formulate the idea of the “human.” That is, before turning to consequences for the humanist novel brought on by a reconsideration of scale, it seems necessary to turn to a re-consideration of the first term of the Human Scale, the “human,” especially in regards to where I end and you begin, especially given how the discursive, metaphoric, sense of this boundary becomes more problematic each day as its literal, more material, sense erodes.

In terms of discourse, of course, I am partially invoking Michel Foucault’s famous line—“man is an invention of recent date. And one perhaps nearing its end” (Foucault 1973: 387). I also invoke the critic Gerald Bruns whose survey of literature leads him to conclude, “the human has never been a stable, much less determinate, homogeneous concept,” but rather a “metaphorical concept, like the divine.”

Like “the divine” or “madness” Bruns writes, “the human” has always been a “literary concept.” It can be said that the human has always been a concept in the way “earth” once meant “fixed immovable position”; a discursive formation that, like the word “earth” has been historically contingent, and has often been used to mark the boundary between human and not-human: human and barbarian, for example, or human and animals; or human and slaves; human and gods; or – approaching our age – human and machine, or human and more than human. Or “is it,” Bruns asks, “less?”

Bruns put the contemporary iteration of the human into relief by referring to what might be called the pre-human, the literary construction of human nature that held sway long before the humanist self was embodied in the realist novel. Ovid’s *Metamorphoses* is Bruns’s exemplary text, for its stories of people turned into trees or spiders depict “the human subject as porous and exposed, liable at any moment to be rinsed like a washcloth by whatever surrounds it.”

Similarly, he writes, much Modernist angst can be seen as anxiety over a shift in the narrative about what being human means. The demands of a boss, the pressure to conform life to train schedules, the constraints of bureaucracy, and other elements that made up Gregor Samsa’s very modern life transformed him into something not quite animal, nor insect, but not human *being* either. Indeed, the realism (if not optical fidelity) of a Cubist painting might be said to reside in its fracturing of a coherent self. In *The Man without Qualities*, Robert Musil writes that the inhabitant of [any] country has at least nine characters: “...a professional, a national, a civic, a class, a geographic, a sexual, a conscious, an unconscious, and possibly even a private character to boot. He unites them in himself, but they dissolve him, so that he is really nothing more than a small basin hollowed out by these many streamlets that trickle into it, and drain out again, to join other such rills in filling some other basin. Which is why every inhabitant of the earth also has a tenth character that is nothing else than the passive fantasy of spaces yet unfilled.” (Musil 1996: 30).

Clearly, “being human,” at least as it is imagined in art and literature, is not a given. This “I” – let’s call it, out of courtesy to philosophical tradition,” Bruns writes, “the logical subject, the disengaged punctual ego exercising rational control – the “I” is always in danger of being lost and must struggle to preserve its integrity.” The human is a literary concept, critic N. Katherine Hayles notes, that is being eclipsed by a concept we must helplessly refer to as the “posthuman,” a term Priscilla Wald objects to because, she maintains, that it implies that there was once a stable “human” to be post to. Indeed, it is in this sense that Bruns employs the descriptor “helplessly” because, as he points out, we can no more stop the emergence of the posthuman than critics of Galileo could stop

the dawn of a new earth. And for the same reason: the communal or discursive nature of nature, including human nature. Or as Bruns puts it, being human is “a process in which others tend to interfere.” Or, to put it less ominously, that is, to put it in a way that acknowledges our own complicity and desire for a world of global interconnectedness, Japanese cars, off-the-shelf replacement hearts, open markets, a world where individual species can be seen as packets of information that can be copied, rearranged, and pasted—and all that comes with these new formations—it is a process in which others take part. Indeed, unlike Robinson Crusoe and other 18th or 19th century characters, unlike C.B. Macpherson’s formulation of the human – “the proprietor of his own person or capacities, owing nothing to society for them.....” – what makes us ‘post’ according to Hayles, is that there is “no *a priori* way to identify a self-will that can be clearly distinguished from an other-will.” (E.g. the fact that I think and write in English instead of Chinese has less to do with me than others.) It’s not that the posthuman is not free, she writes, rather, it is that the posthuman is “an amalgam, a collection of heterogeneous components, a *material-informational* entity whose boundaries undergo continuous construction and reconstruction” (Hayles 1999: 3).

That is, there’s a striking symmetry between material and discursive interactions when courts are called upon to determine the legal “owner” of an embryo who (“that?”) is the product of sperm from a bank, and an egg from a donor, nurtured in the womb of a surrogate rented by a fourth party who contributed none of the other “components.” Since the advent of Dolly the Sheep – another watershed moment in how we see ourselves – much has been written about the material of the posthuman, so here I would only like to pause to note how easily I’ve slipped from a discussion of discourse into one of material concerns, for the two seem to form a Möbius strip that forces us to consider the individual person – even the body – in much more flexible terms than we’ve been accustomed. It is becoming increasingly easy to speak of human bodies as we have spoken of textual bodies – those “material-informational” entities Hayles refers to – for the very real cut-paste-and-burn mentality that has migrated to our bodies has translated onto the literal body a vocabulary of instabilities generated by the proliferation of body texts: imitation, pastiche, influence, quotation, irony, the pun, or significantly, plagiarism, given the fact that an original meaning of the word referred to the kidnapping of a child. That is, like those first pictures of earth from space, Dolly’s birth – is that the right word? – forces us to viscerally confront a place at which we had already arrived intellectually: a reconsideration of the body, the last stronghold of the individual’s claim to uniqueness in a world where the self was already seen to be constructed.

In terms of the novel, it seems clear that a sense of human self is inextricably linked to a sense of human scale, and together they form the cornerstone – or is it heart? – of the realist novel. So what might a reformulation of one mean for a refiguration of the other?

To begin, it certainly doesn't spell an end for the humanist novel; the novel of the Human Scale will always be with us, because our natural world will always be a world of face-to-face interaction. We will always be vitally interested in the individual, maybe even more so with the emergence of a posthuman consciousness: a rearguard action (think of the rise of landscape painting during the Industrial Revolution). And yet, as Kenneth Burke writes, a conception of man as that being who stole fire from the gods is going to result in very different works of literature than will a conception that sees man as a link in an evolutionary chain; and by extension we might add, so will that being who sees him or herself as in possession of a superabundance of subjectivity, "A self – who? That? – to quote Bruns again, "is in excess of the subjectivity presupposed by knowledge ... self-possession...the unity of narratives, ... a posthuman, in other words, who appears when "[pattern] rather than [self] possessive individualism is taken as the ground of being" (Bruns 1998: 17).

Against this backdrop, or rather, from within this network, we conduct our affairs; we find mates – both on-line and in the old-fashioned, Humanist face-to-face way; we procreate (both in test tubes and in the old-fashioned, face-to-face humanist way); we fight in court over whether or not genes can be patented and by whom – the person they were taken from or the pharmaceutical company that duplicates them. And, of course, we write novels.

What might an emerging posthuman narrative look like? A narrative that does not, like its Modernist precedents, feel a blurring of the self's boundaries as an existential crisis? That simply takes this new status of the human as a state of nature? A narrative that turns the page on the modernist novel with its dream of the individual soaring above history as James Joyce ends his *Portrait of an Artist as a Young Man*, or the despair of not being able to escape history, the nihilism at the end of Hemingway's *Farewell to Arms*. A narrative that is at home with a larger-than-human scale? That not only does not mourn the loss of the first person narrative, but privileges absence over presence, pattern over detail, that takes as a given the fact that the body, the last firewall to the individual, is in the end as permeable as other barriers between where "I" end and culture, society, others, begins?

Just as there are many affinities between Modernist art and Modernist literature, or between Medieval art and Medieval literature, or the art and literature of any one time and place, so we might expect to find clues to a posthuman literature in what can be called posthuman art: Eduardo Kac's *Genesis*, for example: an installation by which viewers around the globe can activate an ultra-violet light on a Petri

dish of bacteria, and thereby mutate the sentence embedded in their DNA: “Let man have dominion over the fish of the sea, and over the fowl of the air, and over every living thing that moves upon the earth” (Fig. 13). Or the prosthetic ear that Australian performance artist Stelarc had surgically implanted into his forearm to allow anyone on the Internet to hear what he hears. Or Natalie Jeremijenko’s *Bang Bang*, for example, a work of art that uses gunshot-activated web-cams to create a video quilt of violent hotspots around the world: a ghetto in L.A., urban warfare in Kosovo, or Northern Ireland.

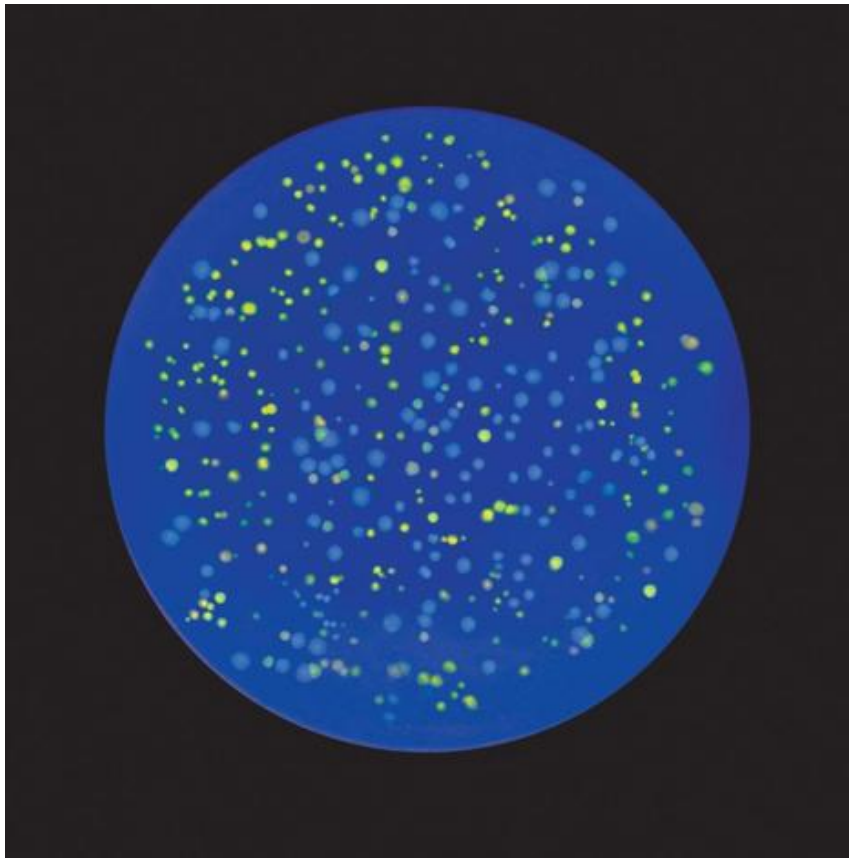


Fig. 13: Kac, Eduardo. *Genesis*

Rather than embodying viewpoint in a human character like Moll Flanders or Robinson Crusoe, or even in the artist or author, the viewpoints of these works are dissipated, leaving their traces as data points, as pattern, which together form what Hayles would refer to as “information narratives”: narratives where pattern overwhelms presence in that pattern is what captures our attention, informs our interpretation, rather than, for example, a semiotic reading of the world through an individual embodied viewpoint: the world as perceived and represented to us through the body present in hu-

manist narrative, for example. In Kac's *Genesis*, it's easy to see that pattern, rather than presence, has become the ground of its reality: its inception, execution and interpretation depend on a pattern: patterns of AGCTs, algorithms of information design, Morse Code, and the sort of change in scale we experience in a rising plane – or in Minard's graph of Napoleon's retreat – a change in scale that allows us to see data points as pattern, and pattern as narrative. With the fade of presence, the techniques of humanist narrative become less relevant, as well as the empiricism upon which they depend, as well as linear cause and effect, or plot.

Yet, like the datapoints in Minard's graph of the Grand Army's retreat from Russia, the data that makes up both *Genesis* and *Bang Bang* has also been dramatized: though it has no plot, these works do move through time. And here seems to be a characteristic of posthuman narrative to underscore: rather than plot, the engine of posthuman narrative is emergence: the process by which lower-level conditions and interactions give rise to higher order behaviors, patterns, formations, meanings (Figs. 14A-C).



Fig. 14A: Collage as an organizing principle and manner of seeing



Fig. 14B: Emergence as an organizing principle and manner of seeing



Fig. 14C: Emergence as an organizing principle and manner of seeing

Emergence is both an organizing principle and a manner of seeing in the way that collage or perspective painting are also manners of seeing and means of organization. (As such, the concept of emergence can also be used as a lens through which to read, just as feminism can be used as a critical lens through which to understand the *Iliad*.) Think for example, of evolution. At one scale, the hu-

manist scale Darwin lived and worked at, the story of evolution can be seen as a story of cause and effect: speckled pigeons produce speckled pigeons when they mate with other speckled pigeons. At another scale, say the bird's-eye view afforded by a rising airplane, or the scale of eco-infomatics or statistical modeling, evolution can be thought of in terms of emergence: a cloud of interactions too numerable and complex to account for a linear cause-and-effect plot.

How is it, John Holland asks, that without any central oversight, cities generally have on hand the right amount of food to feed their citizens instead of lurching between the waste of overabundance and the famine of scarcity? The answer lies, of course, in the feedback loops, constraints, and interactions among individuals acting for their own reasons: Shopkeepers rent property on thoroughfares; thoroughfares stream the most traffic, the most potential shoppers, thus reinforcing those shopkeepers who rent property on thoroughfares. Similarly, an amalgam of other low-level interactions operating under constraints – e.g. survival of the fittest – allow increasingly complex formations – the Platypus, for example – to emerge from impossibly simple beginnings, the AGCT's of all life. Or consider, for example, the way the aggregation of individual on-line searches for flu symptoms can form a snapshot of the spread of the actual disease; or the way Macrosense merges data from GPS, Wi-Fi positioning, cell-tower triangulation, RF identity chips and other sensors to create an information-laden snapshot of people and their movements: the hour of the day that stock traders report to and leave work, for example, or which nightclubs all your friends are going to (Fig. 15). As Holland says, “Like the standing wave in front of a rock in a fast-moving stream, a city is a pattern in time.” (Johnson 2001: 27)

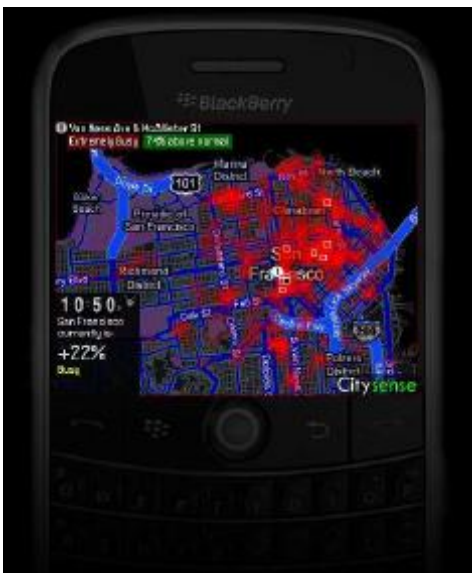


Fig. 15: Citysense Map of Nightclub activity

Of course all of this has a Foucaultian ring to it; it's easy to think of an emergent world—a world where pigeons and platypuses, pop stars, and best sellers, as well as discursive objects, meaning in narrative, and other elements that constitute “knowledge” come into being as the result of independent lower-level interactions. It's easy to see an epistemology of emergence as a generalization of the process by which discursive objects come into existence.

Indeed, Holland's image of a rock in a stream could serve as a metaphor for the “practices that systematically form the objects of which they speak” be they “Madness,” the “Human,” the “Post-human”: the rock and river banks act as constraints that allow the stream of language to form discursive standing waves, including, of course, the novel (Foucault, 1982: 428).

Put another way, in describing emergence I've slid into a description of emergent narrative as a mode of narration that complements a post-human ground of being as well as the humanist novel fit the humanist conception of “mankind.” And, just as no period ends or begins abruptly, it might be said that we have been thinking of narrative in terms of emergence for some time, even if we may not have yet embraced its name. That is, for some time now, we workers in literature have understood all the world as a text: Patterns form through time by the dynamics of feedback loops that give the appearance of self-organization, though there is no self, and indeed no consciousness that the word “organization” may imply; there is no collective sense of a beginning or endpoint, as the various actors and catalysts and conditions, including their constraints, unwittingly create a higher-level order. It might be said that this higher order is invisible to those who are part of its makeup as it can only be seen from above, or in history's rear-view mirror.

Put another way, all narrative is a matter of architecture, and architecture is always semiotically loaded, especially the architecture of information. The Tree of Life can be drawn as an actual, ancient oak tree as it was in Darwin's time, or drawn as a corporate organization chart, as was fashionable during the last century, or as it is often drawn today: folders of digitized information that show at a glance, for example, how closely a human might be genetically related to a mouse. By choosing the architecture of one system, be it a haiku or a repair manual, we enable some values and disable others. By constructing a narrative at one scale rather than another we determine what will be seen, and the rhetorical tools of analysis. And this of course goes for the architecture of the novel. At the humanist scale, we have dialog, smell, and the other senses, as well as all the other cultural markers a novelist might draw upon, as noted by Roland Barthes in *S/Z* or Erich Auerbach's monumental *Mimesis: The Representation of Reality in Western Literature*. By adopting a non-human scale, we enable readers to see in another way, allowing other stories to emerge, other considerations to be made.

A posthuman, emergent novel would not necessarily be any more or less accurate a model of the world than those glorious 19th century novels, or the novel in general: that structure best suited to “organizing vast amounts of information into patterns possessing cognitive value and coherence,” as Joseph Tabbi calls it (Tabbi 1997: 3).

But like those earlier novels, if our model is well chosen, if the world is a literature of constraint from which patterns emerge, and our novel is conceived of as a literature of constraint from which sense emerges, the two models may map onto one another: a narrative may emerge that says something we can believe in that might not be apparent with our eyes too close to our neighbor.

I’ve indulged in a thought experiment to imagine what a posthuman novel might look like. Yet, this has not so much been an exercise in imagination as one of simply looking at the world as it already exists. For the posthuman work of art or literature, as Hayles says of the posthuman, will not have any traction unless “the cultural conditions authorizing the assumptions are pervasive enough that the posthuman is experienced as an everyday, lived reality as well as an intellectual proposition” (Hayles 1999: 39).

Given how much of our lived experience seems to privilege pattern over presence, where biology is information and information can be turned into biology, where email signatures replace the penmanship of an actual hand, a global economy of voice recognition, simulacrum, tomatoes with genes of a cod fish, face transplants and all the rest, it comes as no surprise that within this mix we find posthuman art as I’ve described; or consider how encyclopedias have changed in the age of Wikipedia, or how journalism or historiography – indeed all story telling – is evolving in the climate of collaborative blogs. Patrik Ouredník’s novel *Europeana* is a historical rewriting of the last century with much affinity to Minard’s graph. Shelly Jackson’s *Patchwork Girl*, a rewriting of Mary Shelly’s *Frankenstein* presents the human as a collage of others. The story of Roberto Bolaño’s *2666* comes not from any plot or emotional bonds with a title character. Rather, its portrait of contemporary life and humanity emerges from the collective summaries of hundreds of characters. Similarly, Kate, the protagonist of David Markson’s *Wittgenstein’s Mistress*, believes she is the last person on earth. She lives in museums such as the Louvre, burns Delacroix and DaVinci paintings to keep warm, and by the end of this plotless novel of digression, of loops and eddy currents, allows a story to emerge that convinces the reader that she is in fact the only human, if not the last person on earth.

Many characteristics of an emergent, posthuman novel – malleability, ease of recombination, dependence on the image, interactivity, infinite linkage and therefore indeterminacy, dispersal of Origins, of Author/Authority, its grounding in pattern rather than presence, and material-informational

entities – many of these characteristics seem also to characterize our cultural moment, a posthuman emergent manner of seeing coming from, and handing back our world as Stendhal’s mirror once came from, reflected, and help articulate the world of his time.

Think of turn-of-the-century Parisians enthusiastically gathered around the first kinescopes to watch a jerky movie of a horse. The horse, i.e. the content, obviously wasn’t what excited people whose real horses were tied up outside. Rather, it was the virtual reality of the kinescope, that is, the Modern *way of seeing* it afforded – a way to order the world through division and recombination with ramifications as profound as Renaissance viewers found the perspective painting with its case for re-ordering the Medieval alwayseverpresent in a spatial, rather than divine, hierarchy. Razor blades, light bulbs, phonographs – the great wash of consumer products made possible by modern manufacturing stood for modern society and people became modern by using them. This was especially true for products that embodied a modern way of seeing. For seeing – including seeing through the epistemological lens that is the novel – is also a way of orienting oneself to the world.

Works Cited

- Bruns, Gerald (1998): “On Ceasing to Be Human.” Manuscript of the Roger Allan Moore Lecture at the Department of Social Medicine of the Harvard Medical School in April.
- Foucault, Michel (1973): *The Order of Things: An Archeology of the Human Sciences*. New York: Vintage Books.
- : (1982). *The Archaeology of Knowledge & The Discourse on Language*. NY: Pantheon.
- Hayles, N. Katherine (1999): *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics*. Chicago: University of Chicago Press.
- Holland, John H. (1999): *Emergence: From Chaos to Order*. NY: Basic Books.
- Johnson, Steven (2001): *Emergence: The Connected Lives of Ants, Brains, Cities, and Software*. NY: Scribner.
- Khun, Thomas (1996): *The Structure of Scientific Revolutions*. Chicago: University of Chicago Press.
- Macpherson, C.B (1999): *The Political Theory of Possessive Individualism*. Qtd. in Hayles (1999).
- Musil, Robert (1996): *The Man without Qualities*. Sophie Wilkins trans. NY: Vintage International.
- Tabbi, Joseph (1997): *Reading Matters: Narrative in the New Media Ecology*. Ithaca: Cornell UP.
- Tufte, Edward R. (2001): *The Visual Display of Quantitative Information*. Cheshire, Connecticut: Graphics Press.
- Wald, Priscilla (2009): Personal conversation, March 2009.