TRANSHUMANISM:
EVOLUTIONARY LOGIC, RHETORIC, AND THE FUTURE

A Dissertation in
English
by
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Abstract

This project traces the discursive formation called “transhumanism” through various incarnations in twentieth century science, philosophy, and science fiction. While subject to no single, clear definition, I follow most of the major thinkers in the topic by defining transhumanism as a discourse surrounding the view of human beings as subject to ongoing evolutionary processes. Humanism, from Descartes forward, has historically viewed the human as stable; transhumanism, instead, views humans as constantly evolving and changing, whether through technological or cultural means. The degree of change, the direction of said change, and the shape the species will take in the distant future, however, are all topics upon which there is little consensus in transhuman circles.

In tracing this discourse, I accomplish a number of things. First, previously disparate zones of academic inquiry—poststructural philosophy, science studies, literary modernism and postmodernism, etc.—are shown to be united by a common vocabulary when viewed from the perspective of the “evolutionary futurism” suggested by transhuman thinkers. Second, I provide a window on the rhetorically strategies and philosophical features of an increasingly pervasive cultural discourse around contemporary transhumanists such as Ray Kurzweil and his politically influential followers. Third, I recover the works of several forgotten transhuman thinkers who have much to contribute to an ongoing and vibrant conversation about the future of humanity.

Ultimately, my project provides a framework for thinking about the rhetorical arguments being made about the future of humanity during the 20th and 21st centuries while also arguing for the construction of the future as a rhetorical act itself. In this capacity, my dissertation can be thought of as a toolbox for scholars interested in further exploring the various topics covered by transhuman discourse.
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## Conclusion: The Transhumanities

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A thesis on the emergence of the noösphere is of course going to be the product of a number of minds, perhaps least of all my own.

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The pedagogical brilliance of Paul Youngquist and Patrick Chaney provided different, and yet equally invaluable, models for navigating the history of academic inquiry.
and inhabiting the position of professional academic at a moment when I was a lost and scared engineer. Kit Hume, also, provided, through the power of the negative, invaluable insight into the fact that the rhetorical, rather than the literary, was the path for me.

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‘I believe in transhumanism’: once there are enough people who can truly say that, the human species will be on the threshold of a new kind of existence, as different from ours as ours is from that of Pekin man. It will at last be consciously fulfilling its real destiny.

–Julian Huxley, “Transhumanism”
Introduction: One Or Many Transhumanisms?

In an article for *Foreign Policy* entitled “The World’s Most Dangerous Idea,” the journal’s editors “asked eight leading thinkers to issue an early warning on the ideas that will be most destructive in the coming years.” While many of the invited thinkers spoke of the U.N.’s inability to respond to global crisis or the forced spread of democracy by US foreign policy, Francis Fukuyama, author of the controversial *The End of History and the Last Man*, suggested that the world’s most dangerous idea was something called “transhumanism.” Fukuyama speaks of “a strange libertarian movement” whose members “want nothing less than to liberate the human race from its biological constraints” (Fukuyama 42). When juxtaposed to our normal expectations of dangerous ideas that might be found in a journal of foreign policy—Fukuyama’s piece is sandwiched between “Spreading Democracy” and “Religious Intolerance”—the discussion of “some sort of odd cult” seems wildly out of place. That said, Fukuyama’s concerns are also well-founded: in describing transhumanism as he does, he identifies the fact that the creation of post-Natural supermen may result in new and extremely complicated issues involving human rights. In the end, of course, Fukuyama partly accuses transhuman discourse
of being “nothing more than science fiction taken too seriously” at the same time that he takes very seriously transhumanism’s worldview. This worldview, though, is drawn from science fictional works as diverse as the film *Gattaca* and H.G. Well’s *The Time Machine* (in which, through evolutionary principles, humanity divides into a over and under classes along genetic lines). In both dismissing the science fictional daydreams of transhumanism and taking it seriously as “the world’s most dangerous idea,” Fukuyama highlights one of the rhetorical impasses at the heart of the idea of the transhuman.

That said, what is transhumanism? Fukuyama’s best definition, as mentioned above, is not entirely coherent. We can guess that it has something to do with a post biological future (a posthuman, perhaps?). Perhaps it has something to do with the earlier figure of the cyborg. Made popular in academic circles by Donna Haraway’s justifiably famous essay “A Manifesto for Cyborgs,” the cyborg is a concept to emerge from NASA in the 1960s. A portmanteau word derived from “cybernetic” and “organism,” cyborgs are portmanteau beings who combine technological and biological matter in their bodies. While the boundaries for the concept are hazy, some having suggested that anyone who has been vaccinated (so all of us) is a cyborg because the vaccine is a genetically engineered piece of technology that cybernetically enhances our immune systems, cyborgs proliferate in our current cultural moment. As discussed in Fukuyama’s piece, transhumans are, more or less, cyborg supermen from the future. So we could argue that, at least partly, transhumanism is an extension of the concept of the cyborg, which was widely discussed in the history of science, feminism, and cyberculture writing during the 1990s and 2000s. And often times, transhumanism does feel like a relic from those earlier days of cyber-utopianism.

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1 It’s hard not to talk about transhumanism without resorting to the language of the pulp novel.

2 Culminating in N. Katherine Hayles’s *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics* in 1999
Having said that, if transhumanism is merely the cyborg renamed, what would a book-length investigation of the concept, such as the present project, hope to accomplish? There is more to the concept of transhumanism than Fukuyama’s article suggests. While Fukuyama’s piece on the concept is entrenched around the idea of technological enhancement, transhumanism is a word often thrown around in discussions of the evolutionary future of the human race, mostly in science fiction or fringe science discourse. In Fukuyama’s account, transhumanism means that “humans must wrest their biological destiny from evolution’s blind progress of random selection” (42). Perhaps inadvertently, Fukuyama has hit on an interesting rhetorical problem in transhuman thought. While some thinkers argue that transhumanism means a liberation from evolutionary constraints (Simon Young has a book called Designer Evolution: A Transhumanist Manifesto, for instance), others see the transhuman as the next evolutionary step for humanity. So either transhumanists are progressing beyond evolution or progressing evolution. In either case, the discourse of evolution is somehow involved.

In fact the two concepts, transhumanism and evolution, are inextricably linked. While Fukuyama’s piece in Foreign Policy highlights some contemporary dimensions of the concept, transhumanism is much older. The concept began to take shape in the letters exchanged between the British evolutionary biologist Julian Huxley and the French Jesuit monk Pierre Teilhard de Chardin. Teilhard’s oeuvre will be discussed in greater length in Chapter #3 but, for the moment, looking at Julian Huxley’s 1949 essay, “Transhumanism,” may begin to provide some clues as to the broader meaning of the concept that eludes Fukuyama.

Huxley’s Utopian essay opens: “as a result of a thousand million years of evolution, the universe is becoming conscious of itself, able to understand something of its past history and its possible future.” In the opening pages of this account, Huxley continues to expound this new, cosmic vision of consciousness. “This cosmic self-awareness,” he
writes, “is being realized in one tiny fragment of the universe—in a few of us human be-
ings.” Huxley sees post-WWII science, a new global unity, and the defeat of fascism as suggestive of a new step in evolution: towards a cosmic consciousness. This language, with its focus on evolutionary change, sounds both similar to and startlingly different from Fukuyama’s discussion of transhumanism above. Where Fukuyama finds a move-
ment to “liberate the human race from its biological constraints,” Huxley sees the future of humanity as a continuance of the incalculably long evolutionary, biological processes that created the species in the first place:

Evolution on this planet is a history of the realization of ever new possibili-
ties by the stuff of which earth (and the rest of the universe) is made —life; strength, speed and awareness the flight of birds and the social polities of bees and ants; the emergence of mind, long before man was ever dreamt of, with the production of colour, beauty, communication, maternal care, and the beginnings of intelligence and insight. And finally, during the last few ticks of the cosmic clock, something wholly new and revolutionary, hu-
man beings with their capacities for conceptual thought and language, for self-conscious awareness and purpose, for accumulating and pooling con-
sic experience. For do not let us forget that the human species is as radically different from any of the microscopic single-celled animals that lived a thousand million years ago as they were from a fragment of stone or metal.

Huxley continues in this vein and defines transhumanism as “man remaining man, but transcending himself, by realizing new possibilities of and for his human nature.” So, while man may remain (and this is a disputed claim in transhumanism), Huxley’s un-
derstanding of transhumanism means that the horizons upon which the human species may gaze are greatly expanded. We will become to humans what stones are to bacteria, to use his example above.

To extract a broader definition of “transhumanism” from Huxley’s account, we can suggest that, for the purposes of this project, transhumanism is a discourse that treats the human as undergoing continued evolutionary change. Such an understanding of the
concept suggests it as an antithesis to the philosophy of humanism but, more than the academically en vogue notion of the “posthuman”\(^3\) transhumanism offers a trajectory for the species and a model of what may come next, evolutionarily speaking. Posthumanism is often merely a celebration of the death of the human, with little thought given to what comes next. As examples, one could consider the posthuman fictions of J.G. Ballard, especially his loose trilogy of novels, *Crash*, *Concrete Island*, and *High Rise*. In *High Rise*, for instance, life in new high rise apartment complex causes Laing, the main character, and his neighbors to resort to savage pre-human behavior, as the amenities of the building begin to fail. In each of the novels of this period, Ballard documents an apocalyptic violence that shatters some aspect of the classical vision of the human (community in *High Rise*; sexuality in *Crash*; mobility in *Concrete Island*). In the conclusion of *High Rise*, we see the promise that this violence will produce new, posthuman communities, but what will they be like and, more importantly, why must they be predicated on mass death?

Following most of the plot points of the novel, Laing muses that, thanks to the apartment lifestyle, “the situation allowed him ample freedom to explore himself” (Balard 172). The reversion to savagery, for Ballard, leads to new possibility and a re-engagement with communal life. Laing notes, increasingly, that he sees women, organized by the children’s author, maintaining the apartment complex (“it might even be possible to get an elevator working”) and the last sentence of the novel concludes that he is ready to welcome the two women he has living with him “to their new world” (173). All of this newness may seem great and progressive, but it comes with the cost of a willful ignorance towards the drained swimming pool “covered with skulls, bones, and dismembered limbs of dozens of corpses ... like the tenants of a crowded beach visited

\(^3\)See Cary Wolfe’s *What is Posthumanism?* for an account of this concept.
by a sudden holocaust” (170). Additionally, Laing notices that the surgical precision of the dismembering suggests a reversion to cannibalism. Posthumanism, especially in Ballard, often can only imagine itself as an apocalyptic break, a ground-clearing, and a starting-over. Transhumanism, instead, suggests that our current condition does not need an apocalypse in order to be evolved beyond.

To return to Huxley, at this point in the essay, one could be rightly excused in thinking that Fukuyama is describing something entirely different that happened to be called “transhumanism,” but Huxley goes on to suggest:

> It is as if man had been suddenly appointed managing director of the biggest business of all, the business of evolution — appointed without being asked if he wanted it, and without proper warning and preparation. What is more, he can’t refuse the job. Whether he wants to or not, whether he is conscious of what he is doing or not, he is in point of fact determining the future direction of evolution on this earth. That is his inescapable destiny, and the sooner he realizes it and starts believing in it, the better for all concerned.

For Huxley, evolution, something that has worked quite well on its own for some time, is now to be managed and focused through conscious actions of mankind (after all, Huxley was a bureaucrat with the U.N. for much of his life). In this moment, Huxley’s understanding of transhuman looks more like the movement Fukuyama discusses in *Foreign Policy*. Moreover, this idea of managed evolution suggests one of the first moments where we will shall see why transhumanist discourse is so rhetorically interesting.

At one level, Huxley suggests that transhumanism, “man remaining man, but transcending himself, by realizing new possibilities of and for his human nature,” is the inevitable byproduct of the biological forces of evolution and that these “new possibilities” will open up naturally. In the above selection, though, Huxley suggests that it is the role of the human (rather than a broadly anthropomorphized concept like “Nature”) to bring about this transhuman becoming. Inevitability or teleology? Is transhumanism
a byproduct of evolution or a goal to be sought? This tension is never fully resolved in
the discourse. In fact, many times, the answer is: “both.”

In other words, transhumanism is, especially when no longer confined to authors
and texts that explicitly name themselves such, a discourse that motivates many people
throughout the twentieth century but that also, simultaneously, lacks a stable or coherent
definition. People know that transhumanism represents a kind of future of the human
species but beyond that, it can take a number of different, contradictory shapes (even in
the definitional essay in which it is named).

The problem of defining transhumanism is compounded by the fact that the word
itself could take a number of competing meanings (many of which are deployed within
the discourse itself). For instance, Huxley’s essay offers two differing meanings. When
actually defining the concept, he suggests that it refers to the process by which hu-
man beings transcend themselves. That said, though, the essay’s introduction mentions
the fact that transhumanism is the process of the universe becoming aware of itself, a
seemingly different process. This cosmic consciousness is another form of transhuman
futurity and has come to mean, especially in works like Howard Bloom’s *The Global
Brain*, a higher-order of intelligence that is composed of individual humans but thinks
as though one giant brain. While the human transcending itself is not antithetical to
Huxley’s invocation of a cosmic consciousness, his insistence that man will remain man
does seem incompatible.

Part of this definitional vagary may result from the unclear etymology of “transhu-
manism.” The prefix “trans-” comes from Latin and, according to *The Oxford English
Dictionary*, means “across, through, over, to or on the other side of, beyond, outside
of, from one place, person, thing, or state to another.” Given that list, there are a num-
ber of possible meanings. In the first, more limited, definition we discussed above, we
can see that Huxley’s usage of “transhumanism” suggests a position beyond the human.
The cosmic consciousness definition, that is more expansive, may suggest a state of being across various humans or from one person to another. Moreover, the suffix “-humanism” is not entirely stable, either. Is “transhumanism” an “-ism” (“forming the name of a system of theory or practice, religious, ecclesiastical, philosophical, political, social, etc., sometimes founded on the name of its subject or object, sometimes on that of its founder” in the OED’s definition) of theories about moving beyond or across humans? Or is it the practice of moving beyond or across “humanism”?

Both, perhaps. Humanism, the dominate philosophy in the West for several hundred years, often views the human as the apotheosis of either God’s creation or biological evolution and has come under attack in the last 50 years from various philosophical movements that could be labelled “post-” or “anti-humanism.” In this case, then, transhumanism would be seen as another continuation of the philosophical process of displacing humanism. However, as we saw in Huxley’s definition, transhumanism could also be a belief system dealing with theories and practices of moving beyond or across the human (which is not the same thing from a philosophical standpoint).

Further extending this problem, it is entirely unclear what to call transhuman enthusiasts. For instance, at various times in the history of the discourse, persons engaged in transhuman practices have been referred to as transhumans and transhumanists. The latter was more often deployed in Pierre Teilhard de Chardin’s philosophy and the various manifestoes of futurist FM-2030. In both of these accounts, the transhuman is something that either exists now (in the case of FM-2030, who defined “transhuman” as “transitional human”) or will come to be realized in the future (in the case of Teilhard). By using the term “transhuman,” it is implied that the transhuman is an entity to be created (like, perhaps, the star child of magickal practice). In these cases, then, “transhumanism” could come to be defined as “a system of theory or practice” concerned with realizing the transhuman in either the future or the present.
In any case, the definitions of transhumanism endlessly proliferate. Given this proliferation, a broad definition is perhaps best for understanding the concept. As we saw earlier, the various transhumanisms (and transhumans, and trans-humanisms, etc.) are all unified by a desire to think evolutionarily about the future of the human. Transhumanism is a discourse that, at its best, marks the realization of our own limits as a species and a desire to expand beyond the categories we thought were fixed by our genetic destiny. Humans, from a transhuman perspective, become capable of so much more and can be seen as having boundless potential. This transhuman perspective is, ultimately, capable of offering an optimistic view of the future of the species, when so many biological reductionist views seek to limit our capabilities.

Having said that, as we can see from the discussion of Fukuyama’s article in Foreign Policy, even this broad idea of transhumanism is both at once dangerously real and embarrassingly fantastic: it forces us to confront the futures imagined by science fiction within the real-world domains of genetic engineering, cloning, and other formerly science fictional concepts. A critical intervention into this domain is imperative now because transhumanism is one of the flashpoints of the ongoing actualization of concepts drawn from science fiction. As William Gibson has said in numerous interviews: “The future is already here – it’s just not very evenly distributed,” and transhumanism is one of the main discursive sites for exploring this unevenly distributed future.

That said, the discursive possibilities afforded by transhumanism, for discussing such a future are narrower than they once were. Consider the following quote from Fukuyama’s article on transhumanism: “Although the rapid advances in biotechnology often leave us vaguely uncomfortable, the intellectual or moral threat they represent is not always easy to identify” (Fukuyama 42). While there may be a lot to find wrong with Fukuyama’s account of the concept, he has pointed to one of the vaguely worrisome aspects of contemporary transhuman thought: a widespread and pervasive belief
in the logic of techno-positivism. Many contemporary transhuman thinkers believe that technology is, and always will be, capable of solving any problem that crops up in the future. As such, they often ignore the ethical, philosophical, or moral implications of their new, wondrous technologies. To explain, let me offer an anecdote.

Raymond Kurzweil, the transhuman guru, once spoke at Penn State (via a satellite link, of course). During his talk, which was focused on transhuman technologies and their benefits to the disabled in a post-Singularity future (The Singularity is the name to the Second-Coming-like event in which we will all become transhuman, in Kurzweil’s philosophy), he mentioned the fact that, thanks to genetic engineering, we would soon be able to engineer out undesirable or disease-causing traits in babies.

During the Q&A, I (being the token humanities scholar in the audience) asked what I thought was an obvious question: “Given that we will soon be able to engineer undesirable qualities out of babies, as you said, how would we define undesirable? For instance, some parts of this country might define being black as ‘undesirable’.”

Kurzweil chuckled and glibly answered: “that’s what philosophers are for, technology is my job.” He then took the next question without another word.

Given this stance in contemporary transhumanism, this project seeks to restore the threads of mysticism, spiritualism, inner development, psychedelics, and evolution of consciousness present in earlier iterations of transhuman discourse. By highlighting the very serious and very central roles that non-technological, non-engineering voices have played in conversations about evolutionary our future, this work seeks to suggest a more interdisciplinary approach to the future of the human race and to highlight the place that non-scientists have in determining our evolutionary destiny.

In Chapter 2 I read P.D. Ouspensky’s 1931 “Superman”—a discussion of Nietzsche’s concept of the übermensch from the perspective of the theosophy movement—as a manual for transhuman evolution, as more widely understood during the twentieth century.
Ouspensky’s reading of Nietzsche offers a number of specific challenges to the cybernetic transhumanism of Kurzweil and his contemporaries. Specifically of interest is Ouspensky’s refocusing of the concept of evolution from biological, somatic evolution to an evolution of consciousness itself. This refocusing allows for a new discourse of human evolution outside of Richard Dawkin’s currently en vogue concept of “the selfish gene.” By creating the mind as the object of evolutionary processes, Ouspensky, I suggest, provides a key counterpoint to the logic of enhancement, by suggesting a different way of working towards a transhuman future.

In Chapter 3, an account of various philosophies of the transhuman is explored, especially with regards to questions of life and questions of the role of the human in a transhuman future. The chapter begins by looking at Ray Kurzweil’s *The Singularity is Near* and Gilles Deleuze and Felix Guattari’s *What Is Philosophy*? to show how understanding questions of thought are intrinsic to an understanding of life itself. With Deleuze and Guattari as our guide, we see why Kurzweil’s account of evolutionary futurism is impoverished in certain key aspects. From this discussion, the ultimate goal of transhumanism is taken up by analyzing the work of Pierre Teilhard de Chardin, the originator of transhumanism, for possible answers to the ultimate aims of life in a transhuman universe. This section walks through Teilhard’s philosophical system and reveals how his key concepts are still directly relevant to an understanding of transhumanism, despite efforts to marginalize his contributions in contemporary transhuman discourse.

In Chapter 4, I discuss the “superman boom” in Pulp and Golden Age science fiction during the 1930s and 1940s in America. Specifically, the chapter focuses on the superman novels of A.E. van Vogt and John W. Campbell’s non-fiction writings about fringe science. In this chapter, I open by discussing the similarities between van Vogt’s fictional supermen and the rhetoric of contemporary transhumanism. The crucial dif-
ference, I find, is a large and largely unexplored discourse of the unconsciousness and a quasi-mystical understanding of language. By exploring the interest, on the part of a number of Golden Age SF figures, in Korzybski’s General Semantics and L. Ron Hubbard’s *Dianetics*, I highlight the fact that, while often writing about cybernetically enhanced supermen in their fiction, in their daily lives, many SF writers during this period were interested in using linguistic means to initiate a cognitive evolutionary leap. This disjunction, between fictional bodies and factual minds, I argue, is at the heart of the shift from mind to body as the locus of evolution in contemporary transhuman discourse.
Chapter 2

An Inner Transhumanism: P.D. Ouspensky & the Superman

“In order to find the true meaning of the idea of superman it is necessary to understand that the idea is much more difficult than is generally thought. This is so because the idea requires for its right expression and understanding new words, new concepts and a knowledge which may very easily not be in the possession of man.” - P.D. Ouspensky

In this chapter, we will begin to build up a further understanding of transhumanism, as a means of dimensionalizing the definitional questions raised in the Introduction. Specifically, this chapter will explore the role of evolution in our understanding of transhumanism. While many contemporary transhumanists take a strictly Darwinian approach to defining evolution and its role in the future of the species, we will here look at these Darwinian concepts as limits on our understanding of the transhuman. We may ask, at this point, if such a limited understanding of transhumanism is the ultimate horizon of the concept. Of course it is not. In fact, the concept has much longer history than the recent cybernetic valences of the word and, more importantly, the concept means much more than just mere enhancement. In this chapter, I argue that contempo-
rary transhuman thinkers, especially Nick Bostrom and the other philosophers associated with *The Journal of Evolutionary Technology*, construct a model of evolutionary futurism situated around a belief in the evolutionary perfection and stability of the human. I juxtapose this Cartesian transhumanism against a more ecstatic model drawn from Nietzsche and, specifically, focused on the Theosophist thinker P.D. Ouspensky, whose commentary on evolution in Nietzsche is amongst the finest written. By tracing out Ouspensky’s understanding of Nietzsche’s concept of the Übermensch, we can gain a better understanding of the immense possibilities of a transhumanism outside of the straightjacket of Darwinian evolution.

This concept of the Übermensch has recently been a controversial issue in transhuman discourse. Max More, in a 2010 article entitled “The Overhuman in the Transhuman,” suggests that there exists affinity between the two:

What we can infer is that differing variants of transhumanism are possible. Certainly there is no inconsistency between transhumanism and a utilitarian morality. But neither is there any inconsistency between transhumanism and a more Nietzschean view of morality (More).

More, however, only wants to suggest a tentative affinity. Instead, in this piece, I would like to suggest that transhumanism is, at least in part, a deeply Nietzschean discourse. Before we get to that, though, we must explain some important background on the concept of the Übermensch.

The Übermensch, along with The Eternal Recurrence of the Same and The Will to Power, is often cited as one of Nietzsche’s most important contributions to modern thought. Of his concepts, it certainly comes with the most anxiety surrounding its translation. Many early translators chose to render the phrase as “superman” in English. As Michael Tanner declared in *Nietzsche: A Very Short Introduction*, “I find ‘superman’ absurd,” mirroring the opinion of a lot of philosophers who grew up in a culture familiar
with Action Comics (see Figure 2.1 for one, famous example of this). Beyond mere embarrassment, though, nearly every book about Nietzsche feels some need to comment on the chosen translation of the German phrase. Ulrich Haase’s own account, from Starting With Nietzsche, offers a particular useful account of the stakes involved in the particular translation of this concept:

The notion of Übermensch in Nietzsche’s works has long attracted considerable interest and it is perhaps not too surprising that much of this interest has led to sometimes amusing and sometimes catastrophic interpretations. Thus in particular the National Socialists of the German Third Reich have made out of this Übermensch the caricature of a self-willed ‘Blond Beast’. The first translation of this term in Nietzsche’s texts as the ‘Superman’ has only worsened this absurd image. This idea of the Superman ‘having’ a great Will to Power by means of which he would subjugate other humans has, unfortunately, held sway for a long time. This is not on account of any close reading of his works, but simply because that is how one could easily understand the terms Will to Power and Superman. Consequently, many translators have adopted the more literal translation ‘Overman’. This translation makes more sense in terms of the Über, but still suffers from implying a single individual. But Nietzsche does not speak about an individual male or female human being, but about the historical existence of the ‘human being’. (Haase 153)

Haase concludes by stating that he translates Übermensch as “Overhuman” because it captures the essence of Nietzsche’s original concept: the Übermensch replaces the human as a philosophical concept, not so much as one individual replaces another. Far from the brainy, super-villain of pulp fiction, the Übermensch is a guide-post for becoming: a beacon to humans who want to overcome the contingent and base existence Nietzsche associates with humanist conceptions of life.

While the Übermensch is present throughout much of Nietzsche’s body of work, in one form or another, the most concentrated focus on the topic is probably to be found in Thus Spoke Zarathustra. Upon entering the village, Zarathustra’s first speech begins:
It is time that mankind set themselves a goal. It is time that mankind plant the seed of their highest hope.

Their soil is still rich enough for this. But one day this soil will be poor and tame, and no tall tree will be able to grow from it anymore.

Beware! The time approaches when human beings no longer launch the arrow of their longing beyond the human, and the string of their bow will have forgotten how to whir!. (Nietzsche 9)

The “goal” spoken of above is to “launch the arrow of their longing beyond the human” toward the ideal of Übermensch. If the Übermensch is not some kind of brainy, super-villain, how can it be a goal? As we will see below, the Übermensch represents an idea of a future being that is beyond the human condition. This idea does not have spe-
cific characteristics. Instead, the Übermensch stands for all avenues beyond the human, without a specific shape. Ulrich Haase uses a specifically ingenious means of explaining the relationship between Mensch and Übermensch: he imagines an ape thinking about a future in which their species ends. While the ape will not be able to articulate the specific shape of the species to come, it may be able to name this species to come “the overape”. Of course, in retrospect, we can see that the overape is the human, but we cannot know that before the fact (Haase 154). In other words, “Übermensch” is what we call any being that will come to fill our place as dominant species on Earth.

As we saw in the quote above, Zarathustra suggests that the time for attaining Übermensch may be soon passing, as another model of human futurity, the last humans, may be also approaching. Zarathustra, in the selection above, mentions that “the time approaches when human beings no longer launch the arrow of their longing beyond the human” (Nietzsche 9). What does this mean? Zarathustra’s speech, quoted above, continues:

Beware! The time approaches when human beings will no longer give birth to a dancing star. Beware! The time of the most contemptible human is coming, the one who can no longer have contempt for himself.

Behold! I show you the last human being.

“What is love? What is creation? What is longing? What is a star?” – thus asks the last human being, blinking.

Then the earth has become small, and on it hops the last human being, who makes everything small. His kind is ineradicable, like the flea beetle; the last human being lives longest.

“We invented happiness” – say the last human beings, blinking.

They abandoned the regions where it was hard to live: for one needs warmth. One still loves one’s neighbor and rubs up against him: for one needs warmth. (9-10)

\[1\] In Chapter 3, we will find this to be very similar to Teilhard’s account of the noësphere.
In this passage, Zarathustra contrasts the Übermensch to these last human beings as the evolutionary destiny of the human. Where the Übermensch is a form of ecstatic becoming, a making large of the human, these Last Men are small creatures who have banished any suffering and only wish for small, meaningless lives. Ulrich Haase argues that The Last Men understand themselves as the high point of creation, as beings of an absolute value, from whom there is, consequently, nothing to do. The Last Men can see the future only as the preservation of their own presence: with this they are the masters of the present ... The masters of the present are thus the ones without future and they are, as such, tired of the world in that they are unable to see in it anything but themselves. And even beyond their death they still see themselves as determining the ‘fatherland’ of their offspring. Nowadays, as they have given up on the idea of eternal life in heaven, they even think they might cheat death completely by inventing some genetic cure for this presumed ‘illness’. (Haase 156-7)

In Haase’s account Nietzsche’s concept of The Last Men suggests those who have a vested interest in extending the human into the future do so with a mind toward foreclosing the evolutionary destiny of the human represented by the Übermensch. The Last Men, in Haase’s understanding, have no interest in the future, or even the present, because they live in a small world, of small comfort, without any of the hardships that add meaning to existence. Indeed, they foreclose the very idea of a future by establishing a fixed template, the “fatherland” in Haase’s quote above, for future existence instead of seeing the future as the nebulous and undetermined chaos out of which will be born the Übermensch.

The tension between the Übermensch and these Last Men can serve to intensify the connection between Übermensch and transhumanism, as we can begin to think about transhumanism as actually having two concurrent threads: a Nietzschean thread and, for lack of a better phrase, a Cartesian thread. If, for instance, we look at transhumanist philosopher Nick Bostrom’s 2005 article, “A History of Transhumanist Thought,” we
find a good historical model for thinking about the rise of this latter, more dominant, rhetorical thread. For Bostrom, Nietzsche has nothing to do with transhumanism. He suggests that while Nietzsche’s Übermensch “would have been a major inspiration for transhumanism,” it was not:

What Nietzsche had in mind, however, was not technological transformation but rather a kind of soaring personal growth and cultural refinement in exceptional individuals (who he thought would have to overcome the life-sapping “slave-morality” of Christianity). Despite some surface-level similarities with the Nietzschean vision, transhumanism – with its Enlightenment roots, its emphasis on individual liberties, and its humanistic concern for the welfare of all humans (and other sentient beings) – probably has as much or more in common with Nietzsche’s contemporary J.S. Mill, the English liberal thinker and utilitarian. (Bostrom)

As we can see, for Bostrom, evolution is technological evolution and, more importantly, evolution of the human is the same as enhancement of the human. In addition to this limited definition of “transhumanism,” we can also see that Bostrom’s dismissal of Nietzschean thought is a result of the misreading of the concept of the Übermensch identified by Haase. While we have so far seen the misapprehension of the idea of Übermensch most commonly associated with Nazis and comic books, Bostrom’s entire account of the Übermensch is driven by an idea of the concept that has nothing to do with Nietzsche’s writing. We can see this misreading in Max More’s account of Nietzsche’s transhuman influence, as well, when he suggests that Nietzschean transhumanism is “a version of transhumanism that champions the self-overcoming of the individual without an obligation to ‘the masses’” (More). In both More and Bostrom, we see authors ignoring the fact that the Übermensch is not seen as an individual but a beacon for future evolution. Bostrom also suggests, by claiming that Cartesian transhumanism is concerned “for the welfare of all humans (and other sentient beings)”, that the Übermensch is a concept somehow not concerned with the mass of humanity. While it is easy to rely on hearsay,
and often hard to extract from his texts, Nietzsche’s prime concern, with the concept of Übermensch, is with the mass of humanity:

Now to desecrate the earth is the most terrible thing, and to esteem the bowels of the unfathomable higher than the meaning of the earth!

Once the soul gazed contemptuously at the body, and then such con- tempt was the highest thing: it wanted the body gaunt, ghastly, starved. Thus it intended to escape the body and the earth.

Oh this soul was gaunt, ghastly and starved, and cruelty was the lust of this soul!

But you, too, my brothers, tell me: what does your body proclaim about your soul? Is your soul not poverty and filth and a pitiful contentment?

Truly, mankind is a polluted stream. One has to be a sea to take in a polluted stream without becoming unclean.

Behold, I teach you the overman: he is this sea, in him your great contempt can go under. (Nietzsche 6)

In this passage Zarathustra denounces the philosophical concept of the human, as lauded by Cartesian transhumanism, for focusing on the soul and the mind at the expense of the body and the Earth. Humanism has long had a legacy of disparaging human embodiment in favor of the cool, purity of the logical mind. Martin Heidegger clarifies this point in his “Letter on Humanism”:

The Christian sees the humanity of man, the humanitas of homo, in contradistinction to Deitas. He is the man of the history of redemption who as a ‘child of God’ hears and accepts the call of the Father in Christ. Man is not of this world, since the ‘world,’ thought in terms of Platonic theory, is only a temporary passage to the beyond. (Heidegger 224)

Heidegger, aligning himself with Nietzsche’s philosophical attack on humanism, goes on to suggest that “the sole implication” of his account of Cartesian humanism “is that the highest determination of the essence of man in humanism still does not realize the
proper dignity of man” (233). In this way (given the affinity Heidegger felt for Nietzsche’s work), we can suggest that the Übermensch is not the elitist, anti-human concept of Bostrom’s account but instead is concerned with fully realizing the dignity owed humanity and denied it by the forces of Cartesian humanism.

To continue to think through the role of the human, we can return to Bostrom’s earlier claim that transhumanism is interested in “individual liberties” and “humanistic concerns” thanks to its “Enlightenment roots.” Unlike the Übermensch, which does away with the problematic concept of the human, Bostrom claims that transhumanism is based around the belief that “humans themselves can be developed through the appliance of science” (Bostrom). In reality, this distinction sums up the difference between the Cartesian thread and the Nietzschean thread of transhumanism: Cartesian transhumanists, like Bostrom, view transhumanism as a means of enhancing present humans into “posthumans” while Nietzschean transhumanists share Nietzsche’s suspicions of the political and ethical character of Cartesian humanism and suggest that, instead, transhumanism is a philosophical means of thinking through the overhuman that will replace us (and, as we shall see, has nothing to do with us).

Additionally, in the pages to come, we will see how Bostrom’s dismissal of Nietzsche ignores a larger understanding of evolution that is in fact directly understandable as transhumanism. Nietzschean transhumanism is not a discourse limited to technological enhancement of the human. From the perspective of the Übermensch as transhuman, the Cartesian transhumanists, represented here by Nick Bostrom, would be aligned with the petty and lifeless “Last Men,” discussed above. While Bostrom seems more than willing to dismiss the “soaring personal growth and cultural refinement” afforded by the Übermensch, we will see that this is not the case in a Nietzschean understanding of transhumanism.

One of the best sources for further understanding the blending of Übermensch and
transhuman occurs in P.D. Ouspensky’s essay entitled “Superman” from *A New Model of the Universe*. Ouspensky, in addition to being one of the most astute readers of Nietzsche to date, was a student of the mystic and educator G.I. Gurdjieff. Taking off from his teacher, Ouspensky’s work concerns the new forms of knowledge made possible by the combination of psychology and the occult. In the “Superman” essay, in particular, Ouspensky’s writing is particularly evocative of Nietzsche’s later, aphoristic writing and in moving through this essay, from a particularly transhuman perspective, we can begin to understand the degree to which Ouspensky understood the stakes within the transhuman conversation. Additionally, his writing in this essay does interesting rhetorical work within the transhuman field of discourse. While Ouspensky’s word choice often conforms to many later transhuman writings, his specific knowledge of esoteric practice and his intense absorption of Nietzsche’s philosophy causes subtle redefinitions of key concepts, especially “evolution,” that will prove useful to a further understanding of the concept of transhumanism.

*Aphorism #1*: “The idea of superman is as old as the world. Through all the centuries, through hundreds of centuries of its history, humanity has lived with the idea of superman” *(Ouspensky 101)*

As we see in Aphorism #1, Ouspensky opens his essay by asserting that Nietzsche’s concept of the superman is, in fact, a transhistorical concept that has operated in all major religions and as an engine driving the advancement of the human race. For Ouspensky, “popular wisdom has never regarded man as the crowning achievement of creation” *(101)*. In his understanding, before the onset of the scientific and rational framework of humanism, the human was regarded as incomplete while the superman representing the
horizon of achievement, the next great iteration of the species. Nietzsche’s concept of the superman is so revolutionary to us because humanism has successfully asserted that “man as he is, as he always was and always will be” should be the object of knowledge production and philosophizing (101). In contrast, Ouspensky claims that the superman represents a rhetoric of the human that is “never satisfied with man as he is,” an understanding that, as he points out in numerous parts of his article, is a rhetoric of “the masses,” a populist rhetoric (101).

In fact, Ouspensky makes the claim that “The masses in their own way still live with the idea of superman; they are never satisfied with man as he is; and the literature supplied to the masses invariably gives them a superman” (101). This claim about the literature of the masses goes towards explaining, partly, the proliferation of superman in mass cultural genre writing, such as science fiction and fantasy writing. In fact, if one were to walk into the SF section of any well stocked used bookstore looking for superman, one could easily come away with more books than could easily be carried. With that in mind, during this discussion of Ouspensky’s account of the concept of superman and its relationship to transhumanism we will look to several SF texts for clarification.

In any case, to return to Ouspensky’s essay, he writes that this historical or pre-humanist understanding of supermen occurred first as legends about the past or a “Golden Age”:

> The first idea of superman pictured him in the past, connected him with the legendary Golden Age. The idea has always been one and the same. People dreamt of, or remembered, times long past when their life was governed by supermen, who struggled against evil, upheld justice and acted as mediators between men and the Deity, governing them according to the will of the Deity, giving them laws, bringing them commandments. (102)

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2For more information on the idea of supermen in science fiction, see Chapter 4 which will deal explicitly with the “Supermen Boom” during science fictions Golden Age.
Ouspensky continues: “But dreams of the past could not satisfy man; he began to dream of the future, of the time when a superman would come again. From this a new conception of superman resulted” (102).

In the two above quotes, we see the two early shapes that Ouspensky sees for understanding the superman. I say “understand” because, and Ouspensky is not as clear as one would like on this point, he suggests in this essay that the superman is often grasped through narrative: myths and, more contemporarily, genre fiction (he cites Sherlock Holmes as a modern example of superman). In any case, though, Ouspensky claims that, initially, the concept of superman was always associated with the dual forces of nostalgia and what Donna Haraway has called “salvation history.”

In “A Cyborg Manifesto,” Haraway discusses the possibility of the science fiction trope of the cyborg (part human part machine) as a model for revolutionary feminism (and revolutionary politics in general) during the present moment of technologically capitalism. Specifically, for her, this revolutionary cyborg opens the possibility “for weaving something other than a shroud for the day after the apocalypse that so prophetically ends salvation history.” (Haraway 158) Haraway’s essay argues that there is a palpable rhetorical link between Judeo-Christian “salvation history” and the logical of “mutually assured destruction” that underscores much of the rhetoric of nuclear weapons. For Haraway, the work of revolution is the work of resisting this teleological narrative of Western, Judeo-Christian humanism, a telos that with the rise of a specifically militarized science concludes with an apocalyptic break. The cyborg can, possibly, “subvert the apocalypse of returning to nuclear dust in the manic compulsion to name the Enemy” by writing itself out of the “salvation history” narrative provided by Judeo-Christian beliefs and the increasing lust for apocalypse (152). While Ouspensky was obviously

not as aware of the apocalyptic telos as someone like Haraway can be, the connection between the Judeo-Christian “salvation history” narrative and the superman is also troubling to Ouspensky. Interestingly enough, as we shall see in a moment, Ouspensky and Haraway reach similar conclusions through their discussions of superman and cyborg. First, though, we need to unpack Ouspensky’s own concern with the superman that comes from the future.

There are a number of problems with the “salvation history” model of superman for Ouspensky. For instance, given the often feudal or religious functions of Golden Age models of the superman (such as King Arthur or Moses), the superman from the future was to come, arrange their affairs, govern them, teach them to obey the law, or bring them a new law, a new teaching, a new knowledge, a new truth, a new revelation. The superman was to come to save men from themselves, as well as from the evil forces surrounding them. (Ouspensky 102)

Coupling this attitude of waiting for salvation with an increasing view of the human as already complete and perfect—which, for Ouspensky is the true rhetorical effect of science—the process of manifesting a superman from the future is merely waiting around for better days to arrive. In fact, while such a stance is often applied to Western religious practice, Ouspensky finds the naive belief in future salvation to be even more pervasive in the supposedly a-religious field of science:

In this connection, evolutionary theories have become the basis of a naive optimistic view of life and of man. It is as though people said to themselves: now that evolution exists and now that science recognises evolution, it follows that all is well and must in future become still better. In the imagination of the modern man reasoning from the point of view of the ideas of evolution, everything should have a happy ending. A story should necessarily end in a wedding. It is precisely here that the chief mistake with regard to the ideas of evolution lies. (103)

This naive, evolutionary optimism is an interesting character of the scientific mind in
Ouspensky’s account. While it could be argued by someone subscribing to the scientific worldview that Judeo-Christian “salvation history” produces this sort of naive faith, Ouspensky attempts to show that science only serves to magnify this naivety. We can see this nowhere better illustrated than in the early and influential science fiction television program, *Star Trek* and, specifically, the reaction to it as a cultural object. More specifically, we can focus on James Tiptree Jr.’s 1969⁴ short story, “Beam Us Home.” In telling the story of Hobie, an early *Star Trek* fan, Tiptree offers science-fictional accounts of the rhetorical effects produced by the show.⁵ The story opens with: “Hobie’s parents might have seen the first signs if they had been watching about eight-thirty on Friday nights” (J. T. Jr. 296). Tiptree here sets the twin stakes of the show: Hobie’s fandom (for 8:30 on Fridays was when Season 3 of *Star Trek* aired on CBS) and the obsession with diagnosis that swarms around Hobie. Reflecting on Tiptree’s background in experimental psychology, the story reads like a case file in its account of Hobie’s inability to fit into any psychological category:

> The official high school view was that Hobie had no real problems. In this they were supported by a test battery profile that could have qualified him as the ideal normal control. Certainly there was nothing to get hold of in his routine interviews with the high school psychologist. (298)

In the one sample interview provided in the story, the high school psychologist (reading *Sex Differences in the Adolescent Identity Crisis*) attempts to discern whether or not Hobie is a homosexual. Instead, Hobie turns the discussion back on the analyst who ultimately “looked into Hobie’s light hazel eyes and suddenly found himself slipping toward some very large uninhabited dimension” (299) All that seems to exist inside of Hobie, beyond the pathologically normal exterior is the blackness of space. After the

⁴Published around the time of the show’s original cancellation.

⁵Also of interest: the story is a rewriting of “Paul’s Case” by Willa Cather that substitutes “alien” for “queer” in its account.
interview, the psychologist relishes the “next boy, who turned out to be a satisfying High
Anx. [He] forgot about the empty place he had slid into” (299).

All the while, Hobie seems to be merely observing the life around him: “his usual
manner was open but quiet, tolerant of a put-on that didn’t end” (297). This world that
he sees, and the glimpses of it that we get it, is fast sliding into some kind of dystopian
police state:

Those days a lot of boys were standing around looking as if they couldn’t
believe what went on, as if they were waiting for—who knows?—a better
world, their glands, something. Hobie’s faintly aghast expression was not
unique. Events like the installation of an armed patrol around the school
enclave were bound to have a disturbing effect on the more sensitive kids.
(297)

Also:

They had been talking about the state of the world, which was then quite
prosperous and peaceful. That is to say, about seventy million people were
starving to death, a number of advanced nations were maintaining them-
selves on police terror tactics, four or five borders were being fought over,
Hobie’s family’s maid had just been cut up by the suburban peacekeeper
squad, and the school had added a charged wire and two dogs to its patrol.
But none of the big nations were waving fissionables, and the U.S.-Sino-
Soviet détente was a twenty-year reality. (300)

In both these cases, we can begin to recognize projections from the future that mirror, in
rather disturbing ways, the state of our own world. Eventually, as the story progresses,
Hobie joins the Air Force to get work as an astronaut but, instead, ends up serving as
a combat pilot in an endless guerilla war in Venezuela. All the while, Tiptree stresses
Hobie’s detachment from the state of the world until the moment he snaps. Dying of
a genetically engineered bacterial plague, Hobie begins to confess the reasons he has
acted so strangely throughout his life:
“Oh, it was pathetic, I guess,” Hobie said. “It started out . . . I believed they were real, you know? Kirk, Spock, McCoy, all of them. And the ship. To this day, I swear . . . one of them talked to me once; I mean, he really did . . . I had it all figured out; they had me left behind as an observer.” Hobie giggled.

“They were coming back for me. It was secret. All I had to do was sort of fit in and observe. Like a report. One day they would come back and haul me up in that beam thing; maybe you know about that? And there I’d be back in real time where human beings were, where they were human. I wasn’t really stuck here in the past. On a backward planet.”

The paramed nodded.

“Oh, I mean, I didn’t really believe it; I knew it was just a show. But I did believe it too. It was like there, in the background, underneath, no matter what was going on. They were coming for me. All I had to do was observe. And not to interfere. You know? Prime directive . . . Of course, after I grew up, I realized they weren’t; I mean, I realized consciously. So I was going to go to them. Somehow, somewhere. Out there . . . Now I know. It really isn’t so. None of it. Never. There’s nothing . . . Now I know I’ll die here.”

(309)

The whole time, Hobie has believed so deeply in Star Trek that he has been unable to act due to the show’s stressing of non-interference, called “The Prime Directive”. In this instance, Tiptree has tapped into one of the most unusual effects of watching Star Trek: passive naivety. The show, which depicts a futuristic Utopia (that is organized along Marxist lines), often produces viewers uninterested in working towards such a Utopia (as one of my science fiction students once observed: “the most conservative person I knew in high school was a huge Star Trek fan.”). This isn’t to suggest that Star Trek is only compatible with certain political ideologies, but it does beg the question: if Star Trek is so compelling (and I think we can all agree that it is), what are its fans latching onto if they are not interested in the Utopian politics that can make such a civilization a reality? Tiptree suggests one answer to this question in her story:

“Oh, it’s not so bad,” said Hobie. “I mean, it’s not unusually bad. It’s just a stage. This world is going through a primitive stage. There’s a lot of stages. It takes a long time. They’re just very, very backward, that’s all.” (301)
This discussion of stages illustrates the evolutionary faith that Ouspensky claims is dominate within the modern, scientific mind. Hobie’s views can be found, also, all over the series itself. For instance, in the episode “Assignment: Earth,”[6] the character of “Seven” (a human trained as a secret peace agent by aliens from Sirius[7]) explains his purpose on Earth in the 1960s: “Problem. Earth technology and science have progressed faster than political and social knowledge. Purpose of mission. To prevent Earth’s civilisation from destroying itself before it can mature into a peaceful society.” While this quote is but one example in the show’s three seasons, it illustrates the frame of mind that underscores the show’s outlook on the future: while 1960s Earth was bad (and things were going to get worse, as Star Trek is ultimately an example of post-apocalyptic SF), all of the bad things are part of the natural evolution of society towards a peaceful ideal.

In other words, the Utopia of the program is compelling because it offers a warm, soothing outlook on the future: “just sit back & relax. Everything will be okay, in the end” appears to be the message the show offers to its viewers. We see this further reflected in Hobie’s final speech, quoted above. He turned his back on a career in politics due to his belief in The Prime Directive, and his childhood fantasies of observation mutate into adult desires for escape. Never is there a commitment to helping the society mature. Instead, there is only the blind faith Ouspensky finds in the mind of the scientist: things are good now but will get better and better. Of course, suggestively, Tiptree shows in “Beam Us Home” how this viewpoint is incommensurate with the downward trend taken by civilization during the twentieth century. Part of the naivety or silliness of Star Trek when watched by the uninitiated may lie in this passivity. It may also lie in the mischaracterization of superman the show offers. As Ouspensky writes, “the image of

[6]Which was intended as the pilot of a spin-off that never materialized

[7]aliens from Sirius guiding human evolution is a surprisingly persistent meme in science fiction and paranormal circles. For more information on the topic, see Cosmic Trigger by Robert Anton Wilson.
superman in this case loses all colour and grows almost repulsive, as though from the very fact of becoming lawful and inevitable,” suggesting that the orderliness of Utopia in *Star Trek* makes it undesirable to viewers not entranced by the show’s promise that things will get better on their own (Ouspensky 110).

Moreover, though, this blind faith in an evolutionary future is a common rhetorical move in transhumanism, and Ouspensky is rightly suspicious of the religious nature of blind faith that underscores what he terms a misperception of the nature of evolution.

What then does Ouspensky mean by “evolution”? He offers this definition:

> Evolution, however it be understood, is not assured for anyone or for anything. The theory of evolution means only that nothing stands still, nothing remains as it was, everything inevitably goes either up or down, but not at all necessarily up; to think that everything necessarily goes up—this is the most fantastic conception of the possibilities of evolution. (103)

Ouspensky’s redefinition of evolution is an interesting one, especially given his interest in superman. Ouspensky suggests in this quote that evolution “goes either up or down,” but what exactly does that mean? To Ouspensky, this up or down movement is a movement away from or towards superman. This perspective is hugely problematic. While the correction of evolutionary positivism is definitely needed (and is still needed in Cartesian transhumanism), to suggest that something either moves up or down in the process of ever-infinite evolutionary change also suggests that there is a benchmark for evolution. Ouspensky is still measuring evolution against superman. One could conclude that he still provides a telos for the development of the human species. This would be inaccurate because for Ouspensky, as we shall see, superman is not unlike Zeno’s Paradox: no matter how close one gets to superman, there is always half as much distance left to walk. In other words, the concept of superman is a beacon and not

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8 This issue will be taken up at length in Chapter 3.
a promise, a guide post for evolution and not the inevitable destination at the end of the journey.

As was suggested in Aphorism #1, superman, for Ouspensky, is a transhistorical concept. The concept, as he shows is old and persistent. Moreover, Ouspensky’s discussion of this transhistorical nature of superman deftly moves from real, existing (or at least mythically existing) supermen (in both the past and the future) to an understanding of superman as a beacon guiding man’s evolutionary endeavors. The split between these ideas (real supermen and superman as process) will become increasingly important in Ouspensky’s discussion of superman as the essay moves forward. This distinction is also why Ouspensky is so adamant about removing evolutionary positivism and the passive logic of salvation history from his discussion of superman: he is emphasizing the importance of individual work in driving evolution upwards towards superman.

**Aphorism #2 - “Man is pre-eminently a transitional form, constant only in his contradictions and inconstancy—moving, becoming, changing under our eyes.”** (105)

Having discussed the transhistorical role of superman, Ouspensky’s discussion turns to questions concerning how to perform the work of moving evolution “upwards”. Most important to Ouspensky’s problem with the future/past model of superman discussed at this point in the essay is a problem that results from vision:

But the idea of a superman as a prophet or messiah, of the superman whom people were expecting, was always very obscure. People had a very dim conception of superman, they did not understand in what way superman should differ from ordinary man. (103)
While people can look back on the supermen of the past, to the mythical Golden Age in which they are often set, and see the characteristics of these supermen that made them so much more superior to ordinary humans, the superman of the future differs in ways that have yet to be determined. This problem of vision and, in a way, lack of imagination is the entire problem Ouspensky sees with our understanding of superman. For many models of superman and with most models of Cartesian transhumanism, superman is merely the human amplified. For Ouspensky, though, the superman is in fact a doing-away-with of much of what is often amplified in speculation about superman: “when we picture to ourselves a superman we accept and approve in him just those sides of human nature which should be discarded on the way” (104). In other words people have, historically, imagined incorrect visions of the superman, especially given the congealing vision of the human thanks to a humanist logic through which “man began to lose the realisation of his nothingness” (103). While we define transhumanism, in this project, as the view of the human as the object of ongoing evolutionary processes, much of the rhetoric being analyzed in fact does the opposite. This problem (of failing to adequately “evolutionize” the human) is why the discourse of someone like Ouspensky is such an important adjunct to Cartesian transhumanism.

In contemporary transhumanism, we see at work a logic of augmentation in which the human is amplified or accelerated through technological means. For Ouspensky, the superman is a ground-clearing, a washing clean of the entire notion of the human. Part of his concern lies in the thread of eugenic discourse that runs through this essay, through much of Ouspensky’s thought, and, ultimately, through much of transhumanism itself. Ouspensky writes on this matter of change:

All the forms of life we know are either the result of evolution, or the result of degeneration. But we cannot discriminate between these two processes, and we very often mistake the results of degeneration for the results of evolution. (104)
This mistake that Ouspensky describes shows the influence of Max Nordau’s *Degeneration* on his thinking. Nordau’s work suggested that early 20th century social phenomena such as urbanization and modern art were diseases that were negatively affecting the species, causing humans to negatively evolve (or degenerate) into beings only capable of experiencing empty pleasure and no longer interested in the progress of civilization. This argument also seems to be partly the occasion for Ouspensky’s writing on the superman. While many within the naive scientific view may claim that the modern period in which he is writing represents the pinnacle of human achievement, Ouspensky’s definition wishes to caution that this is not the case and that, in fact, for Ouspensky, degeneration is the result of the foreclosure of superman.

Following the disjunction between “evolution” and “degeneration,” Ouspensky speaks of the human as being understood in two ways, as “scientific man” and as “the bridge to superman.” In defining these two views of the human, Ouspensky writes:

In the first case [scientific] man is taken as a completed being. Study is made of his anatomical structure, his physiological and psychological functions, his present position in the world, his historical fate, his culture and civilisation, the possibility of the better organisation of his life, his possibilities of knowledge, etc.: in all this man is taken as what he is. In this case chief attention is concentrated on the results of man’s activities, his attainments, his discoveries, his inventions. And in this case these results of man’s activities are regarded as proofs of his evolution, although as often happens, they demonstrate just the contrary . . .

In the second case man [as bridge to superman] is taken as an uncompleted being, out of which something different should result. And the whole meaning of the existence of this being lies, in this case, in its transition into this new state. Man is regarded as a grain, as a larva, as something temporary and subject to transformation. ([107])

We see then, Ouspensky’s interest in Nordau and degeneration: any evolution that precedes from the supposition of human completeness is, inherently, evolution away from superman. Understanding this frame of mind is an important point in the genealogy of
transhumanism, as it is a point that is largely lost. One of the main problems in contemporary transhumanism is the colonization of transhuman discourse by engineers and hobbyists who were more interested in the work of transhumanism than any philosophy behind it. Ouspensky’s analysis of Nietzsche in this chapter points towards a more complicated (and ultimately more difficult) understanding of transhumanism: the only transhumanism that has real legs to the future is the transhumanism that begins with the end of the human.

*Evolution* in the true sense of the word has nothing in common with the anthropological change of the type, even if we consider such a change of type as established. Nor has evolution anything in common with the change of social forms, customs and laws, nor with the modification and “evolution” of forms of slavery or means of warfare. Evolution towards superman is the creation of new forms of thinking and feeling, and the abandonment of old forms.

Moreover, we must remember that the development of a new type is accomplished at the expense of the old type, which is made to disappear by the same process. The new type being created out of an old one overcomes it, so to speak, conquers it, occupies its place. (103–4)

In this section we can begin to see what Ouspensky (and, by extension, Nietzsche) has to offer to contemporary understandings of transhumanism: the old models of the human and the old ways of thinking about ourselves as humans will not produce anything truly new. This obsession with newness is a point of engagement with his modernist contemporaries (at the same time that he draws on one of their chief denouncers by alluding to Nordau): where Cartesian transhumanism wants to offer the old human in new, cybernetic clothing, Ouspensky’s model of superman seeks to follow that classic modernist axiom: “make it new!” This distinction is an important one and, sadly, also a largely ignored one within the discourse of transhumanism.

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9See Chapter for more on this topic.
For Ouspensky, the idea that superman is “a higher zoological type in comparison with man” characterizes “the wrong view of evolution in general,” as we saw in the previous selection (111). Having said that, what does Ouspensky have to say about transhumanism, which we are defining in this work as the view that humans are the objects of ongoing evolutionary processes? If Ouspensky rejects the model of evolution foregrounded in Cartesian transhumanism as mere “change,” how do we label his thought “transhuman?”

The answer, of course, lies in the above selection: “Evolution towards superman is the creation of new forms of thinking and feeling, and the abandonment of old forms” (103-4). While this may be a potentially vague statement, Ouspensky later writes that “the evolution of consciousness, the inner growth of man, is the ‘ascent towards superman’” (110). In other words, for Ouspensky, the evolution towards superman precedes not entirely on the level of the organism but on the evolution in patterns of thinking. That said, as Ouspensky points out, “superman is regarded in this case as a possible product of the evolution of man,” to suggest that superman does not have to also preclude the possibility of new forms of the organism (111). It is merely to state that the products of organic change are not the same as superman, a distinction forgotten by more recent versions of this discourse.

An interesting point about the above summary of Ouspensky’s theory of evolution. In offering an account of this concept, we have called, in the above sentence, the progression of the organism’s physical form “change.” It seems impossible to substitute “change” for a scientific definition of “evolution” without thinking of the various crises about the teaching of intelligent design and evolutionary science in America’s high schools during the early 2000s. In 2004, Georgia Superintendent of Schools, Kathy Cox, attempted to mandate that, in science classrooms, the concept of “evolution” should be referred to when being discussed in the classroom as “biological changes over time:”
Cox repeatedly referred to evolution as a “buzzword” Thursday and said the ban was proposed, in part, to alleviate pressure on teachers in socially conservative areas where parents object to its teaching (“Georgia Considers Banning ‘Evolution’”).

This was occurring at the same time that a lawsuit in Dover, PA was moving forward that attempted to teach “intelligent design” on the same footing as evolutionary theory in science classrooms. What is interesting, especially about Cox’s proposed linguistic shift, is that Ouspensky is doing the same thing. That said, something different is at work in this rhetorical shift. While Cox was probably motivated by the then prevalent idea to teach Christian theories of human origins along side scientific theories, Ouspensky is not trying to displace both science and religion. Both theories of evolution, Intelligent Design and Darwinian Evolution, take somatic change to be the action of evolution. In substituting a rhetoric of “change,” rather than substituting one belief structure for another, Ouspensky refocuses our understanding of evolutionary action from the body to the mind. In this way, Ouspensky is attempting to shift the entire landscape of thinking about evolution.

A final point about the nature of evolution in Ouspensky: unlike the supposed gradual rising or complexification of species through biological evolution, evolution of consciousness is often punctuated by the radical break or the emergence of fully formed superman in an unexpected or spectacular fashion. He writes: “superman must have something unlawful in him, something which violates the general course of things, something unexpected, unsubjected to any general laws” (Ouspensky 111). Further, and more importantly, Ouspensky points out that “lightning cannot be regarded as the result of the ‘evolution of the cloud’” (111). This image of the lightning and the cloud, drawn from the lips of Nietzsche’s Zarathustra (“I want to teach humans the meaning of their being, which is the overman, the lightning from the dark cloud ‘human being.’” (Nietzsche 12)) marks out the nature of evolution for Ouspensky. In one moment, there is cloud;
then there is lightning. Similarly, Ouspensky suggests that there can be one day man and then the next superman. Ouspensky’s understanding of evolution is particularly interesting here, because his rhetoric in this reading of superman is effective at demolishing the commonplace understandings of evolution often held by most people without extensive training in biology, namely in a gradual change of the organism. As we move forward in this discussion of Ouspensky’s transhumanism, we will see that his work on the evolution of superman mirrors some of the thinking being done in the biological sciences on overcoming some commonplace arguments about evolution.

In any case, Ouspensky’s discussion of the instantaneous appearance of superman from man is an important point to conclude this section with: understanding that Ouspensky’s theory of superman is driven by the radical emergence of the new and not by the gradual advancement of species is important going forward in this account. While Ouspensky’s model of transhumanism begins, at least some what, with a perspective on the species, his discussion of superman becomes increasingly personal and focused on individual action. We can see this shift in focus begin in the next aphorism.

_Aphorism #3: Evolution, which is usually regarded as evolution of the masses, can in reality never be anything but evolution of the few. And in _mankind_ such an evolution can only be conscious. It is only degeneration which can proceed unconsciously in men._

This discussion, in Aphorism #3, of the evolution of the few versus the evolution of the masses is one of the most troubling quotes in this article, especially from a transhuman-

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10In fact, it becomes increasingly apparent, when studying transhumanism, that the entire history of this discourse is one of an ongoing struggle between misreading Darwin and attempting to correct said misreadings.
ism perspective. One of the more laudable elements of the contemporary transhumanist rhetoric being analyzed in this chapter is that it does hold out the possibility for a better future for the entire planet. Again and again, transhumanism offers the promise of a better future for all, as we can see in this quote from Teilhard de Chardin’s classic, *The Phenomenon of Man*:

> The outcome of the world, the gates of the future, the entry into the superhuman—these are not thrown open to a few of the privileged nor to one chosen people to the exclusion of all others. They will open only to an advance of *all together*, in a direction in which *all together* can join and find completion in a spiritual renovation of the earth. (de Chardin, *The Phenomenon of Man* 244-5)

In this quote, we see the futurist populism that is one of the more redeeming qualities of the entire discourse of transhumanism. That said, Teilhard’s quote flies in the face of Ouspensky’s claim in Aphorism #3. For Ouspensky, it is only the few who walk the path toward superman. We saw a loose conflation between Utopia and superman earlier in the essay, but Ouspensky’s elitism is at odds with the more populist/socialist/Marxist bent to discussions of Utopia. How do we resolve this conflict between the many and the few?

A hint of the answer lies in the footnote to the above quoted passage from *The Phenomenon of Man*. There appears a footnote on the second instance of “all together” that reads, “even if they do so only under the influence of a few, an *élite*” (245). This footnote, nestled at the bottom of the page, further complicates the issues at hand. Lurking below Teilhard’s own populist vision of superman lies the influence of a shadowy elite.

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11 After all, Bostrom accuses Nietzsche of being unconcerned with the masses.

12 I talk about this elite as “shadowy” due to Teilhard’s loose association with a conspiracy, organized by Julian Huxley, to work towards a transhuman becoming through UNESCO. See “The Aquarian Conspiracy” by Lyndon Larouche (http://www.biblebelievers.org.au/aquarian.htm) for an apocryphal account of the conspiratorial nature of Huxley’s vision of transhumanism.
This question of an elite raises the question as to whether or not transhumanism is a form of elitism. This question necessitates a careful consideration of Ouspensky’s own rhetoric and some of the rhetorical predispositions that may exist within the mindset of the reader. If we read Ouspensky’s claim closely, we see that he is merely juxtaposing “evolution of the few” to “evolution of the masses.” While it may be tempting to read this “few” as being a privileged few, if there is anything we learn from Thus Spoke Zarathustra and Ouspensky’s reading of it, it is that the path toward superman is a lonely one for those who walk it. As Ouspensky points out: “when superman came, people stoned him or crucified him because he did not fulfil their expectations” (Ouspensky 103). Examples of the superman, in the past, have not always met with the most pleasant of ends. If this is not in line with Teilhard’s elitist footnote, what does Ouspensky mean by “evolution of the few”?

Partly, this question can be answered by suggesting that Ouspensky’s model of the evolution of consciousness towards superman conforms to evolutionary realities, even if it disputes the optimism of biological evolution as we saw above. One of the most fascinating aspects of Ouspensky’s model of transhumanism is that he does not forget the fact that evolution of consciousness has to operate in the same manner as evolution of the organism. This claim about “evolution of the few” speaks to a controversy, still partly ongoing, within evolutionary theory, centering around the question of “the units of selection.”

Elliott Sober, in The Philosophy of Biology, offers the following formal definition of the unit of selection:

\[ X \text{ is a unit of selection in the evolution of trait } T \text{ in lineage } L \text{ if and only if one of the factors influencing the evolution of } T \text{ in } L \text{ is the fact that } Xs \text{ in } L \text{ vary in fitness because there is a variation among them with respect to } T. \] (Sober 90)
For Sober and for most evolutionary biologists, the unit of selection refers to the part of the organism (conceived on a sliding scale from gene to larger concepts like species or environment) that matters for the evolution of a trait and, more importantly, the things in an organism that determines it’s relation to others of it species with regards to fitness. The dispute over the unit of selection fully manifested following the publication of Richard Dawkins’s *The Selfish Gene* in 1976, although the controversy had been simmering since the publication of *On the Origin of Species*. Initially, in Darwin, the primary unit of selection was the individual, with phenotypic expression of genetic material mattering in natural selection. With the discovery of DNA and the rise of molecular biology, evolutionary biologists began to suspect, more and more, that the unit of selection was, in fact, the gene instead of the organism that bears the genes. Dawkins merely condensed this thesis and focused it to a point where he could claim that, essentially, the organism does not matter from an evolutionary standpoint.

As Dawkins would later clarify in the essay “God’s Utility Function”:

> Time and again, cooperative restraint is thwarted by its own internal instability. God’s Utility Function seldom turns out to be the greatest good for the greatest number. God’s Utility Function betrays its origins in an uncoordinated scramble for selfish gain.

> Humans have a rather endearing tendency to assume that welfare means group welfare, that ‘good’ means the good of society, the future well-being of the species or even of the ecosystem. God’s Utility Function, as derived from a contemplation of the nuts and bolts of natural selection, turns out to be sadly at odds with such utopian visions. To be sure, there are occasions when genes may maximize their selfish welfare at their level, by programming unselfish cooperation, or even self-sacrifice, by the organism at its level. But group welfare is always a fortuitous consequence, not a primary drive. This is the meaning of ‘the selfish gene’. (Dawkins 121-2)

In Dawkins’s theory of the selfish gene, the only traits that get selected for by evolution are those that allow for the maximal spread of an individual’s genes. Additionally, as we can see in the quote above, the essay is an attack on utilitarianism and other forms of
utopianism that seek to establish a greater good beyond the selfish gains of individuals. That said, Dawkins’s theory of the selfish gene begins to suggest the “few” of Aphorism #3. For Ouspensky, only the fittest of a species can drive the evolution of consciousness towards superman. Similarly, in Dawkins’s account of elephant seals in this essay, he discusses a species in which “4 percent of the males accounted for 88 percent of all the copulations” (106). In other words, evolution of consciousness and evolution of the organism both proceed along a “winner fuck all” model in which the fittest individuals get to influence the character of the next generation.

While Dawkins’s “winner fuck all” model of reproduction is clearly persuasive within the context of the animal, when we consider the aspects of the human that are beyond the mere reproduction demanded by the selfish gene (which is after all the domain of superman), Ouspensky’s adoption of the survival of the fittest (along selfish gene lines) suggests a problem, when we remember that Ouspensky’s supermen have a habit of getting stoned or crucified or burned at the stake. Horrible and violent death at the hands of a disappointed rabble is at odds with the survival of the selfish gene in Dawkins’s theory.

This problem brings up a conflict that has resulted from Dawkins’s theory with regards to his model of the unit of selection. As the dispute over the selfish gene theory developed, one camp that formed around the debate suggested that the species or the community might be a better unit of selection due to the appearance of altruistic traits in individuals. Sober writes:

Why isn’t it a matter of convention whether one describes a trait as evolving for the good of the organism or for the good of the species?

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13 I’m suspicious of my phrasing here, but I think it’s a clear problem with Dawkins’s reasoning that he does not consider the internal life of the organism in his theory. We will see my complaint get expanded from a biologist’s perspective in a moment.
The answer to this question can be given in one word: *altruism*. An altruistic trait is one that is deleterious to the individual possessing it but advantageous for the group in which it occurs. If the organism is the exclusive unit of selection, then natural selection works against the evolution of altruism. If the group is sometimes a unit of selection, then natural selection sometimes favors altruistic traits. The units of selection problem cannot be settled by stipulative convention, because different views about the units of selection make contrary predictions about which traits evolve under natural selection. The important point is that there can be conflicts of interest between objects at different levels of organization: What is good for the group may not be good for the organism. (Sober 91)

As we can see, the presence of altruistic traits in animals suggests that something outside of the selfish individualism of Dawkins’s model may be at work in biological evolution.

In fact, this problem is present in Darwin’s foundational work for the entire field:

But it may be asked, how within the limits of the same tribe did a large number of members first become endowed with these social and moral qualities, and how was the standard of excellence raised? It is extremely doubtful whether the offspring of the more sympathetic and benevolent parents, or of those who were the most faithful to their comrades, would be reared in greater numbers than the children of selfish and treacherous parents belonging to the same tribe. He who was ready to sacrifice his life, as many a savage has been, rather than betray his comrades, would often leave no offspring to inherit his noble nature. The bravest men, who were always willing to come to the front in war, and who freely risked their lives for others, would on an average perish in larger numbers than other men. Therefore, it hardly seems probable that the number of men gifted with such virtues, or that the standard of their excellence, could be increased through natural selection, that is, by the survival of the fittest; for we are not here speaking of one tribe being victorious over another. (Darwin 135)

As we can see here, Darwin is questioning how common human traits could be selected for when, in fact, they work at odds to the demands of the selfish gene. Darwin then goes on to answer his own question:

It must not be forgotten that although a high standard of morality gives but a slight or no advantage to each individual man and his children over the other
men of the same tribe, yet that an increase in the number of well-endowed men and an advancement in the standard of morality will certainly give an immense advantage to one tribe over another. A tribe including many members who, from possessing in a high degree the spirit of patriotism, fidelity, obedience, courage, and sympathy, were always ready to aid one another, and to sacrifice themselves for the common good, would be victorious over most other tribes; and this would be natural selection. At all times throughout the world tribes have supplanted other tribes; and as morality is one important element in their success, the standard of morality and the number of well-endowed men will thus everywhere tend to rise and increase.

In these examples, we can see the roots of viewing the community as a unit of selection in some cases, as it was formulated in Darwin’s *The Descent of Man*. Perhaps, then, we can also suggest that this view of evolution may begin to explain Ouspensky’s evolutionary view of the superman by suggesting that those “who freely risked their lives for others” may in fact have some aspect of the superman. In other words, these community selected, altruistic traits may in fact be partly what Ouspensky is talking about in his discussion of superman and evolution of consciousness.

While this explains the distinction of the few and the many in Aphorism #3, we are still left with the puzzling last portion of that selection: “And in mankind such an evolution can only be conscious. It is only degeneration which can proceed unconsciously in men” (Ouspensky 108). What does it mean for evolution to be conscious? Part of Dawkins’s concern in “God’s Utility Function” is with showing how the selfish gene model of evolution is at odds with our own understanding of how life should operate.

For instance, this quote shows Dawkins’s other main concern (beyond further explicating the role of utility in evolution):

> We humans have purpose on the brain. We find it hard to look at anything without wondering what it is ‘for,’ what the motive for it is, or the purpose behind it. When the obsession with purpose becomes pathological it is called paranoia—reading malevolent purpose into what is actually random bad luck. But this is just an exaggerated for of a nearly universal delusion.
Show us almost any object or process, and it is hard for us to resist the ‘Why’ question—the ‘What is it for?’ question. (Dawkins 96)

Dawkins is suggesting that evolution operates outside of the normal, human protocols of being, specifically the idea of teleology or direction to human life. We could loosely suggest that Dawkins’s insertion of purposelessness into a discussion of human being is in line with Ouspensky’s attack on biological evolution as discussed above. This loose connection is the strongest point of concurrence between Dawkins and Ouspensky. In fact, Dawkin’s introduces the above selection with some very Nietzschean sentiments: “we cannot admit that things might be neither good nor evil, neither cruel nor kind, but simply callous–indifferent to all suffering, lacking all purpose” (which of course echoes the thesis of Beyond Good and Evil) (96). Having said that, though, Nietzsche (and by extension Ouspensky) suggests in Thus Spoke Zarathustra: “the [superman] is the meaning of the earth. Let your will say: the [superman] shall be the meaning of the earth!” (Nietzsche 6). This insistence on meaning is at odds with Dawkins’s claim that beyond good and evil only lies purposelessness. Resolving this contradiction is key if we are to continue to unpack Ouspensky’s account of transhumanism.

In Aphorism #3, Ouspensky may be overstating his claims about degeneration (“it is only degeneration which can proceed unconsciously in men”). As we saw earlier, in evolution, for Ouspensky, “everything inevitably goes either up or down, but not at all necessarily up,” which suggests that sometimes, by accident, biological evolution can be a move towards superman (Ouspensky 103). In fact, again as we saw earlier, Ouspensky has claimed that:

 evolution in the true sense of the word has nothing in common with the anthropological change of the type, even if we consider such a change of type as established. Nor has evolution anything in common with the change of social forms, customs and laws, nor with the modification and “evolution ” of forms of slavery or means of warfare. Evolution towards superman is
the creation of new forms of thinking and feeling, and the abandonment of old forms. (103)

For Ouspensky, the only evolution that matters, evolution towards superman, involves abandoning old habits and finding new ways of being. Both biological and cultural change are irrelevant in this picture of evolution. In addition to situating himself beyond Darwinian dogma, we can also suggest that, at this point, Ouspensky is even beyond the eventual critics of Dawkins’s selfish gene model of the world. In *Unfinished Synthesis*, the paleontologist Niles Eldredge argues that this neo-Darwinian dogma impoverishes our understanding of the world and the complicated processes of evolution:

In an nutshell, the synthesis limits its attention to only a few of the biological entities that seem to me to exist in the world and to be involved in the evolutionary process. Genes (in a premolecular phase of understanding of course), organisms, demes (to some degree), and species are explicitly addressed in the writings of the synthesis; monophyletic taxa are but dimly perceived: and ecological entities (populations, communities, and regional biotas) are not even addressed. Species are especially crucial; I will show that the view of species in the synthesis reveals a variable ontology that is context-dependent. Species are quite real to Dobzhansky and Mayr when considered at any point in time and particularly when sympatric with other closely related species. Through time, though, species are classes or, at best, classlike entities, viewed in a manner that is literally required if we see evolution as primarily the adaptive transformation of phenotypic attributes through time. Viewing species (and other entities usually treated as classes by the synthesis) as individuals . . . enlarges the range of entities that take an active part in the evolutionary process. What we need, it seems, is a revised ontology of evolutionary entities . . .

This revised ontology, I will argue, automatically forces us to consider an alternative approach to the very structure of evolutionary theory—simply because it presents us with an alternative description of the organization of biological nature. That structure is *hierarchical*. Genes, organisms, demes, species, and monophyletic taxa form one nested hierarchical system of individuals that is concerned with the development, retention, and modification of *information* ensconced, at base, in the genome. But there is at the same time a parallel hierarchy of nested *ecological* individuals–proteins, organisms, populations, communities, and regional biotal systems, that reflects
the *economic* organization and integration of living systems. The processes within each of these two process hierarchies, plus the interactions between these two hierarchies, seems to me to produce the events and patterns that we call evolution. (Eldredge 7)

Eldredge’s critique, then, of molecular biology’s account of evolution lies in the fact that this discourse of change only accounts for the information that is being exchanged, at the expense of accounting for the evolutionary pressures exerted by the system that facilitates such change, as Eldredge calls it “the economy.” While Eldredge’s addition of this second hierarchy to the modern synthesis of evolutionary biology is most interesting, as we can see in the Ouspensky selections we have been discussing, Ouspensky is interested in rejecting both of Eldredge’s hierarchies, the economic and the informational.

What, then, is left?

An obscure book by one of the modern synthesis’s chief architects may provide the answer. In 1959, the biologist Bernhard Rensch published the book *Homo Sapiens: From Man to Demigod* in order to answer the question, “what are we, we humans?” from the perspective of the modern evolutionary synthesis Rensch helped to create with Julian Huxley and other major biologists of the 1930s & 40s (Rensch 1). Rensch suggestively proposes a three-fold approach to discussing the evolutionary past and future of human beings:

The first task will be to determine how and why any progressive phylogenetic development of living organisms took place on this planet, and what in particular led to the emergence of man in his present form. We shall consider how the human mind emerged from earlier animal stages. With the rise and progress of cultures we shall have to sketch the outlines of man’s strange and unique position, touching on certain imperfections and various dangers in the path of his future evolution. We shall see that although it springs from an entirely different root the rise of man’s culture has been subject to similar laws and constraints to those that have governed the evolution of other living organisms . . . we shall then be able to attempt a cautious forecast of the future development of man’s specifically human
characteristics, as well as to outline a clear-cut aim—namely, a rather more purposive progressive development of man’s special features and a more consistent direction of his cultural future . . .

The ensuing chapters will be concerned with biological, psychological, and cultural facts. (3)

While Rensch is most interested in the cultural dimension of evolution, his three folds are outlined in the final sentence of the selection: we can see that he views evolution as proceeding along three paths informational, economic, and cognitive (to use Eldredge’s vocabulary with the addition of a third term of my own). This expansion of evolution’s domain is important because one of the failings of both Eldredge and Dawkins lies in their lack of focus specifically on the human. Obviously, focusing on human evolution is not the task at hand for these authors, but neither theory (the selfish gene nor Eldredge’s new ontology) accounts for the singularity of human cognition, something that Rensch’s work attempts to encompass. Even having recognized this singularity, Rensch is more interested in focusing on the cultural hierarchy as the chief pathway of human evolution and gives this focus primacy in his account of the future evolution of the human. Additionally, his account of cultural evolution belies the naive optimism that Ouspensky critiques in evolutionary discourse:

The separate achievements of leading nations are fusing into a universal culture; and this culture is expanding at an immense pace, now that all sections of their populations are able to rise to higher social levels—and especially as the backward countries are making spectacular strides towards a more advanced civilization. (2)

Once again, we see the problem of the many and the few as initially outlined in Aphorism #3. Rensch sees the process of cultural evolution as an all-inclusive, “rising tide raises all boats” model of development, ignoring the “winner fuck all” model of evolution so popular at the level of the organism. As Ouspensky suggests:
the evolution of the masses is as fantastic and illogical an idea as would be, for instance, the idea of an identical evolution of all the cells of a tree or all the cells of an organism. We do not realise that the idea of the evolution of the masses is equivalent to expecting all the cells of a tree, that is, the cells of the roots, bark, wood-fibre and leaves, to be transformed into cells of flowers and fruit, that is, expecting the whole tree to be transformed into flowers and fruit. (Ouspensky 108)

Why does Ouspensky thus focus his attention? In the following selection, we can begin to see Ouspensky outlining the reasons for thus focusing:

In superman qualities must develop which cannot exist in a tree or in a stone, qualities with which neither high mountains nor earthquakes can compete. The development of the inner world, the evolution of consciousness, this is an absolute value, which in the world known to us can develop only in man and cannot develop apart from him.

The evolution of consciousness, the inner growth of man, is the “ascent towards superman.” But inner growth proceeds not along one line, but along several lines simultaneously. These lines must be established and determined, because mingled with them are many deceptive, false ways, which lead man aside, turn him backward or bring him into blind alleys.

There is no one avenue towards superman, just as there is no one, final, complete Human (or Transhuman). For Ouspensky, evolution is a process that goes up and down, with evolution towards superman being the up and degeneration being the down. That said, there is no fixed model for superman. In Rensch’s account of man’s ascent to demigod, “advanced civilization” is held out as the benchmark for advancement, such that “backward” countries must join the advanced Western nations in the wonder of modernity. In Rensch’s account of superman (and, more broadly, in the evolutionary optimism that Ouspensky finds in science), human consciousness grows like bamboo, straight up towards the sun. In Ouspensky’s account of superman, human consciousness instead grows like a rhizome, spreading out under the ground in a complex and unplanned network. This difference can be mapped onto the distinction between new and old forms of
Utopian fiction in Fredric Jameson’s *Archaeologies of the Future*. Older Utopian fiction featured “the representation of Utopia” in a presentation of specific Utopian communities: Jameson finds in Kim Stanley Robinson’s Mars trilogy “a new formal tendency . . . the conflict of all possible Utopias, and the arguments about the nature and desirability of Utopia as such” (Jameson, *Archaeologies of the Future* 216). Later in *Archaeologies of the Future*, Jameson will refer to this second kind of formal representation as a “meta-utopia.” In Ouspensky, the ascent towards superman is presented as this latter kind of Utopian narrative: a discussion of all possible avenues towards superman, whereas Rensch’s account looks more like the former kind of fiction: an account of a single model for Utopia. [14]

It is also interesting in the previous selection from Ouspensky that the concept of evolution is here referred to as “inner growth.” Despite having denied the immediate ascendency to superman earlier in the essay, this section of the text is concerned with establishing ways in which interested and concerned individuals may actualize future supermen in the here-and-now. By using the phrase “inner growth,” Ouspensky adds a dimension of personal growth and personal consciousness expansion to the species’s quest for superman.

As we have already seen, Ouspensky claims that evolution can move towards or away from the superman. Additionally, we have begun to see that this process may be the result of the subjective explorations of an entire web of possible avenues of consciousness. With the “many deceptive, false ways, which lead man aside, turn him backward or bring him into blind alleys” along the path to superman, it would seem that the important question becomes how to recognize successful avenues for experimentation. The next section of the essay is taken up with this concern.

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[14] For more on this Utopian distinction, see Chapter 3.
Aphorism #4: “Superman must have something unlawful in him, something which violates the general course of things, something unexpected, unsubjected to any general laws.” (Ouspensky 111)

In explaining the role of the superman in human evolution, Ouspensky inevitably has to instruct his readers in recognition of the possible sources of internal growth towards superman. His pedagogy on this matter even further distances the readers’ thoughts of biological evolution as we’ve partially been discussing above. He writes that “the first thing that can be said is that superman cannot be thought about on the ordinary ‘materialistic’ plane. Superman must necessarily be connected with something mysterious, something of magic and sorcery” (110). It is during this portion of the essay that Ouspensky’s deep connections to theosophy become most apparent. While in Aphorism #4, as we’ve already seen, Ouspensky suggests that the superman must have something unlawful about him, Ouspensky goes on, in this portion of the essay, to discuss the form this unlawfulness takes. Specifically, Ouspensky connects superman to concepts of magic and, more ominously, demonism.

When Ouspensky writes that “superman must necessarily be connected with something mysterious, something of magic and sorcery,” what does this mean? (110). Is it not convenient that Ouspensky, a teacher within the occult tradition, has discovered a strong affinity between Nietzsche’s superman and the ideals of theosophy and the occult in general? Is this the inevitable hard-sell at the core of any self-help course?

Perhaps not. Ouspensky’s usage of “magic” during this section is very interesting and worthy of further analysis. Ouspensky writes that “superman cannot be thought about on the ordinary ‘materialistic’ plane” before including the above cited mention of “magic” and “sorcery” (110). As we have seen, Ouspensky is continually arguing
for a decoupling of superman and the laws of the material world (namely evolutionary biology). He is stressing this point once again. Continuing his discussion of magic, he writes:

Consequently an interest directed towards the “mysterious” and the “inexplicable”, a gravitation towards the “occult”, are inevitably connected with evolution in the direction of superman. Man suddenly feels that he cannot continue to ignore much that has seemed to him, till now, unworthy of attention. Suddenly he begins to see everything as it were with new eyes, and all the “fairy-like”, the “mystical”, which only yesterday he smilingly rejected as a superstition, acquires unexpectedly for him some new deep meaning, either symbolical or real.

For Ouspensky, the occult is not the way to the superman, just a convenient system for moving beyond commonplace knowledge. In fact, at the time of the writing, occult systems such as theosophy could be seen as the best means for thinking outside of codified Western knowledge. So it is not that Ouspensky is trying to suggest a special place for theosophy within the pantheon of human evolution, but merely that he is suggesting that his system of belief and metaphysical practice suggests a path toward superman that is not available within Western science.\(^{15}\)

Ouspensky clarifies this point about science when he writes that the occultist on the road to superman finds that “his thought penetrates the inward meaning of allegories and myths, he finds a deep and strange significance in things which formerly looked self-evident and uninteresting” (110). Superman, therefore, operates on the margins of scientific discourse, amongst the cranks and visionaries who populate the realms on the border (or beyond) of what is scientifically acceptable. This interpretation suggests one of the problems seen in contemporary transhuman rhetoric: while their interpretations

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\(^{15}\)Richard Doyle, in *The Ecodelic Hypothesis: Plants, Rhetoric and the Evolution of The Noösphere*, argues that hallucinogenic compounds have a similar effect, in that they render familiar situations in a strange or new way: “Ecodelics can introduce unprecedented states of consciousness inscribed into texts and images in modes not subject to the usual protocols of either identity or objectivity.”
may be fresh, the principles of cybernetics being used are hardly “unlawful.” Also, by juxtaposing the occult to the scientific in Ouspensky’s account of superman, we can see more of what is meant by “unlawful” in Aphorism #4. The unlawfulness of superman lies in his inability to conform to our expectations, he lies outside what is considered acceptable by the law of science.

In Ouspensky’s reading of Nietzsche, by focusing on those aspects of superman that violate “the general course of things,” the “unexpected,” and the magical, Ouspensky suggests that superman is the dissolver of paradigms (like pathbreaking scientists in Thomas Kuhn’s *The Structure of Scientific Revolutions*) but on an ontological scale. The superman rewrites what it means to be human by breaking with any written or social code or “general law.” As Ouspensky states, “the same time superman cannot be simply a ‘great business man’ or a ‘great conqueror’ or a ‘great statesman’ or a ‘great scientist’. He must inevitably be either a magician or a saint” (111). The superman will not be of a recognizable form; he will not be an enhanced version of the human, as some contemporary transhumanists expect.

This unlawfulness assigns an interesting rhetorical function to the superman. The superman is a deconstructionist, a rhetorician who cuts through the linguistic codes that underscore our concepts of humanity and rewrites these laws to provide a new model, a new direction for the species. As we have previously seen, Ouspensky dislikes scientific conceptions of evolution because these theories fetishize the human as it currently exists and seek to describe how humans, as they are now, are already the pinnacle of evolution. In other words, Ouspensky suggests that science is a discourse that seeks to continually refine the linguistic codes governing our understanding of ourselves as we currently are. The superman, in contrasts, rubs out these codes, moves beyond the law, to produce new understanding, new territories for humanity.

As we previously saw, those on the path to superman, in Ouspensky’s formulation,
begin to “penetrate the inward meaning of allegories and myths” to find “a deep and strange significance in things which formerly looked self-evident and uninteresting” (110). By erasing a dependence on the previous body of law shaping the limits of the human, the superman can find new modes of being in those spaces previously ignored. The movement from science to occult, in the path of the superman, does raise an interesting question: would it be possible for an occult model of the human, at some point in the future, to become as overdetermined and stifling as the scientific model of the human is at present? In other words, couldn’t the occult become the new science?

Perhaps. It is important to remember that, for Ouspensky, evolution towards superman is never complete. Unlike many models of transhumanism (both classic and modern), there is never one specific moment of superman. The process of unlawful rupture is ongoing and never final (except maybe in apocalypse). In this way, superman can be seen to ally with Fredric Jameson’s concept of Utopia. Utopia, in the Jamesonian sense, is not the same thing as the utopian community or the utopian space. Jameson’s understanding of Utopia, rather, is not unlike the Lacanian Real, “a kernel resisting symbolic integration .. a leftover which persists and cannot be reduced to a universal play of illusory mirroring” (Zizek 3;47). The Real, for Lacan, is that fantastic object which can never be fully absorbed into thought and continues to persist, necessitating continuing pursuit. This kernel is fundamental to desire and dreams of its possession structure our actions in the world (46). Jameson constructs Utopia, throughout his work, as another hard kernel, like the Lacanian Real, which does not actually exist but forever shapes hopes and dreams. For Jameson, Utopia is not tied to any specific ideology or place and, instead, exists solely as a desire.

Returning to Ouspensky, we can begin to see that superman may be thought of as

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16For more on language and superman, see Chapter 4
another of these endless, receding hard kernels. In the end, superman can be thought of as merely a desire, The Desire Called Superman (to borrow a distinctly Jamesonian phrasing). That said, as Freud has shown, desires often have very great power at motivating human activity. So, while this does begin to explain the means by which The Desire Called Superman may one day supersede theosophy, Jameson’s concept of Utopia still has much to suggest about the nature of superman and its operation within human evolution.

In recent works, most notably *Archaeologies of the Future*, Fredric Jameson has begun to make the important distinction between Utopian Ideology and Utopian Science as a means of clarifying his concept of Utopia, following Marx and Engel’s own distinction between ideology and science. For Jameson, Utopian Ideology becomes an embodied political program, an intentional community, or some other real-world praxis that occurs within the concrete confines of space and is not merely a desire. While Jameson’s lifelong commitment to Marxism clearly illustrates a strong favoring of Utopian Ideologies, he is quick to point out, throughout his body of work, that Utopia is not specifically about political struggle. An exclamation following a reading of Thomas More is most telling on this point: “enough has been said, however, to suggest that it is not only political passion that is involved here, and that the Utopians were not only driven by indignation at social injustice or compassion for the poor” (Jameson, *Archaeologies of the future* 42). He then goes on to discuss the other obsessions, often with gadgets and gizmos, that permeate Utopian plans and novels. These machines for organizing Utopian societies are labelled “Utopian Science” and are opposed to the underlying desires that create a community. To illustrate the point, Jameson discusses, at length, B.F. Skinner’s account of better designed lunch trays in *Walden 2* (50-2). While these better trays have nothing to

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17 For more on desire and tranthumanism, see Chapter 3
do with the community organized around behaviorist principles, they are of clear interest to Skinner, nonetheless. In Jameson’s example, the lunch trays are Utopian Science, while behaviorism would be the Utopian Ideology. By including space for tinkerers and inventors, Jameson constructs his concept of Utopia as transcending the ideological and beginning to resemble a large, open field of play.

We can now see that Ouspensky’s interest in theosophy serves a function similar to Jameson’s distinctions between Ideology and Science within Utopia. While Ouspensky has very specific reasons for seeking superman and a very specific program for moving towards it in mind, this path towards superman is but one of many avenues. In fact, we may use Jameson’s concept of Utopia to briefly historicize this interest in magic and sorcery as a means of gaining unlawful insight. In *Archaeologies of the Future*, Jameson additionally explores the concept of a “Utopian enclave” as a key function of Utopian imagination. This enclave is a new social formation whose use and social meaning has not stabilized or become ubiquitous. He discusses money in Thomas More’s *Utopia* as one example of a Utopian enclave:

> Here too, in this still largely medieval moment of “early modernity”, money and commerce will have remained episodic, embodied in the decorative ostentation of gold on the one hand or the excitement of the great fairs on the other: but this enclave status of money is precisely what allows More to fantasize its removal from social life in his new Utopian vision. It is an absence which will become unthinkable when the use of money is generalized to all sections of the “modern” economies, at which point Utopian speculation will take the form of various substitutions—stamp script, labor certificates, a return to silver, and so forth, none of which offer very convincing Utopian possibilities. (17)

This Utopian enclave, then is something new in the social, whose function is not yet determined and whose Utopian character is open for experimentation. At the dawn of the twentieth century, writing from the height of European Modernism, the realm of spiritualism must have appeared a perfect Utopian enclave for Ouspensky. After
all, theosophy, and related occult movements, was an attempt to add a degree of spirit and mysticism to a West that was becoming increasingly rational, machinic, automated, dehumanizing. At that moment, such mystic practices would have been the perfect locus for Utopian experimentation, something Ouspensky heartily engages in. Interestingly, while specific vocabularies and practices may have changed, the association between mysticism and superman has never really vanished, due to the failure of such practices to attain any kind of ubiquity.

Having understood some of the rhetorical function of The Desire Called Superman, we can begin to further explore the full nature of unlawfulness in Ouspensky’s understanding of superman, specifically his interest in demonism and Pontius Pilate. Ouspensky’s discussion of demonism is brief, vague, and utterly pivotal for understanding the unlawfulness of superman. He writes: “The fundamental feature of superman is power. The idea of ‘power’ is very often connected with the idea of demonism. And then appears the demoniacal man” (Ouspensky 113). This connection between demonism and the superman is based on a false understanding of the concept of superman in Thus Spoke Zarathustra. According to Ouspensky:

But the feeling of the “unlawfulness” of superman, his “impossibility” from the ordinary point of view, causes people to attribute to him features that are really impossible, and so superman is often pictured as a kind of Juggernaut car, crushing people in its progress. Malice, hatred, pride, conceit, selfishness, cruelty, all are considered superhuman, on the sole condition that they reach the furthest possible limits and do not stop at any obstacle. Complete liberation from all moral restraint is considered superhuman or approaching superhuman. “Superman” in the vulgar and falsified sense of the word means: all is permitted. (111-2)

Following this misunderstanding by Nietzsche’s readers, Ouspensky suggests that many view an association between superman and a demon. He credits this conflation to a misunderstanding of evil on the part of modern humanity:
As a matter of fact the “beautiful demonism” we know is one of the “pseudoideas” by which people live. We do not know and do not want to know the real demonism, such as it must be according to a right meaning of the idea. All evil is very small and very vulgar. There can be no strong and great evil. Evil always consists in the transforming of something great into something small. But how can people reconcile themselves to such an idea? They must necessarily have “great evil”. (113-4)

Ouspensky then draws on Dostoevsky’s portrayal of the devil in *The Brothers Karamazov* to make a point about the nature of evil in Nietzsche’s philosophy. As Ouspensky explains, “the Devil whom Ivan Karamazov sees is a parasite in check trousers, who suffers from rheumatism and has lately had himself vaccinated against smallpox. The devil is vulgarity and triviality embodied” (114). This vulgarity embodies an understanding of evil as a force that “always consists in the transforming of something great into something small” (114). The “beautiful demonism” of the above selection, instead, refers to demonic figures like Satan in Milton’s *Paradise Lost*. In that work, Ouspensky finds a devil who “possesses many beautiful and positive qualities: power, intelligence, contempt of everything small and vulgar” (114). He goes onto suggest further that these “same demoniacal traits are ascribed to superman” (114). In other words, people “are inclined to forget the real nature of the devil and are more willing to believe the poets” when they suggest that superman and demon are one and the same (114).

Ouspensky’s suggestion that Milton, when writing about Satan, was actually more interested in superman than writing about actual evil (as Ouspensky points out, evil is always petty). This point also generally fits in with the present discussion of the unlawfulness of the superman. Thinking outside of a Christian moralistic framework, when one thinks about the depiction of Satan in *Paradise Lost*, it becomes clear that Satan is cast out of heaven for attempting to unseat the law of God, which Ouspensky suggests is the function of the superman. In Book 1 of *Paradise Lost*, Satan makes the following speech:
Though chang’d in outward lustre; that fixt mind
And high disdain, from sense of injur’d merit,
That with the mightiest rais’d me to contend,
And to the fierce contention brought along
Innumerable force of Spirits arm’d
That durst dislike his reign, and me preferring,
His utmost power with adverse power oppos’d
In dubious Battel on the Plains of Heav’n,
And shook his throne. What though the field be lost?
All is not lost; the unconquerable Will,
And study of revenge, immortal hate,
And courage never to submit or yield:
And what is else not to be overcome? (Milton I:97-109)

In this, one of the more famous speeches in world literature, we see a number of the keywords Ouspensky and Nietzsche associate with superman. As we saw above, in Ouspensky’s understanding, “the fundamental feature of superman is power” (Ouspensky 113), and in the above speech, we see that Satan, despite being overcome by God’s more powerful Thunder, had enough power to shake the throne of God. Moreover, his Will and his power was enough to marshal “Innumerable force of Spirits arm’d / That durst dislike his reign.” Satan, in this description suggests many of the admirable features Ouspensky ascribes to the superman. Moreover, this passage from Milton, from a Nietzschean stance, merely dramatizes the act of testing the law. While Satan was found wanting, often times in Nietzsche’s accounts of the superman, to cast the dice is enough.

To be clear, the so-called demonic or evil elements of superman are a result of a misapprehension of the nature of evil. Evil, in Ouspensky’s view, is always petty, small, and banal. This cool dismissal of evil may not be so easy for Ouspensky’s readers in the present day, standing as we do on the other side of the 20th Century. In fact, many of the tragedies of the years that followed Ouspensky’s authoring of this essay suggest that a certain will to power and single-minded focus on a specific path may be a more dangerous force than Dostoyevsky’s trivial devil.
With regards to the evolution of consciousness, this is not the case. While Ouspensky likes to point out the unlawfulness of the superman, there is still a careful attention to method and certain rules of evolution. Focusing on this rule-bound behavior provides a counterpoint to the image of the lawless, amoral superman. During a discussion of the similarities between consciousness evolution and esoteric initiatory practices (dating back to the Eulesian Mystery Cults), Ouspensky writes:

One of the first things that the man to be initiated learned and had to appreciate was the impossibility of following a path of his own choice and the danger which awaited him if he did not carry out all the preparatory rituals and ceremonies required before initiation, and if he failed to learn all that was required to be known, if he failed to remember all that he had to remember. He was told of the awful consequences following a violation of the order of initiation, the terrible punishments which awaited the man to be initiated who dared to enter the sanctuary without having observed all these rules. (120)

In this section, Ouspensky is drawing an important distinction between rules and laws. In his lexicon, the law that must be overcome is a forbearance on certain pathways beyond the human; rules, meanwhile, are the mindful actions that must be taken in the process of exploring unlawful areas. So while Ouspensky envisions the superman, especially when drawing on Milton’s portrayal of Satan, as an unlawful being, he is not suggesting that supermen are unmoored from all constraints, anything but, in fact. For Ouspensky, the path towards superman is incredibly dangerous and the proper observances must be made along the way in order to protect the safety and sanity of the traveller. Ouspensky uses another biblical villain as an example of one such danger.

Having used Milton’s Satan as a positive example of the behavior of superman, Ouspensky turns to another classic figure of evil within the Christian canon. Pontius Pilate, of course, was the Fifth Prefect of Judea and the man who judged at Jesus’s trial. More importantly, in the gospels, he was the man who would have freed Jesus, but instead
freed Barabbas when the crowd demanded it, as part of the Passover custom of spar-
ing one prisoner whom the crowd favored. Ouspensky finds this account incomplete, however:

It is not sufficient to say that Pilate tried Jesus, wanted to free him, and fi-
nally executed him. This does not determine the essence of his nature. The
chief point lies in the fact that Pilate was almost the only one who under-
stood Jesus. He understood him, of course, in his own Roman way; yet, in
spite of understanding, he delivered him to be scourged and executed. Pi-
late was undoubtedly a very clever man, well educated and cultured. He saw
very clearly that the man who stood before him was no criminal “preaching
sedition to the people” or “inducing them not to pay the taxes”, etc., as was
declared to him by the “truly Jewish people” of that time; that this man was
not a pretender, not an impostor who called himself the King of Judea, but
simply a “philosopher”, as he could define Jesus to himself. (115)

Ouspensky continues to speculate on Pilate’s character by writing:

This “philosopher” aroused his sympathy, even his compassion. The Jews
clamouring for the blood of an innocent man were repellent to him. He tried
to help Jesus. But it was too much for him to fight for Jesus in earnest and
incur unpleasantness, so, after a short hesitation, Pilate delivered him up to
the Jews. (115)

For Ouspensky, Pilate “is a very modern man” in that he adopts a personal philosophy in
which “everything is relative, everything is a question of point of view, nothing is of any
particular value” (115). In Pilate, Ouspensky finds an archetype for a kind of person who
“sees the truth but does not wish to follow it” (116). In writing about Pilate, Ouspensky
finds more than just a Biblical villain; he finds the pattern for all that is most despicable
in modern man. While it is possibly forgivable to be entirely unaware of the truth that
leads to superman, Ouspensky suggests that it is unforgivable to be aware and to turn
away. This is why Ouspensky makes so much of the moment in the gospels when Pilate
“came out to the people and washed his hands, showing by this that he disclaimed all
responsibility” (116). For Ouspensky, “the whole of Pilate is in this. The symbolical
washing of hands is indissolubly connected with the image of Pilate. The whole of him is in this gesture” (116). This is so because the washing of the hands represents a break from the experience of truth. For Ouspensky, maintaining a fidelity to the inner experience of some truth is key to following the path towards superman. In Pilate, rather than finding the arch-villain who could have spared Christ but didn’t, Ouspensky finds the classic figure of the man “just following orders,” who does something he knows to be wrong because it is easier than standing by an inner morality.

Ouspensky writes, further, that “for a man of real inner development there cannot be any washing of hands. This gesture of inner deceit can never belong to such a man” (116). These men of inner development are the vanguard of superman and they have no place for compromise. This is a problematic formulation for Ouspensky, given how much stress he places earlier in the essay on the dangers of occult exploration, specifically the dangers of committing to incorrect or inaccurate ideas. Of course, there is no guarantee that evolution should be easy.

Concluding his discussion of Pilate, Ouspensky writes:

“Pilate” is a type expressing that which in cultured humanity hinders the inner development of man, and forms the chief obstacle on the way to superman. Life is full of big and small Pilates ...

They see and understand the truth perfectly. But any “regrettable necessity”, or interests of politics as understood by them, or interests of their own position, may force them to betray truth and then to wash their hands.

In relation to the evolution of the spirit, Pilate is a stop. (116)

We can learn from all of this that, for Ouspensky, the avenue toward inner development and superman is through a maintaining a certain fidelity to an experience of inner truth or an experience of the mystical (as discussed above). In any case, Ouspensky goes

18 The writing in this section may have taken on a certain cast reminiscent of Badiou. While not necessarily integral to my argument, Allain Badiou’s discussion of the event, fidelity, and becoming in Being
on briefly to discuss a third Biblical villain, Judas, as “simply a small man who found himself in the wrong place, an ordinary man, full of distrust, of fears and suspicions, a man who ought not to have been among the apostles, who understood nothing of what Jesus said to his disciples” (117). While this quote does not require, perhaps, as much of a gloss as the discussions of Satan and Pontius Pilate, we find with the addition of this third character, a basic typology of humans in the face of superman. We have people who maintain fidelity to their inner truth (Satan), those that wash their hands in the face of adversity (Pilate), and those who simply do not belong in the discussion of evolution (Judas). Having built up an argument about the various human responses to superman, Ouspensky can begin to more fully explore the concept of “inner development” he has been mentioning in passing during this section.

**Aphorism #5:** “Instead of approaching inner unity, man recedes farther and farther from it, but the question of attaining this unity is the most essential question of the inner development of man” (117)

In this section of the essay Ouspensky is seeking to move from a typology of humanity toward a fuller understanding of superman, having laid the groundwork for why the concept itself is often so difficult to grasp and so hard to understand correctly in Nietzsche. In Aphorism #5, Ouspensky begins to expound some of the practical means of working towards superman, in the here-and-now. This concept of inner unity, which has come to

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*and Event* and *Deleuze: The Clamor of Being* provides a most useful shorthand for explaining Ouspensky’s ideas about Pilate and “the washing of the hands.” As Badiou writes in *Being and Event*, fidelity is “the apparatus that separates, in the ensemble of presented multiples, those that depend on an event. Being faithful consists in assembling and in distinguishing a legitimate becoming from what is merely fortuitous” (qtd. in Badiou 137). We see the same sort of operation at work in the account of “inner development” Ouspensky is beginning to build through his account of Satan and Pontius Pilate.
increasingly dominate the essay, is hugely important for Ouspensky, as he relates inner
unity to the concept of “will” in Nietzsche’s philosophy:

Most of our actions are prompted by involuntary motives. The whole of life
is composed of small things which we continually obey and serve Our “I”
continually changes as in a kaleidoscope. Every external event which strikes
us, every suddenly aroused emotion, becomes caliph for an hour, begins to
build and govern, and is in its turn as unexpectedly deposed and replaced
by something else. And the inner consciousness, without attempting to dis-
perse the illusory designs created by the shaking of the kaleidoscope and
without understanding that in reality the power that decides and acts is not
itself, endorses everything and says about those moments of life in which
different external forces are at work, “This is I, this is I”.

From this point of view “the will” can be defined only as the “resultant of
desires”. Consequently, so long as desires have not become permanent, man
is the plaything of moods and external impressions. He never knows what
he will say or do next. Not only the next day, but even the next moment, is
hidden from him by the wall of accident (118).

As we saw in Ouspensky’s discussion of Satan and Pilate, above, the ability to focus on
a singular course of action, to not “wash the hands,” is key to becoming unlawful. In
order to evolve in the way that Ouspensky wants, humanity must begin to nurture a sense
of purpose and direction, a singular “will” that exits outside of other distractions. While
this focus on a singular will appears more dangerous, in light of much of the history of
the twentieth century, Ouspensky once again suggests that such apprehension lies with
our inability to fully grasp the concept of superman:

If we do not understand the absence of unity in the inner world of man,
we do not understand the necessity of such a unity in superman, just as we
do not understand many of his other features. Thus superman appears to
us a dried-up being, rational and deprived of emotions, whereas in reality
the emotionality of superman, that is, his ability to feel, must far exceed
ordinary human emotionality. (118)

So, in other words, while the “will” of the superman may appear to make him cold and
calculating, often times this is an effect of our own inability to understand the emo-
tionality of the superman. Ouspensky attributes this to the fact that the most common emotional register for superman is ecstasy. He writes that “the psychology of superman eludes us because we do not understand the fact that the normal psychic state of superman constitutes what we call ecstasy in all possible meanings of this word”. What does he mean, though, by “all possible meanings of this word?”

Ecstasy is an interesting concept in the history of Western thought, and Ouspensky no doubt chose it deliberately. In fact, *The Oxford English Dictionary* lists a number of interesting definitions that suggest the way the usage of this term has mutated. The oldest example of a meaning defines ecstasy as “the state of being ‘beside oneself’, thrown into a frenzy or a stupor, with anxiety, astonishment, fear, or passion.” This usage is the closest to the Greek origins of the term, from the words meaning “to be besides oneself,” as this first definition implied. Later the word came to mean, specifically, “An exalted state of feeling which engrosses the mind to the exclusion of thought; rapture, transport. Now chiefly, Intense or rapturous delight.” It is this variation of meaning that Ouspensky most likely intended, but two other definitions are also suggestive: “Used by mystical writers as the technical name for the state of rapture in which the body was supposed to become incapable of sensation, while the soul was engaged in the contemplation of divine things” and “The state of trance supposed to be a concomitant of prophetic inspiration; hence, Poetic frenzy or rapture.” In any case, the various meanings that can be applied to ecstasy suggest a heightened state of consciousness in which an individual is in some way able to exceed the boundaries of his own consciousness. This exceeding often takes the form of artistic creation or religious communion. Having pointed out the connection between ecstasy and religion and ecstasy and aesthetics, looking at other usages of the concept may help to further clarify the nature of “inner unity” in Ouspensky.
The concept of “ecstasy” is one of the most important in the philosophy of Timothy Leary. He writes the following about the concept in *Neuropolitics*:

What Gilder and all orthodox moralists fear is the unfolding of the fifth neurological-rapture circuit, freedom from static imprints, disciplined release of right-lobe ecstasy, the joyful experience of Zen freedom, the spirit of levity which will free individual atoms to float loose from the terrestrial molecule and form higher units in neurological (and physical) Outer Space. ([T. F. Leary](https://example.com) 109)

Here, the concept of ecstasy touches on the religious experiences mentioned in the *OED* definitions above, but expands the scope of the meaning. The “neurological-rapture circuit” that Leary mentions in the above selection is drawn from his 8-circuit theory of consciousness that sees the evolution of mind as an activating of eight different cybernetic circuits in sequence. The first four circuits are larger concerned with the various baseline, terrestrial needs for bodily survival. The final four circuits, in various ways, are concerned with heightening consciousness and expanding the scope of what it means to be human (most of us are stuck with only four circuits on). If one reads an account of the 8-circuits (for instance, in Robert Anton Wilson’s *Cosmic Trigger: The Final Circuits of the Illuminati* or on Wikipedia), it becomes apparent that the end-goal of this model of human evolution is an increasing spreading out beyond the body of consciousness itself (as Wilson suggests, “consciousness probably precedes the biological unit”) ([Wilson](https://example.com) 189). In the Leary quote, we see several metaphors for this spread: “disciplined release,” “spirit of levity,” “free individual atoms to float loose from the terrestrial molecule.” It is Leary’s stated goal, in much of his work, to point humanity towards technologies that can heighten this expansion out beyond the current limitations of terrestrial human being. Leary suggests, in the above quote and elsewhere, though, that the experience of higher circuits (beyond circuit IV) are “ecstasy” as understood within traditional religious frameworks. In this way, the logic of “contemplation of divine things” in the *OED*,...
an entirely inadequate formation, becomes a revolutionary and evolutionary program for the maturation of the human race within Leary’s system of thinking.

The concept of “ecstasy,” as used by Leary and Ouspensky, is an interesting point of contact between the two. Further, Leary’s discussion of the concept clarifies some of the questionable claims Ouspensky has made in the preceding text. As we saw earlier, Ouspensky suggests that “the fundamental feature of superman is power” (Ouspensky 117). Coupled with the monomaniacal focus of the superman, this reliance on power suggests the horrors of fascism during the 20th century (a connection also made about Nietzsche’s own work). Leary, in his book High Priest, also emphasizes the connection between evolved beings and power, but does so in a way that both foregrounds the importance of “ecstasy” in understanding the superman and helps clarify the role power plays in the superman. Leary writes:

Anything that’s pleasurable is going to bring down the wrath of the power-control people. Because the essence of ecstasy and the essence of religion and the essence of orgasm (and they’re all pretty much the same) is that you give up power and swing with it. And the cats who can’t do that end up with the power and they use it to punish the innocent and the happy. (T. Leary, High Priest 79)

Leary provides, in this selection, a key point of differentiation between the Nietzschean superman, as we have been discussing, and the Nazi, Aryan superman that borrowed a lot of this rhetoric in the 1930s and 1940s. For evolved consciousnesses, power is a means to an end, rather than a goal in and of itself. This insight is also present in Ouspensky. In the discussion of the typology of humans above (represented by Judas, Satan, and Pontius Pilate), Ouspensky described Judas as “simply a small man who found himself in the wrong place, an ordinary man, full of distrust, of fears and suspicions.” In Ouspensky’s view of humanity, those who are not on the path to superman have no business being around and are best left ignored. This is a more brutal version of the inclusive
philosophy espoused by Timothy Leary, in which most people could participate in the evolution, assuming they had the right mindset. In both cases, though, the superman is not using his power “to punish the innocent and the happy.” Power for the superman is meant to be given up and swung upon, as Leary suggests.

Leary’s understanding of ecstasy also helps to clarify Ouspensky’s point about the misapprehension of emotionality in superman by many humans. In *Cosmic Trigger*, Robert Anton Wilson discusses circuit VIII (the highest order in Leary’s model of consciousness), “The Neuro-Atomic Consciousness,” in the following:

> This neuro-atomic contelligence is four mutations beyond terrestrial domesticity. (The current ideological struggle is between circuit IV tribal moralists-or-collectivists and circuit V hedonic individualists.) When our need for higher intelligence, richer involvement in the cosmic script, further transcendence, will no longer be satisfied by physical bodies, not even by immortal bodies hopping across space-time at Warp 9, circuit VIII will open a further frontier. New universes and realities. (Wilson 206)

In this circuit, according to Wilson, the mind develops a “quantum model of consciousness” that “obliterates space-time.” In Wilson’s description, one reaches the conclusion that Leary’s understanding of circuit VIII was one of decreasing corporeality and an increasing existence as thought itself. This model of being (one can’t really call it “life” anymore) can be thought of as being more communal, a species-level intelligence rather than an individual-level intelligence. In other words, the species itself will exist as a concatenation of minds that think as one. This suggests something of the lack of emotion seen in superman, in Ouspensky’s account. For most humans, emotions are primarily mediated through individuals: we may love humanity but only as a collection of individuals, which is our only way of experiencing the abstract idea of species. In the turned-on consciousness of the superman (especially when considered from Leary’s

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19This concept will be discussed in more detail in Chapter 3 when discussing Pierre Teilhard de Chardin’s work.
perspective), the emotions are directed toward the species itself, experienced as an object and not as an abstraction. To experience an abstraction in concrete terms is most assuredly difficult and this goes quite a way towards explaining the confusing behavior of superman.

Having said all of that, one could begin to think of Ouspensky’s “inner unity” as being at least partly similar to the higher levels of consciousness in Leary’s model. This coherence is important and goes a long way towards explaining the nature of this entire transhuman project. One of the common issues that may be taken with this discussion of Leary, specifically, and Ouspensky, throughout the chapter, is that neither thinker used the term “transhuman” in their account of human evolutionary development. While this may be the case for these two authors (and a number of others to be discussed in later chapters), both Leary and Ouspensky offer rich contexts for thinking through the issues involved in coming to terms with humanity’s evolutionary future. While Leary has been retroactively declared a transhumanist, many of the thinkers discussed in this project are not so claimed. As discussed in Chapter 3, transhumanism proper is an often closed discourse community that focuses on a limited number of questions and an even smaller number of answers. In focusing on the shockingly rich history of twentieth century speculation about the evolutionary future of the human, this project, as a whole, is an attempt to re-inject some of the broader historical arguments about transhuman topics into the contemporary discourse.

In any case, Ouspensky’s discussion of ecstasy helps clarify the otherness of the superman. As we have seen throughout this discussion, Ouspensky views evolution as the creation of new modes of thinking and being, and this specific discussion of ecstasy serves to focus on a specific example of these new ways. By suggesting that many

view superman as “a dried-up being, rational and deprived of emotions,” Ouspensky highlights what a broader concern for the species, as conceived from the perspective of a higher order of consciousness, actually would look like to us (Ouspensky 118). In doing this, Ouspensky begins to conceive of another problem with his discussion of the superman: if superman is an alien Other to us humans, why should we work to bring him about? How can Ouspensky ask people to suffer in the present in order to bring about a future in which they can never participate?

Having concluded his discussion of aesthetics, ecstasy, and archetypical humans, Ouspensky writes the following:

People may reason and often have reasoned in this way: let us grant that superman will come and that he will be exactly as we have pictured him, a new and enlightened being, and that he will be in a sense the result of the whole of our life. But what is it to us if it is he who will exist and not we? What are we in relation to him? Soil, on which will grow a gorgeous flower? Clay, out of which will be modelled a beautiful statue? We are promised a light which we shall never see. Why should we serve the light which will shine for others? We are beggars, we are in the dark and in the cold, and we are comforted by being shown the lights of a rich man’s house. We are hungry and we are told of the magnificent feast in which we can have no part. We spend our whole life in collecting pitiful crumbs of knowledge, and then we are told that all our knowledge is illusion; that in the soul of superman a light will spring forth in which he will see in a flash all that we have so eagerly sought, aspired to and could never find. (119-20)

In this section, Ouspensky raises the most important question for the whole essay. If, as he says previously, superman is to our own existence as lightning is to a cloud, why should we suffer so that the superman may have life in the future? Ouspensky’s answer to this very legitimate question is both maddening and absolutely brilliant:

And the misgivings which assail people when they encounter the idea of superman have a very sound basis. They cannot be passed by. They cannot be disposed of by saying that man must find happiness in being conscious of his connection with the idea of superman. These are nothing but words:
“man must” And what if he does not feel happiness? Man has a right to know, has a right to ask questions: why must he serve the idea of superman, why must he submit to this idea, why must he do anything? (120)

Immediately following this selection, Ouspensky changes the subject of the essay to talking about initiatory rites and the path of the superman (as we discussed above). This answer is the only offered to these questions. It almost seems that Ouspensky is dismissing his readers’ concerns: “yes,” he seems to be saying, “the path to superman is hard. Tough.” The key to recognizing his answer as an answer lies in the latter half of the paragraph. First, Ouspensky acknowledges that any words he offered to palliate his readers’ fears would be worthless, after all, “these are nothing but words.” Words are not actions. If a reader believes that the road to superman is full of only misery, in what way is Ouspensky’s command (“you must find happiness in being conscious of your connection with the idea of superman!”) going to change their minds? Ouspensky is not finished at this point, though. The final rhetorical question in the list that concludes the above paragraph is most suggestive of Ouspensky’s real answer to his readers’ concerns about the unavailability of superman: “why must he do anything?” Indeed. Ouspensky is asking his readers, here, to consider why there is a feeling of “must” about anything they may do in there day-to-day lives. Why must we get up and have coffee instead of staying in bed? Why must we go to work instead of staying home and watching TV? We do these things. While Ouspensky’s answer may not be entirely satisfying to people having doubts about pursuing superman, the point he makes with this final rhetorical question is that evolutionary change is axiomatic for human beings. We must change.

Just as Richard Dawkin’s “selfish genes” must reproduce themselves (in a way that is to be understood, as we saw above, as being beyond good and evil), in Ouspensky’s ontology, human beings must seek out evolutionary change. While Ouspensky has no faith in banal notions of evolutionary progress, as we have seen earlier, he does believe
in cognitive evolution as an omnipresent aspect of human being. This force of evolution, of course, can move up (towards superman) or down (towards degeneration) and is to be influenced by the conscious efforts of humans. In that case, given the choice between superman and degeneration, why would you not choose superman?

Having finally established the reason for working towards superman, Ouspensky begins to conclude his essay by more fully talking about the aims and means of the superman.

**Aphorism #7:** “The idea of superman is closely connected with the problem of time and eternity, with the Riddle of the Sphinx. In this lie its attraction and its danger; this is why it so strongly affects the souls of men” (121)

In Aphorism # 7, we can begin to see the more concrete dimensions of Ouspensky’s understanding of the superman. While this Aphorism is itself rather cryptic, Ouspensky unpacks his concern with the question of time and eternity as he moves into a fully explicated model of transhuman becoming. He writes that “in reality the idea of superman has never existed apart from the idea of higher consciousness” and explains that this “higher” consciousness is actually a “fuller self-consciousness” of the nature of time and infinity in human life (124). For Ouspensky, the superman, in overcoming the human, specifically overcomes the human perspective, which is a lower (“the lower is nothing but a limited conception of the whole”) perspective on the nature of time (124).

In Ouspensky’s understanding,

Time is not a condition of the existence of the universe, but only a condition of the perception of the world by our psychic apparatus, which imposes on the world conditions of time, since otherwise the psychic apparatus would be unable to conceive it. (125)
Instead, he suggests that our lives actually unfold in an Eternal Now, in which all possibilities already exist. Ouspensky acknowledges that the popular understanding of this idea interprets “Eternal Now” to refer to “the idea of a cold and merciless predetermination of everything, of an exact and infallible pre-existence,” but rejects it, claiming that the concept of the superman, and the Nietzschean understanding of the Eternal Now, easily dismisses these claims, which are nothing but the result of trying to grasp the infinite with the finite, limited equipment of our human minds (after all, as we have seen, our understanding of time as linear is only a result of brains trained in logocentric thought) (123). Ouspensky, instead, claims that the Eternal Now means that

The world is a world of infinite possibilities.

Our mind follows the development of possibilities always in one direction only. But in fact every moment contains a very large number of possibilities. And all of them are actualised, only we do not see it and do not know it. We always see only one of the actualisations, and in this lie the poverty and limitation of the human mind. But if we try to imagine the actualisation of all the possibilities of the present moment, then of the next moment, and so on, we shall feel the world growing infinitely, incessantly multiplying by itself and becoming immeasurably rich and utterly unlike the flat and limited world we have pictured to ourselves up to this moment. Having imagined this infinite variety we shall feel a “taste” of infinity for a moment and shall understand how inadequate and impossible it is to approach the problem of time with earthly measures. We shall understand what an infinite richness of time going in all directions is necessary for the actualisation of all the possibilities that arise each moment. And we shall understand that the very idea of arising and disappearing possibilities is created by the human mind, because otherwise it would burst and perish from a single contact with the infinite actualisation. Simultaneously with this we shall feel the unreality of all our pessimistic deductions as compared with the vastness of the unfolding horizons. We shall feel that the world is so boundlessly large that a thought of the existence of any limits in it, a thought of there being anything whatever which is not contained within it, will appear to us ridiculous. (124)

For Ouspensky, then, the universe exists as a plentitude of possible unfoldings in which our limited minds ever only grasp one. In other words, Ouspensky suggests that our
conception of history as a series of choices leading down one path (that also, at least in many Cartesian models, leads towards a glorious, ecstatic future) is only a product of the human mind, a limited perspective that is overcome in the superman.

Ouspensky next questions how to begin exploring these dimensions of time and infinity, as he has been asking throughout the work. In fact, once again, we find the same answer as before: the evolution of consciousness. Only having specifically highlighted the aspect of the human mind, linear time, that must be overcome as we move toward superman, Ouspensky can offer a concrete answer to this question. He writes that “the soul of man, is the answer of the ancient teachings. Everything is within man, and there is nothing outside him” (125). This answer is sufficient for Ouspensky, especially given his interest in the history of esoteric thought, but in providing a mystic answer to a mystic question, he then seeks to update this concept, of exploring inside of man, in light of recent discoveries and philosophical insights:

Western thought, at least the evolving part of it, the part that builds no dogmatic barriers for itself, also finds “further possibilities of studying problems of time in passing to questions of psychology” (Minkovsky).

The “passing to questions of psychology” in problems of space and time, of the necessity for which Minkovsky speaks, would mean for natural science the acceptance of Kant’s proposition that time and space are nothing but forms of our sense perception and originate in our psychic apparatus.

We are, however, unable to conceive infinity without relation to space and time. Therefore, if space and time are forms of our perception and lie in our soul, it follows that the roots of infinity are to be sought also within us, within our soul. And we may perhaps define it as an infinite possibility of the expansion of our consciousness. (125-6)

Ouspensky, in this selection, updates the pre-Socratic research methodologies of Heraclitus, a famous pre-Socratic who felt that exploration of his soul was as good a method as any for exploring the nature of all existence21 to the more rigorous psychological insights.

21 See the following selections from The Fragments:
understanding of humanity during Modernism. It is interesting to note Ouspensky’s rea-
soning behind this: if our understanding of time is not a characteristic of the universe
but instead a projection of our own consciousness onto the universe, than it makes sense
that an understanding of the mechanics of time can only emerge from psychology, the
study of our inner space/time.

Ouspensky further intensifies the connection between mysticism and superman by
showing that this thread of soul as containing the infinite travels from the pre-Socratics,
through Cabal scholars in the 17th century (by quoting J.G. Gichtel), to his contempo-
raries in the theosophy movement\(^{22}\). From this idea, Ouspensky is able to suggest “If
infinity lies in the soul of man and if he is able to come into contact with it by penetrat-
ing within himself, this means that the ‘future’ and ‘superman’ are in his soul, and that
he can find them within himself if he seeks them in the right way” (127). While this may
seem at odds with earlier claims Ouspensky has made about the superman, those were
from a point in the essay before Ouspensky dismisses the idea of linear time. Having
freed his reader from notions of time and space, Ouspensky can now claim that

the nearness or remoteness of superman from man lies not in time, but in
man’s attitude towards the idea, and not only in a mental attitude, but in
an active and practical relation to it. Man is separated from superman not
by time, but by the fact that he is not prepared to receive superman. The
whole of time lies within man himself. Time is the inner obstacle to a direct

\(^{43}\) Soul is the vaporization out of which everything else is composed; more-over it is the least corporeal
of things and is in ceaseless flux, for the moving world can only be known by what is in motion.
\(^{80}\) Thinking is common to all.
\(^{118}\) Listening not to me but to the Logos, it is wise to acknowledge that all things are one.
\(^{120}\) Wisdom is one —- to know the intelligence which steers all things through all things.

For Heraclitus, all that exists does so as a condensation of a unitary Soul and operates on a universal
linguistic protocol called Logos. He felt that, as a philosopher, each human contained within his soul the
entirety of being, so that the infinite, as in Ouspensky, could be grasped through the individual (Heracli-
tus fragments are translated by William Harris and available at [http://community.middlebury.edu/~harris/
Philosophy/heraclitus.pdf](http://community.middlebury.edu/~harris/Philosophy/heraclitus.pdf)).

\(^{22}\) Robert Anton Wilson’s *Cosmic Trigger* is an excellent updating of this genealogy and highly recom-
mended to anyone interested in a fuller account of the ideas here called Nietzschean transhumanism.
sensation of one thing or another, and it is nothing else. The building of the future, the serving of the future, are but symbols, symbols of man’s attitude towards himself, towards his own present. It is clear that if this view is accepted and if it is recognised that all the future is contained within man himself, it will be naive to ask: what have I to do with superman? It is evident that man has to do with superman, for superman is man himself. (127-8)

Ouspensky then goes on, from this point, to highlight the understanding that none of these claims about the existence of the future in the souls of humans serves to deny the concrete existence of a world outside of mans souls: this is not solipsism. For Ouspensky, “in relation to the idea of superman only that understanding is true which includes both views, the outer and the inner” (128). Ouspensky suggests that part of activating a higher consciousness is becoming okay with contradictions that may exist in the universe. Thus, he suggests

We have indeed no grounds whatever for denying the possibility of a real, living superman in the past, or in the present, or in the future. At the same time we must recognise in our inner world the presence of seeds of something higher than that by which we ordinarily live, and we must recognise the possibility of the sprouting of these seeds and their manifestation in forms at present incomprehensible to us.

Superman in the past, or in the future, does not stand in contradiction to the possibility of higher consciousness in the man living now. On the contrary, the one reveals the other. (128)

Ouspensky’s account now comes to mirror the consciousness circuits we saw earlier in Timothy Leary’s work. For Leary, most people, in a given historical moment, have a certain number of circuits activated, but a few brave explorers can activate higher circuits through various cognitive practices, including but not limited to psychedelic drugs. That these circuits are already present in our minds does not preclude a future moment in which a civilization might exist in which most members have a larger number of their circuits active. In other words, the creation of superman is both a personal and
a species-level activity. Moreover, Ouspensky suggests that both ideas are intertwined: the mystics exploring the boundaries of the human are the vanguard of future supermen.

Therefore, in an important departure from Cartesian transhumanism, Ouspensky is able to state the following: “Man finds superman within himself when he begins to look for him outside himself, and he can find superman outside himself when he has begun to look for him within himself” [129]. To only seek superman in the world or to only seek superman in the mind is to not actively look, as in either case the full range of possible avenues towards superman are not open for exploration. Ouspensky’s point here should suggest the problem with Cartesian transhumanism’s focus on the body as the avenue toward the posthuman. By saying “this is what transhumanism isn’t,” this other thread of transhuman discourse forecloses the possibility of actual evolution, along the lines outlined in the above account of Ouspensky.

Indeed, Ouspensky concludes his article on the superman with the following parable, taken from a collection of stories from the Talmud:

The whole world was shaken and enthralled by the miracle of the Exodus. The name of Moses was on everyone’s lips. Tidings of the great miracle reached also the wise king of Arabistan. The king summoned to him his best painter and bade him go to Moses, to paint his portrait and bring it back to him. When the painter returned the king gathered together all his sages, wise in the science of physiognomies, and asked them to define by the portrait the character of Moses, his qualities, inclinations, habits and the source of his miraculous power.

“King,” answered the sages, “this is the portrait of a man cruel, haughty, greedy of gain, possessed by desire for power and by all the vices which exist in the world.”

These words roused the king’s indignation.

“How can it be possible,” he exclaimed, “that a man whose marvelous deeds ring through the whole world should be of such a kind?”

A dispute began between the painter and the sages. The painter affirmed that the portrait of Moses had been painted by him quite accurately, while
the sages maintained that Moses’ character had been unerringly determined by them according to the portrait.

The wise king of Arabistan decided to verify which of the disputing parties was right, and he himself set off for the camp of Israel.

At the first glance the king became convinced that the face of Moses had been faultlessly portrayed by the painter. On entering the tent of the man of God he knelt down, bowed to the ground and told Moses of the dispute between the artist and the sages.

“At first, until I saw thy face,” said the king, “I thought it must be that the artist had painted thy image badly, for my sages are men very much experienced in the science of physiognomies. Now I am convinced that they are quite worthless men and that their wisdom is vain and worthless.”

“No,” answered Moses, “it is not so; both the painter and the physiognomists are men highly skilled, and both parties are right. Be it known to thee that all the vices of which the sages spoke have indeed been assigned to me by nature and perhaps to an even higher degree than was found by them from my portrait. But I struggled with my vices by long and intense efforts of the will and gradually overcame and suppressed them in myself until all opposed to them became my second nature. And in this lies my greatest pride” (130)

Ouspensky claims that this story about Moses “contains the whole idea of the evolution of man in the true sense of the word” (130). As he has been arguing throughout the essay, evolution toward superman is a process of overcoming the very characteristics that make us human. Moses is not godly because he has some special character, he is godly because his will allows him to overcome that which makes him human. The object of attaining higher consciousness is to displace the limited perspective on time and infinity afforded by the human.

Ouspensky claims that superman represents the next evolutionary step for life on Earth. This being, which will not be recognizably human, is one who is comfortable living in a world in which infinity is understood as a plenitude of possible avenues for life and not a limited, fixed, linear cognition trapped within the human conception of “I.” Such a future seems at odds with the science fiction dreamscape discussed with breath-
less optimism in the works of Cartesian transhumanists like Nick Bostrom. For them, things like artificial intelligence (in other words, replicating the human on computers), life extension (extending the human in time), and telecommunications (extending the human in space) represent the future of evolution. In what way, though, do any of these technologies actual evolve the human? Rather, Cartesian transhumanism seeks an acceleration and proliferation of the human within the limited confines of time and space that humanism has imprisoned life in, in the first place. If transhumanism is a conversation about the evolutionary future of the human, would not Ouspensky’s significantly more radical claims about the superman represent a fuller understanding of the stakes of evolution?

While it may be easy to dismiss these claims about Nietzschean transhumanism, to do so is to limit the entire idea of “evolution.” The forces of evolution that continually advance the shape of life itself on this planet have shown remarkably clever ways of solving problems. If we are to say that evolution only means the creation of a certain, specific model of life (namely the posthuman of Bostrom’s work), does this not limit the joy and creative spirit of evolution?

The future is a chaos or flux of raw and unknowable creativity. Ouspensky’s understanding of superman offers a model of future being that is okay with this coming flux and more open and adaptable to the changes to come. By attempting to manage the future, Cartesian transhumanism has more in line with Nietzsche’s concept of the Last Men, beings who wish to colonize the future with the present in order to forestall evolution towards superman.

In order to better explain this problem, we may, by way of a conclusion, turn to an example from Philip K. Dick’s *The Three Stigmata of Palmer Eldritch*. In the novel, several characters, most notably Leo Bulero, have undergone a process called “E-therapy.” The process is explained in the following scene, in which Richard Hnatt and his wife
await an initial consultation with Dr. Denkmal, an e-therapist:

“It makes me nervous,” Emily whispered; she held a magazine on her lap but was unable to read. “It’s so—unnatural.”

“Hell,” Hnatt said vigorously, “that’s what it’s not; it’s an acceleration of the natural evolutionary process that’s going on all the time anyway, only usually it’s so slow we don’t perceive it. I mean, look at our ancestors in caves; they were covered with body-hair and they had no chins and a very limited frontal-area brain-wise. And they had huge fused molars in order to chew uncooked seeds.”

“Okay,” Emily said, nodding.

“The farther away we can get from them the better. Anyhow, they evolved to meet the Ice Age; we have to evolve to meet the Fire Age, just the opposite. So we need that chitinous-type skin, that rind and the altered metabolism that lets us sleep in midday and also the improved ventilation and the—”

From the inner office Dr. Denkmal, a small, round style of middle-class German with white hair and an Albert Schweitzer mustache, emerged. With him came another man, and Richard Hnatt saw for the first time close-up the effects of E Therapy. And it was not like seeing pics on the society pages of the homeopape. Not at all.

The man’s head reminded Hnatt of a photograph he had once seen in a textbook; the photo had been labeled hydrocephalic. The same enlargement above the browline; it was clearly domelike and oddly fragile-looking and he saw at once why these well-to-do persons who had evolved were popularly called bubbleheads. Looks about to burst, he thought, impressed. And—the massive rind. Hair had given way to the darker, more uniform pattern of chitinous shell. Bubblehead? More like a coconut. (Dick 66-7)

In the book’s future, the world is undergoing rapid climate change with temperatures so high that people have to move around with personal air conditioning units and can only stay alive without them for a matter of minutes. The e-therapy, which accelerates “the natural evolutionary process that’s going on all the time anyway,” is adapting humans with enough money to the rapidly-changing environment around them. Later, however, the novel suggests that this evolutionary future is only a phase when Leo Bulero encounters some humans when he is transported to the future.

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23 For the purposes of not getting off on a tangent, I speak of events in The Three Stigmata of Palmer
he had never seen such life forms before. Tall, slender, with reed-like limbs and grotesque, egg-shaped heads which, even at this distance, seemed oddly delicate, a highly evolved race, he decided, and yet related to Terrans; the resemblance was closer than to the Proxers.

He walked toward them, hand raised in greeting.

One of the two creatures turned toward him, saw him, gaped, and nudged its companion; both stared and then the first one said, “My God, Alec; it’s one of the old forms. You know, the near-men.”

“Yeah,” the other creature agreed.

“Wait,” Leo Bulero said. “You’re speaking the language of Terra, twenty-first-century English—so you must have seen a Terran before.”

“Terran?” the one named Alec said. “We’re Terrans. What the hell are you? A freak that died out centuries ago, that’s what. Well, maybe not centuries but anyhow a long time ago ... If it wasn’t for Denkmal these dawn men would still be—”

“Denkmal,” Leo said. Then this was the end-result of Denkmal’s E Therapy; this was only a little ahead in time, perhaps merely decades. Like them he felt a gulf of a million years, and yet it was in fact an illusion; he himself, when he finished with his therapy, might resemble these. Except that the chitinous hide was gone, and that had been one of the prime aspects of the evolving types. “I go to his clinic,” he said to the two of them. “Once a week. At Munich. I’m evolving; it’s working on me.” He came up close to them, and studied them intently. “Where’s the hide?” he asked. “To shield you from the sun?”

“Aw, that phony hot period’s over,” the one named Alec said, with a gesture of derision. “That was those Proxers, working with the Renegade. You know. Or maybe you don’t” (103–4)

In this scene, Leo learns that the future he was evolving himself for did not come to pass, as it was the product of alien interference. Dick uses this scene to comment on the absurdity of working towards a specific evolutionary future, as we can only be certain of the shape of the future after the fact (“That was those Proxers, working with the Renegade. You know. Or maybe you don’t”). Instead, the end product of evolution can not

Eldritch as though they definitely occurred. I am aware, of course, that Leo is probably trapped in a simulation of the future when he meets the Terrans in the section quoted, just as I am aware of the fact that much of the plot of the book takes place within some sort of simulation space or another. For purposes of clarity, the vagaries of Dick’s plot and the haziness of its reality are ignored.
be predicted nor can it be halted. While Ouspensky’s treatment of superman encodes for a future of unknown possibilities, the posthuman of Cartesian transhumanism is an entity designed for optimal survival in a future that looks exactly like our globalized, communication-intense future. Will Cartesian transhumanism’s concept of the posthuman, then, seem just as much “a freak that died out centuries ago” to the superman of our future?
Having seen in Chapter 2 the differing ways in which competing definitions of “evolution” can change the understanding of transhumanism, in this chapter, I would like focus on what a number of transhuman thinkers have to say about life. If evolution is the most important concept associated with transhuman thought, then life comes a close second. Much of transhumanism, as we shall see, is concerned with the concept and definition (or redefinition) of life. If one is to make “life is evolving” a central axiom of a program of thought, one must be able to offer solid definitions of both. As we have already seen, the concept of evolution is open-ended in the various discussions of transhumanism. We shall find the same to be the case when it comes to life.

A number of times, these new definitions of life will seem unusual. In looking at Raymond Kurzweil’s concept of The Singularity, we will find that his argument ultimately boils down to the idea that artificial intelligence (“nonbiological intelligence” in his terms) will become increasingly life-like to the point that making distinction between human and computer will become increasingly impossible and meaningless. This understanding of life will be juxtaposed with Gilles Deleuze and Felix Guattari’s un-
derstanding of life, brain, and chaos in the pages of What Is Philosophy? These two philosophers have a different thesis about the nature of nonbiological intelligence and, as we shall see, this complicates Kurzweil’s entire project and suggests a more radical approach to being and becoming than Kurzweil’s own evolutionary futurism. Additionally, we will look to the originator of transhumanism, Pierre Teilhard de Chardin, for a further iteration of the relationship between thought and life by exploring his concept of the noösphere, a space of knowledge and thought that is rapidly superseding the biosphere as the dominant location for life to work itself out. We will further explore this relationship in Teilhard by adding the dimension of time through exploring how Teilhard’s concept of Omega Point works in Frank Tipler’s The Physics of Immortality and Jean-Francois Lyotard’s The Inhuman.

Such a broad exploration of the concept of life in transhuman discourse reveal the breadth and depth of transhuman thought as a rejoinder to a number of contemporary transhuman thinkers are engaged in processes that seek to make transhumanism about a certain, limited subset of this huge discursive space. This chapter ultimately seeks to establish the position that, just as the future cannot ever accurately be predicted, so must our philosophies of the future be open to the chaos of the unknowable.

3.1 The Three Stigmata of Raymond Kurzweil

*The Ood*: The beast and his armies shall rise from the pit to make war against God.
*Rose Tyler*: I’m sorry?
*The Ood*: Apologies. I said, “I hope you enjoy your meal.”
– Doctor Who, “The Impossible Planet”

Raymond Kurzweil, the spiritual guru for the more messianic strains of contemporary transhumanism, in *The Singularity is near*, his latest tome detailing the glories of a
post-Singularity, virtual reality that is just around the corner shows himself to have a deep-seated and serious problem with rocks. This rock-related rage will become very important in this chapter, but, for the moment, it serves as an interesting window into one of the largest problems in Kurzweil’s entire project: specifically the ease of thought and the ubiquity of intelligence. In analyzing this issue, I show how Kurzweil’s stances toward the inanimate, the human, and the world are inconsistent and suggest a malevolent intent behind his New Age exterior. In concluding this section, I offer a parallel reading of Philip K. Dick’s *The Three Stigmata of Palmer Eldritch* and Raymond Kurzweil’s *The Singularity Is Near*. In this reading, I articulate the understanding that Kurzweil is Eldritch and that both argue for the digitization of the universe as a means to attaining godhood for themselves. This rather wild claim serves to highlight some of the stakes in the transhuman argument over and above disengaged speculation on the future of humanity.

In exploring the possibility of turning the world into a computer, Kurzweil takes up the case of a simple, 2.2-pound rock. He writes:

> To appreciate the feasibility of computing with no energy and no heat, consider the computation that takes place in an ordinary rock. Although it may appear that nothing much is going on inside a rock, the approximately $10^{25}$ (ten trillion trillion) atoms in a kilogram of matter are actually extremely active. Despite the apparent solidity of the object, the atoms are all in motion, sharing electrons back and forth, changing particle spins, and generating rapidly moving electromagnetic fields. All of this activity represents computation, even if not very meaningfully organized. (Kurzweil 131).

He goes on to clarify this point by suggesting that despite all this activity at the atomic level, the rock is not performing any useful work aside from perhaps acting as a paperweight or a decoration.

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1 Kurzweil’s writing style, a mash-up of the optimistic, “science fact” essays of the early science fiction pulps published by Hugo Gernsback and late-19th millenarian writing, suggest the persistence of a kind of naive optimism at the core of a supposedly rational and disinterested discourse like engineering.
The reason for this is that the structure of the atoms in the rock is for the most part effectively random. If, on the other hand, we organize the particles in a more purposeful manner, we could also have a cool, zero-energy-consuming computer with a memory of about a thousand trillion trillion bits and a processing capacity of $10^{42}$ operations per second. (131)

Kurzweil’s point here is one that is rather common in Singularity arguments: when you code activity as computation (as Kurzweil does, above): everything looks like a computer. One of the ideas prevalent in Singularity fact and fiction, especially in Charles Stross’s *Accelerando*, is the idea that, in some way, all matter in the universe can be made to perform computation by using and controlling atomic spin in a manner analogous to bits in a computer memory (spinning one way is “on”, while spinning another is “off”). As such, the world would go from being a metaphorical computer (as in some accounts of the Gaia hypothesis) to a literal computer. The key to a more utilitarian universe, then, becomes a magical solution (“If, on the other hand, we organize the particles in a more purposeful manner”) whereby a theoretical ability to reorder matter allows us to harness this “useless” matter for more useful ends.

While Kurzweil’s free exchange between “activity” and “computation” is in itself an interesting rhetorical substitution (that allows us to boldly speculate about Kurzweil’s own axioms), the most interesting shift in the above account is between “nature” and “human”. As Kurzweil will go on to write, his use of the rock is “to assess just how far biological evolution has been able to go from systems with essentially no intelligence (that is, an ordinary rock, which performs no *useful* computation) to the ultimate ability of matter to perform purposeful computation” (137). The question that is unanswered in this discussion of useless matter (the rock) is “who is a rock useful for?,” because in Kurzweil’s transhuman universe, everything exists for the use of humans.

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2 Someone once remarked to me that the problem with Martin Heidegger’s “The Question Concerning Technology” is that no one would ever admit to being on the side of standing reserve. I think we can
Kurzweil, are the perfect example of an entirely useless matter: the only thing they do for us is to serve as “a paperweight or a decoration.” Their uselessness is a uselessness to Raymond Kurzweil (who presumably does not live in a house made of stone or who has never set on a rock during a hike), specifically. Rocks are not fast and they are not intelligent: it is our job to reorder their atoms to do computation for us.

Having shown the complete uselessness of this poor rock, Kurzweil shows that there are actually two uses a rock could be put to: 1) we could write on its surface and 2) “by dropping the stone from a particular height, we can compute the amount of time it takes to drop an object from that height” (137). It is interesting that, for Kurzweil, the only thing that counts as “use” is computation or memory: presumably one would never need to use a rock, or anything, for something other than those two tasks. As I eluded to previously, this ignores the fact that people still live in houses made from stone and, for instance, eat corn ground with a mill stone. Like a man with a hammer who thinks everything is a nail, part of Kurzweil’s appeal, presumably, lies with the fact that he constructs a model of the world that views it as a big, badly programmed computer just waiting to be debugged. That said, returning to the question of intelligence and continuing to engage Kurzweil on his own, limited, grounds, who are we, as humans, to say that because a rock does not do computation for us it is useless?

In Gilles Deleuze and Felix Guattari’s What Is Philosophy?, the concluding chapter suggests much about the affinity that exists between Deleuze and Guattari’s thought and transhumanism. As a means of moving towards this discussion, however, we should briefly consider what the two of them have to say about stones, intelligence, and the usefulness of “dumb” matter:

Of course, plants and rocks do not possess a nervous system. But, if nerve

make the case, here, that Kurzweil’s discussion of the rock is the first known case of someone being for the reduction of Nature to standing reserve.
connections and cerebral integrations presuppose a brain-force as faculty of feeling coexistent with the tissues, it is reasonable to suppose also a faculty of feeling that coexists with embryonic tissues and that appears in the Species as a collective brain; or with the vegetal tissues in the “small species.” Chemical affinities and physical causalities themselves refer to primary forces capable of preserving their long chains by contracting their elements and by making them resonate: no causality is intelligible without this subjective instance. Not every organism has a brain, and not all life is organic, but everywhere there are forces that constitute microbrains, or an inorganic life of things. (Deleuze and Guattari, *What Is Philosophy?* 212-3)

This interpretation of the “inorganic life of things” runs contra to Kurzweil’s account of how the useless rock could be made to do work for humans by being made into a computer. As Deleuze and Guattari see it, the rock is already engaged in thought: *everything* is engaged in thought. In saying this, Deleuze and Guattari partly suggest that the chaos of the world offers a provocation to thought. In encountering the world, our ability to create through thought is constantly solicited. Moreover, as we shall see below, Deleuze and Guattari view thought as hopelessly enmeshed with the experience of the chaotic flux of the world. As such, the world is as much a part of thinking as our own “chemical affinities and physical causalities.” If computation is thought (it is for Kurzweil but not for Deleuze and Guattari), then a rock is already performing computation. Deleuze and Guattari also provide a very different answer to the question identified in Kurzweil with regard to use: there is something else for whom plants and rocks do work in their model of the world. Their account of intelligence in the above passage leads into a discussion of vitalism and its understanding of life, as their argument hinges on a universal distribution of Brain as a globally binding force. As they write:

> Vitalism has always had two possible interpretations: that of an Idea that acts, but is not—that acts therefore only from the point of view of an external cerebral knowledge (from Kant to Claude Bernard); or that of a force that is but does not act—that is therefore a pure internal Awareness (from Leibniz to Ruyer).
For Deleuze and Guattari, the intelligence of rocks is a reflection of a “global brain,” a “single plan of composition bearing all varieties of the universe” (213). Hence the discussion of vitalism: Deleuze and Guattari, in making the case for the microbrain or “inorganic life of things,” rely on this philosophical notion of Life as a unitary force of which we are all merely reflections or, in their terminology, “crystallizations.” What is a unique contribution to the idea of vitalism, in this section of *What Is Philosophy?*, is the replacement of Life with a global notion of Brain as the central animating force of all things on Earth.

With this concept of Brain, *What Is Philosophy?* ends a rather strange book on a rather enigmatic note in the chapter “From Chaos to Brain,” from which the selections above have all been taken. This chapter articulates three disciplines, art, science, and philosophy, in terms of their ability to confront and resist chaos. Chaos is both that which must be struggled against and instigator of creation itself. In their formulation, these three disciplines represent different planes that cut across chaos: “plane of immanence of philosophy, plane of composition of art, plane of reference or coordination of science” (216). The metaphor of the plane cutting across chaos refers to the different strategies by each discipline produces order from the flux of chaos that actually makes up the world. “Philosophy, science, and art want us to tear open the firmament and plunge into chaos,” they suggest (202). In this way, these three disciplines have something of chaos to them: “the struggle against chaos does not take place without an affinity with the enemy” (203). In fact, Deleuze and Guattari show that thought, in these three forms, must itself struggle against opinion as much as against chaos. As they show, opinion functions like an umbrella: “people are constantly putting up an umbrella that shelters them and on the underside of which they draw a firmament and write their conventions and opinions. But poets, artists, make a slit in the umbrella, they tear open the firmament itself, to let in a bit of free and windy chaos” (203).
As Deleuze and Guattari show, “the brain is the junction—not the unity—of these three planes” (208). For them, this juncture, the brain, is not reducible to an individual brain (the goo inside our skulls): “it is the brain that thinks not man—the latter only being cerebral crystallization. We will speak of the brain as Cézanne spoke of the landscape: man absent from, but completely within the brain” (210). The idea that humans are merely “cerebral crystallizations” suggests this universal aspect. They go on to claim their concept of “brain” “is not a brain behind the brain, but, first of all, a state of survey without distance, at ground level, a self-survey that no chasm, fold, or hiatus escapes” (210). It is this universal brain, this ur-substance of thought, that confronts chaos through the three disciplines we discussed above.

All of this is to suggest that Kurzweil has not thought enough about thought itself. His universe is not the free-flowing chaos into which the artist, scientist, philosopher plunges, but the ordered universe in which a rock could only ever serve as “a paperweight or a decoration”: as though the problems of being and the struggle of thought were merely papers misplaced on a professor’s desk. It might seem unfair to assail a leading technologist like Raymond Kurzweil with the work of a pair of French philosophers: the disciplines are different, the questions being asked are not related. In 12 different places in The Singularity Is Near, Raymond Kurzweil refers to “Singularitarianism” as a philosophy: he wants to make claim to drawing a plane over chaos, as Deleuze and Guattari would have, to capture something of the chaos of the world. In other words, we must juxtapose thinkers like Deleuze and Guattari with thinkers like Kurzweil, because people like Kurzweil think they are doing philosophy.

3This suggests an interesting fall-out from the Sokal Affair. In 1996 Alan Sokal, a physics professor at NYU, submitted an article in Social Text, a leading postmodern cultural studies journal. After it was accepted and printed, Sokal announced that the article was mostly made up of nonsense and that anyone who knew anything about physics would know that. This affair was largely instrumental in the dismantling of science studies as a field. While humanities scholars are increasingly wary of discussing science issues, following Sokal’s hoax, scientists and technologists, who have as little understanding of what we do, are
If we continue to explore Kurzweil’s assertions about the nature of the brain, we find an increasing lack of understanding, and even respect, for the processes of thought that produce Kurzweil’s words in which thought is thus defamed. For Kurzweil, one of the key technologies of the transhuman is the process of “reverse engineering the brain.” Reverse engineering is a process most commonly associated with industrial or military espionage and involves determining how a technological artifact works and, more importantly, was produced by analyzing its function and appearance. Many times in the last 100 years, a country has been able to copy the technology of an adversary without any kind of technical documentation, merely by going over a captured or abandoned copy of the technology under study. Raymond Kurzweil and his Singularity followers are attempting to do the same to the human brain.

Why?

In Raymond Kurzweil’s worldview, faster is the same thing as better and he views the key to the evolution of human intelligence as lying in running human minds on digital hardware. As we write, “the combination of human-level intelligence with a computer’s inherent superiority in speed, accuracy, and memory-sharing ability will be formidable” (Kurzweil 144). You see, as strange and confused as this all appears, this is all based Kurzweil’s personal philosophy of “patternism”: “I am principally a pattern that persists in time. I am an evolving pattern, and I can influence the course of the evolution of my pattern” (386). If one takes an optimistic view of computing, as Kurzweil does, than any pattern of information can be encoded onto a digital medium. In this way, human beings, once we decode the pattern, will be fodder for uploading to a computer, as all increasingly turning to writing books of philosophy. This is very clear if anyone were to study the popular accounts of transhumanism being written. In other words, the message is clear: “science is something hard that you have to work to understand, but philosophy is something anyone can do.” I think we can do better.

This all sounds an awful lot like the Human Genome Project.
we are is a pattern of information, like an MP3 file or a LOLcat image.

Kurzweil explains the process of reverse engineering the brain in this fashion: “to see inside it, model it, and simulate it regions” (144). Detailing these three processes is the key matter of his chapter on “Achieving the Software of Human Intelligence.” In that brief definition, though, Kurzweil has already stated the crux of the entire problem of his philosophy: as Alfred Korzybski has taught us, “the map is not the territory.” Kurzweil, throughout *The Singularity is Near*, confuses map for territory, freely substituting model for subject in his account of human intelligence. This slippage, between simulation and reality, is troubling to say the least. Kurzweil is very excited about the increasingly precise ability to scan the brain and suggests that “with the information from brain scanning and modeling studies, we can design simulated ‘neuromorphic’ equivalent software (that is, algorithms functionally equivalent to the overall performance of a brain region)” (147). Never once in the book, is any thought given to whether or not a computer model of the brain is equivalent to the brain itself.

As another example of this thinking, Kurzweil, in the section “Is the Human Brain Different from a Computer?,” details the differences between computers and brains:

> The massive parallelism of the human brain is the key to its pattern-recognition ability, which is one of the pillars of our species’ thinking. Mammalian neurons engage in a chaotic dance (that is, with many apparently random interactions), and if the neural network has learned its lesson well, a stable pattern will emerge, reflecting the network’s decision. (149)

Part of Kurzweil’s trouble here is that neural networks are generally regarded by cognitive scientists as only one tool, a possible means amongst many for modeling brain function. Neural networks are good at solving certain kinds of problems, not so good at other kinds of problems. For Kurzweil to speak about the human brain, as in an actual

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5For more information on Korzybski and transhumanism, please see Chapter 4.
human brain, as a neural network is to erase the difference between model and subject. A neural network is a model of how the brain works; the reverse is not necessarily the case.

The problem is that Kurzweil assumes that they are the same thing: we are neural networks. His claims about reverse engineering the brain operate on the assumption that once we have accurate scanned the brain and developed models based on those scans, we will have a digital brain. Not a model of a brain. But an actual brain itself. For Kurzweil, “the human brain is a complex hierarchy of complex systems, but it does not represent a level of complexity beyond what we are already capable of handling” (145). If a model is “good enough,” than it is the same thing as the original. Kurzweil talks about his involvement in developing the technology of digital pianos. He argues that digital pianos are good enough and are therefore outperforming acoustic pianos: “with their far greater range of features and price-performance, digital pianos already exceed the sales of acoustic pianos in homes” (53). Note that this is a purely economic argument, but Kurzweil is convinced that it is the “good enough” nature of the simulation: he goes on, after the selection we just looked at, to say that “many observers feel that the quality of the ‘piano’ sound on digital pianos now equals or exceeds that of the upright acoustic piano” (53). Rather than highlight the fact that these “observers,” whoever they may be, are convinced digital pianos sound just like a real piano, Kurzweil focuses on the fact that affordability and better feature range, not quality of piano sound, are the real reason these devices are so popular. This from the man who wants to offer affordable and feature-rich immortality to humans in the near future.

To return to Deleuze and Guattari and their account of the brain, we find a very different account of intelligence and brain-scanning. For them, the brain is, as we have already seen, something that exceeds individual human brains as a unifying, absolute plane of existence for the human. Moreover, though, they also point out that their understanding
of the brain and of the three disciplines that cut across chaos are not homologous to mere neuroscience:

It seems difficult to treat philosophy, art, and even science as “mental objects,” simple assemblages of neurones in the objectified brain, since the derisory model of recognition confines these latter with the doxa. If the mental objects of philosophy, art, and science (that is to say, vital ideas) have a place, it will be in the deepest of the synaptic fissures, in the hiatuses, intervals, and meaitimes of a nonobjectifiable brain, in a place where to go in search of them will be to create ... That is to say, thought, even in the form it actively assumes in science, does not depend upon a brain made up of organic connections and integrations. (Deleuze and Guattari, What Is Philosophy? 209)

One wonders what Deleuze and Guattari mean, here, about the “nonobjectifiable brain” and, specifically, the idea that the mental origins of thought are “in a place where to go in search of them will be to create.” Partly, this idea of exploration being the same as creation has to do with attempting to overturn the “brain as computer” metaphor that drives Raymond Kurzweil’s entire operation. As J. David Bolter explains in his book Turing’s Man, various eras in human history are marked by technological advances that come to serve as “defining technologies” for that era. Bolter argues that the digital computer is the defining technology of our own. As he writes:

Such qualities combine with the social and economic importance of the device to make people think. Very often a device will take on a metaphoric significance and be compared in art and philosophy to some part of the animate or inanimate world. Plato compared the created universe to a spindle, Descartes thought of animals as clockwork mechanisms, and scientists in the nineteenth century and early twentieth centuries have regularly compared the universe to a heat engine that is slowly squandering its fuel. Today the computer is constantly serving as a metaphor for the human mind or brain; psychologists speak of the input and output, sometimes even the hardware and software, of the brain; linguists treat human language as if it were a programming code; and everyone speaks of making computers “think.” (Bolter 11)
So, once again, we see that Kurzweil’s work is not so much about turning ourselves into computer programs as forgetting that “we are computer programs” is a metaphor in the first place. Beyond this linguistic point, though, Bolter’s discussion of the role technology plays in metaphorically driving our exploration into the world is what Deleuze and Guattari are after when they claim that the mental origins of thought are “in a place where to go in search of them will be to create.” These deep and dark hiatuses where thought hides are beyond the metaphors we build of the biological brain. In order to go after these three planes of thought, we must go beyond the doxa of opinion, the realm of what is already known, and bring back something of the chaos beyond the shields of our knowledge. In order to find thought in its own terms, we must, inevitably, create new concepts and new models of understanding: there are no maps for the territory of thought. In this way, we can see, again, what Deleuze and Guattari mean when they suggest that art, science, and philosophy inevitably partake of the chaos they study: just as much as these three disciplines cast a plane across chaos, so much our quest for understanding thought be prepared to move beyond the realm of what is already known. Models do not suffice; simulation is not enough.

Thought, then, is more rarified stuff than merely the firing of neurons and the exchange of neurotransmitters. Deleuze and Guattari follow both vitalism, as we have already seen, and phenomenology here in making these claims. Deleuze and Guattari’s claims here, about the three disciplines, certainly valorizes thought in describing the brain as struggling against chaos. While it may seem that this valorization of thought and, by extension, of human being that we find in Deleuze and Guattari’s work would be compatible with Kurzweil’s model of transhumanism (after all, he defines the human by “our ability to reach beyond our limitations”), as we have already shown, Kurzweil is constantly reducing the complexity of the world and especially the human to a series of models that can be easily simulated on a computer (Kurzweil 311). Moreover, while
Kurzweil constantly stresses the limitlessness of human creativity, Kurzweil does not seem to like people very much or respect them.

In his list of “other key ways in which the brain differs from a conventional computer,” Kurzweil counts “the brain is imperfect” as one of the factors that differentiate us from computers. Note the implication that computers, then, are prefect. Moreover, though, many of Kurzweil’s arguments hinge on the flawed nature of human beings (bodies wear out, brains are slow, etc.). While the idea of human perfectibility is as old as humanism (if not older), Kurzweil’s version of transhumanism, in works like *The Singularity Is Near*, is a hyper-accelerated version of this age-old notion. In fact, he concludes the book with the following assertion in a tiny section called “Human Centrality”:

A common view is that science has consistently been correcting our overly inflated view of our own significance. Stephen Jay Gould said, “The most important scientific revolutions all include, as their only common feature, the dethronement of human arrogance from one pedastal after another of previous convictions about our centrality in the cosmos.”

But it turns out that we are central, after all. Our ability to create models—virtual realities—in our brains, combined with our modest-looking thumbs, has been sufficient to usher in another form of evolution: technology. That development enabled the persistence of the accelerating pace that started with biological evolution. It will continue until the entire universe is at our fingertips. (487)

A puzzling statement from someone whom we have already seen to be interested in reducing the complexities of human existence to computerized information patterns. This statement is even more puzzling given statements made earlier in the book. Kurzweil, a number of times in *The Singularity Is Near*, takes a seemingly perverse joy in dethroning human arrogance, as Stephen Jay Gould would have it. He writes:

The range of intelligent tasks in which machines can now compete with human intelligence is continually expanding. In a cartoon I designed for
The Age of Spiritual Machines, a defensive “human race” is seen writing out signs that state what only people (and not machines) can do. Littered on the floor are the signs the human race has already discarded because machines can now perform these functions ... On the wall behind the man symbolizing the human race are signs he has written describing tasks that were still the sole province of humans. (291)

When it comes to artificial intelligence replacing and exceeding us, we are silly for being “defensive” in the face of automation (I would like to view the cartoon man representing the human race as a factory worker who lost his job to a robot Kurzweil helped design), but people like Gould who try to use science to overturn human centrality and replace it with a blind and uncaring Nature are foolish. In Kurzweil’s view of the world, the human is both fodder for robotics and superior to Nature at the same time. Coupling this view with the discussion of rocks above, we can start to become more suspicious of what Kurzweil is actually up to. I use the term “suspicious” with great care, because some parts of his oeuvre suggest that Kurzweil could be regarded as an evil genius, not unlike a Bond villain. For instance, in talking about our increasing dependence on machine intelligence and the potential for Terminator-esque rebellions, he points out that we have nothing to worry about because “our AI systems are not smart enough—yet—to organize such a conspiracy” (289). While probably a joke, the book largely has the air of prophecy, with Kurzweil naming specific dates for when new technologies will arrive (“the experience-beaming technology of 2029 will enable the brain of one person to experience only the sensory experiences ... of another person,” for instance) (380), and there is no reason to assume that an AI revolt is not in Kurzweil’s plans.

We began this section by juxtaposing Kurzweil and Deleuze and Guattari on the intelligence potential of a nonbiological object, namely a rock. Kurzweil sees the rock as useless matter to be converted into a molecular computer; Deleuze and Guattari find a “microbrain,” another crystallization of the global brain that drives thought. Having said
that, Kurzweil’s argument is that, in the future, human beings will merge with robots to become somehow better than our limited intelligence and soft, fleshy bodies. These robots that we will merge with (or that will rise up and overthrow us) are nonbiological, as Kurzweil says:

> Will such a nonbiological entity be conscious? ... It is my view that many humans, ultimately the vast majority of humans, will come to believe that such human-derived but nonetheless nonbiological intelligent entities are conscious, but that’s a political and psychological prediction, not a scientific or philosophical judgement. (475)

The obviously important claim about nonbiological intelligence, in the above selection, is “human-derived.” Kurzweil is only able to admit nonbiological matter as intelligent when it is created by humans, not the product of biological evolution. This should be most disturbing because, then, Kurzweil’s entire program of technological evolution puts humanity into the role of the Judeo-Christian god. While many people like to accuse The Singularity followers of Kurzweil as being a religion (the title of a profile in *Newsweek* was “Ray Kurzweil’s Science Cult”), Kurzweil and his followers have been quick to rebuke these claims, instead asserting that their movement grew out of scientific research and only came to resemble a religion by accident. This claim is actually believable; what Kurzweil is trying to do is much more than mere religion: it is an attempt to steal God’s creation and replace Him with man.

In this way, we can see all the facets of Kurzweil’s argument, as we have been discussing them, fit together into this observation. As in Deleuze and Guattari’s account of opinion as an umbrella stretched over the chaos of the world, Kurzweil’s vision of life as information pattern is an attempt to remake the world out of such an umbrella. While Deleuze and Guattari show that certain brave humans can always use the disciplines of

http://memebox.com/futureblogger/show/1231-ray-kurzweil-the-singularity-is-not-a-religion
thought to puncture this opinion, the stakes are so much higher in the case of Raymond Kurzweil because the ideas of simulation and digitization are a much more pervasive form of opinion than even the *doxa* discussed in *What Is Philosophy*?.

A classic example of the dangers posed by the coupling of opinion to simulation can be found in Philip K. Dick’s *The Three Stigmata of Palmer Eldritch*. In the novel, two competing industrialists, Leo Bulero and Palmer Eldritch, are both selling competing, illicit drugs to the depressed residents of Earth’s off-world colonies. The two drugs, Can-D and Chew-Z, offer escape from the drudgery of life on the hostile planets of our solar system by allowing colonists to transfer their consciousnesses to other, more perfect realms. In the case of Bulero’s older, more established product, Can-D, this more perfect world is created by the drugs’ users in the form of obsessively detailed dioramas that their brains beam into (imagine if you could transfer your thoughts to a Barbie or Ken doll in their mansion, and you have an idea of Dick’s vision in this novel). Chew-Z, Eldritch’s mysterious, new drug, promises a more permanent kind of escape: users are merely permanently trapped within an artificial world of the drug’s or Eldritch’s or his alien backers’ creation. In any case, the sinister figure of Eldritch—about whom, in keeping with his name, it is observed that “that’s not a man in that Palmer Eldritch skin”—dominates this new reality in the manner of a god (Dick 186).

After Leo Bulero becomes trapped in the false world of Chew-Z, he begins to see manifestations of Palmer Eldritch everywhere: people on the street will appear to have Eldritch’s three characteristic wounds and will be able to speak to him as Eldritch. After Leo has a conversation with a little girl speaking as Eldritch, Leo observes the following:

> What we have here, he realized, is not an invasion of Earth by Proxmen, beings from another system. Not an invasion by the legions of a pseudo human race. No. It’s Palmer Eldritch who’s everywhere, growing and growing like a mad weed. Is there a point where he’ll burst, grow too much? All the manifestations of Eldritch, all over Terra and Luna and Mars, Palmer puffing up
and bursting–pop, pop, POP! (184)

Bulero goes on to speculate “Eldritch somehow controls each of the hallucinatory worlds induced by the drug ... that the skunk is in all of them” and that “the fantasy world that Chew-Z induces, he thought, are in Palmer Eldritch’s head” (185). The imagery that Dick uses to describe Eldritch from this point in the novel is one of consumption: Eldritch–be he alien or mutated human–wants to consume reality and store it up inside his head. At the end of the novel, Leo has realized that he is still trapped in Eldritch’s hallucinatory virtual reality, but he holds out the possibility of escape: he believes that there is something inside of him, an essence, that Eldritch cannot consume. As he flies back to Earth, Leo Bulero muses

We have lived thousands of years under one old-time plague already that’s partly spoiled and destroyed our holiness, and that from a source higher than Eldritch. And if that can’t completely obliterate our spirit, how can this? Is it maybe going to finish the job? If it thinks so–if Palmer Eldritch believes that’s what he arrived here for–he’s wrong. Because that power in me that was implanted without my knowledge–it wasn’t even reached by the original ancient blight. How about that? (229)

The plague of which Leo speaks is sin, a topic the book is obsessed with (in many ways, *The Three Stigmata of Palmer Eldritch* is more a meditation on sin and redemption than a science fiction novel). For Leo, there exists a holy core to his being that was implanted by a Gnostic God and can never be touched by the world and its sin ... maybe. In the final image of the novel, Leo begins to turn into Palmer Eldritch, just like every other living being. The important point to note in the above selection, though, is Dick’s choice of the word “higher” to describe the source of the soul: God is still higher than Eldritch, even if we no longer have access to the real of the soul.

The plot of this novel suggests a negative vision of Kurzweil’s utopian vision of *The Singularity*. Eldritch may be able to deliver on his promise of immortality through
Chew-Z, but this immortality occurs within the debased space of a hyperreal⁷. In actuality, the novel’s conclusion reveals, the promise of immortality held out by Palmer Eldritch is in fact a sham used as a means to elevate a single, malevolent industrialist to the status of God. Without the ability to conquer death and shake the throne of God in the real, both Kurzweil and Eldritch substitute a hyperreal in which a limited, debased simulation of humanity is trapped for eternity. Whether inside a computer or inside the mind of a once-human, alien agent, the prospect of a simulated reality can only lead to enslavement to false gods.

Deleuze and Guattari suggest something of how Kurzweil and Eldritch are able to accomplish their substitution. In the chapter of What Is Philosophy? entitled “Geophilosophy,” Deleuze and Guattari discuss how philosophical thought always “takes place in the relationship of territory and earth” and not solely in the relationship between subject and object (Deleuze and Guattari, What Is Philosophy? 85). For them, the earth represents an absolute, immanent plane upon which all acts of creation occur. In many ways, this conceptualization can be thought of as being similar to their concept of chaos, as discussed above. In any case, they go on to discuss thought as a kind of “absolute deterritorialization” that seeks to stretch “out a plane of immanence that absorbs the earth (or rather ‘adsorbs’ it)” (88). In this model of thought, like the earlier version involving chaos, thought in some way seeks to push up against the chaotic absolute in order to create a new means of understanding. Deleuze and Guattari go on to argue that

it is at this point that a major difference arises depending on whether relative deterritorialization takes place through immanence or through transcen-

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⁷“Hyperreal” is a concept drawn from Jean Baudrillard’s post-Lacanian thought on the psychological impact of global media culture. Through phenomena such as simulation, media technologies are able to manufacture a hyperreal that is both less real and more involving than the real with which, in Lacan’s thought, the human subject is engaged. By being more involving, the hyperreal comes to produce a vision of the real as what Baudrillard calls “the desert of the real,” a desiccated plane that is not as interesting as the field of desire we watch on TV.
dence. When it is transcendent, vertical, celestial, and brought about by the imperial unity, the transcendent element must always give way or submit to a sort of rotation in order to be inscribed on the always-immanent plane of Nature-thought ... Thinking here implies a projection of the transcendent on the plane of immanence. Transcendence may be entirely “empty” in itself, yet it becomes full to the extent that it descends and crosses different hierarchized levels that are projected together on a region of the plane, that is to say, on an aspect corresponding to an infinite movement. In this respect, it is the same when transcendence invades the absolute or monotheism replaces unity: the transcendent God would remain empty, or at least absconditus, if it were not projected on a plane of immanence of creation where it traces the stages of its theophany. In both cases, imperial unity or spiritual empire, the transcendence that is projected on the plane of immanence paves it or populates it with Figures. It is a wisdom or a religion— it does not matter which. (88-9)

In this long selection, Deleuze and Guattari explain how their concept of geophilosophy operates in the realm of Kurzweil’s model of The Singularity. Transcendence, here, implies a move above the material into the realm of the divine (hence the description of it as “vertical” and “celestial”). Transcendence, in philosophy, opposes immanence and breaks the world into two substances: a base material and a divine concept of the soul. What is interesting in this selection is that Deleuze and Guattari suggest that regardless of whether one chooses to think in terms of immanence or transcendence, one is always thinking in terms of immanence: as they understand it the earth or chaos is an immanent substance, unifying all being. Transcendent philosophies merely project an artificial and “empty” hierarchy (between base and divine, subject and object, or body and mind, for instance) on this immanent plane in which being actually occurs.

Whether this projected transcendence “paves” over the Earth or “populates it with Figures,” in either case, Nature-thought is reinscribed with a certain kind of artificial logic. This is the operation we see occurring in both Kurzweil and Eldritch. The danger in both cases is that the powers of simulation that help manufacture this transcendence are hugely successful at producing a forgetting: the simulated hyperreal of Eldritch or
Kurzweil actively blocks the contemplation of Nature-thought in its total of all nervous input into the brain. These virtual worlds represent the ultimate triumph over chaotic Nature, but they come at a great price, as such a hyperreal’s creation is a foreclosure of chaos that results in the end of thought itself.

The foreclosure of thought is a dangerous prospect, given Deleuze and Guattari’s connection between thought and creation. As they write in *What Is Philosophy?*, “revelution is absolute deterritorialization even to the point where this calls for a new earth, a new people” (101). The space of thought, of absolute deterritorialization, fundamentally imagines new ways of being that have yet to occur. For Deleuze and Guattari, as we have seen, true thought always creates the new, whereas the space of opinion (which is the space of Kurzweil’s virtual reality) can only reproduce that which is already known. The observation of utopian schemes like The Singularity lead Deleuze and Guattari to further clarify the concept of utopia:

In utopia (as in philosophy) there is always the risk of a restoration, and sometimes a proud affirmation, of transcendence, so that we need to distinguish between authoritarian utopias, or utopias of transcendence, and immanent, revolutionary, libertarian utopias. (100)

These authoritarian utopias, then, are the spaces that, while utopian in the sense that they imagine a better or more perfect social order, do so in a manner that authors a final meaning of the human. In this differentiation between transcendent and immanent utopias, we can see that in Deleuze and Guattari’s understanding even the program for attaining a transhuman future is not yet certain. This is an important concept to understand given the scope and thesis of this project. We will discuss more about this open-ended future in the next section.
3.2 Interlude: The Future is Rhetorical or It Will Be Nothing

“The future is up for grabs. It belongs to any and all who will take the risk and accept the responsibility of consciously creating the future they want.”
– Robert Anton Wilson

“History today still designates only the set of conditions, however recent they may be, from which one turns away in order to become, that is to say, in order to create something new.”
– Gilles Deleuze & Félix Guattari, What Is Philosophy?

One of the important upshots of this discussion of Kurzweil’s futurism is to highlight the way in which the future is as much a rhetorical phenomenon as it is an historical one. Through constructing the future as inevitable, by talking about future events as if they have already happened, Kurzweil builds a rhetoric of a specific future through his writing. By constructing the future as a rhetorical problem, we can see the role of Utopia in transhumanism. In Fredric Jameson’s *Archaeologies of the Future*, Jameson offers an account of Utopia in a postmodern world that has moved beyond the older model of Party-based Utopian thought.

Despite the “unrealizable fantasy” represented by the desire called Utopia, this ephemeral kernel “becomes the most dangerous political enemy, the one most worthy—despite its seeming insubstantiality—of persistent and vigilant criticism:” the stakes in Utopian thought, despite their origins in daydreams of a better future, couldn’t be higher (Jameson, *Archaeologies of the future* 227; 193). The question at hand, though, is why? In a field dominated by cranks, tinkerers, and idealists, the suspicion of and struggle against Utopia is intense from both the Left and the Right, especially following the cynical collapse of the Soviet experiment into repression and the failure of the Western welfare state. Given that Utopian politics is now more polyvocal, distributed, and
interested in affinity between small units rather than large-scale Party politics, Jameson asks what future exists for Leftist praxis and Utopia itself. In this way, Jameson’s own vision of Utopia becomes drawn to

a certain anarchism ... which does not so much involve a seizure and destruction of [state power] as the exploration of zones and enclaves beyond its reach. ... Such differences come to a head around the new problematical idea of revolution: its crisis is not only the practical one, namely the absence of agency and indeed of any conception of what “coming to power” for movements which are not parties and in situations in which power is a network of cybernetic grids. (213)

Jameson’s chasing of Utopia, for much of his scholarly career, seems to have finally led him away from Marxist political ideology and revolution as such. While he is equally wary of the anarchist vision of enclaves beyond state power, the problem he sees with revolution is rightly observed: with power so widely dispersed and political ideologies so divergent (even within Marxism itself), how can the possibility of a single new social order ever be achieved?

Rather than declaring the Utopian project dead, however, Jameson attempts to reinvigorate the desire called Utopia in a post-Communist world. As one would expect, given the ease with which Jameson moves between Utopian Science Fiction (SF) and Utopian Science in *Archaeologies of the Future*, he finds a means towards this new understanding of Utopia within the pages of Utopian fiction itself.

Utopian [sic] is no longer the invention and defense of a specific floorplan, but rather the story of all the arguments about how Utopia should be constructed in the first place. It is no longer the exhibit of an achieved Utopian construct, but rather the story of the production and of the very process of construction as such. (217)

This understanding of Utopia as an ongoing process of realizing a Utopian society that is never finished is drawn from a reading of Kim Stanley Robinson’s *Mars* Trilogy in
which Jameson finds “not the representation of Utopia, but rather the conflict of all possible Utopias, and the arguments about the nature and desirability of Utopia as such” (216). While the definition of Utopia as a field of possible Utopias is an old concept in Jameson, dating to at least Postmodernism (in which Utopia is called “the now open space for something else”), the concept of dialogue and debate over the form and the content of Utopia itself is a new emergence within his discussion of the Utopian science fiction novel.

In any case, Jameson’s exploration of Robinsons’s Mars as a conversation about Utopia highlights the fact that Utopia itself is (and probably always has been) primarily a rhetorical operation. Freed from the old master narratives of Utopia in an era of affinity, we can begin to see how the future is a conversation first before it ever becomes a reality. Just as Jameson, finds the future as a space for rhetorical engagement, William Gibson, author of such science fiction classics as Neuromancer, sees an increasing lack of coherence to the future as a reason for his present trilogy of novels set in the present (Pattern Recognition, Spook Country, and Zero History):

I thought that writing about the world today as I perceive it would probably be more challenging, in the real sense of science fiction, than continuing just to make things up. And I found that to absolutely be the case. If I’m going to write fiction set in an imaginary future now, I’m going to need a yardstick that gives me some accurate sense of how weird things are now. ’Cause I’m going to have to go beyond that. And I think over the course of these last two books—I don’t think I’m done yet—I’ve been getting a yardstick together. (Gibson, “Across the Border to Spook Country: An Interview with William Gibson.”)

For Gibson, the present is so alien, so confusing that novels about it may as well take the form of science fiction. One of the characteristics that continually pops up in accounts of transhumanism, from a broad range of sources, is the unknowability of what comes after the human. Gibson’s remarks about the increasingly confusing nature of the present
suggest that the future is more open than it once was.

This viewpoint deeply informs the course of this project, as a whole. Transhumanism provides a set of key concepts for thinking about and rhetorically constructing the future of humanity, now that we are beyond the age of large-scale Party visions of a specific future. It is important to understand that there are huge political, even evolutionary stakes in this argument. One of the best examples of the rhetorical construction of the future and the concomitant rhetorical resistances that must accompany such a construction is Lee Edelman’s *No Future*. In the book, Edelman identifies an organizing principle in the social that he calls “reproductive futurism: terms that impose an ideological limit on political discourse as such, preserving in the process the absolute privilege of heteronormativity by rendering unthinkable, by casting outside the political domain, the possibility of a queer resistance to this organizing principle of communal relations” (Edelman 2). He goes on to clarify this point by stating that

for politics, however radical the means by which specific constituencies attempt to produce a more desirable social order, remains, at its core, conservative insofar as it works to affirm a structure, to authenticate social order, which it then intends to transmit to the future in the form of its inner Child. That Child remains the perpetual horizon of every acknowledged politics, the fantasmatic beneficiary of every political intervention. (2-3)

In his book, Edelman analyzes the various forms that reproductive futurism take in our culture, showing the pervasiveness of “for the children” arguments that attempt to reproduce a future of absolute sameness in which heterosexual reproduction and child-rearing is the only model of being. In a discussion of Benjamin and The Third Reich, Edelman claims that it “is not to say that the difference of those political programs makes no difference, but rather that both, as political programs, are programmed to reify difference and thus to secure, in the form of the future, the order of the same” (151). Reproductive futurism then becomes a rhetorical model for the future that continually reinscribes
present understandings of “normal” through the figure of the child. Edelman further suggests that the political project of queer subjects, who engage in non-reproductive sexuality, is to resist this model of the future and substitute a future without future, in which The Child is not a political dominant.

Edelman’s book reveals the widespread logical and rhetorical operations through which the future is reified and made to seem natural and inevitable. As we saw in Chapter 2, Nick Bostrom’s philosophical account of the origins of transhumanism attempts to foreclose the broader conversation around the future of humanity by inscribing a false origin story for the concept. Transhumanism, instead, must be understood as a broad site of conversation amongst various, competing futures and stands, as such, as the set of rhetorical modalities for imagining evolutionary futures for the human.

3.3 Toward Omega: Transhumanism At the End of Time

In Chapter 2, we saw how Nick Bostrom’s account managed to create an account of transhumanism drawing on an idea of a stable understanding of the human, rather than one focused on evolutionary overcoming of that category. Perhaps more egregious in Bostrom’s so-called “A History of Transhuman Thought,” is the following:

The singularity idea also comes in a somewhat different eschatological version, which traces its lineage to the writings of Pierre Teilhard de Chardin, a paleontologist and Jesuit theologian who saw an evolutionary telos in the development of an encompassing noosphere (a global consciousness) ... However, while these ideas might appeal to those who fancy a marriage between mysticism and science, they have not caught on either among transhumanists or the larger scientific community ... But the more general point that the transhumanist might make in this context is that we need to learn to think about “big-picture questions” without resorting to wishful thinking or mysticism. Big-picture questions, including ones about our place in the
world and the long-term fate of intelligent life are part of transhumanism; however, these questions should be addressed in a sober, disinterested way, using critical reason and our best available scientific evidence. One reason why such questions are of transhumanist interest is that their answers might affect what outcomes we should expect from our own technological development, and therefore—indirectly—what policies it makes sense for humanity to pursue. (Bostrom).

While it could be claimed that my previous arguments against Bostrom is a matter of opinion, I would like to state emphatically that the above statement is actually wrong. Bostrom’s account of the origins of transhumanism suggests that Bertrand Russell, J.S. Mill, J.B.S. Haldane, and J.D. Bernal all had more to do with the origins of transhumanism than Pierre Teilhard de Chardin, as the above casual dismissal is the only mention of him in Bostrom’s entire “history.” In fact, in Bostrom’s history, nanotechnology visionary Eric Dexter gets more mentions Teilhard.

Why does all of this matter?

Because Teilhard invented transhumanism. 

Despite the wishful thinking that leads Bostrom to dismiss Teilhard as mere “wishful thinking or mysticism,” Teilhard’s work in books like The Phenomenon of Man, The Future of Man, and The Hymn of the Universe stands as the foundational thought on the entire enterprise of evolutionary futurism. While Bostrom wishes that Teilhard did

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8See Eric Steinhart, “Teilhard de Chardin and Transhumanism” in Journal of Evolutionary Technology 20.1, 1-22 (http://jetpress.org/v20/steinhart.htm) for more information on the relationship between Teilhard and transhumanism. While Steinhart is clearly on the side of Teilhard, he still talks about contemporary transhumanism as if it were the only transhumanism. This is the most puzzling aspect of transhuman discourse. At some point in the past, there was a radical break between the more mystically inflected transhumanism under analysis in this project and the contemporary “rigorous” version. In the case of Teilhard, this may be due to the fact that the highly mythic and poetic text The Phenomenon of Man is often taken as a representative work. In that book Teilhard’s scientific basis for his thought is often drawn more from outmoded theories that make his work seem irrelevant to non-philosophically inclined transhuman thinkers such as Bostrom and Kurzweil. That said, I agree with Steinhart in suggesting that The Future of Man, a collection of essays published posthumously, is actually the better starting place. In many ways, in this work, Teilhard’s writing is less artful and more easily accessible. Additionally, as we shall see, he also reveals himself, in this work, to be astutely aware of scientific arguments about life that still hold sway in the present day.
not exist and partially manages to cobble together a “sober, disinterested” version of transhumanism that does not involve Teilhard’s attempt to weld together theology, philosophy, and science, the simple fact of the matter remains: Bostrom’s vocabulary is drawn from Teilhard. It was in a letter to Julian Huxley, from Teilhard, that the term transhumanism was first used to describe the evolutionary logic Huxley, Teilhard, and thinkers such as Vladimir Vernadsky and Edouard Le Roy were building from the work of Henri Bergson. While Bostrom is no doubt an intelligent individual, one has to question the wishful thinking that went into machining the global, grandiose discourse of transhumanism built by these men into the small-minded, logical operation of a few obscure British philosophers. Sadly for people like Bostrom, the history of transhumanism has to grapple with mysticism and it has to acknowledge Teilhard as its forefather, unless it wishes to continue to propagate lies.

In any case, a more in-depth exploration of Teilhard’s work can lead to much richer and more full understanding of the range and scope of transhuman thought. In this section, we shall see the ramifications for transhumanism to be gained from Teilhard’s understanding of life and his entire system of thought, as primarily presented in his most famous work, *The Phenomenon of Man*[^9].

Pierre Teilhard de Chardin was a Jesuit who lived from 1881 to 1955. During the course of his life, he accomplished significant work as both a paleontologist and a philosopher. His work developed from both an early association with Henri Bergson’s students while a researcher in Paris and from his work on the excavation of Peking Man during the 1920s. Throughout his life, he constantly ran into trouble with Catholic authorities over the content of his work, which as we shall see is both an intensifica-

[^9]: It should be pointed out, here, that the French title of this work was *Le Phénomène Humain*, which should be more accurately translated as *The Human Phenomenon*. This more accurate translation better captures the thrust of Teilhard’s argument, by capturing that the human race *is* a phenomenon, rather than the causer of phenomena.
tion of and a contradiction to many of the central tenets of Christian faith. While his work could be regarded as blasphemy, as Donna Haraway reminds us, blasphemy is often more faithful than “reverent worship and identification”: “blasphemy has always seemed to require taking things very seriously” (Haraway 149). As his early writings reveal, Teilhard’s Catholic faith and early mystical experiences shaped his later work on transhumanism.

If the creation of transhumanism was told as the origin story of a superhero society (The Transhuman League, perhaps), Pierre Teilhard de Chardin would bring the power of “The Cosmic Christ,” Edouard Le Roy would bring the power of “Creative Evolution,” and Vladimir Vernadsky would bring the power of the “Noösphere.” So while we are discussing Teilhard’s “invention” of transhumanism, it is important to remember that this discourse was created through the collaborative spirit of three brilliant friends in Post-WWI Paris. While we will talk more about Vernadsky and Le Roy’s contributions in a moment, analyzing Teilhard’s concept of The Cosmic Christ is a good place to start for understanding Teilhard’s project. As we will see in this discussion, Teilhard’s work, more than just “wishful thinking or mysticism” as Bostrom would have it, actually reflects a deep engagement with the scientific and philosophical trends of his era.

10 For more information on this fascinating origin story, see M. Bischof, “Vernadsky’s Noösphere and Slavophile Sobornost” in Biophotonics and Coherent Systems in Biology, ed. L. V. Belousov, V. L. Voeikov and V. S. Martynyuk. The ownership of the concept of noösphere is a complicated one. In a 1943 essay entitled, “The Biosphere and the Noösphere,” Vernadsky claimed that Edouard Le Roy, “in his lectures at the Collège de France in Paris, introduced in 1927 the concept of the noösphere as the stage through which the biosphere is now passing geologically. He emphasized that he arrived at such a notion in collaboration with his friend Teilhard de Chardin” (Vernadsky). However, Vaclav Smil points out that in “one of his French lectures in 1925,” Vernadsky identifies “humanity as a new geological, perhaps even cosmic, force resulting from human intelligence,” which suggests that Vernadsky was thinking along the lines of Le Roy’s lectures before they were given (Smil, The Earth’s Biosphere 13). In the end, it is fitting that the first formally theorized, scientific model of global, shared intelligence would be the result of a collaborative effort and that the concept could not be said to belong to any single thinker. The noösphere, after all, belongs to all of us.
The first of Teilhard’s written works that details a nascent theory of transhumanism is his composition of 1916, entitled *The Cosmic Life*, published in the collection *Writings in Time of War*, which he wrote while an ambulance driver on The Western Front in WWI. In this work, he lays out a more mystical version of his transhuman philosophy. Of primary interest, though, is his articulation of The Cosmic Christ. Detailing Teilhard’s relationship to Christianity is an often difficult task. In *The Phenomenon of Man*, for instance, Christianity is not widely discussed until the final chapters in which Teilhard’s ecstatic vision of evolution is suddenly coupled to a vision of Christ’s suffering. *The Cosmic Life*, however, suggests a way into an understanding of how Teilhard’s faith functions within the context of his transhumanism.

Based on the traumas of wartime service, Teilhard begins his book with a startling moment of Enlightenment he expressed. The first chapter of the work is entitled “Awakening to the Cosmos” and this is precisely what Teilhard claims to have done. His experience is a “fundamental vision ... of plurality and the multitude, the multitude that surrounds us and the multitude that constitutes us, that is in restless motion around us, and that shelters within us” (de Chardin, *Writings in Time of War* 18). Teilhard realizes that, despite empirical evidence to the contrary, the cosmos is actually composed of a universal matter and linked together in surprising ways. This vision of cosmic unity is consistent with the monist philosophy of D&G, as we saw above, but, more importantly, crops up so often in transhuman discourse, even today, that we must begin to think that this vision of Teilhard’s is in some way inseparable from transhumanism itself. Such an observation, then, refocuses the action of evolution from an increasingly complex human existence and towards a praxis of return: we are evolving ways of re-membering our cosmic being. We shall see in a moment how Teilhard is able to argue for this vision of evolutionary change.
In any case, Teilhard’s vision of the cosmos is, in *The Cosmic Life*, intimately connected to his Christianity. The unifying force of all being is this figure of The Cosmic Christ. In Teilhard’s vision,

Jesus Christ is united to all sanctified souls, and since the bonds that link souls to him in one single hallowed mass end in Him and meet in Him, and hold together by Him, it is He who reigns and He who lives; the whole body is His in its entirety. Souls, however, are not a group of isolated monads. As the ‘cosmic view’ specifically shows us, they make up one single whole with the universe, consolidated by life and matter. Christ, therefore, cannot confine his body to some periphery drawn within things; though he came primarily, and in fact exclusively, for souls, he could bring them together and give them life only by assuming and animating, with them, all the rest of the world; through is Incarnation he entered not only into mankind but also into the universe that bears mankind—and this he did, not simply in the capacity of an element associated with it, but with the dignity and function of directive principle, of centre upon which every form of love and every affinity converge ... Christ has a *cosmic Body* that extends throughout the whole universe (57-8).

For Teilhard, then, the figure of The Cosmic Christ is the unifying principle of the entire cosmos. In figuring the universe in this manner, Teilhard is able to accomplish a number of operations. The first, and most important, is that it allows him to claim that “by the incarnation, which redeemed man, the very Becoming of the Universe, too, has been transformed. Christ is the term of even the natural evolution of living beings; evolution is holy” (59). This claim is central to Teilhard’s entire project. In addition to the important work of inventing transhumanism, Teilhard’s larger project could be claimed to be an attempt to build a Catholicism for a world of quantum mechanics, uncertainty, thermodynamics, and Darwinian evolution.

This injection of evolution into Catholic theology was the primary cause of Teilhard’s problems with The Catholic Church during his life, but not in the ways in which

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11 It should be noted that *The Cosmic Life* was written before Teilhard took the vows of the Jesuits. In many ways, as the editor of *Writings in Time of War* claims, the work stands as Teilhard’s “intellectual testament” and an early account of his reasons for joining the Jesuits (*Writings in Time of War* 13).
we may think. While the relationship between Church and evolution has been complex and well-documented, Teilhard’s theory of evolution as a holy realization of the connections afforded by our unitary existence within the body of The Cosmic Christ is not the sole reason for the ban on his thought within the Church. More than just talking about Darwinian evolution, Teilhard’s realization of the holiness of evolution ultimately leads to the exclusion of the concept of God from his philosophy. One of the most striking aspects of reading *The Cosmic Life* for the first time is how often Teilhard, in this early work, uses the word “God” 26 times in a 63 page work. By comparison, the later *The Phenomenon of Man*, considered by many to be Teilhard’s ultimate statement, mentions God only 11 times in its 319 pages. This change in emphasis is the actual source of Teilhard’s problems with the Church.

As Allan Stoekl has pointed in a discussion of one of Teilhard’s predecessors, Giordano Bruno, the kind of God imagined by Teilhard is also the kind that “could not exist” (Stoekl 9). Stoekl explains Bruno’s understanding of God (which is intimately connected with Teilhard’s) with the following:

> For Pascal, God alone could act to reassure man and give him a place between the two extremes; without God there would be merely the “disproportion of man.” It seems, however, that by emphasizing God’s identity with the potential of infinity, with the infinite proliferation of matter in opposition to itself, Bruno has underlined that ver disproportion. Pascal’s reassuring God is at least a moral principle of human existence and proportion; Bruno’s God ... is ultimately the principle of natural, material multiplication (and subtraction). God is present in all matter, in every atom, but his presence is necessarily inseparable from the incessant transformations of those atoms, of that matter. (7)

In Stoekl’s account of Bruno’s thought, we see that a God that is in all matter (as in Teilhard’s understand of The Cosmic Christ) is also a God that is in some ways inseparable from that matter. As Stoekl shows, “this God could literally be said not to exist. He is incessantly prior to existence, since he precedes the very distinction between the
formed and the formless” (9). In similar fashion, God as Teilhard imagines him does not literally exist. Making matters even more complicated, Teilhard’s concept of The Omega Point will further complicate the existence of God in his work. Oddly, though, given the vanishing nature of God in his work, Teilhard’s concept of The Cosmic Christ never disappears from his work. In fact, in many ways, it always remains both the spiritual core and central axis of his entire project. Teilhard’s work, then, is controversial because he figures a scientific Christianity that does away with a transcendent God but retains the figure of the Body of Christ. This reorientation away from a more mystical, transcendent God and towards the figure of God as Human, suggests the important role humanism plays in transhuman thought. For Teilhard, the project of doing God’s work as a Christian and as scientist, in The Cosmic Life, is to work towards a further perfection of the unity between Man and Christ, a realization of the cosmic nature of existence (de Chardin, Writings in Time of War 34-5).

In Teilhard’s later writing, especially The Phenomenon of Man, God does exist but only in the future. This future God is referred to as Omega in his many, later writings. A good definition from Human Energy reads:

The noösphere in fact physically requires for its maintenance and functioning, the existence in the universe of a true pole of psychic convergence: a centre different from all the other centres which it ‘super-centres’ by assimilation: a personality distinct from all the personalities it perfects by uniting with them. The world would not function if there did not exist, somewhere ahead in time and space, ‘a cosmic point Omega’ of total synthesis. (Human Energy 145)

In order to fully understand this “cosmic point Omega,” a brief digression into Teilhard’s vision of evolution and human existence is necessary.

Partly following Vernadsky’s theory of the biosphere, Teilhard conceptualized evolution as being a two-fold process of increasing atomization of matter accompanied by
an increasing unification of energy (or consciousness). His account of evolution sees
the history of pre-living matter as an account of the emergence, from an undifferenti-
ated mass of matter, of increasingly complex non-living structures over time. From the
perspective of a purely materialistic science, though, such a model of creation will in-
evitably lead to Heat Death, the moment at which each particle of matter is equidistant
and there no longer remains any free energy for motion or life. As we have suggested
before, much of Teilhard’s thought is an attempt to make Christian theology compat-
ible with modern scientific discoveries. Heat Death, more so even than many of the
other concepts discovered by science is incompatible with a Christian model of the uni-
verse. For instance, in John 12:50, Jesus says “And I know that [God’s] commandment
is life everlasting: whatsoever I speak therefore, even as the Father said unto me, so I
speak.” In Teilhard’s universe, the finite nature of reality promised by thermodynamics
is at odds with God’s promise of eternal life. This, then, is why Teilhard argues that
an understanding of consciousness must be injected into the analysis of the evolution of
matter in scientific discourse.

As Teilhard suggests,

Being now called upon by biology to consider the effects of synthesis, it
is beginning to perceive that, parallel with the phenomenon of corpuscular
disintegration, the Universe historically displays a second process as gen-
eralized and fundamental as the first: I mean that of the gradual concen-
tration of its physicochemical elements in nuclei of increasing complexity,
each succeeding stage of material concentration and differentiation being
accompanied by a more advanced form of spontaneity and spiritual energy.
The outflowing flood of Entropy equalled and offset by the rising tide of a
Noögenesis! (The Future of Man 79)

12Teilhard’s account of evolution differs from Ouspensky’s, as seen in Chapter 2. For Teilhard, evolu-
tion is both the change of biological form and the advancement of consciousness. Of course, as we shall
see, these are the same thing.
Then there is a two-fold action to evolution in Teilhard’s understanding of the process. As matter becomes increasingly specialized, intelligence becomes increasingly concentrated. Teilhard’s view of evolutionary time, then, follows Vernadsky’s understanding: first evolution operated on the geosphere, creating mineral deposits that ultimately gave rise to bacteria, the first biological life; at this point, evolution shifted focus from the geosphere to the biosphere, focusing on the creation of ever sophisticated forms of life on Earth; with the creation of humans, consciousness reached a point sufficient enough to switch evolutionary focus from the biosphere to noösphere, a realm of pure thought. This is the process of noögenesis mentioned in the quote above. This process, as Teilhard understands it, eventually converges into The Omega Point, a first manifestation of life as pure thought-energy.

One concern that might arise from this account of biology, written after all by a Christian monk, would be the relationship between Teilhard’s thought and recent legal matters involving Intelligent Design. Intelligent Design is, as Judge John E. Jones III wrote in his decision in *Kitzmiller v Dover Area School District*, “a religious view, a mere re-labeling of creationism, and not a scientific theory” that attempts to argue for a model of Darwinian evolutionary theory in which “changes over time” are directed by God’s will towards some unknown ends. Teilhard’s vision of evolution could be said to fit into this model: life is “a rising rocket along time’s arrow” shooting towards a union with the Godhead at the Omega Point (The Phenomenon of Man 52). Rather than accuse Teilhard of a blind faith in ever rising progress (following Ouspensky’s critique of Darwin in Chapter 2) or suggest that his approach to evolutionary science is clouded in the same sort of anti-scientific thinking found in Intelligent Design, we will find that his approach is actually much more sophisticated.

As I have already suggested, Teilhard’s system increasingly does away with an understanding of a transcendent God. Instead, Teilhard increasingly comes to understand
that “orthogenesis is the dynamic and only complete form of heredity” (108). Orthogen-
esis is the term for the broad range of theses in evolutionary biology that view evolution proceeding through some sort of inner drive to perfection. For the most part, this con-
cept was abandoned around the beginning of the twentieth century, though it is widely used as a central justification of Intelligent Design dogma. Teilhard’s claims about it suggest, partly, why Bostrom is so quick to dismiss Teilhard’s thought: it does not fit in with modern understandings of genetics. As the Wikipedia entry on “Orthogenesis” suggests,

The orthogenesis hypothesis began to collapse when it became clear that it could not explain the patterns found by paleontologists in the fossil record, which was non-linear with many complications. The hypothesis was generally abandoned when no mechanism could be found that would account for the process, and the theory of evolution by natural selection became the prevailing theory of evolution. The modern evolutionary synthesis, in which the genetic mechanisms of evolution were discovered, refuted the hypothesis for good. As more was understood about these mechanisms it became obvious that there was no possible naturalistic way in which the newly discovered mechanism of heredity could be far-sighted or have a memory of past trends.

Of course, it is important to point out (without going into too much detail) that the claim of “no possible naturalistic way” for heredity to be explained is based purely on the very materialist understanding of evolution Teilhard is arguing against. To claim that Teilhard has a purely linear understanding of evolution because other people who believed in orthogenesis thought so is to not read him very carefully. For Teilhard, in fact, evolution is highly experimental and not at all linear, just as the fossil record indicates.

In Teilhard’s system, life advances via a mechanism he calls “groping.”

13Of course, this rhetorical move (of rejecting counterargument by claiming that interlocutors are asking the wrong questions) is commonly associated with “fringe” or “kook” discourse. That said, the truth of the matter is that science is not studying life from these perspectives (assuming it even could).
the specific and invincible weapon of all expanding multitudes. This groping strangely combines the blind fantasy of large numbers with the precise orientation of a specific target. It would be a mistake to see it as mere chance. Groping is directed chance. It means pervading everything so as to try everything, and trying everything so as to find everything. Surely in the last resort it is precisely to develop this procedure ... that nature has had recourse to profusion. (110)

Focusing on this concept of groping, as a metaphor for natural selection as directed chance, rather than mere chance, Teilhard is both able to align his system with Darwinian theory and make a break from the model of externally-driven evolution of Intelligent Design. For Teilhard, rather than a transcendent God’s desire, the drive to increasing complexity is an intrinsic property of the universe, in the same way as gravity. Complexity rises simply as a survival strategy. While Teilhard is fairly vague on this point, the creation of the noösphere and the emergence of the Omega Point is a means of escaping from Heat Death. This is not a model of life that travels a linear path to perfection, as many who believed in orthogenesis would have it, but an experimental model that happens to be “oriented” along an “axis” pointing towards Omega (142). This subtle distinction is but one reason why we should still pay attention to Teilhard, despite Bostrom’s characterization of him as a mystic hopelessly lost in a scientific world he does not understand. Teilhard is attempting to build up an understanding of life in the universe that remains true to his Christian faith while also adapting to changing scientific discoveries.

The Omega Point, then, stands in the future of all of this evolutionary groping, as the moment at which thought coheres into a single, highly personal, universal consciousness. In Teilhard’s system, this Omega Point manufactures God, rather than merges with him in an act of transcendence. This is the final meaning of what was said earlier about Teilhard removing God from his vision of the universe but retaining Cosmic Christ: the

14One wonders what the world would be like if all humans had this flexibility of conviction.
union of all our individual minds through the noösphere is actually the moment of God’s creation, at the end of time. For Teilhard, this process comes about through a convergence of the Universal and the Personal in what he refers to as the hyper-personal. To explain, part of Teilhard’s origin story for the noösphere contains the observation that, increasingly, media technology increase the scope of humanity’s awareness: “through the discovery yesterday of the railway, the motor car, and the aeroplane, the physical influence of each man, formerly restricted to a few miles, now extends to hundreds of leagues or more” (240). Moreover, Teilhard suggests that “not only through the constant increase in the number of its members, but also through the continual augmentation of their area of individual activity” humanity is constantly consciously aware of more and more aspects of the Universe (240).

Teilhard sees this as a direct result of the Ego, in contradistinction to many of his peers who saw a path to global unity in an anti-humanism derived from notions of Ego-death. Of course, as with many things in his ouevre, Teilhard’s conception of the Ego is rather singular. He lists the three characteristics of the Ego that help associate it with the All as “(i) of centering everything partially upon itself; (ii) of being able to centre itself upon itself constantly; and (iii) of being brought more by this very super-centration into association with all the other centres surrounding it” (259). Thus, he can suggest that, as a result of the extending of our awareness into a global context thanks to communication and transportation technologies, “are we not at every instant living the experience of a universe whose immensity, by the play of our senses and our reason, is gathered up more and more simply in each of us?” (259). The Omega Point is, then, the moment at the end of the Universe, at which matter and thought are universally distributed such that the entire Universe is composed solely of thought. At that moment, consciousness will have transcended the individuation of thought in which we currently find ourselves and the noösphere will have fully come into its own.
While Teilhard leaves the question of Omega Point rather vague, lacking a solid scientific framework with which to speculate on the Heat Death of the Universe, Frank J. Tipler’s book, *The Physics of Immortality*, provides more insight into the Omega Point and how it might actually be a concrete reality. To condense a rather complicated argument, essentially Tipler argues that a universal mind, composed of the coordinated thoughts of human life spread evenly across the universe using Van Neumann Machines\(^\text{15}\) at the moment of Heat Death, will be able to manipulate the shape of the collapsing universe:

If, however, the universe stays the same size in one direction while it contracts in the other two directions, radiation in the latter directions will become hotter than in the stationary direction. This means that the directions of contraction will be hot spots in the sky and the other direction will be a cold spot. This temperature difference in different directions will power life in the far future just as the hot spot in the sky called the Sun powers life on Earth today. (Tipler 64)

This moment in which the shape of the collapsing universe is massaged by our superhuman offspring is, in Tipler’s theory, what Teilhard envisioned when he spoke of the Omega Point. Tipler’s account, then, shows how the noösphere resolves the problem of Heat Death in a Christian universe that has been promised everlasting life.

Tipler’s book further suggests a remix of Teilhard’s original thought for an era dominated by the “brain = computer” metaphor we so exerting so much power in Kurzweil’s rhetoric. Part of Tipler’s mathematical proof of Omega Point and a future of everlasting life and universal intelligence is the assertion, similar to Kurzweil’s, that he regards “the human as nothing but a particular type of machine, the human brain as nothing but an information processing device, the human soul as nothing but a program being run on

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\(^{15}\) A kind of hybrid space ship / photocopier, that could be used to spread humanity throughout the universe by going to a new planet, terraforming that planet, creating humans, and then copying itself to move on and continue spreading our DNA.
a computer called the brain” (ix). Tipler goes on to suggest that such a reductionism is in fact a way of glorifying the human because “the very fact that humans are machines of a very special sort allows us to prove that we humans probably have free will” (ix). Where Teilhard provides a model of transhumanism driven by the language of Christian mysticism, Tipler’s project rewrites that religious vocabulary into a rigorous scientific discourse.

But does Teilhard need such a clean-up? Teilhard’s work is as much a work of philosophy as it is a work of science, and does he really need someone like Tipler to come along and “prove” him to be correct? Especially when that person is as inept a reader of philosophy as Tipler (the horrors he brings forth in his reading of Nietzsche in *The Physics of Immortality* are best left unobserved). Moreover, in this section on Teilhard and life at the End of Time, I would like to conclude by arguing that Teilhard’s metaphysics and, especially, the mystical language with which he builds his system is inherently necessary for the whole operation of life to work. As Jean François Lyotard’s essay on transhumanism, “Can Thought Go On Without a Body?,” shows, the manner in which thought functions as a transcendent and transhistorical force in Teilhard’s system can be most problematic.

Lyotard’s essay, a dialogue between “HE” and “SHE,” concerns “the sole serious question to face humanity today,” the fact that “while we talk, the sun is getting older. It will explode in 4.5 billion years ... Wars, conflicts, political tension, shifts in opinion, philosophical debates, even passions—everything’s dead already if this infinite reserve from which you now draw energy ... dies out with the sun” (Lyotard 8-9). HE, who makes these claims, is concerned about the point of doing philosophy at all in a world that will eventually just stop, someday. HE is concerned that the great questions of philosophy may, in fact, “stay unanswered right up to the end, flawlessly formulated, though now both grounds for raising such questions as well as the place to do this will
no longer exist” (8-9). More than that, HE continues, the vanishing of the human race, when the sun explodes (or in Teilhard’s case at Heat Death) will be a kind of death beyond even death itself: “with the disappearance of earth, thought will have stopped—leaving that disappearance absolutely unthought of. It’s the horizon itself that will be abolished” (9). HE contrasts Heat Death with a nuclear apocalypse drawn from the pages of “political science-fiction”: at least in a post-apocalyptic world, there are still humans to chronicle life itself, dehumanized as they may be (10). With Heat Death, and the End of Time, there will be no one on the other side of this event to mark it. Everything will just stop.

HE goes on to suggest that, in contrast to Heat Death,

human death is included in the life of human mind. Solar death implies an irreparably exclusive disjunction between death and thought: if there’s death, then there’s no thought. Negation without remainder. No self to make sense of it. Pure event. Disaster. All the events and disasters we’re familiar with and try to think of will end up as no more than pale simulacra. (11)

In many ways, HE suggests, the very term “death” is inadequate to describe what happens to thought at the End of Time. Following Tipler, HE sees a possible salvation in uploading, transposing human consciousness into a computer:

Now: the hardware will be consumed in the solar explosion taking philosophical thought with it (along with all other thought) as it goes up in flames.

So the problem of the technological sciences can be stated as: how to provide this software with a hardware that is independent of the conditions of life on earth.

That is: how to make thought without a body possible. (13)

As with Tipler and Kurzweil, and many other contemporary transhuman thinkers, HE argues that this mode of escape is possible thanks to the fact that humans have, all along been computers.

Here is HE’s explanation of his model of human as computer:
Any material system is technological if it filters information and makes inferences based on the regulating effect of behaviour, that is, if it intervenes on and impacts its environment so as to assure its perpetuation at least. A human being isn’t different in nature from an object of this type. Its equipment for absorbing data isn’t exceptional compared to other living things. What’s true is that this human being is omnivorous when dealing with information because it has a regulating system (codes and rules of processing) that’s more differentiated and a storage capacity for its memory that’s greater than those of other living things. Most of all: it’s equipped with a symbolic system that’s both arbitrary (in semantics and syntax), letting it be less dependent on an immediate environment, and also ‘recursive’ (Hofstadter), allowing it to take into account (above and beyond raw data) the way it has of processing such data. That is, itself. Hence, of processing as information its own rules in turn and of inferring other ways of processing information. (12)

Similarly to arguments made by Kurzweil and Tipler, but also Teilhard, HE articulates the human primarily in terms of mind and thought. The human is its capacity to gather information from its environment, process it, and develop new and more supple processing rules from these experiences. Moreover, HE suggests to SHE (who is presumably a philosopher, while HE is probably an engineer) that “your philosophy is possible only because the material ensemble called ‘man’ is endowed with very sophisticated software” (13). In this way, once again, we see claims made by technologists (or parodied by Lyotard, in this case) that human thought is a simple matter of a few codes, some rules, and an environment that can easily be simulated. Therefore, HE takes the titular question to mean “‘without a body’ in this exact sense: without the complex living terrestrial organism known as the human body. Not without hardware, obviously” (14).

Obviously.

As with both Tipler and Kurzweil, HE claims that “theoretically the solution is very simple: manufacture hardware capable of ‘nurturing’ software at least as complex (or replex) as the present-day human brain, but in non-terrestrial conditions” (14). The problem of Heat Death is so easy! With some clever modeling and some liberal application
of computer hardware, we can all live forever!

One wonders why the accurate parody of thinkers like Tipler and Kurzweil, by Lyotard, so easily pounces on this problem of making immortality seem easy. If it is so obvious to people like Lyotard, why is it not so obvious to the many transhuman disciples who patiently wait for their near-future evolution to immortal super-beings?

In any case, to return to the dialogue between HE and SHE, HE concludes his speech by suggesting that the problem with uploading to immortality is not inherent to thought or anything like that, it lies in the fact that AI researchers are look in the wrong place. HE claims that

our disappointment in these organs of ‘bodiless thought’ comes from the fact that they operate on binary logic, one imposed on us by Russell’s and Whitehead’s mathematical logic, Turing’s machine, McCulloch’s and Pitts’s neuronal model, the cybernetics of Wiener and von Neumann, Boolian algebra and Shannon’s information science.

But as [Hubert L.] Dreyfus argues, human thought doesn’t think in a binary mode ... It accepts imprecise, ambiguous data that don’t seem to be selected to preestablished codes or readability. (15)

The problem of AI and our ability to extend ourselves through it, in Lyotard’s parody of contemporary transhumanism, lies, simply, in the fact that the codes and algorithms of the human mind are actually analogic, not binary. This point, that the fundamental logic of the mind has been misinterpreted by the scientists trying to reverse engineer it, is how Lyotard has SHE open her defense of philosophy.

SHE’s argument opens by showing that the analogical mind “never satisfies the logical demand for complete description. In any serious discussion of analogy it’s this experience that is meant, this blur, this uncertainty, this faith in the inexhaustibility of the perceivable” (17). Writing functions like this, as well: “when it stops ... it’s only suspending its exploration for a moment (a moment that might last a lifetime) and that there remains, beyond the writing that has stopped, an infinity of words, phrases and
meanings in a latent state” (17). SHE goes on to claim that “real ‘analogy’ requires a thinking or representing machine to be in its data just as the eye is in the visual field or writing is in language. It isn’t enough for these machines to simulate the results of vision or of writing fairly well” (17). Only when in data will an upload or an AI ever be anything more than “a poor binarized ghost of what it was beforehand” (17). Thought, in SHE’s account, depends on a body in order to do this, “it’s a matter ... of ‘giving body’ to the artificial thought” (17).

In this moment, Lyotard focuses attention on a central problem in Kurzweil’s discourse: what if simulating results “fairly well” isn’t enough? One might think about this issue through a moment from TV’s Arrested Development. In the episode entitled “The Ocean Walker,” the show’s main character, Michael Bluth, has just learned that his fiancee, Rita, is mentally challenged. In talking to her about it and how long it took him to notice, Rita says to Michael: “Maybe you’re not smart either. I didn’t know until they told me” (Feig). Rita’s obliviousness to her own mental condition mirrors concerns about uploading: if mental perception is all we have, how would we know, post-Singularity, whether we were still capable of thought or not?

In fact, in a lot of ways, contemporary science fiction is mirroring these very anxieties. It could be argued that the amok or corrupt Singularity novel is replacing the robotic conspiracy story as the site through which we primarily work out our anxieties about technological change and our own species’s finitude. Partly beginning with William Gibson’s 1986 short story, “The Winter Market,” in which an artist and a dream editor discuss the inevitable call from another artist, Lise, who has recently had herself converted into a computer program; most of the story’s plot concerns the inevitable moment the editor, Casey, will have to confront this new “program that pretends to be

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16See Chapter 5 for more on this subgenre.
Lise to the extent that it believes it’s her” (Gibson, *Burning Chrome* 139). Continuing
from this story’s basic themes, we can find several recent examples of apocalyptic Sin-
gularities, such as *Ribofunk* by Paul Di Filippo, *Postsingular* by Rudy Rucker, *Long
Twentieth* by Joe Haldeman, *Accelerando* by Charles Stross, and *Glasshouse* also by
Stross. In these novels, the switch to a digital existence or the introduction of some kind
of life-extending technology is coded as a disaster. Both *Glasshouse* and *Long Twen-
tieth* use images drawn from WWII and the Cambodian Killing Fields to describe the
Singularity. These novels end in apocalypse or feature apocalyptic scenarios because,
in their quest to be transhuman, the humans of the novel did not get “fairly well” well
enough and their technology goes wrong somehow. In *Accelerando*, for instance, the
super-intelligent financial instruments that drive The Singularity end up devouring the
solar system (and most of the species), while the remainder of humanity lives on as
refugees on the cold edge of our solar system. In *Long Twentieth*, after a genocidal war
between immortal and mortal humans results in a mass death on Earth, an unforeseen
biological side effect of the immortality drug ends up wiping out all civilization, leaving
a few primitives as the only human survivors. In each of these books, the wisdom of
assuming easy solutions and quick-fixes to the “big-picture questions” Nick Bostrom
says transhumanism answers are put to the test.

In any case, to return to Lyotard, SHE suggests that the only way to continue thought
is by giving it a body. SHE eventually concedes that, despite the fact that this giving
body to artificial intelligence is “programming an experience that defies, if not program-
ming, than at least the programme,” “it’s up to you to give it a try. After all, the problem’s
an urgent one for you” (Lyotard 17-18). Having partly conceded this point, Lyotard next
has SHE raise a much more difficult issue: “thinking and suffering overlap” (18). This

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17 *Postsingular* by Rudy Rucker being the exception in which some kind of optimism can still be found at the end.
claim further complicates the arguments made by HE, in that it further connects thought to the body.

In a rather poetic passage, SHE claims that

> Words, phrases in the act of writing, the latent nuances and timbres at the horizon of a painting or a musical composition as it’s being created ... all lend themselves to us for the occasion and yet slip through our fingers. And even inscribed on a page or canvas, they “say” something other than what we “meant” because they’re older than the present intent, overloaded with possibilities of meaning—that is, connected with other words, phrases, shades of meaning, timbres. By means of which precisely they constitute a field, a “world,” the “brave” human world you were speaking about, but one that’s probably more like an opaqueness of very distant horizons that exist only so we’ll “brave” them. (18)

In building up an argument about suffering, that we will see in a moment, SHE is, here, making the case that to “be in its data,” thought is always going to be embedded in a field of language that exceeds our ability to master it. We only use language, as language places distant goals we strive for only if we dare. More even than an emphasis on the body over the mind, SHE is making an argument for the world and language as the key elements of thought, not the body or the mind of the thinker. In this way, the question of simulating the world as a series of inputs and models seems even more absurd than it did before:

> if you think you're describing thought when you describe a selecting and tabulating of data, you're silencing the truth. Because data aren’t given, but givable, and selection isn’t choice. Thinking, like writing or painting, is almost no more than letting a givable come toward you. (18)

SHE goes on to suggest that this process, of letting the givable flow toward you, is the “soliciting of emptiness” and that “this evacuation–very much the opposite of overweening, selective, identificatory activity–doesn’t take place without some suffering” (18). SHE is here claiming that the position articulated by HE once again fits into the
common transhuman assumption that thinking is somehow easy and that it in some way involves a smooth transit between outside (mind) and inside (world). Through SHE, Lyotard seems to suggest the impossibility of this position: thought, true creative thought, is anything but easy. In fact, SHE goes on to equate thought with a state of grace: “the body and the mind have to be free of burdens for grace to touch us. That doesn’t happen without suffering” (19).

SHE goes on to further attack the position of artificial intelligence, simulation, and uploading:

In what we call thinking the mind isn’t “directed” but suspended. You don’t give it rule. You teach it to receive. You don’t clear the ground to build unobstructed: you make a little clearing where the penumbra of an almost-given will be able to enter and modify its contour ... This kind of thinking has little to do with combining symbols in accordance with a set of rules. Even though the act of combining, as it seeks out and waits for its rules, can have quite a lot to do with thought. (19)

It may be helpful here to recall the difference between “thought” and “opinion” as formulated by Deleuze and Guattari in What Is Philosophy?. To them, mere opinion is the symbolic activity by which that which is already known is maintained. In contrast, “what would thinking be if it did not constantly confront chaos?” (Deleuze and Guattari, What Is Philosophy?, 208). For D&G, thought is an act of creation, the bringing of something new into being from the plane of chaos. SHE articulates a similar understanding of thought, in Lyotard’s essay: thought is opening up to chaos by the brain and returning with something new. This model of thinking has little to do with computer models or “a set of rules;” it is not simulatable, precisely because it is so hard. Also, more importantly, this model of thought is not easily abstracted from the chaotic flux of being in the world. This poses a problem for those who would wish to use simulation as a means of escaping from Heat Death. SHE asks: “will your thinking-, your representing-machines
suffer? What will be their future if they are just memories? You will tell me this scarcely matters if at least they can ‘achieve’ the paradoxical relationship to said ‘data,’ which are only quasi-givens, givables ... this is a hardly credible proposition” (Lyotard 19).

SHE continues:

the unthought hurts because we’re comfortable in what’s already thought. And thinking, which is accepting this discomfort, is also, to put it bluntly, an attempt to have done with it. That’s the hope sustaining all writing ... that at the end, things will be better. As there is no end, this hope is illusory. So: the unthought would have to make your machines uncomfortable, the uninscribed that remains to be inscribed would have to make their memory suffer ... Otherwise why would they ever start thinking? We need machines that suffer from the burden of their memory. (20)

This idea of suffering is an interesting concept to consider in the field of artificial intelligence. AI has done a reasonably good job at addressing some of the rules that underscore the mechanics of thinking, but no one seems to have articulated a good reason for explaining why we think[18]. One could think of this problem in terms of the society articulated in Charles Stross’s The Children of Saturn. This recent SF novel depicts a society in which humans, having perfected artificial intelligent slave robots, die out from a lack of things to do. The novel documents, then, the quest of these various robots to exist in a world in which they lack humans to give them orders and make their lives meaningful by giving them work. Ultimately, it is revealed that many people in their society are working to regrow humans from genetic material because they cannot think outside of us. Stross’s novel, rather tangentially, addresses the motivation to thought: outside of

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[18]I’m reminded of the time, in an introduction to artificial intelligence class, taught by Dr. Charles Isbell at Georgia Tech, that, in answer to Dr. Isbell’s question, “What makes AI so hard?,” I replied “Because we don’t know what thinking is.” To which Dr. Isbell responded by looking at me as though I had antlers growing out of my nose. This is one of the reasons why I write about artificial intelligence and philosophy, instead of work in a computer science research lab. Moreover, though, this story is intended to highlight the fact that very smart, very capable artificial intelligence researchers, of which Isbell is most certainly one, lack basic understanding of what thought is and why we do it. When AI is held up as a means of extending human life, as is the case in someone like Kurzweil, this is a huge problem.
a lack of a master, these robots he depicts do not suffer. As such, they are only fitfully capable of progressing as a society. The unthought does not cause these robots to suffer.

SHE, at this point, turns the focus of her speech to gender, in a rather problematic part of the essay. While the account of gender that Lyotard has SHE offer could be easily demolished by anyone with a basic understanding of queer theory, I think there is a kernel of an argument in this section that can better help explain the role of suffering in this portion of Lyotard’s essay. Nonetheless, SHE problematically proclaims that “sexual difference is a paradigm of an incompleteness of not just bodies, but minds too” (20). SHE goes on to suggest that thought, or at least the motivations of thought, is a result of the incompleteness brought about by sexual difference (I am motivated partly by the desire to fill the lack of the feminine created by my maleness, for instance). This is problematic, of course, because it gives thought a compulsory heterosexuality, by encoding as an origin of thought the lack created by sexual difference itself. This moment is puzzling in Lyotard’s essay given that so much of what he writes is very incisive and on point. Ray Brassier, in a reading of this essay, suggests that “Lyotard is implicitly pitting the in-human singularity of sexuation against the anti-human genericity of the technoscientific neuter” in this section of the essay (Brassier 425). Brassier sees problem with this, as well, but his analysis abandons this issue to focus on remapping the Freudian death-drive in terms of Heat Death.

What is interesting about Brassier’s article, for the present study, however is his turn to psychoanalysis. SHE’s account of bodies and thought seems to cry out, for some unknown reason, for a juxtaposition with psychoanalytic theory. As a way of recuperating Lyotard’s understand of gender differentiation as generative of philosophical thought, I would like to shift Lyotard’s focus on gender difference, with the problematic ties to compulsory heterosexuality, to a more general account of what I think Lyotard is talking about: namely desire as it functions in Jacques Lacan’s L Schema.

In Figure 3.1 we can see the diagram Lacan refers to as the L Schema. In Lacan’s account, from “On the Possible Treatment of Psychosis,” “this schema signifies that the condition of the subject S (neurosis or psychosis) is dependent on what is being unfolded in the Other” ([*Ecrits*] 193). The schema also depicts the imaginary relationship between the ego \( a \) and the other \( a' \), “its fellow being, in the form of the specular other” ([*The Seminars of Jacques Lacan. Book II: The Ego in Freud’s Theory and in the Technique of Psychoanalysis, 1954-1955*] 244). This imaginary relationship between \( a \) and \( a' \) maps desire in a much more sophisticated way. In Lacan, \( a \) represents the ego that is driven by a lack of fullness instantiated during the mirror stage, in which the child falls out of an experience of organic fullness and into the singular consciousness of language. \( a' \), then, is that aspect of myself that is lacking. In my relationships with the world, \( a \) finds \( a' \) reflected in the figure of the Other (represented by people or things). I then desire to reunite with this \( a' \). As the L Schema shows, the only way to gain access to \( A \), the Other, is through this relationship that is mediated through the imaginary. Rather than Lyotard’s reliance on the desire to restore the lack created by an incomplete heterosexual pair within the body as the cause for thought, Lacan’s understanding of desire presents
a much more free-floating relationship between desire and suffering.

Lyotard’s account of the original motivation for thought in the suffering of gender difference and the desire it engenders does have one feature that is more directly relevant and immediately apparent than Lacan’s understanding of desire as evidenced by the L Schema: Lyotard’s account focuses the lack that drives thought on the body, specifically. Having supplemented this account, though, with a Lacanian understanding of desire does not invalidate Lyotard’s argument about artificial intelligence, especially given the fact that Lyotard’s account of the suffering induced by gender difference hinges on “perceiving and conceiving as produced by an impossibility of unifying and completely determining the object seen,” which is a statement that fits with Lacan’s L Schema: we project our desire onto the Other as a means of relating to the always receding, unknowable object represented by the Other. In this explanation, then, Lyotard suggests that lack brings “a demand” to the “neutral experience of the space-time of perceptions and thoughts” that results without an understanding of lack and incompleteness (Lyotard 21-2).

This “force” of desire poses a difficult problem to proponents of artificial intelligence and uploading (22). As we have previously seen, Kurzweil’s interest in merging AI with humans and other radical life extension technologies is specifically a Utopian project to remove the suffering engendered by death and the unhappiness experienced through lack. While some could argue that Lyotard’s account of suffering and thought is another variation of the idea that, in some way, the experience of death and lack fundamentally defines us as human, it seems that this point, as raised by Lyotard, is hugely important. In The Matrix, for instance, Agent Smith explains to Neo:

Did you know that the first Matrix was designed to be a perfect human world, where none suffered, where everyone would be happy? It was a disaster. No one would accept the program, entire crops were lost. Some believed we lacked the programming language to describe your perfect world,
but I believe that, as a species, human beings define their reality through misery and suffering. The perfect world was a dream that your primitive cerebrum kept trying to wake up from. (Wachowski and Wachowski)

In this quote, Agent Smith treats the definition of reality through suffering as a human weakness (a function of “your primitive cerebrum”), but Lyotard’s discussion flips the script: our ability to define our reality through our suffering is seen as an advantage over the machines: without the discomfort of desire, why do anything? Suffering is a provocation to thought and thought is an endless quest to be done with the suffering of the body. This is what makes us human, not something to be overcome in a Utopian scheme to move thought beyond the body.

As an illustration of this relationship between body and suffering, we can return to William Gibson’s short story, “The Winter Market.” As I mentioned above, the story concerns an editor, Casey, struggling to relate to an artist who he helped make famous, Lise, who has converted herself into a computer program. Lise had, before her conversion

one of those diseases. Either one of the old ones they’ve never quite figured out or one of the new ones the all too obviously environmental kind that they’ve barely even named yet. She couldn’t move, not without that extra skeleton, and it was jacked straight into her brain, myoelectric interface. The fragile-looking polycarbon braces moved her arms and legs, but a more subtle system handled her thin hands, galvanic inlays. (Gibson, *Burning Chrome* 122)

Prior to her discovery as a major artistic talent in the medium of dream digitization, Lise is saved from certain death after the batteries on her suit fail, leaving her stranded in an alley amongst a pile of rubbish (127). In any case, we can argue that, thanks to her condition, Lise’s experience of thought is more defined by suffering than perhaps is normal.
In the story, as Casey attempts to come to terms with what has happened to Lise, he slowly reveals his insight into Lise’s relationship to her humanity. During a night wandering around downtown Vancouver, Casey happens to stumble upon Lise in a bar, on the night before she is to be converted. Reflecting on what he sees, he writes:

And I know something now. I know that if I hadn’t happened in there, hadn’t seen them, I’d have been able to accept all that came later. Might even have found a way to rejoice on her behalf, or found a way to trust in whatever it is that she’s since become, or had built in her image—a program that pretends to be Lise to the extent that it believes it’s her. I could have believed what Rubin believes, that she was so truly past it, our hi-tech Saint Joan burning for union with that hardwired godhead in Hollywood, that nothing mattered to her except the hour of her departure. That she threw away that poor sad body with a cry of release, free of the bonds of polycarbon and hated flesh. Well, maybe, after all, she did. Maybe it was that way. I’m sure that’s the way she expected it to be. (139)

The narrative one would expect to unfold about Lise is documented in this quote: we would expect someone who has suffered as much as Lise to welcome the release of cybernetic disembodiment. It is the transhuman story we expect. The release from the flesh is the release from death, disease, suffering, poverty, and all the other traumas associated with being human. What Casey goes on to describe, however, suggests that something much more complex is at work.

When Casey first meets Lise, she convinces him to take her home with him. Upon getting there, she aggressively asks if he would like to have sex with her. In attempt to hurt her, he asks “could you feel it if I did?” She responds: “No, but sometimes I like to watch” (122). Here, her statement is a deflection, a way of appearing or acting tough in the face of a world stacked against her. When Casey sees her again, before she becomes a computer program, though, this original scene is repeated:

But seeing her there, that drunken kid’s hand in hers, that hand she couldn’t even feel, I knew, once and for all, that no human motive is ever entirely
pure. Even Lise, with that corrosive, crazy drive to stardom and cybernetic immortality, had weaknesses. Was human in a way I hated myself for admitting.

She’d gone out that night, I knew, to kiss herself goodbye. To find someone drunk enough to do it for her. Because, I knew then, it was true: She did like to watch. (140)

In this repetition lies the entire story. The first time we encounter it, Lise claims that she “likes to watch” as a sarcastic commentary on her own condition. This fits in with our expected narrative of disability and transhumanism. What Casey realizes, though, in the second instance of the phrase is that Lise does like to watch, as in she enjoys her embodiment even as damaged as it is. This repetition suggests the relationship between suffering, desire, and the body that Lyotard proves so forcefully as implicit in defining us as humans. Lise may be viewed as a “hi-tech Saint Joan burning for union with that hardwired godhead in Hollywood,” but that does not change the fact that her relationship to her body is not something she is wholly willing to part with. Thought and the body are too tightly meshed.

Returning to Teilhard, from this discussion of Lyotard and the giving body to thought, we find that, even in Teilhard, Lise’s desire to watch is a part of Teilhard’s philosophy. For all of the his poetic waxing about love as a universal condition, Teilhard is not, after all, the idealist he is often made out to be. Teilhard, when he says things like, “it is not a tête-à-tête or a corps-à-corps that we need; it is a heart to heart ... if the synthesis of the Spirit is to be brought about in its entirety ... it can only ... be realized in a a universal, mutual love,” he does not mean it in the way his work is often discussed (de Chardin, The Future of Man 75). Given the preponderance of Teilhard quotes that appear in New Age life-couching manuals, with titles like Your Sacred Self: Making the Decision to Be Free and The Proof: A 40-Day Program for Embodying Oneness, one might be led to draw the conclusion that Teilhard’s idea that love constitutes a funda-
mental physical force like gravity, measuring the “affinity of being with being,” marks him as part of the stereotypical one-world, New Age, feel-good vibes often associated with the sort of self-help manuals that so often quote this portion of his work (The Phenomenon of Man 264).

This could not be further from the truth.

Teilhard, in Cosmic Life, lays out a theory of this model of love that could not be any further from the kind of good vibrations vision of cosmic love so often parodied in film and other media. For Teilhard, the kind of love of which he speaks is intimately connected to the personal suffering of thought, as the love which binds together the noösphere is the love of the earth. In explaining this, he writes:

One might at first be deceived by the mistaken views of pagan pantheism and believe that to adhere to the cosmic doctrine is simply to pass from a narrow and commonplace self-love to a wider and more subtle egotism—a neat way of encompassing more enjoyment with less risk ...

If he is to act in conformity with his new ideal, the man who has determined to admit love of the world and its cares into his interior life finds that he has to accept a supreme renunciation. He has sworn to seek for himself outside himself. He will now have to realize what this noble ambition will cost him. In the first place he must, in any case, work to drive things, and his own being, up the steep slope of liberation and purification, he must discipline or conquer the hostile forces of matter, of the forest and of the heart—he must bring about the victory of duty over attraction, of the spiritual over the senses, of good over evil ... The multitude of the dead cry out to him not to weaken, and from the depths of the future those who are waiting for their turn to be born stretch out their arms to him and beg him to build for them a loftier nest, warmer and brighter.

He may perhaps have to accept the role of the imperceptible atom which loyally, but without honour, carries out the obscure function for which it exists, to serve the well-being and balance of the Whole. He must agree to be, some day, the fragment of steel on the surface of the blade that flies off as soon as a blow is struck, the soldier in the first wave of the attack, the outer surface, made use of and sacrificed, of the cosmos in activity. (Writings in Time of War 66)
To love the world is to take the suffering of the world onto your shoulders. Teilhard continues by observing that “the truth of our position in this world is that in it we are on a Cross” (67). For Teilhard, then, the path of evolution, and those who choose to work to move the species along it, is filled with same sufferings that Christ endured. It is also interesting that this form of love that Teilhard is talking about is accompanied by a call to emptiness in the same way as was described by Lyotard. The “supreme renunciation” of those who “admit love the world and its cares into” their “interior life” suggests a similar model of thought as that found in Lyotard’s account of creation as being open to the givable. In any case, this model of love of the world is the very opposite, as Teilhard points out, from the self-love professed in the self-help manuals that so often quote from Teilhard. One wonders what a manual helping people become “the fragment of steel on the surface of the blade that flies off as soon as a blow is struck” might look like. Very differently, indeed.

While this example of what Teilhard means when he says love is drawn from his earliest published work, this sense of an association between a Christ-like love of the world and the image of Christ hung on a cross never really leaves Teilhard’s writing. This is evidenced by the enigmatic ending of The Phenomenon of Man, where Teilhard concludes by writing that “the human epic resembles nothing so much as a way of the Cross” (The Phenomenon of Man 313). For Teilhard, then, “the Cross is the symbol of the arduous labour of Evolution–rather than the symbol of expiation” (Writings in Time of War 71). For Teilhard, then, the Cross, as a symbol of the Cosmic Christ, reminds us not of the suffering in the past that washes away present sin so much as a potent symbol of the suffering to come, the suffering that we must bear along the path to Omega.

This account of love, then, must force a return to Tipler. For Tipler, his task as a scientist is to de-mystify Teilhard and explain how mathematics and contemporary physics solves Teilhard by realizing a path to the future out of the speculative and vague
discourse Teilhard provides. Moreover, Tipler’s easy solutions to these mystic problems hinge on the reduction of human thought to the operations of a computer, when Teilhard, as I hope to have shown, operates with a model of thought more in line with the embodied model suggested in Lyotard’s understanding of thought. In this way, Tipler attempts to render the transhuman future knowable in human terms. Part of Teilhard’s vaguer, though, lies in the fact that in his understanding, transhumanism is fundamentally unknowable. He can describe Omega as the fundamental flicker between the Universal and the Personal, but we cannot know exactly what that means. When Tipler overcodes this concept with an account of a vast virtual reality in which we will all be simulated by distant-future ultra-humans, he is missing the point.

As we have already discussed, the space of the future is, by definition, unknown. Therefore, any account of what the future will be about is not doing as much work for the development of transhumanism as it could be. What we see in Teilhard and Lyotard are accounts of the human and the world that raises issues that must be dealt with in the present and provide possible pathways to better futures. Tipler, meanwhile, has a clearly articulated theory of what the future will hold for humanity. He authors a theory that attempts to fix the problems of Teilhard by coupling Teilhard’s account of the universe to models from science. This process of fixing misses the fact that Teilhard is already complete, in that he provides a conceptual framework for emptying the ego and being open to all possible futures.

In Teilhard, the Omega Point functions as much as a beacon of hope, like Nietzsche’s concept of the Übermensch, as it does of a blue print for a specific model of the future. The noösphere is, for Teilhard, clearly the next major step in human evolution, but what this will actually entail is left open. It is the business of the future to determine these new relationships and new patterns of being. At best, Teilhard suggests through his account of love of the world, we can work in the present to actualize a future further along
the arrow toward Omega. To follow someone like Tipler or Kurzweil and believe in a model of the future, we would, metaphorically, put all our eggs in one basket. Given the unknowable space represented by the transhuman future, the best we can assume about the coming transhumanity is that it will be different and that we will need new tools to adapt. In the end, we can only ever experience the future through an openness toward the present.

It is with this idea of openness to the future with which I will conclude.

3.4 Conclusion: The Hybrid Networks of “The Future”

In this chapter, we have been exploring various contributions to transhumanism made in 20th century philosophy, especially with regards to questions concerning life. In analyzing Deleuze, Guattari, and Teilhard, we have hopefully gained more insight into the richness of transhuman thought during the 20th century. By way of conclusion, I wish to discuss, once again, some of the issues raised in Section 3.2, namely the ways of constructing and thinking about the future. In Section 3.2, I argued that the future must be first understood as being a rhetorical effect, rather than an historical one. In this conclusion, I suggest another framework for viewing the future, based on the discussion above.

In tracing a more mystical and contemplative model of transhumanism, I hope to have highlighted certain limitations within the scientific, rational discourse of contemporary transhumanism, a discourse that is often openly hostile to philosophical questions. As Nick Bostrom suggested, transhumanism should go about solving the problems of being alive and being human in “a sober, disinterested way, using critical reason and our best available scientific evidence” (Bostrom). This is an especially interesting statement coming from a philosopher. Bostrom’s accounts of transhuman philosophy often seem
to be interested in discarding whole centuries of metaphysical inquiries into the very issues that transhumanism proposes to address from the perspective of science. This disciplinary fight, first identified in C.P. Snow’s *The Two Cultures*, once again enacts the tired and old struggle of sciences versus humanities, but, I think, in transhumanism, the stakes are higher than when Snow identified them.

In Bruno Latour’s *We Have Never Been Modern*, we can find a better explanation for this problem than Snow’s two culture model. Following an account of a number of newspaper articles and how they reveal broad connections that defy the categorization inherent to disciplines, Latour writes:

Yet no one seems to find this troubling. Headings like Economy, Politics, Science, Books, Culture, Religion and Local Events remain in place as if there were nothing odd going on. The smallest AIDS virus takes you from sex to the unconscious, then to Africa, tissue cultures, DNA and San Francisco, but the analysts, thinkers, journalists and decision-makers will slice the delicate network traced by the virus for you into tidy compartments where you will find only science, only economy, only social phenomena, only local news, only sentiment, only sex. (Latour 2)

From this Latour argues that these network-based problems (issues and artifacts that cut across the nice and easy compartmentalization afforded by disciplinary thinking) do not respond to the critical methodologies of “science studies” due to the inability of criticism to absorb science, the social, and politics into a coherent and relevant argument. From these observations, Latour spins out into a general analysis of modernity itself. He claims that

the word ‘modern’ designates two sets of entirely different practices which must remain distinct if they are to remain effective, but have recently begun

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19 I want to suggest, here, that transhumanism can be thought of, in certain ways, as the best example of the growing convergence between metaphysics and science. This can also be seen in the increasingly philosophical nature of contemporary physics, for instance. It is my concern, however, that in a realization of the similarities of the problems, transhumanism is attempting to squeeze out its philosophical origins in order to appear as a legitimate science. Such a view represents a sad limitation of the discourse.
to be confused. The first set of practices, by ‘translation’ creates mixtures between entirely new types of beings, hybrids of nature and culture. The second, by ‘purification’, creates two entirely distinct ontological zones: that of human beings on the one hand; that of nonhumans on the other. (10-1)

You can see this understanding of modernity diagrammed in Figure 3.2. In any case, Latour identifies, further, that modernity breaks down into something else (whether postmodern or antimodern, Latour is not sure) when critics begin to pay attention to both actions of translation and purification together. In the face of many of the global crises such as AIDS and global warming that Latour identifies, it becomes increasingly necessarily for this breakdown to happen and something else to take its place. Latour spends the rest of *We Have Never Been Modern* arguing for and attempting to shape a new kind of critical mind: one that is capable of accounting for both humans and non-humans while also being able to take into account the increasing proliferation of disciplinary contexts.

Figure 3.2: Work of Purification and Work of Translation: Latour’s Diagram Of The Critical Crisis of Modernity

As we have seen in this chapter, transhuman thinkers such as Nick Bostrom and
Raymond Kurzweil are attempting to create a transhuman discipline using techniques of purification to remove philosophical questions of the nature of life and the condition of being human. I hope to have revealed in this chapter some of the reasons why such an approach to this issue is inadequate. Transhumanism, as a discourse seeking to actualize the future of the human race, must overcome a limited perspective, a “reality tunnel” as Robert Anton Wilson would say.

Moreover, this brief discussion of these hybrid networks and the problem of purification in transhuman thought should suggest that, beyond thinking of it as a rhetorical construction, the future here emerges as one of these hybrid networks. Partly this is a result of the increasing awareness of our own finitude as science advances. As we saw earlier in the chapter, Teilhard’s philosophy can be thought of as an attempt to coordinate God’s promise of life everlasting in a universe that will eventually experience Heat Death at the end of time. As Teilhard writes:

Today, by a development natural to itself, the [forward movement of thought] has come to look like a receding tide. For all his discoveries and inventions, twentieth century man is a sad creature. How shall we account for his present dejected state except basically by the fact that, following that exalted vision of species in growth, he is now confronted by an accumulation of scientific evidence pointing to the reverse—the species doomed to extinction? (de Chardin, *The Future of Man* 299)

As science acquires more knowledge of the universe and there is an increasing planetarization of consciousness, a negative aspect of this rise, as Teilhard suggests, is an increasing awareness of the possibility of the end of the species. As extinction becomes an increasingly distinct reality, the zone of the future becomes increasingly coded, culturally, as a problem that must be solved (rather than a Utopia created through limitless progress).

In many ways, this idea of future as problem is what Latour is actually discussing in *We Have Never Been Modern*. He claims that the background for his book is “the end
of limitless Nature” and the moment at which “nature, over which we were supposed to gain absolute mastery, dominates us in an equally global fashion, and threatens us all” (Latour 8-9). This occasion is only part of the problem, however. Imagining this end is to, fundamentally, imagine a future without humans (or, at least, a future without the modern notion of human with which we are familiar). Once we, as a species, cease to believe in the future solely as “a Golden Age, a period of euphoria and abundance,” we begin to see the future as a problem that must be solved in some manner. Latour’s account of the breakdown of modernity, then, is partly a breakdown in traditional models of Utopia.

As we saw in our discussion of Utopia in a post-Soviet era, Jameson argues that under the breakdown of Party politics, here coded as an actual crisis in futurity itself, Utopia must become a discussion “about the nature and desirability of Utopia as such” (Jameson, Archaeologies of the future 216). Where we saw that, earlier, this was an occasion for understanding the future as a rhetorical question, in the context of Latour’s account of modernity and the future as a hybrid network, we must now begin to understand that such a discussion of the future must include any possible allies, regardless of with which discipline they may contain allegiance.

While Nick Bostrom and Raymond Kurzweil might wish to disregard philosophical answers to some of the questions involved in thinking through evolutionary futurism, their position is a dangerous one. As Latour has outlined in We Have Never Been Modern, the problems that threaten our vision of ourselves in any kind of future cut across our ability to purify our disciplinary conversation. We cannot nor should not limit the tools we wish to bring to the conversation about the future.
4.1 From Superman to supermen

In chapter 2 we found P.D. Ouspensky exploring the subjective dimensions to the evolutionary expansion of human potential. Specifically, this discussion revolved around Friedrich Nietzsche’s concept of “Übermensch” (or “Superman”). As Ouspensky outlined, the path to transhumanism, as originally understood, lay not in augmenting the body (as was seen in the Chapter 3’s account of contemporary transhumanism discourse), but in expanding the mind. While Ouspensky’s involvement in the theosophy movement suggests one possible path toward evolution into the transhuman, his path was not the only available to evolution enthusiasts during the first half of the twentieth century. In this chapter, another of these paths will be explored, namely the various transhuman programs that coalesced around the pulp science fiction magazine, Astounding Science Fiction, during the period of the editorship of John W. Campbell (1937-1971).
John W. Campbell, as a writer but even more so as an editor, was a pivotal figure in the development of science fiction. While editing *Astounding*, he bought early stories from Isaac Asimov, Robert A. Heinlein, A.E. van Vogt, Lester del Ray, and Theodore Sturgeon. More importantly, he used his position as editor of *Astounding* to “raise the standard of thinking and writing in magazine SF.” Many of the plot devices, ideas, and familiar conventions of the genre today are the result of Campbell’s work. The early period of his editorship from the publication of the July 1939 issue of *Astounding* until around 1950 is generally referred to as science fiction’s “Golden Age,” when the campy futurism and superscience of the earlier pulp period gave way to the more philosophical and mature kind of tale that Asimov liked to refer to as “social science fiction,” which focused on the human experience of new technologies rather than the technology itself.

More importantly for the present study, though, is the fact that John W. Campbell’s editorship at *Astounding* also corresponded to two interesting events in the history of science fiction: the “supermen boom” of the 1940s and 1950s and the initial publication of information concerning Dianetics by L. Ron Hubbard in the May, 1950 issue of *Astounding*. In both of these two events, we find an interest in expanding the horizons of the human at the core of the Golden Age period. To explore further this interest, this chapter will focus primarily on two figures from the Golden Age “stable” of figures associated with *Astounding Science Fiction*, A.E. van Vogt and John W. Campbell. While an interest in scientific and cybernetic mind expansion spread across many writers during this period, these two figures (both in their work and their personal lives) indicate a specific affinity for transhuman thought.

From the publication of his first story, “Black Destroyer,” A.E. van Vogt revealed an interest in systematically thinking beyond the human. In addition to early work

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1 featuring the first stories by A.E. van Vogt and Isaac Asimov.
that reveals an interest in Alfred Korzybski’s non-Aristotelian General Semantics movement, van Vogt was, like Campbell, initially very involved in L. Ron Hubbard’s Dianetics movement (the group that eventually become the modern Church of Scientology). Therefore, in addition to reading both Campbell and van Vogt’s fiction, this chapter will look at both Dianetics and General Semantics as transhuman systems of thought.

In exploring the transhumanism of *Astounding Science Fiction*, we can see the ways in which the inner transhumanism of Ouspensky and the spiritual cybernetics of Teilhard begin to look more like modern transhumanism’s obsession with augmentation. In this chapter, though, we find that the transhumanism of Golden Age SF has, ultimately, more in common with these mystical models due to the intensities of spiritual practice.

### 4.2 Fans Are Slans: A.E. van Vogt & the Supermen Boom in Golden Age SF

Toward the end of 1939, *Astounding Science Fiction* began to serialize A.E. van Vogt’s first novel, *Slan*. The novel relates the early life of adolescent super-being Jommy Cross and his struggle to survive in a world dedicated to eradicating his species of evolved humans, called slans. The novel’s status as a sensation was only further enforced when it became one of the first SF novels to be published in hard back. For a number of years, *Slan* had the status as the science fiction novel to read if one wanted to be considered a serious SF fan.

As Kevin J. Anderson points out in the introduction to the most recent reprint of the novel:

“Fans are slans” was actually a slogan used by fledgling SF fandom in the 1940s, a group of whom founded their own cooperative housing development in Battle Creek, Michigan. They dyed streaks—surrogate tendrils—in
the hair at the back of the head and moved into an eight-room house that they called the “Slan Shack.” (van Vogt, Slan 7)

While the above selection does point to the nerdiness of early fandom, it also speaks to the ability of the novel’s themes to speak to a group of individuals who also felt persecuted for being different. In fact, the history of the Slan Shack and the subsequent attempts to create a Slan Center outside Los Angeles suggest some of the early evolutionary themes that operated in SF during the Golden Age. The history of First Fandom and specifically these utopian ideals suggest that “fans are slans” may have been taken quite literally. For instance, in Dal Coger’s account of The Slan Shack, he writes: “someone had almost immediately asked, ‘Do you suppose fans are Slans?’ (Meaning, were we a mutation from the mundane variety of humans? No one took the idea seriously, of course)” (Coger, “The Degler Legend” 53). In contrast, though, Harry Warner, Jr., in his column “All Our Yesterdays,” claims that the usage of “slan” was “half serious,” quoting fan Al Ashley as saying:

The average fan enjoys intellectual superiority over the average man. But that only means that as a select group we excel the human average. No effort would be needed to find other select groups which surpass the fen intellectually. (H. W. Jr.)

Here, Warner seems to suggest that some early fans, in the example of Al Ashley, felt that science fiction fandom may have actually represented a new evolutionary leap in humanity. In fact, Warner continues by suggesting that there may have been something to this observation:

[Jack] Speer, I might add, had written from his testing observations:

‘Practically all fans fell into the upper one-quarter of the population in intelligence, and the average is within the top ten percent.’ (H. W. Jr.)

2“fen” was an early plural of “fan” in the language of SF fandom.
Later in life, in an interview, Harry Winter also observed:

I think [Slan] may have inspired a lot of individuals at the time into thinking that maybe fans were a ‘chosen race’ because the Slans in the story were separate and different from the rest of humanity, and fans in those days did feel a sense of being ‘different’ somehow. (Phillips)

This view fans took, of a chosen race of human evolutionary elites, partly informs the creation of The Slan Shack (and subsequent other fan communes), but, also, fans were drawn to cohabitation due to a perceived outsider status. Harry Winter, discussing the Slan Shack phenomenon, also observed:

[Jack] Speer thinks that all fans are handicapped in some way or another but he has to stretch ‘handicapped’ to cover so many different circumstances that I don’t think his theory holds up. For instance, he thinks growing up in a small town is a handicap. (Phillips)

So in addition to being more intelligent, fans, like Jommy in Slan, felt persecuted and isolated due to their intellect. As Dal Coger observed, “we all seem, in retrospect, to have been a bunch of misfits looking for a niche in society” (Coger, “The Legendary Slan Shack”). Formations such as The Slan Shack in Battle Creek seem inevitable when placed in this light. In any case, The Slan Shack, as originally conceived, was an experiment that grew out of Al Ashley’s original idea of the Slan Center:

In 1943 appeared Slan Shack itself, which gave its name to the idea (previously called by the more formal name of science-fiction house). Here dwelt the Ashleys, Liebscher, and Weidenbeck, and later EE Evans; they moved en masse from the original Slan Shack in Battle Creek to another site on Bixel Street, Los Angeles, cheek by jowl with the [Los Angeles Science Fiction Society] clubroom. (It was the ground floor of a duplex next door. Its upper floor, “Slan Shack Annex”, was rented occasionally to struggling fen and pros.) The place didn’t break up till the building was torn down in March ’48 to make room for an office building

Ashley’s original idea had been a much broader, intentional community to be formed outside of Los Angeles composed of a number of houses and apartment towers to be structured around a shared printing facility (for the production of fanzines). As Harry Warner points out:

Fans can get along well with one another in such instances as Berkeley, and there is no intrinsic reason why fans should not make up the population of a city block, if they can run a household. Ashley suggested a location on the outskirts of a large city which would contain “a collection of adjacent individual dwellings sprinkled with a few apartment structures and with a large communal building.” Choice of the site would be made with an eye to the city’s current fan population, to permit some of the city’s current fan population, to permit some of the centre’s inhabitants to avoid a drastic break with familiar surroundings. And it should be understood that this proposal was taken very seriously by level-headed fans, at the time it was made. (H. W. Jr.)

The most interesting point to note about the above selection is Warner’s assertion that this proposal was taken seriously by “level-headed fans” of the era. This seriousness reveals the power of the superman narrative within early SF fandom. Warner also mentions this due to the fact that Slan Shack lost steam when it became associated with more eccentric models of utopian fan communities, specifically Claude Degler’s proposed rural retreat for SF fans. Claude Degler’s relationship to fandom and his own utopian scheme is an interesting counterpoint to the more rational fan utopia of the Slan Center. Degler was a colorful character who may or may not have spent time in a mental hopsital and who certainly had a more cosmic and visionary idea about the future Utopian potentials of SF fandom.

Degler, unlike most early fans who had more normal lives, was an itinerant fan who travelled to conventions by hitchhiking and whose “great dream was to unite all of fandom into a single organization which he had named ‘The Cosmic Circle’” (Coger, "The Degler Legend"). His aim in doing so was “promoting

4http://fancyclopedia.editme.com/CLAUDEDE
cosmic consciousness” (“The Degler Legend”). Degler’s utopian community was to be organized on specifically less conservative ends. As Harry Warner deadpanned, Degler wanted to create a “wilderness settlement in the Ozarks where fans would make love and rise above humanity” (H. W. Jr.). While fans were willing to take something called “The Slan Shack” seriously, Degler’s vision (which may have resonated more with the hippy movement 20 years later) proved too much. Additionally, it has been suggested in fan accounts of the period that Degler’s more radical vision doomed The Slan Center by association, as fandom was both working towards Utopian evolutionary potential and striving for some degree of mainstream acceptance. Claude Degler’s vision of cosmic consciousness may have been too much. In any case, neither the Ozarks settlement nor Slan Center ever amounted to much, but the implications of a utopian community of self-styled supermen is suggestive of the power of science fiction during the 1940s.

Indeed, these early utopian ambitions bespeak the evolutionary themes that permeated science fiction during this period. The world of Golden Age SF was one that saw unlimited technological expansion as the key to overcoming the limits of the human and opening up new frontiers of being. As an example of this general viewpoint, we can turn to the 1942 murder mystery, *Rocket to the Morgue* by Anthony Boucher⁵. In the course of the novel, which takes place against the backdrop of the pre-War Los Angeles SF community of which Boucher was an active member⁶ and Jack Parsons’s⁷ early ex-

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⁵This novel details a murder investigation set amongst the Golden Age SF writers community in early 1940s Los Angeles. Thinly fictionalized versions of Robert Heinlein, L. Ron Hubbard, and Henry Kuttner are all suspects and C.L. Moore, Edmund Hamilton, John W. Campbell, and Forest J Ackerman all make appearances.

⁶a longtime pulp writer, Boucher was the first to translate Borges into English as well as the founder of *The Magazine of Fantasy & Science Fiction*

⁷Jack Parsons, in addition to being one of the most important figures in the development of rocketry was also a member of Aleister Crowley’s Ordo Templi Orientis. His visions of the occult and the scientific did not, sadly, make it into this present study. For more information on this fascinating figure, see *Sex and Rockets* by Jack Carter and *Strange Angel: The Otherworldly Life of Rocket Scientist John Whiteside Parsons* by George Pendle.
periments in solid-fuel rockets at Cal Tech, Austin Carter (who is a thinly fictionalized Robert A. Heinlein) speaks about the possible future developing from experiments in rocketry:

There’s just one point about rockets I’d like to venture on my own before we start the demonstration. I don’t know if Hugo agrees with me on this; he probably hasn’t even bothered himself about it. But it’s this: That the rocket carries in its zooming path the hopes of all men of good will. By leaving the planet, man may become worthy of his dominion over it, and attain dominion over himself. The realization that there is something beyond this earth, if only a purely physical sense, may unite this earth, may change men form a horde of wretchedly warring clans to a noble union of mankind.

I may be deluded in my hopes. The discovery of new worlds may be as futile as the discovery of the New World. It may mean only further imperial wars of conquest, new chapters in the cruel exploitation of subject native races. But it may mean new unity, new vigor, new humanity, and the realization at last of all that is best in mankind. I hope so anyway. (Holmes 192).

Boucher shows that even this early in the development of modern science fiction, the connection between evolution, science fiction, and technological progress was very clear. While this observation could fit under the broad umbrella of utopia in SF as discussed by scholars such as Darko Suvin and Fredric Jameson[8], the vision that Boucher associates with Heinlein is more specifically about unlocking latent abilities in the human being through the broad application of new technologies to daily life. Instead of merely imagining new social formations, as is often suggested, the above quote suggests that science fiction is actually more concerned with advancing the potentials of humans themselves (sometimes through social formations, sometimes not, which suggests a broader range of goals than merely the Utopian). This specific obsession, with the untapped well of human potential, drives much of the philosophy underpinning the superman boom during the Golden Age of SF.

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[8]For more information on this topic, see *Archaeologies of the Future* by Jameson.
To return specifically to van Vogt, while it can be successfully argued that A.E. van Vogt was not the first SF writer to focus on evolutionary futures of the human\(^9\), the popularity of *Slan* helped shape the conversation around supermen and their presentation in SF, going forward. For instance, in Philip K. Dick’s *Exegesis*\(^{10}\), he writes:

> I am, ahem, like a Van Vogt character after all; like a Slan. (The next step up)
> God works through evolution, not to circumvent it.\(^{11}\)

While it is commonly known that A.E. van Vogt mentored Philip K. Dick when he was beginning his writing career, reading the above selection from his journal casts a specific light on his work. Of course, Dick handles these themes differently than van Vogt\(^{12}\), but this example from *Exegesis* shows that SF should, as a genre, be thought of as an explicit experiment in transhuman potential.

The question that must be answered, at this juncture, though, is why A.E. van Vogt and why supermen? Part of the answer can be found in his autobiography. Writing of his early life, van Vogt observed:

> [My father] said, years later, that he regarded himself as the archetypical transition person—from the farm to the city—and that it had not been easy. I don’t believe anyone could have sold him Brooklyn Bridge, but all his life, he had curious blind spots. His legal logic was often impeccable, and praised by judges, but he had his best success early in life. He never really recovered from the Great Depression, which came early in Canada (van Vogt, *Reflections of A. E. Van Vogt* 27).

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\(^9\)One would have to look to the works of Olaf Stapledon to see the origins of this trope.

\(^{10}\)An edition of which is forthcoming. This massive manuscript is Dick’s private journal that attempts to deal with the metaphysical experiences that inspired the novels *Valis* and *The Divine Invasion*.

\(^{11}\)Folder 5ba, p. 17

\(^{12}\)In works such as *A Scanner Darkly* and, especially, *The Three Stigmata of Palmer Eldritch*, Dick discusses the idea of supermen as being much more problematic than van Vogt’s treatment of the field. For more on how post-Golden Age SF handled presentations of superman, see below. For more information on this theme in Philip K. Dick, see Chapters 2 & 3, which both discuss *Eldritch*. 
This transition from the city to the country is integral to understanding van Vogt’s often dizzying fiction. Van Vogt saw, in his father, a person who had grown up in the country, moved to the city, done reasonably well for himself, but had not yet developed a thorough ability to operate in an urban environment (van Vogt describes how his family was constantly short on money due to his father’s interest in get-rich-quick schemes). Examining van Vogt’s fiction, we can see that van Vogt felt that his father’s naivety about the ways of modernity was the result of a specific mindset, a literal village mentality. More importantly, recall above the quotation that suggested that some fans, specifically Jack Speer, operated under the assumption that “growing up in a small town is a handicap” (Phillips).

For instance, in his novel *The Weapon Shops of Isher*, van Vogt begins the novel by describing the plight of Cayle Clark, a “callidetic giant”, who is manipulated by the libertarian Weapon Shops into a fight against the Empire of Isher on a far-future Earth. Clark leaves his home village to try his fate in the big city but is robbed on the plane by some card sharps. His Weapon Shop handler, in seeking assistance from the Weapon Shop’s Coordination Department has this conversation about Clark:

“Coordination department.”

“This is Lucy Rall, guardian of Imperial Potential Cayle Clark.” She went on to describe briefly what had happened to Cayle. “We measured him as a callidetic giant and are watching him in the hope that his rise will be so rapid that we can use him in our fight to prevent the empress from destroying the Weapon Shops with her new time weapon. This is in accord with the directive that no possibility be neglected provided there is someone available to do something about it. I think he should be given some money.”

“I see.” The virile face was thoughtful. “What is his village index?”

“Middling. He may have a hard time in the city for a while. But he’ll get over his small town attitudes quickly. The trouble he is involved in will toughen him. But he needs help” (van Vogt, *The Empire of Isher* emphasis added, 57).
In the above discussion of Cayle, the concept of the “village index” is important, as it relates to the previous quote from van Vogt’s autobiography. Moreover, by referring to the mindset programmed by life in a small town as an “index,” van Vogt implies some kind of statistical understanding of personality, the idea that a person could be composed of various factors that could be managed, like a computer program. Much of *The Weapon Shops of Isher* is taken up with Cayle’s deprogramming by the Weapon Shops. The mutability and reprogrammable nature of the human brain is one of the most common points in depictions of supermen of this era. This is different than previous discussions of the human as computer metaphor, in previous chapters, given that here, the question is not emulating the human computer on new hardware but reprogramming the software of the computer itself. In many ways, the shift from one operation to another may represent the birth of contemporary transhumanism. Below, we will see the origins of this model of a cybernetic mind in the work of Alfred Korzybski and L. Ron Hubbard. For the moment, it is enough to suggest that van Vogt deploys a homology between computers and humans in much of his fiction on supermen.

In *The Weapon Makers*, the supreme leader of Earth, Empress Inelda, is described in the following: “the abnormal sociotechnical pressures of the age have made her as restless and as adventure-minded as her nineteen billion subjects” (184). For van Vogt, the pressures of city life are irrevocably tied up with the “sociotechnical” advances to be found in the hypermodern urban landscapes of his fiction. It is interesting that he fictionalizes the transition that, as we saw above, he observed firsthand in the figure of his father by setting it in 48th century (as both of the Weapon Shop novels are). For all of the far-future wonders on display in van Vogt’s cities, the central tension for many of his characters is successfully navigating the evolutionary pressures placed on the human by the space of the city itself. In his autobiography, he writes specifically about these pressures and the processes necessary to overcome them:
The way I picture the world today, is that our reactions are not too far away from the Trans-Alpine Gauls who harassed Hannibal as he was crossing the Alps into Italy. They couldn’t understand that he wasn’t going to attack them. He just wanted to get across. They were a nuisance to him, but no communication was satisfactory to them.

I have a feeling that we’re living in a world where no communication is yet satisfactory to anybody, because we all suspect danger. What’s being said isn’t good enough. It’s an intermediate stage of history, and we’re playing around with powerful toys. Man has just grown like Topsy, and here and there we’ve educated certain abilities of his—just an ability here and an ability there, but he doesn’t even know what that ability is, really. (Reflections of A. E. Van Vogt 92)

Van Vogt’s view of the world is not unlike that of the Singularitarians discussed in Chapter 3: having seen his father’s move from the rural to the urban, from the pastoral to the modern, van Vogt understands modernity and the concomitant technological advances to be specifically connected to an evolutionary stage. The problem, then, for van Vogt and much of science fiction is how to make humanity come to terms with an evolutionary technology that has surpassed its abilities to cope, as we saw in Chapter 2 in the discussion of Leary’s circuit model of consciousness. This inability to function successfully within the urban confines of modernity is what van Vogt means by “intermediate stage of history”: we are, as a species, trapped between the village and the modern without having fully assimilated to our new potential. As we shall see, van Vogt sought solutions to this problem in the non-Aristotelian logic of General Semantics and the cybernetic psychology of Dianetics.

To make this point more explicit, we must look at Terry Bisson’s essay “The Singularity,” in which the SF author takes apart Kurzweil’s argument about The Singularity and its current vogue in SF. Bisson writes:

We will die, you and I, in the world we were born into; not so my mother, your grandmother, our great uncle Jim. They were born into a world lit by fire, pulled by horses, or steam at best, and they died in a world knit together
electronically, in which no two cities in the world are more than a long day’s journey apart. (Terry)

For him, The Singularity already happened, much like in van Vogt’s account of his father, with the move from the country to the city and the emergence of various global media (telephones, Internet, jet travel, etc.). For Bisson, the fact that, as a girl, his mother was lucky to get to the nearest city once a year (on an overnight boat ride) and that, by the end of her life, she could receive calls from her daughter in Thailand marks the twentieth century out as the true Singularity. He writes of his mother, slowly vanishing to Alzheimer’s Disease:

One night I took her for a drive on the bypass that now encircles her small town: Walmart, McDonald’s, 7-11, all ablaze with neon signs. The traffic flowed like a river of light, and Elvis was on the radio, twenty years after his death. The car phone rang; it was my wife, reminding me to pick up ice cream.

My mother sat up suddenly, looked around, delighted, and asked, “What happened here?”

What happened was the Singularity. It happened in an instant of historical time, and it created a world unrecognizable to the little girl who saw it begin. (Terry)

As Bisson and van Vogt document, The Singularity happened in the change from the village to the city. Bisson goes on to write: The Singularity “was and is truly wonderful, and it’s ours to finish, to refine, to enjoy, and hopefully to learn to control and use. Not ours to create, ours to inherit” (Terry). For Bisson, the accelerating returns of Kurzweil’s endlessly iterated logarithmic graph totems is nothing more than refinement: “Computers get smaller and faster and smarter but they are still just off-loads of ourselves, memory and math. They will never tell us anything that we haven’t told them to tell us” (Terry). We can verify Bisson’s claims by looking at historian of science Vaclav Smil, who claims that the 1880s was “the most innovative decade of human history” (Smil,
157

Transforming the twentieth century 131). Such a claim flies in the face of Kurzweil’s “law of accelerating returns.” The technological singularity already happened.

While I agree with Bisson that an account of modernity in the twentieth century looks a lot more like The Singularity than Kurzweil’s opaque account, what van Vogt and Bisson both see in the move from the village to the city is a technological singularity that has not, yet, been accompanied by an evolutionary singularity. The project of the human species, in the twenty-first century is, as Bisson writes, “to finish, to refine, to enjoy, and hopefully to learn to control and use.” Our technology has evolved, both writers suggest, now so must we.

For van Vogt, the evolutionary imperatives of modern technologies take a specifically linguistic and cognitive form:

You see, he doesn’t even know what [ability] is, because for example, if you say someone has the ability to learn the Morse Code, you’re saying it wrong. People could have learned the Morse Code in the sixteenth century, before they ever knew that there was such a thing.

Human beings have basic abilities. These have nothing to do with the Morse Code or learning how to wage a war or writing a book. He’s got something more basic than that, and we don’t even know what that is. We’re testing the wrong things. He has learning ability, and learning the Morse Code at such a speed merely proves that in this one area he has no barriers to using those basic abilities.

To describe human abilities, we use terms like creativity, intelligence, and so forth. These are not operational terms (van Vogt, Reflections of A. E. Van Vogt 92-3).

The supermen that populate van Vogt’s novels all reflect the outcome of the unlocking of innate abilities or the evolutionary creation of new basic abilities. Despite deploying the language of engineering (“operational terms”), van Vogt’s account of transhumanism in the above selection (and throughout much of his fictional work) actually falls closer to the ecstatic spiritualism of Ouspensky’s account of The Übermensch than it does to
the technopositivism of The Singularitarians. Despite that comparison, the stress placed on “operational terms” in the above quote is hugely important to understanding the framework in which van Vogt discusses supermen in his novels. An “operational term,” a concept drawn from technical writing, is a precisely defined, technical term that can be used to remove ambiguity from a discussion of a given topic. Given this definition, we can see what van Vogt is after in the above quote: to unlock human potential (and, by extension, convert ourselves into supermen), we, as a species, must begin to think about ourselves in terms that have precise definitions. In other words, to extrapolate on van Vogt’s remarks, we can suggest that a cognitive science / psychology that relies on fuzzy terms like creativity and intelligence is more a fuzzy impressionism of the human than an actual science. Van Vogt seems to be suggesting that for humans to evolve into their full potential, an engineering of the human mind is needed.

The contrast between poetics and engineering that has been unpacked above shows van Vogt making an interesting point about the rhetoric of science when it comes to the human. In van Vogt’s call for “operational terms” to “describe human abilities,” we can see that the problem with our understanding of human potential does not stem from a lack of data as such but from the lack of an accurate vocabulary to describe the basic abilities that humans do possess (below, we will see the source of this desire in van Vogt’s work).

An example of the form this approach takes can be seen in John W. Campbell’s editorial, “We ‘Must’ Study Psi.” While Campbell was a famously prickly and iconclastic person, “Psi” is one of his more controversial editorials. In addition to championing scientific endeavors that could be considered more mainstream, he was also a famous proponent of what would now be more accurately labelled “fringe science.” In this editorial, Campbell lays out the beliefs behind his interest in phenomenon such as psychic forces and mind control.
The editorial opens with Campbell claiming: “the essential concept of truth-seeking is that a truth must be accepted, whether it is favorable or unfavorable, desired or dreaded, whether it means riches and happiness or stark madness” (Campbell 217). Campbell is writing after having conducted his own studies of various psi-powered devices and reached the conclusion that their is a subjective force that can influence the objective universe in a profound way. He connects this force first to traditional beliefs in magic then to the concept of emotions. In both cases, Campbell suggests to his readers that, on these topics, “the very best advice Logicians, Philosophers, and Scientists have had has been … ‘There shouldn’t be any such thing! Suppress them! Deny them! Do away with them!’” (224). In each case, though, Campbell finds that civilizations that have attempted to do away with magic and emotion have not been successful in their endeavors.

He concludes from this that the universe can be divided into Subjective Reality and Objective Reality:

I suggest that Subjective Reality bears the same relationship to Object reality that field-forces do to matter. Field forces are not material; they obey wildly different laws–but they do obey laws.

I suggest that Subject Reality is a true, inherent level of reality in the Universe. It’s no more something exclusively generated by human minds than ‘organic’ chemical compounds were exclusively generated by living organisms (223).

Campbell suggests that psychic phenomenon are “the only objectively observable set of phenomena stemming from subjective forces” (224). In other words, Campbell wants to explore the subjective dimension of reality in order to better control these psychic forces, as Subjective Reality is potentially a new, untapped realm of human ability. The concept of “control” is important to Campbell’s vision of expanded human potential. In the following selection, note the repetition of the word:
You can’t control a phenomenon by denying its existence. You can’t control it by suppressing it either; suppression simply causes an energy-storage effect that leads to eventual explosive release. If there’s a river flowing through a valley where you want to build a city, it’s rather futile to simply build a dam to block the river; eventually the dam will be burst by the building pressure, and the city wiped out in the resultant flood.

A phenomenon can be controlled only by acknowledging it, studying it, understanding it, and directing it usefully. Properly handled, that river should be dammed, channeled through turbines, and made to supply the city with light and power. (224).

In addition to very potent imagery, the insistence on controlling psi, to dam the flow of energy to supply the world with “light and power” suggests a connection between Golden Age SF and cybernetics that is neither casual nor coincidence. As was mentioned earlier, in discussing A.E. van Vogt’s biography, a language of control and operational terms suggests that writers like van Vogt and Campbell were interested in applying cybernetic principles to untapped, newly discovered human potential thereby creating a kind of transhuman engineering. The focus on an applied science of human potential goes a long way towards explaining the interest many Golden Age SF writers, including van Vogt and Campbell, had in systems of human potential expansion, such as General Semantics and Dianetics.

4.3 General Semantics: Cybernetic System of Supermen

Perhaps the greatest of A.E. van Vogt’s supermen novels is The World of Ā, a dizzying ride through a future civilization built around the non-Aristotelian principles outlined in Count Alfred Korzybski’s philosophy of General Semantics. This system of human expansion was one of two that A.E. van Vogt expressed an interest in during his life;
the other was the more famous and controversial philosophy of Dianetics (which was the basis for the later Church of Scientology) outlined by the SF writer L. Ron Hubbard. Hubbard’s system, which was an intensification and refinement of Korzybski’s General Semantics, also explains the human mind in terms more familiar to the logic of engineering. In both cases, these systems sought to unlock new horizons of human becoming through a systematic approach to the mind. While often tangential to the fiction produced during SF’s Golden Age, evidence exists to suggest that many SF writers during this period were enthusiastic proponents of both General Semantics and Dianetics.

In van Vogt’s *The World of Å*, we can merely see a more explicit account of the influence of Korzybski\(^\text{14}\) on the development of SF and, specifically, the supermen boom.

The earlier of the two philosophies, General Semantics, was outlined by Alfred Korzybski, a Polish mathematician, in his 1933 work, *Science & Sanity: An Introduction to Non-Aristotelian Systems and General Semantics*. This work takes a starting point similar to A.E. van Vogt’s discussion of his own life and the transitional nature of modernity. Korzybski writes:

> One of the gravest difficulties facing the world today is the passing from one historical era to another. Such passings, as history shows, have always been painful, and pregnant with consequences (Korzybski xxxvi-xxxvii).

This is similar to the discussion, quoted above, about the transition from village to city and its impact on van Vogt’s science fiction. For Korzybski this transition is specifically problematized through language. The central concern in *Science and Sanity* is with the exposition of a Non-Aristotelian (or Å) system of language. While Aristotle does become something of a villain in the book, Korzybski points out in the introduction that:

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\(^{14}\)Sadly, van Vogt never got around to writing a planned novel using Dianetic principles nor the non-fiction account of his time in the early days of the Dianetics group, as discussed in his autobiography.
The system by which the white race lives, suffers, ‘prospers’, starves, and dies today is not in a strict sense an aristotelian system. Aristotle had far too much of the sense of actualities for that. It represents, however, a system formulated by those who, for nearly two thousand years since Aristotle, have controlled our knowledge and methods of orientations, and who, for purposes of their own, selected what today appears as the worst from Aristotle and the worst from Plato and, with their own additions, imposed this composite system upon us. In this they were greatly aided by the structure of language and psycho-logical habits, which from the primitive down to this very day have affected all of us consciously or unconsciously, and have introduced serious difficulties even in science and in mathematics (xxxvi-xxxvii).

Characteristics of the Aristotelian system includes mind-body duality, the identity between words and things, a belief in the ability of language to determine the world (motivated by an unconscious belief in the Platonic Forms), etc.. Korzybski claims, as in the selection above, that these mental habits are brought about by our language, through its usage of “is” to imply identity (Korzybski repeatedly reminds his readers that “the map is not the territory,” meaning that linguistic definitions are not the thing themselves but merely abstractions). Extending this idea further, Korzybski’s theory of language hinges on what he calls semantic responses (s.r.) . These s.r. are built up through processing our sensory experiences linguistically and determine our actions in response to given stimulus. Korzybski argues that if our language does not conform to reality (and Korzybski suggests that our current, Aristotelian language does not), our s.r. will be inadequate to deal with crisis situations.

Korzybski claims that this Aristotelian mindset is outmoded and no longer relevant to describe the world we live in, due to a number of discoveries (namely non-Euclidian geometry and General Relativity). A Š system is necessary, in 1933, because the Aristotelian system no longer resembles our understanding of the world: “any map or language, to be of maximum usefulness, should, in structure, be similar to the structure of the empirical world” (11). He writes that:
experience shows that the more technically developed a nation or race is, the more cruel, ruthless, predatory, and commercialized its systems tend to become. These tendencies, in turn, colour and vitiate international, national, capital-labour, and even family, relations.

Is, then, the application of science at fault? No, the real difficulty lies in the fact that different primitive, animalistic, un-revised doctrines and creeds with corresponding s.r have not advanced in an equal ratio with the technical achievements. When we analyse these creeds semantically, we find them to be based on structural assumptions which are false to facts, but which are strictly connected with the unrevised structure of the primitive language, all of which is the more dangerous because it works unconsciously.

Also:

The older an individual or a race grows, the more structural observations they gather, and the more they notice the structural dissimilarity of their forms of representation with the first order facts they encounter.

In essence, Korzybski claims in *Science and Sanity* that our technology has advanced beyond our ability to deal with it. This problem is the result of a language that is based on copying “animals in our nervous responses” and science that is several thousand years out of sync with a current understanding of reality. By switching to a Ā language, the human being can move from a state of “un-sanity” to one of “sanity” and the human race can move from “infantilism” to “adulthood,” having ceased to copy animals and embraced the full potential of the human mind.

What does it mean, though, “to copy animals” in one’s mental habits? Korzybski explained the difference through a diagram he called “The Structural Differential,” which can be seen in Figure 4.1. This diagram, a pictorial representation of an instructional aid sold by The General Semantics Foundation reveals the operations of the mind of a sane human being. In the worldview of General Semantics, reality is a constant,

\[15\] This point is important. Once again, we see Korzybski stressing the importance of grasping Ā concepts as actual, existing things and not merely representations.
universal flux (not unlike in Deleuze or Bergson) and within this flux there exist events (events can be things like people or other objects) that could be thought of as specific incidents within the larger flux of the world. In Figure 4.1, the broken parabola at the top (labelled “Event E”) represents one such event in the flux of reality. The parabola
is broken in The Structural Differential in order to remind the observer that any event is always infinite, continuing beyond the margins of any representation.

Below Event E in Figure 4.1, there are a series of circles labelled as $O_{h1}$, $O_{h2}$, $O_{h3}$, etc. These items (referred to as $O_{hn}$) represent objects. In General Semantics, an object is an abstraction from Event E. Objects are what we actually experience when we interact with the world. Following Korzybski’s continued insistence on not confusing representations for reality (“the map is not the territory”), it is important to understand that objects are not events. In fact, in Korzybski’s explanation of this process, it is important to understand that while objects may be experienced as individuals (like, say, thinking about a pencil as distinct from the table upon which it sits), the Event is often a continuum, as Korzybski continually stresses that things are never experienced in isolation from their environment (we can only understand a pencil because it is sitting on the table. In this way, our experience is a process of finding singularities within a continuous reality).

Returning to Figure 4.1 for Korzybski, the process of abstraction is the process of selecting specific characteristics of an Event to focus on. These characteristics are represented in Figure 4.1 by the circles that cover the various shapes in the diagram. Event E has more characteristics than $O_{hn}$, as one would expect (given that $O_{hn}$ are the result of abstractions from Event E). In Figure 4.1 you can see that some characteristics are connected by lines from Event E to the objects in $O_{hn}$. These are the characteristics of Event E that are contained within the various abstractions (also note that $O_{h1}$ and $O_{h2}$ abstract different characteristics from Event E). Also, note in Figure 4.1 that other characteristics of Event E have lines that do not connect to any objects. This is done to emphasize the point, to the viewer, that in abstraction, some characteristics are selected and others are not. As an example of how this process works, consider an apple. When eating an apple, I focus on the sweet taste and the crunch, but when buying an apple at
the store I focus on the red color and the smooth skin. The apple is an event and in each instance, I am abstracting different objects from the flux of that event.

The rectangles below $O_{hn}$ in Figure 4.1 represent further abstractions from the object. These are referred to as “labels” in Korzybski’s vocabulary and they represent a combination of linguistic and mental representations that label the experienced objects in some useful way. Note on the left of Figure 4.1 the section of the diagram labelled “Animal Object.” This portion of The Structural Differential represents the animal consciousness that Korzybski claims is copied in a mindset. In The Animal Object, there is no connection between $O_a$ and Event $E$. In animal consciousness, the abstraction is reality (without a consciousness of abstraction). Additionally, the animal consciousness is only capable of producing a single layer of labels, while the human can produce an infinite number of labels representing the process of thinking about thinking and thinking about language (note the “etc.” at the bottom of Figure 4.1). In General Semantics, the human consciousness that we have been exploring is labelled “sane” while animal consciousness, when copied in a human, is labelled as “unsane.”

It is interesting to note, above, that the main difference between human and animal consciousness is an issue of awareness. Human consciousness abstracts from the Event and does so through an awareness of this process. In human consciousness we are aware of the process by which we abstract from reality. This awareness is important in General Semantics because when we become aware of how the world works (a constant, continuous flux), we can structure our language and therefore our mind around abstracting from this flux. In The Animal Object in Figure 4.1 the abstraction is reality, moving a human using such a model further from the flux of reality.

But what is the relevance to all of this to transhumanism? As Korzybski writes, “the full acquisition of the new s.r requires special training; but, when acquired, it solves for a given individual, without any outside interference, all important human problems
I know of. It imparts to him some of the s.r of so-called ‘genius’, and thus enlarges his so-called ‘intelligence’” (30). For Korzybski, writing on the eve of World War II and watching the world descend into fascism, the proliferation of unsane semantic responses was stalling the development of humanity into its full potential:

Our rulers, who rule our symbols, and so rule a symbolic class of life, impose their own infantilism on our institutions, educational methods, and doctrines. This leads to nervous maladjustment of the incoming generations which, being born into, are forced to develop under the un-natural (for man) semantic conditions imposed on them. In turn, they produce leaders afflicted with the old animalistic limitations. The vicious circle is completed; it results in a general state of human un-sanity, reflected again in our institutions. And so it goes, on and on (41).

While not explicitly about evolution, there is a rather high dose of evolutionary logic at work in Ā. Korzybski viewed the human race as a species capable of so much more than the violence, ignorance, and fear that has marked so much of human history. His work made the claim that Ā was a means of unlocking the full potential of the human species. Moreover, Korzybski talks at length in Science & Sanity about the gradual changes that will take place within society once children are educated in Ā philosophy. Korzybski viewed General Semantics as the key to the next step in human evolution: out of the limited, Aristotelian worldview that, increasingly, produced conditions of unsanity in humans. By moving to a Ā perspective, many of the neuroses associated with modernity would vanish, as humanity from unsanity to sanity [16]

As we saw with John W. Campbell’s piece, “We ‘Must’ Study Psi,” Korzybski views his Ā as “better” because it embraces a newly discovered subjective reality. Following Heisenberg’s discovery in physics, Ā is sane because it embraces the presence of the observer in the construction

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[16] Korzybski’s differentiation between “insanity” and “unsanity” would prove interesting to scholars of disability studies, as Korzybski claims that many mental illnesses are, in fact, physical manifestations of improper semantic responses (he calls these “unsane”). In Science & Sanity, “insanity” is reserved for those illnesses that are a result of a biological malfunction in the brain. L. Ron Hubbard also makes much of this distinction in Dianetics.
of a mental view of reality (from $E$ to $O_{hn}$ in Figure 4.1). The repeated discovery of a subjective reality would now appear to be a key element in the transhuman philosophy regardless of origins.

More importantly, Korzybski was specifically influential on Golden Age SF. While we have already suggested A.E. van Vogt’s interest in the topic, a number of fan accounts mention that interest in General Semantics was common during the 1940s, and H.L. Drake has documented the rather large influence $\bar{A}$ had on the work of Robert A. Heinlein. In any case, the superman boom in SF during the 1930s and 40s was, in fact, at least partially influenced by Korzybski’s work. This is nowhere more apparent than in *The World of $\bar{A}$*, A.E. van Vogt’s 1948 novel.

The novel, amongst the first science fiction novels published in hardback, details the activities of Gilbert Gosseyn (pronounced “Go Sane,” a move that van Vogt insisted in interviews was purely coincidental) as he attempts to stop an alien invasion of Earth and Venus. Moreover, the novel’s plot takes place on Earth in 2560 when the teachings of Korzybski and his $\bar{A}$ philosophy have reshaped society. Interestingly, though, van Vogt’s novel does not document a complete transition: despite being run by $\bar{A}$ trained individuals, most of the population has not yet been enlightened. Instead, the planet Venus, which is being colonized, has been created along $\bar{A}$ lines:

> Everything is voluntary; every man lives to himself alone, and yet conjoins with others to see that the necessary work is done. But people can choose their own work. You might say, suppose everybody decided to enter the same profession. That doesn’t happen. The population is composed of responsible citizens who make a careful study of the entire work-to-be-done situation before they choose their jobs (van Vogt, *The World of Null-$\bar{A}$* 88-9).

While this may seem like idle utopian speculation, keep in mind that such a civiliza-

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17 For even more evidence of Heinlein’s interest in General Semantics, please see *The Number of the Beast*. This novel, written after H.L. Drake’s article on the subject, explicitly references Korzybski in the novel’s opening pages and has characters adopting the methods of General Semantics throughout the text.
tion is built around Korzybski’s program that allows for better adaptation and analysis free from the bad semantic responses of Aristotelian language. In fact, much of the book reads as a commercial for General Semantics, as Gilbert Gosseyn again and again escapes from situations thanks to his ability to adapt his semantic responses instantly to the present conditions. This is especially trying for Gosseyn given the fact that he spends the entirety of the novel with amnesia and, in fact, dies around half way through the book to reawaken on Venus with full memory of his death on Earth.

This death and rebirth is specifically interesting with regards to the question of General Semantics and transhumanism. The discussion surrounding Gosseyn and his role in the galactic events of the story takes on a specifically mythological / mystic cast in van Vogt’s writing, despite Korzybski’s stated interest to move beyond such topics through A philosophy:

> The semantic difficulties are serious, because the accepted two-valued structure of language and semantic habits reflect the primitive mythologies; so there is always the danger of drifting either into animalism, or into some other sort of equally primitive mysticism (Korzybski 336-7).

While the concept of “primitive” is increasingly loaded, it is clear from the above selection that Korzybski opposes “science” and “mysticism” in the split between A and E philosophies. His insistence throughout *Science & Sanity* is placed on the rational character of A and the rational character of science as a worldview. That said, van Vogt’s descriptions of Gosseyn in terms that mirror Buddhist thought highlights the compatibility between General Semantics and Buddhism: as we shall see, both beliefs stress the principal of non-identity of label and event.

When we first learn of the colonization of Venus, Gosseyn and Patricia Hardie, the president’s daughter and possible love interest[18] are discussing the process by which

[18] The novel never makes it entirely clear what Patricia’s role in the plot is. She kind of exists for a while and then vanishes from the novel as the rushed conclusion attempts to wrap things up.
hopeful Ā practitioners are assigned jobs on Earth, The Game:

These psychologists, such as the one you’re going to–is it true that they’re all people who have won the trip to Venus in the games, and have come back to Earth to practice their profession? And that actually no one else can go in for psychiatry and the related sciences? (van Vogt, *The World of Null-A* 39)

This quote may seem like a minor plot detail, but it is the beginning of a suggestion on van Vogt’s part that there is a spiritual quality to Gosseyn’s journey through the plot. Moreover, that spiritual journey has a specifically Buddhist cast. Patricia Hardie describes the psychologist, Dr. Kair, in the above section as having “won the trip to Venus” but having chosen to remain on Earth to help other humans through various forms of semantic blockages. In the Mahāyāna tradition of Buddhism, certain persons who have attained Nirvana (or enlightenment) but have not transcended their material existence are called “boddhisattvas.” These spiritual figures are important for their role in helping others along the path towards enlightenment. This suggestion of Dr. Kair as an enlightened being is not unique to this moment in the text. Later, after Gosseyn has activated his telepathic powers (more on that below), he finds that, while trapped in an enemy military base, he can distinguish Dr. Kair from the “warm fire along his nerves” that represent the men in the facility because of “‘friendliness’ that effused from the man” (247). The parallels between the novel’s description of Ā and Buddhist concepts of enlightenment only continues from this encounter with the boddhisattva / psychotherapist.

When Gosseyn dies while trying to escape from the presidential palace, he awakens, as if from a nap, on Venus which is described in the following selection:

Gosseyn drew a deep, slow, exhilarated breath. The air was still rain-fresh, and it braced him to acceptance of his danger. The very mildness of the day calmed his restless mind. He sighed and let the sweetness of the day tingle upon and through his body. It was impossible to tell what time of day
it was. The sun was not visible. The vast height of the sky was cut off by
clouds that were almost hidden in the haze of an atmosphere that was more
than a thousand miles thick. A hush lay over the day, a silence so intense
that it was startling—but not frightening. There was a grandeur here, a peace
unequalled by anything in his experience. He felt himself in a timeless world
(72-3).

Van Vogt’s word choice in the above section is most interesting: Gosseyn finds Venus to
be calming, silent, sweet, and, most importantly, timeless. As we saw in the discussion
of Dr. Kair above, Venus seems to have some association with Nirvana in van Vogt’s
analogy between Ā and Buddhism. In describing Venus as he does in this scene, van
Vogt specifically draws upon the language used to describe the final, transcendental
state of Nirvana as described in the Mahāparinirvāṇa Sūtra. Kosho Yamamoto, in his
commentary on the Sūtra, writes that according to the teaching of the text, in Nirvana:

if the non-eternal is made away with, what there remains must be the Eternal;
if there is no more any sorrow, what there remains must be Bliss; if there
is no more any non-Self, what exists there must be the Self; if there is no
longer anything that is impure, what there is must be the Pure (Yamamoto
107-8).

The Eternal, Bliss, Self, and Purity: these are the four characteristics of transcendental
Nirvana according to Mahāyāna Buddhism. What is interesting about the above quote
from The World of Ā is that, in describing Venus, van Vogt uses adjectives that conform
to the four characters of Nirvana: the world is “timeless,” Gosseyn finds “a peace un-
equalled,” and the air is intensely “silent” [19] and “fresh.” Van Vogt draws on imagery
associated with older, Enlightenment-focused theologies in order to rhetorically justify
and explicate Ā.

[19] In commentary on the text, and in the Sūtra itself, it is noted that Self, in the four characteristics of
Nirvana, is actually the collective Self of enlightenment and, as such, is more like non-Self. The Buddha
chose to call this enlightened Self such in order to be explicable to non-Buddhists.
In exploring the Buddhist implications of the above quote, the mention that the air is intensely “silent” is especially interesting within the Buddhist understanding of final Enlightenment. The process of non-Self given way to a universal Self, alluded to above, is a process of silencing the “I” or ego-entity that constitutes an individual’s perception of his own identity. This process of silencing an internal ego-identity is also important in the acquisition of new semantic responses in Korzybski. While not as explicit or radical as the Buddhist silence, Korzybski’s belief in the importance of understanding non-identity includes a special emphasis on erasing any distinction between “self” and “world,” as these are merely objects abstracted from the flux around us. While Korzybski probably does retain more of a sense of autonomous humans than found in Buddhist concepts of enlightenment, both systems stress the importance of recognizing “I” as a word, not a thing.

This convergence of science and spirit multiplies throughout the novel. After he has first died, we learn that Gosseyn is partly special (in a society in which Ā renders everyone more or less equal) due to his having an extra brain within his head. Dr. Kair explains:

The evidence shows, Gosseyn, that what you have resembles not so much a brain as the great control systems in the solar plexus and the spine. Only it is the most compact setup of controls that I have ever seen. The number of cells involved is equal to about a third of the total now in your brain. You’ve got enough control apparatus in your head to direct atomic and electronic operations in the microcosm, and there just aren’t enough objects in the macrocosm to ever engage the full potential control power of the automatic switches and relays now in your brain (van Vogt, *The World of Null-A* 142).

From examining the x-ray photos of Gosseyn’s mind that revealed the extra brain in the first place, Dr. Kair concludes that the new neural matter is not integrated into Gosseyn’s brain, nor will it ever be. As Gosseyn learns at the novel’s conclusion, the extra brain “exists in embryo in every normal human brain. But it can’t develop under the tensions
of conscious life.” Of course, Gosseyn overcomes this natural barrier, integrates the extra brain, and gains the ability to exploit what we now call quantum entanglement to teleport himself and other objects at will.

In essence, Gosseyn has a new brain that enables him to manipulate subatomic forces and radical expands the potential of the human body. This new brain that must be turned on is not unlike the concept of the “third eye” in Buddhism and Hinduism. In these belief systems (and others, like Theosophy and Mormonism that make use of this concept), the third eye supposedly sees the world differently and opens when the subject has attained enlightenment. In some versions of Buddhism, the third eye is itself a symbol of Nirvana. This eye is always depicted in the middle of the forehead on art illustrating enlightened figures, much like the extra brain revealed when Gosseyn’s cortex was photographed by the alien conspiracy in *The World of Š*.

Comparing Enlightenment in Buddhism to attaining Š consciousness in General Semantics is not a convenient plot device or a theme in this novel. Van Vogt’s usage of religious concepts serves to intensify Korzybski’s own message. Van Vogt’s novel highlights a crucial similarity between Š and Nirvana. In the *Diamond Sutra*, for instance, the following discussion between The Buddha and his disciple, Subhuti. It begins with The Buddha asking:

Subhuti, what do you think? Does a disciple who has entered the Stream of the Holy Life say within himself: I obtain the fruit of a Stream-entrant?

Subhuti said: No, World-honored One. Wherefore? Because “Stream-entrant” is merely a name. There is no stream-entering. The disciple who pays no regard to form, sound, odor, taste, touch, or any quality, is called a Stream-entrant.

In fact, using other discourses to explain Korzybski’s often cryptic utterances is not a unique feature of van Vogt’s novel. *Drive Yourself Sane* by Susan Presby Kodish and Bruce I. Kodish makes use of generic protocols of the self-help book to explain General Semantics. S.I. Hayakawa’s *Language In Thought and Action* weds General Semantics to the discourse of linguistics to better explain Korzybski’s thought. In both cases, it is interesting to note that some of Korzybski’s most prolific students adapt his work by producing abstractions from it.
Subhuti, what do you think? Does an adept who is subject to only one more rebirth say within himself: I obtain the fruit of a Once-to-be-reborn?

Subhuti said: No, World-honored One. Wherefore? Because “Once-to-be-reborn” is merely a name. There is no passing away nor coming into existence. [The adept who realizes] this is called “Once-to-be-reborn.”

Subhuti, what do you think? Does a venerable one who will never more be reborn as a mortal say within himself: I obtain the fruit of a Non-returner?

Subhuti said: No, World-honored One. Wherefore? Because “Non-returner” is merely a name. There is no non-returning; hence the designation “Non-returner.”

Subhuti, what do you think? Does a holy one say within himself: I have obtained Perfective Enlightenment?

Subhuti said: No, World-honored One. Wherefore? Because there is no such condition as that called “Perfective Enlightenment.” World-honored one, if a holy one of Perfective Enlightenment said to himself “such am I,” he would necessarily partake of the idea of an ego-entity, a personality, a being, or a separated individuality. World-honored One, when the Buddha declares that I excel amongst holy men in the Yoga of perfect quiescence, in dwelling in seclusion, and in freedom from passions, I do not say within myself: I am a holy one of Perfective Enlightenment, free from passions. World-honored One, if I said within myself: Such am I; you would not declare: Subhuti finds happiness abiding in peace, in seclusion in the midst of the forest. This is because Subhuti abides nowhere: therefore he is called, “Subhuti, Joyful-Abider-in-Peace, Dweller-in-Seclusion-in-the-Forest.” (Price et al. 26)

In the above selection, the point that is continually emphasized is, as in General Semantics, the non-identity between words and things. As Subhuti says, “‘Stream-entrant’ is merely a name.” The stops along the path to enlightenment are states of mind that, while having specific names, are not names themselves. The emphasis is on the state of mind that produces a set of effects that can be labelled with a given title like “Non-returner” or “Once-to-be-reborn.” Along the way, the important lesson to continue is, as above, “Subhuti abides nowhere”: emptiness is the path to enlightenment.

Å is similarly a practice of emptiness. In order to attain new semantic responses, one must first empty oneself of Aristotelian s.r. The pattern of Buddhist references in
van Vogt’s novel highlights the importance of emptiness as a practice within General Semantics. While such an idea can be found in *Science and Sanity*, van Vogt’s usage of Buddhist imagery and an inclusion of references specifically to emptiness and the non-identity principle highlights the role this concept plays in Ā.

While we began this section by discussing an opposition between science and spirit in The Golden Age, we find in the end that there is in actuality a serious concordance between the two practices. Both General Semantics and Buddhism stress the importance of non-identity and emptiness as part of the mental process towards enlightenment, despite using different vocabularies to discuss this issue. This stresses the importance of emptying out the concept of the human as key to the transhuman. This emptying out is in opposition to the logic of enhancement and we can now see why this is a problem for modern transhumanism. As specific example of emptiness and transhumanism, we can turn to *Experience and Philosophy* by Franklin Merrell-Wolff. He writes:

> When such an entity is focused within the human octave, it might be agreed to call him human, but something other than human when focused in other octaves. Logically, this is simply a matter of definition of terms, and I am more than willing to regard the human as merely a stage in consciousness, provided it is not asserted dogmatically that it is impossible for consciousness and self-identity to flow from stage to stage. On the basis of such a definition, this philosophy would not be a contribution to Humanism but to Transhumanism (Merrell-Wolff 317).

In Merrell-Wolff’s account, the human is merely a definition for a state of being (which should now be a recognizably Ā statement) that can be moved beyond by focusing consciousness on a different set of associations. In other words we can see that both Buddhism and General Semantics can be thought of as transhuman technologies through their ability to show that The Human is nothing more than a label for a state of mind. In A.E. van Vogt’s *The World of Ā*, we can see that this process of attaining emptiness is ultimately about recognizing this abstraction for what it is. This observation sug-
gests that A.E. van Vogt’s previous desire for better “operational terms” is a quest for grasping proper Å semantic terms on the path to emptying out The Human. Thus the interest in systems of supermen (such as General Semantics) during The Golden Age of SF is not so much about the creation of science of the subjective (as suggested by John Campbell’s article “We Must Study Psi”) as it is a concentrated focus on recognizing that “human” (just like “slan”) is, after all, just a word.

4.4 The Persistence of Supermen: Campbell’s Legacy and Transhumanism

One of the most difficult aspects of Golden Age science fiction is the continued presence of human beings. Quietly, but forcefully, this question of the future presence of so many 1950s-style humans drives the movement that displaced Golden Age SF as the future of the future: The New Wave. Without going too in-depth into the history, origins, and character of The New Wave, science fiction in the 1960s underwent a revolution in which writers such as J.G. Ballard, Harlan Ellison, Samuel Delany, and Thomas M. Disch changed the shape of science fiction by experimenting in writing styles and with content that was considered taboo under John W. Campbell’s influence. In stories such as “Terminal Beach” by Ballard and “Driftglass” by Samuel Delany, we see an emerging transhuman sensibility, as SF writers begin to question why depictions of the future must necessarily view humans as stable beings who will, in a thousand years, be more or less the same as we are now.

It may seem to be odd to have to point this out, now, as the transhuman perspective in science fiction has so greatly expanded, but when one reads works from the Golden Age, one finds the presence of humans, just like those depicted in films and television from the 1940s and 1950s. During John W. Campbell’s reign as the leading light of science
fiction, these human beings were seen as solutions to the problems poised by the future. In science fiction following The New Wave, SF authors began to see the concept of the human, as contemporaneously configured, as the problem itself. In James Gunn’s essay, “Towards a Definition of Science Fiction,” we can see some of how this distinction works (although Gunn uses his discussion of Golden Age vs. New Wave to denigrate The New Wave):

[in science fiction] some significant element of the situation is different from the world with which we are familiar, and the characters cannot respond to the situation in customary ways, that is without recognizing that a changed situation requires analysis and a different response. Or if the characters attempt to respond traditionally, without recognizing the need for a different response, they fail, or they fail for the rest of us, the human species.

It may be useful here to make a comparison with what was called “new wave” SF, which seemed like science fiction and was usually published in science-fiction magazines, but to many long-time science-fiction readers did not seem to have “the right stuff.” In the usual “new wave” story the situation was different, but the characters responded to the situation in the the traditional ways, or, if the new ways, in ways that were inappropriate or had no likelihood of coping with the situations. Thus, the characters in those stories usually failed to cope with their situations, but their failure was attributed to the catastrophic scope of their situations or its incomprehensibility or to universal defects in human nature, and not to individual lack of knowledge, wisdom, character, or effort (Candelaria and Gunn 7).

If we read the selection above against Gunn and from a transhuman perspective, we can see that Gunn falls on the side of human completeness. For Gunn, SF, as opposed to the troubling new wave story (“which seemed like science fiction”), is about placing humans in new and different situations, demanding that they use “analysis” to formulate a “different response,” echoing Korzybski’s interest in matching semantic responses to the current scientific understanding of the event. Gunn finds a comforting narrative of human perfection in the body of work he selects from science fiction to be representative of the genre: in SF, the human is able to escape from a new situation by using reason and
science to think his way out of a confusing, new problem. In The New Wave, though, future shock wins and humans perish because of the “incomprehensibility” of futurity itself, as though there were “universal defects in human nature” that prevent us from surviving the future. Despite Gunn’s own wariness of endorsing such a position, science fiction increasingly began to inhabit a position in which the human was seen as a limit to human potential, much in line with the transhuman perspective at large. Gunn does not take into account the fact that The New Wave may have, in fact, been critiquing the stability of the human itself. Part of the problem raised at the beginning of the chapter is that the same kind of human persists into the future. These same engineering-minded humans appear in a lot of New Wave stories and fail to adapt. In both cases, Gunn’s vision of SF and The New Wave, the need for human adaptation to novel situations is presented, but in The New Wave these adaptations are far more radical and involve giving up some of what is often accepted as “human.”

In this way, we can suggest that New Wave science fiction, with its attempt to rethink SF as a whole by rethinking the role the human plays in the stories being told, heralds a limit to the kind of superman model of transhumanism described in the works of Golden Age writers. In a very real sense, this is true, but, nonetheless, the theme of supermen survives the revolutions of The New Wave. In fact, the quest for supermen reaches a greater intensity in SF after The New Wave, as science fiction partly becomes a conversation of how to overcome the “incomprehensibility” of the future by evolving the human. In order to crystallize this process, I would like to briefly look at one instance of a post-New Wave superman story in order to see how the older mode of transhumanism continues to persist in more contemporary SF.

As the Encyclopedia of Science Fiction entry makes clear, John Varley views humanity stuck in an “evolutionary impasse . . . like a lungfish struggling to breathe on a Pacific beach” as we find ourselves “struggling for breath on the steel beach that is all
the home [humanity] has, after the final death of Nature” (Nicholls and Clute 1272). In his famous short story, “The Persistence of Vision,” the Golden Age protocols of the superman confront the evolutionary imperative seen to be facing humanity in post-New Wave SF.

The story concerns a man wandering in the Southwest deserts of New Mexico during an economic depression in the United States of the late 1990s (the story was written in 1978). He comes upon a commune, which he calls Keller, set up by a group of deaf-blind individuals who have crafted a system for living that meets the needs of their disability, rather than conforming to the needs of the hearing-sighted. As the story progresses, in classic SF fashion, we learn that, in fact, we are disabled and that the deaf-blind have a new, richer, post-human ontology.

Varley focuses much of the plot on the narrator’s attempts to learn the several languages “spoken” in the community: handspeak, bodytalk, and Touch. These languages are “spoken” by physical contact. In describing how Pink, the narrator’s tutor, experiences the language, Varley writes:

> Talk, to her, meant a complex interchange involving all parts of the body. She could read words or emotions in every twitch of my muscles, like a lie detector. Sound, to her, was only a minor part of communication. It was something she used to talk to outsiders. Pink talked with her whole being (Varley 285).

For Pink, and the other Kellerites, a fullness of language, outside of the aural, exists if the hearing could only pay attention. For Varley, this is important, because the ultimate lesson, if we can say that there is one in this story, is that the human is only one of many possible modalities of being possible within the human body. In this way, the people of Keller flicker between two different definitions of the word “communicate.” The OED lists two suggestive definitions for this concept, both of which are in play in Varley’s story. The more commonly used definition for the word reads:
**1a.** To impart (information, knowledge, or the like) (to a person; also formerly with); to impart the knowledge or idea of (something), to inform a person of; to convey, express; to give an impression of, put across.

Additionally, though, an older usage of the term, more associated with the Christian sacraments suggests something of the increased role of language in Keller:

**6b.** To have a common part or share; to partake, participate, share (with another person).

Despite the commonality these definitions have, there is an interesting tension between them. While they both imply sharing, the former definition sees this sharing as operating on a transmission model, in that information is communicated from me to you via the medium of language. The latter definition of “communicate”, however, implies a communal action, some experience that is shared. This form of communication is much more intimate, more in line with the sexualized language spoken in Keller. As Ludwig Wittgenstein has suggested, a new world follows from this new language:

Keller *was* an organism. It was a new way of relating and it seemed to work ... The cells of the organism cooperated beautifully. The organism was strong, flourishing, and possessed of all the attributes I’ve ever heard used in defining life except the ability to reproduce ... The strength of the organism was communication *(309).*

The community is quite literally alive in Keller. This new language of Touch blurs the lines between self and other, inside and outside, and reconfigures the individualist logic of humanism to a transhuman model of community in which the species (or at least the group) attains a kind of life on its own. Additionally, as Varley loosely suggests, this new model of community is predicated on the creation of a language that is not only new (as has been suggested) but actually breaks with the model of language posited by Ferdinand de Saussure:
[Touch] was a language of inventing languages. Everyone spoke their own dialect because everyone spoke with a different instrument: a different body and set of life experiences. It was modified by everything. *It would not stand still*.

To model language as an ongoing, ever-changing affair is to directly refute Saussurian linguistics. For Saussure, language is composed of signs whose mapping to the real world is entirely arbitrary. The sign, in Saussure’s understanding, consisted of a sound-image (called a signifier) that roughly corresponds to a written or spoken word and a concept (called a signified). By interlinking sound-images to concepts, communication could be facilitated. However, as these concepts and sound-images do not necessarily connect to the real world (as the concept of a tree, for instance, is distinct from a specific tree), the linguistic sign system is, as was mentioned, arbitrary. This arbitrariness causes the system of language to be both utterly meaningless and fully rigid, as the preferences of individual speakers do not matter as much as the stability of the whole system. In Keller, of course, Saussure’s model of language would not be able to gain a foothold: what use do the deaf-blind have for sound-images?

Varley shows, in the story, that the abilities to see and hear, in fact, lock us into a model of language driven by an abstraction from the world (much as Korzybski observed in *Science & Sanity*), rather than focus us on the concrete facts of existence. By removing the need for a language based on sound-images, Keller creates a language in which the individual is an active participant, sharing in the endless creation of communication itself. As the story continues, the coming together and reconfiguration of our understanding of organism that Varley describes in Keller continues to intensify until the narrator encounters the final level of Touch: **:

I found the adults, after a short search of the area, out in the north pasture. All the parents, none of the children. They were standing in a group with no apparent pattern. It wasn’t a circle, but it was almost round. If there was
any organization, it was in the fact that everybody was about the a same
distance from everybody else . . .

I started to go up to the people. I stopped when I became aware of the
concentration. They were touching, but their hands were not moving. The
silence of seeing all those permanently moving people standing that still
was deafening to me . . .

It gradually dawned on me that the group was moving. It was very slow,
just a step here and another there, over many minutes. It was expanding in
such a way that the distance between any of the individuals was the same.
Like the expending universe, where all galaxies move away from all others.
Their arms were-extended now; they were touching only with fingertips, in
a crystal lattice arrangement.

Finally they were not touching at all. I saw their fingers straining to cover
distances that were too far to bridge. And still they expanded equilaterally.
One of the shepherds began to whimper a little. I felt the hair on the back
of my neck stand up. Chilly out here, I thought (300-1).

In this description, the narrator encounters the founders of Keller, who unlike their chil-
dren are deaf and blind, engaged in a strange practice that is called in Touch “***”
(“three sharp slaps on the chest with the fingers spread”) (300). The narrator later learns
from Pink that *** is something she does not have access to when she attempts to ex-
plain the practice to him:

I had a little better definition now. Not one that I can easily translate into
English, and even that attempt will only convey my hazy concept of what it
was.

“It is the mode of touching without touching,” Pink said, her body going
like crazy in an attempt to reach me with her own imperfect concept of
what it was, handicapped by my illiteracy. Her body denied the truth of her
shorthand definition, and at the same time admitted to me that she did not
know what it wee herself.
“It is the gift whereby one can expand oneself from the eternal quiet and dark into something else.” And again her body denied it. She beat on the floor in exasperation.

“It is an attribute of being in the quiet and dark all the time, touching others. All I know for sure is that vision and hearing preclude it or obscure it. I can make it as quiet and dark as I possibly can and be aware of the edges of it, but the visual orientation of the mind persists. That door is closed to me, and to all the children.” (308).

While Varley never writes a clearer explanation of *** than that, we can surmise that it is a practice leading to some kind of becoming, a transformation beyond the human brought about by a removal of “the visual orientation of the mind.” This becoming takes the form of an almost telepathic communion that all of the sighted inhabitants of Keller, even the children born there, can never access. As Varley points out, this change is Utopian: “what they had going certainly came as near as anyone ever has in this imperfect world to a sane, rational way for people to exist without warfare and with a minimum of politics” (309). This Utopia, however, is predicated on the removal of the human. As the narrator points out, this system of communing removes “any dozen other ‘innate’ human defects” from the social life of Keller (310). Having solved the problem of warfare and overcome the pettiness of human life, the Kellerites discover *** and begin to evolve. Unlike the supermen of the Golden Age, though, this evolution is made possible by the loss of humanity rather than its increase.

In the end, the narrator flees Keller, because he realizes that with eyes and ears, “I would always be on the outside. I would be the blind and deaf one. I would be the freak” (312). Spending six years on the outside, on the eve of the new millennium, the narrator decides to return to Keller and, on arrival, finds that only the children remain in the village. By way of an explanation, he learns that the founders are gone. As Pink says, “I don’t know where. They’re happy. They ***ed. It was glorious. We could
only touch a part of it” (315). In this way, the community of Keller comes to resemble Claude Degler’s Utopian vision for fandom, specifically his “wilderness settlement in the Ozarks where fans would make love and rise above humanity” (H. W. Jr.). While not explicitly sexualized in the account of ***ing quoted above, communication does involve sexual contact in a number of moments in the story. So, in a sense, Keller is an account that fulfills Degler’s vision of a transhuman SF fandom, but, even then, the inhabitants of Keller look nothing like the Golden Age supermen we saw in van Vogt’s fiction.

To make this clear, Varley concludes the story with the narrator realizing that the children have all made themselves deaf and blind in order to follow their parents into the new world they have discovered and departed to (having thrown off the flesh entirely). In the end, the narrator joins them in “the lovely quiet and dark” (Varley 316). By ending the story this way, Varley shows the break from the Golden Age narrative of the superman. The human, with its persisting “visual orientation,” gets in the way of our evolution into something else, something new. By problematizing the human itself, the question of evolution can be taken up again in science fiction.

The legacy of The New Wave can be viewed this way as an intensification of the urge toward supermen in Golden Age SF, rather than an attempt to go in a different direction. What Varley’s story, especially, highlights is that some loss must be associated with the acquisition of new semantic responses, to return to Korzybski’s vocabulary. At the start of this section, we saw James Gunn claiming that New Wave SF depicts human beings who are unable to adapt to the future because of a failing of human nature. While this may be true, the radical evolution depicted in “The Persistence of Vision” suggests that adapting to new situations may involve the loss of a comfortable humanity. After all, the narrator flees Keller when he learns what he must give up to truly experience life in the community. While in The World of Ā, Gilbert Gosseyn becomes a Ā superman
by studying for his exams at home, Varley shows that the process of evolution is much more violent, messy, and dangerous than previously thought. In this way, we can see that this loss-based evolutionary gain that becomes *en vogue* in the 1960s is an attempt to rethink the work involved in walking the path towards supermen.

In this way, we see that John W. Campbell’s real legacy in science fiction is not, necessarily, the stylistic enhancements of the Golden Age, so much as the ongoing concern with evolutionary imperatives and their continual reshaping of the human condition. While Campbell may have been wrong to view the human as the solution of the problem of evolution, he raised the idea of human evolution as a central theme in SF, an idea that persists to this day. Additionally, by rigidly enforcing the character of that evolution for a time, he helped show that the human is only one possible approach to the ongoing need to rethink human being in the face of increasing evolutionary pressure.

### 4.5 Coda: The Automatic Writing of the Transhuman

Having seen the operation of scientific rationality and cybernetics in the birth of modern transhuman thought during the Golden Age of SF, we can see how the modern transhuman logic of enhancement came to dominate discussions surrounding contemporary transhumanism. Having said that, one of the aspects of A.E. van Vogt’s fiction (and that of many of his peers at *Astounding*) that has not been well captured by this chapter is the weirdness of his work. As a rule, van Vogt’s novels, during the final third of the text begin to explode with new ideas, new plot developments, new characters, and new gadgets. This acceleration is dizzying, to say the least. As an example, in *The Weapon Makers*, the majority of the novel is concerned with a character named Hedrock’s quest to maintain stability between the Weapon Shops and the Empire of Isher. In the novel’s final eighty pages, Hedrock discovers a working faster-than-light starship drive, warps
to the edge of the universe, encounters a species of telepathic spiders who put humanity on trial for their emotions (the space spiders are emotionless, you see), uses a parallel dimension to photocopy himself, gets married to the Empress, and produces an heir. This explosion of plot is fairly common in van Vogt’s novels: for instance, both The Voyage of the Space Beagle and The World of A conclude by introducing a heretofore unseen alien, galactic empire as the actual villains of the novel. Given that, in general, the first two thirds of any A.E. van Vogt novel consists of fairly measured prose and a careful attention to detail, these slap-dash, rushed blurbs of an ending mark his fiction as very weird. At the end of an A.E. van Vogt novel literally anything can happen (giant telepathic spiders! 5000 years of human history lost to nuclear war! etc.)

Why this weirdness? To read A.E. van Vogt’s descriptions of his writing, one would conclude that these endings are the product of a sloppy writer. Additionally, it would appear that this weirdness, the sheer illogic of these conclusions, would be an anathema to John W. Campbell’s insistence on reason, rationality, and logic in both the fiction that he edited and the science he called for. Despite this, though, A.E. van Vogt, who wrote such terminally weird fiction, was one of Campbell’s stars. In concluding this chapter on the origins of modern transhumanism, I want to return to the earlier, collective, spiritual, and, frankly, weirder versions of transhumanism discussed in the previous chapters by showing a connection between the weird transhumanism of the earlier writings with this more scientific approach to human evolution.

To begin to show that an inner or spiritual evolution lies at the core of van Vogt’s writing, the following, from van Vogt’s autobiography, should be most suggestive:

Other writers may be able to work on intuition, but I can’t. In other words, here I am living on two things. One is that there are methods for doing things and the other is that I dream my story ideas in my sleep.

I don’t say that I get all my ideas by dreaming, but it is how I get aspects of them. I’m writing a story, for example, and I suddenly realize that I don’t
know what comes next—you see, I have no endings for my stories when I start them . . . just a thought and something that excites me. I get some picture that is very interesting and I write it. But I don’t know where it’s going to go next.

So then I sleep on it, and keep waking up and thinking, ‘well, now, I need a lift here of some kind.’

Then, I fall asleep, you see, even as I put that thought into my mind. Then I wake up again and repeat that, just run through the thought. If I can’t do this, if I sleep all through the night, the next day I just wander around without ideas.

Generally, either in a dream or about ten o’clock the next morning—bang!—an idea comes and it will be something in a sense non-sequitur, yet a growth from the story. I’ve gotten my most original stories that way; these ideas made the story different every ten pages. In other words, I wouldn’t have been able to reason them out.

I have tried to plot stories consciously, from beginning to end, and I never sell them. I know better, now, than to attempt to write them that way.

Somehow or other, I by-pass my formidable thinking machine in my sleep. When I’m writing the idea, I don’t operate in that area at all. As soon as the thinking machine gets involved, my sentences get longer—I have to go back and feel my way through the material again, because I have so many bad habits in terms of thinking (van Vogt, Reflections of A. E. Van Vogt 72-3).

Besides van Vogt’s modesty, what jumps out most in this selection is the tension van Vogt finds between thought, intuition, and dream in his own writing methodology. For him, writing becomes an act of having to dream his way out of an impasse, literally.

The interesting thing to note in the above selection is how van Vogt’s agency in his own writing flickers. He says “I don’t know where it’s going to go next” and that “when I’m writing the idea, I don’t operate in [the thinking machine] area at all,” both of which seems to remove his “I” from his own writing, as though he senses that it is both A.E. van Vogt and the Logos writing his novels in concert. Van Vogt is still convinced in the above quote that, even if he doesn’t “know” where the ideas come from, they are his ideas none-the-less, suggesting a potentially messy relationship to the text he produces.
Despite the commitment to rational scientific exploration of the superman, as we saw in earlier sections, and despite van Vogt’s assertion of his own “formidable thinking machine,” there seems to be a lack of agency in how he describes his own writing. Later in the autobiography, he writes: “I don’t know where I got my impulse to write science fiction . . . I took a look at it, so to speak, and thought, ‘What am I doing here?’” (96–7). Throughout his autobiography, van Vogt is reiterating the fact that the act of writing SF is, for him, something unknowable and uncontrollable, at least by his conscious mind.

I find it interesting that van Vogt would use this language of unconscious processes to describe his own writing, as, at other points in the autobiography, he describes his writing as part of a scientific exploration of human potential. His description of muddling through the writing and relying on his unconscious (that seething pool of libidinous desire) would seem at odds with the ethos of the rational scientist projected by many golden age writers.

As a specific means of exploring this disjunction in van Vogt’s writing, notice how van Vogt describes his writing in the above selection: “when I’m writing the idea, I don’t operate in [the thinking machine] area at all.” He insists that thinking is not involved in his writing, it is an unconscious operation. For all of their interest in rational control, cybernetics, and level-headed experimentation with regards to human consciousness expansion, the concept of automatic writing, with much of the baggage attached to it by the Surrealists, is very much in operation within many of the texts being discussed in this chapter. Golden Age SF is weird because it is, in fact, surreal.

Automatic writing is “writing performed by a person without his conscious intention or awareness, often encouraged to make contact with the person’s unconscious,” as the editor’s glossary in *Dianetics: Evolution of a Science* defines it (Hubbard 138). The practice itself has a long and varied history both in the literary avant-garde and as a tool of psychological study. What is interesting about the practice is the insistence that
writing produced automatically, by the hand not the brain as it were, comes from an outside. What this outside is, exactly, remains to be seen.

One view of automatic writing centers the writing within the individual. Famously, in “Manifesto For Surrealism,” Andre Breton offered a definition of the movement that read: “SURREALISM, n. Psychic automatism in its pure state, by which one proposes to express – verbally, by means of the written word, or in any other manner – the actual functioning of thought. Dictated by the thought, in the absence of any control exercised by reason, exempt from any aesthetic or moral concern.” For Breton and the Surrealists, the act of automatic writing put the artist in touch with his unconscious, bypassing the rational, the aesthetic, and other processes that are seen in this theory of mind as getting in the way of childlike sense of open possibility and the free play of language and art. The pure unconscious appears, here, as the source of creativity and the “sentence unknown to our consciousness which is only crying out to be heard.” Breton goes on to describe the unconscious as a “murmur”: “put your trust in the inexhaustible nature of the murmur.” In the surrealist model of automatic writing, the unconscious is endlessly generative, but it is, in the end, a singular unconscious, wholly contained within the mind of the writer.

This view of automatic writing can be complicated further by the work Gertrude Stein did with Leon Solomons in the Harvard Psychology Lab while she was an undergraduate at Radford College. In their 1896 account of various experiments (that the two performed on one another) studying “normal motor automatism,” they find that the process of automatic writing is not, in fact, dictated by the unconscious, as “the subject was absolutely unable to recall a single word written, but nevertheless felt quite certain that he had been writing, and that he had been conscious of every word as he wrote it” (Solomons and Stein 501). In their experiments, the researchers made a planchette consisting of “a glass plate mounted on metal balls, with a metal arm holding a pencil.
The subject placed one hand firmly on this and then proceeded to get himself as deeply interested in a novel as possible” (494). While not exactly the one Stein and Solomons describe, a period planchette can be seen in Figure 4.2. As the subject read a novel, the experiment’s operator would slightly move the planchette “after which [the arm] will continue of itself if not deliberately checked by the will of the subject” (494). From this initial motion study, Solomons & Stein created a range of experiments with planchette and novel reading designed to study various aspects of normal motor automatism. Their conclusions suggest a different origin for these automatic motions than Breton finds in “Manifesto For Surrealism.”

Instead of originating in the unconscious, Solomons & Stein find automatic writing to be an “extra-personal” phenomenon: “Where he is conscious of the movements of
his arm, however, they appear to him to be *extra personal*. It is not he but his arm that moves” (494). Solomons & Stein conclude from their research that, while conscious, normal motor automatism, of which automatic writing is an example, displays a degree of independence from the rational, logical control of the higher brain. The most interesting statement, for the present study, to be found in their article, though, is: “the feeling that the writing is our writing seems to disappear with the motor impulse” (498). In their terminology, the “motor impulse” appears to be analogous to the subject’s “will,” the force of consciousness that controls and coordinates the movement of the body. Based on their self experimentation Solomons & Stein show that the concept of authorship flickers when conscious, rational attention is diverted, in these experiments by the act of reading an interesting novel.

While for the surrealists automatic writing is a way to get more in touch with core of pre-rational thought, the research of Leon Solomons and Gertrude Stein renders the association between text and author problematic. This problematization of ownership is common in discussions of automatic writing. In fact, there exists an entire occult tradition of automatic writing where the extra personal author of such texts is explicitly sought after. In spiritualism, the practice of automatic writing is used as a method to contact the dead and to encounter past lives. This is nowhere more famous than in the account of the pseudonymous French medium “Hélène Smith” (whose real name was Catherine-Elise Müller) that can be found in the 1901 book, *From India to the Planet Mars: A Study of Somnambulism with Glossolalia* by Théodore Flournoy.

According to Flourney’s account, Smith received her insights, which split between spoken messages from dead seance members’ relatives and detailed automatically written accounts of her own past lives, from “the mysterious presence of a ‘spirit’ answering to the name of Leopold, who assumed to be the guide and protector of the medium” (Flournoy, Cifali, and Shamdasani 4). Flourney goes on to describe Leopold’s role in
Smith’s practice:

To sum up: sometimes revealing himself by raps upon the table, the taps of a finger, or by automatic writing; sometimes incarnating himself completely and speaking by the mouth of Mlle. Smith while entranced—Leopold fulfills in these seances the multiple and varied functions of spirit-guide, giving good advice relative to the manner of acting towards the medium; of stage-manager hidden behind the scenes watching the performance and ready at any time to intervene; of benevolently disposed interpreter willing to furnish explanations of all that is obscure; of censor of morals sharply reprimanding the sitters when he deems it necessary; of sympathetic physician prompt at diagnosis and well versed in the pharmacopoeia, etc. He also appears under his own name of Cagliostro to the somnambulistic gaze of the resuscitated Marie Antoinette and answers her questions by means of auditive hallucinations. Nor is this all: to make our summary complete, it is necessary also to investigate the personal connection of Mlle. Smith with her invisible protector. She often invokes and questions Leopold at her own convenience, and while he remains sometimes for weeks without giving any sign of life, he at other times readily responds to her by means of voices or visions which surprise her while fully awake in the course of her daily duties, and in which he lavishes upon her in turn material or moral advice, useful information, or the encouragement and consolation of which she has need. (12-3)

Having said all of this, Flourney is also quick to point out to his readers that Smith’s various past life and Martian stories which come out in her automatic writing “undoubtedly has a common origin in Hélène’s subliminal consciousness.” The tension between believing and skepticism is quite palpable in Flourney’s account. Immediately after having assured his readers (and himself) of the mental origins of these stories, he states that “in practice, at least, and to all appearance, these imaginative constructions present a relative independence” (9). While Flourney “knows” that Smith’s automatic writing is not actually the account of her lived experience as “the favorite wife of a Hindoo prince named Sivrouka Nayaka” or as Marie Antoinette, he never appears fully convinced that Leopold is not, in fact, vehiculating an account of real events as they actually happened (10). Once again, we see the uncertain origins of texts produced through the process of automatic writing, though this time, the “extra personal” phenomena of this account of
spiritualist practice places the agency of authorship outside of the mind of the writer entirely . . . maybe.

As Flourney spends more time watching Smith perform seances and channeling Leopold, he becomes increasingly suspicious of her visions, especially the ones supposedly from Mars. Eventually, having translated the Martian texts, he notices the language’s “superficial originalities and fundamental resemblances to French: the frequent occurrence of i and e, its puerile construction, identical with French, even to the slipping in of a superfluous euphonic m between the words bérmier and hed in order to imitate the expression reviendra-t-il? its numerous caprices of phonetics and homonyms, evident reflexes of those to which we are accustomed, etc.” (264). Having pointed this out to Smith, Flourney notices that his criticisms “have nevertheless penetrated to the profound strata where the Martian visions are elaborated, and, acting there as a leaven, have been the source of new and unexpected developments,” as Smith begins to have visions of a new race of Martians, the ultra-Martians: a species far removed from the “Oriental” character of her previous accounts (266). Additionally, and more suggestively, the ultra-Martian language bears no resemblance to French, whatsoever. Flourney attributes this new development as “only a product of suggestion and autosuggestion” and yet cannot help but notice that these new developments are “where the most beautiful disorder is practically a work of art” (266)(272). While Smith’s visions are suspected by Flourney to be the product of her mind (and not supernatural manifestations), he cannot escape the fertility of her subliminal imagination. Moreover, we cannot, in reading this account, escape the fact that there is something still very weird at work in the practice of automatic writing.

The origins of language created via automatic writing become increasingly opaque
when exploring the work of one its foremost literary enthusiasts: W.B. Yeats.* As Susan Johnston Graf documents, Yeats, upon being initiated into the Inner Order of the Golden Dawn, chose as his motto the Latin phrase “*Demon est Deus Inversus.*” As Graf documents, this quote, more than suggesting an interest in devil worship, highlights Yeats’s own theories about artist production: “*Demon est Deus Inversus* labeled Yeats as one who recognized that a genius descends to its chosen human and invests him with power” (Graf 12). For Yeats, this genius took the form of a *daimon*, “a higher mentality that becomes the poet’s genius and enables him to create truly great art” (12). As Yeats would make clear in *Per Amica Silentia Lunae*, this daimon (he also spelled it “daemon”) was explicitly Other:

The books say that our happiness comes from the opposite of hate, but I am not certain, for we may love unhappily. And plainly, when I have closed a book too stirred to go on reading, and in those brief intense visions of sleep, I have something about me that, though it makes me love, is more like innocence. I am in the place where the Daimon is, but I do not think he is with me until I begin to make a new personality, selecting among those images, seeking always to satisfy a hunger grown out of conceit with daily diet; and yet as I write the words ‘I select,’ I am full of uncertainty, not knowing when I am the finger, when the clay (*Yeats, Per amica silentia luna* 93).

Additionally, Yeats describes the daimon:

the Daimon comes not as like to like but seeking its own opposite, for man and Daimon feed the hunger in one another’s hearts . . . I think it was Heraclitus who said: the Daimon is our destiny. When I think of life as a struggle with the Daimon who would ever set us to the hardest work among those not impossible, I understand why there is a deep enmity between a man and his destiny, and why a man loves nothing but his destiny (37-8).

The relationship to the daimon, and by extension poetic production, is mutualist: “man and Daimon feed the hunger in one another’s hearts.” Additionally, as Yeats makes

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21This discussion of Yeats is deeply indebted to the fantastic work on Yeats done by Susan Johnston Graf in her book *W.B. Yeats Twentieth Century Magus.*
explicit in the first section quoted above, the writing is never clearly a product of his
own being, as he cannot differentiate between the words written by the daimon and the
words written by his own hand. This daimon, for Yeats, is similar to the extra personal
text creator in Stein & Solomon’s work, as well as Leopold in Flourney’s account of
automatic writing. What changes, though, is that in the previous two encounters, the
act of creation is expelled from the conscious mind. As Stein & Solomon wrote, “the
subject was absolutely unable to recall a single word written, but nevertheless felt quite
certain that he had been writing” (Solomons and Stein 501). Similarly, in Flourney’s
account of Hélène Smith’s work as a medium, Leopold spoke through her and she was
not consciously aware of what he spoke. While Yeats would experiment with automatic
writing, using his wife to channel much of the text that became A Vision, this model
of creation is not driven by a trance state. Yeats’s account of his writing questions the
“I” that selects the words being composed on the page, rather than purely attributing his
creation to the daimon and its access to his unconscious, even if the visions that inspire
him to “the hardest work among those not impossible” are produced during sleep.

This model of automatic writing discussed by Yeats in Per Amica Silentia Lunae
is more similar to the form of extra personal textual creation we found in van Vogt’s
account of his dream-mediated SF writing than the trance states explored by Stein &
Solomon and Flourney. Having said that, though, Yeats and van Vogt both question
the origins of their text, and speak of authorship as a mutual process to be negotiated
between a daimon on the outside and the inside of the authorial mind. This model of
authorship suggests the transpersonal dimensions of much transhuman thought while
also falling into accord with the Ä philosophy of General Semantics. One of Korzyb-
ski’s key insights is to do away with the binary opposition of “self” and “other” within
Western thought. The concept of the daimon provides a convenient abstraction to think
through this process and come to terms with a less centered, Ä model of reality and tex-
tual production. This model of writing is not unique to A.E. van Vogt during the Golden Age. Looking at L. Ron Hubbard’s descriptions of writing and other accounts of his writing methodology, we see that the trance, the external muse, and automatic writing were never far from the minds of many of the SF writers interested in creating supermen during the Golden Age of SF.

L. Ron Hubbard’s theories of Dianetics posit the human mind as a complex cybernetic circuit that gets disrupted by computer virus-like circuits called engrams. In analyzing the early experiments that led to the codification of the science of Dianetics, Hubbard writes:

I rechecked the memory banks. How was I withdrawing data? I was using automatic writing for some, bypass circuit for others, direct regression and revivification on the old Hindu principle for others. I set about trying to classify what kind of data I was getting with each method of recall. All of a sudden the problem fell apart. By automatic writing, I was getting data not available to the analyzer. By bypass, I was getting data not available otherwise. By regression and revivification, material was being procured only a little better than could be recalled by the tranced subject. The data I could check was found to be invariably accurate by any of these methods (Hubbard 62).

Hubbard, here, lists automatic writing as one of the tools in the arsenal of an auditor. The fact that this technique should be included is both interesting and puzzling. While, on the one hand, as we have seen throughout the account of automatic writing above, the practice can be a powerful tool for accessing unconscious or extra personal elements of the human, but automatic writing is also tied up with certain irrational aspects of personality, the parts of the “I” that are not as easily quantifiable (As Yeats describes one of the doctrines of the esoteric tradition: “that the borders of our mind are ever shifting, and that many minds can flow into one another, as it were, and create or reveal a single mind, a single energy”) (Yeats, Yeats’s Poetry, Drama, and Prose 275). So while Dianetics is an attempt to build a rational, scientific, and cybernetic approach to
managing unconscious trauma, it uses a practice that is commonly found to destabilize the rational framework of the human and the mind itself. This tension is important in thinking about the transhuman implications of the Golden Age SF and the systems of supermen that underscored the fiction in that it places an element of the ineffable, of the unquantifiable in the heart of the rational, scientific practices of self that yield evolutionary progress.

In addition to the above mentioned interest in automatic writing in Dianetics, there are numerous accounts of Hubbard’s usage of the technique in his own writing career, which suggest an awareness of the tension identified above between rational and irrational thought in the understanding of mind in Hubbard’s work. In A.E. van Vogt’s autobiography, Hubbard’s fiction writing is described in the following fashion:

During his writing career, Hubbard used to be a 900,00-word-per-year man, at least so he told me. He’d write a short story or novelette in a single night, and never re-read it. His wife would gather the sheets and mail the manuscript in the morning. He would start about midnight and work until he finished. Meanwhile, his wife was not allowed in the room.

For example, as an ordinary evening progressed, Hubbard would begin to think of a plot for a story. If he were visiting somewhere, he would begin to throw these ideas to the people. ‘What do you think of that?’ he might ask. ‘What do you think of this?’ It sounded pretty awful to being with, but by midnight he’d have the story and he’d start to write (van Vogt, Reflections of A. E. Van Vogt 80-1).

This description is further intensified in an interview conducted with van Vogt by Russell Miller for his unauthorized biography of Hubbard, The Bare-faced Messiah:

I knew his work as a writer, of course, and enjoyed it. He wrote about a million words a year, straight on to the typewriter at incredible speed. My guess was that he typed at about seventy words a minute. It just poured out - I have seen typists working at that speed, but never a writer. I was in his apartment a couple of times when he said he had to finish a story and he would sit typing steadily for twenty minutes without a break and without looking up. That would have been totally impossible for me.
When he was out in the evenings, he would begin to think of a plot for a story and throw ideas around, asking people around the table what they thought of this or that. By the end of the evening he would have it worked out in his mind and when he got home he would spend the night writing, tearing the pages out of the typewriter and throwing them all over the floor. Sara told me it was her job when she got up in the morning to collect the pages and put them in order. He left a note to tell her where to send it and he never looked at it again (Miller 140-1).

Further evidence of Hubbard’s speedy writing can be found in his depiction, as D. Vance Wimpole, in Anthony Boucher’s *Rocket to the Morgue* where Austin Carter (Robert A. Heinlein) relates the following:

‘I know his brother-in-law, D. Vance Wimpole. There, sir, is one of the most damnedest and most fabulous figures in the whole pulp field, and he tackles most of it. Fair on science fiction and excellent on fantasy. But what I mean by fabulous: One night in New York Don Stuart and I were seeing him off to Chicago. He got talking and outlined a fantasy short ad lib from hook to tag. Don liked it, but said, “The trouble is, now you’ll never write it. You never do write what you’ve talked out first.” And vance said, “Oh, won’t I?”’

‘He left by train for Chicago around eight. The next morning the story was on Don’s desk, air-mail special delivery from Chi. I won’t say that it was a masterpiece, but it was publishable as it stood and it drew good fan mail.’ (Holmes 84).

Slightly after relating this story, Wimpole’s writing is described as taking place on “an especially geared electric typewriter because he composes faster than any ordinary machine can go” (85).

That A.E. van Vogt and Robert Heinlein, both, are in clear awe of Hubbard’s ability to compose text is fascinating especially when given that both authors themselves were shockingly prolific. Additionally, van Vogt’s depictions of Hubbard’s methodology from the Miller interview is especially interesting, given the subject matter at hand: according to van Vogt, Hubbard “would sit typing steadily for twenty minutes without a break and without looking up” and that the writing “just poured out.” While not exactly
like the depictions of automatic writing discussed above, the idea of text pouring out, uninterrupted from a writer is a powerful figure for automatic writing like those seen in the studies of Stein or Flourney. While these depictions of Hubbard’s trance-like writing apply to his fiction, there is also an apocryphal story on the Internet that suggests that the methodology of automatic writing may also have been used in composing *Dianetics: The Modern Science of Mental Health*.

In John Atack’s account of the early relationship between Dianetics and Aleister Crowley’s magick, the following story is presented:

In 1984, a former close colleague of Hubbard’s told me that thirty years before when asked how he had managed to write *Dianetics: The Modern Science of Mental Health* in just three weeks, Hubbard had replied that it had been automatic writing. He said that the book had been dictated by “the Empress”. (Atack)

While this story bears all the tropes of a fake (the “a friend told me” pattern being a classic trope of a lie), if true, it is interesting in that it suggests further that L. Ron Hubbard was interested in some of the more irrational, or at least non-scientific, aspects of automatic writing we saw in the discussion of automatic writing in Yeats’s work. As Atack goes on to discuss, The Empress is a figure from Aleister Crowley’s Thoth Tarot cards. Atack’s account of Hubbard’s early interest in the occult include a number of stories that suggest that The Empress for Hubbard was a muse, an extra personal genius along the lines of W.B. Yeats’s daimon, but also with elements of a guardian angel. Again, while these stories are difficult to verify, tied up as they are with the anti-Scientology community on the Internet, if we consider them as-if-true, Hubbard’s interest in automatic writing and his use of it throughout his career is even more suggestive of a knowledge of the entire, broad history we have been sketching above.

All of this information about the nature of automatic writing and its presence in the work of Hubbard and van Vogt (and possibly other Golden Age writers) suggests an
interesting conclusion for this chapter (and the narrative of transhumanism we have been building). While the superman boom in SF and the interest in Dianetics and General Semantics that intertwined with it suggest a rational exploration of human potential, that arguably birthed the modern transhumanism movement discussed in Chapters 2 & 3, the reliance on the scientifically questionable, if not wholly anti-rational, practice of automatic writing at the core of this group of writers discussed makes the account of the rationalization of transhumanism that we have been building highly problematic.

Even as the process of transhuman evolution is subjugated to the instrumental rationality of science, we can still see an interest in the spirit, in the unconscious, in the extra personal dimension of creativity that defies rational, scientific models of the human. If, as was mentioned in the introduction, one of the two poles towards which transhumanism is drawn is a fetishism of the concept of the human, we can see how, through this interest in automatic writing, the authors of SF’s Golden Age do not entirely conform to the enhancement obsessed logics of contemporary transhumanism. While we can accuse both groups of fetishizing the human, of wanting to extend the human into the future (which, after all, is one of the oddest features of Golden Age SF, as we discussed earlier), the extra personal dimension of automatic writing weaves a thread of the outside into the smooth fabric of the human, automatic writing, with its origins in dreams, the unconscious, or linguistic demons, troubles the clean break between self and other, between living and non-living, between “I” and the World that stands as an axiom of classical humanist thought.

It may be helpful to think about the differences between the Golden Age SF figure of the superman and the contemporary figure of the transhuman in terms of the divide between “intensive” and “extensive” properties in the work of the philosopher Gilles Deleuze. Deleuze argues that matter can be thought about as having both kinds of properties with the break between intensive and extensive being more a means of thinking
about matter than any hard and fast division. As Ian Buchannon and Gregg Lambert explain in their introduction to *Deleuze and Space*, “that which you can grasp, cut, twist and turn, is extensive; that which affects you, but does not yield to your attempt to contain it, is, like wind in your face, intensive. Intensive differences are, as Deleuze rightly points out, indivisible” (Buchanan and Lambert 9). As they point out, the extensive are the properties of matter that appear tangible, while the intensive is the intangible. In the case of automatic writing, the extra personal origin of the text that Stein and Solomon found is an intensive property. In fact, we find intensive origins of writing throughout the above account of automatic writing: van Vogt’s dreams, Hubbard’s Empress, Yeat’s daemons, and Hélène Smith’s Leopold are all figures that flicker between self and outside and speak from beyond the quantifiable dimensions of an extensive science.

This insistence on the intensive, though often silenced, is what differentiates the Golden Age from the logic of enhancement seen in contemporary transhumanism. Enhancement is fundamentally concerned with the extensive: “to build better baby boomers” as Raymond Kurzweil likes to say in speeches. While Korzybski’s General Semantics and Hubbard’s Dianetics are also interested in making the human better and enhanced, these enhancements lie within unlocking the potential of the human mind to uncover new forms of being, rather than merely extending the body’s current functions in the face of the inevitable decay of aging. Korzybski suggests that the regulating factor introduced by Ā training

is not simply additive, so that, when it is introduced and superimposed on any response of the human nervous system allowing such superimposition, the whole reaction is fundamentally changed in a beneficial way. (Korzybski 37)

So, in Ā thought, the introduction of new, proper semantic responses produces entirely new modes of thought, new ways of being. For Korzybski, the Ā human is the first
properly sane being to bare that distinction, whereas, often times, more contemporary transhumanism seeks to retain (in an enhanced manner) the unsane semantic responses of previous models of humanity.

In this discussion of automatic writing, I have highlighted the core of intensive concerns at the heart of a branch of transhuman thought that nominally gave rise to the extensive logic of enhancement that drives contemporary transhumanism. By showing an interest in the unquantifiable, the connection between this period and earlier discussions of transhumanism becomes clear. Additionally, this chapter highlights the waning of the intensive within transhumanism and its discussion of future human evolutions. It is my hope to have shown in the previous chapters, how an interest in intensive concerns drives transhuman thought and not the other way around. As such, we can see that the problems of enhancement, documented in the Chapter 3, result from a lack of concern for the intensive properties of the human. As we have seen again and again—in Ouspensky, in Deleuze, in Teilhard, in van Vogt, in Hubbard, in Korzybski—concepts like the spirit, the mind, and life itself are the true loci of any possible becoming new for the concept of the human. These are all intensive properties of matter. In their absence, transhumanism is left with an accelerated, digital human that isn’t different or very evolved at all.
Conclusion: The Transhumanities

5.1 Is Humanism Us?

In a blog post entitled “The Turtlenecked Hairshirt,” Ian Bogost continues the recent trend of bashing the humanities on the Internet and in the pages of The New York Times. Bogost’s concern in the post has to do with the humanities not being connected with “the real world” and being outmoded, especially about questions concerning emerging technologies. An interesting feature of many of these opinion pieces about the death of the humanities, besides the joy they seem to take in proclaiming the death of a worthy discipline, is that each article constructs a specific (and different) straw man model of what the discipline actually is. In Bogost’s post, this straw man is constructed in the following selection:

Humanists work hard, but at all the wrong things, the commonest of which is the fetid fester of a hypothetical socialist dreamworld, one that has become far more disconnected with labor and material than the neoliberalism it claims to replace.

*Humanism does not deserve to carry the standard for humans, for frankly it despises them.*
We don’t make reform our mission because we secretly hate the idea of partaking of and in the greater world, even as we purport to give it voice, to speak of its ills through critical esoterics no public ear could ever grasp. Instead we colonize that world—all in the name of liberation, of course—in order to return its spoils to our fetid den of Lacanian self-denial. We masti- cate on culture for the pleasure of praising our own steaming shit. (Emphasis Added [Bogost]).

While there is much that could be said about the above selection, the most interesting and perhaps most puzzling claim Bogost makes is the emphasized selection which equates, somehow, the humanities with the philosophical regime of humanism. Discussing this connection would mirror the discussion of defining transhumanism in the introduction: are the humanities a field that studies humans or humanisms? If it studies humanism, as Bogost gambles, then it is easier to displace the discipline, given the large philosophical trend toward post-humanism during the last century.

Having said that, if the humanities, in fact, somehow study humans, does Bogost’s vitriol towards a perceived humanism toss the baby out with the bath water? Bogost sees humanism as corrosive, naval-gazing, and, ultimately, anti-human. He claims that the humanities “hate the idea of partaking of and in the greater world” while ignoring queer theory, rhetoric and composition, new media, Marxist literary criticism, etc. Moreover, Bogost suggests that the future of the humanities somehow involves the digital human- ities (which “point to a great outdoors. A real world. A world of humans, things, and ideas. A world of the commonplace. A world that prepares jello salads. A world that litigates, that chews gum, that mixes cement. A world that rusts, that photosynthesizes, that ebbs”) and he suggests, via hyperlink, two works that may serve as future models: *After Finitude: An Essay on the Necessity of Contingency* by Quentin Meillassoux and *The Democracy of Objects: An Essay in Object-Oriented Ontology* by Levi R. Bryant, both works dealing with French philosophy written in a language that “speak ... through critical esoterics no public ear could ever grasp.” In other words, we should burn down
in-grown, esoteric scholarship that is tone-deaf to the real world and replace it with ... commentary on Deleuze and Badiou!

By manufacturing a model of the humanities as the study of humanism, Bogost is able, like so many other examples of the recent “The Humanities Are Burning” genre of articles, to lambast an already battered discipline while at the same time feeling self-important without accomplishing a thing. These commentators have written a number of celebrations of the burning of the humanities discipline without giving thought to what comes next. Bogost writes that “we must cull. We must burn away the dead wood to let new growth flourish. If we don’t, we will suffocate under the noxious rot of our own decay.” While there are clear problems with the humanities (too focused on an inward and increasingly esoteric discourse), Bogost is only offering a sham remedy by suggesting that his brand of inward and increasingly esoteric discourse is the solution. Moreover, suggesting the replacement of the humanities with some other new buzzword laden discourse (something interdisciplinary no doubt) ignores the brand recognition that “the humanities” continues to have in the academy.

As a long-standing and tolerated member of the academy, the humanities has some standing within University curriculum, if nothing else than for the reason that people in Bogost’s “real world” know what it is. More importantly, Bogost’s hysterical celebration of culling the discipline only accomplishes half of any kind of reform project. In an account of Nietzsche’s nihilism from a “trans-human” perspective, Daniel Conway suggests that:

While viewed by some critics as an event of strictly negative and stultifying consequence, the advent of European nihilism may actually furnish an interpretive context within which philosophers might finally ‘let drop’ their nagging anthropocentric prejudices. Against the blighted backdrop of European nihilism, that is, philosophers might progress significantly toward (and ultimately complete?) the untimely agenda set for them by Friedrich Nietzsche: ‘to translate man back into Nature,’ and thus behold the world
in its amoral immanence. (Conway 117)

Conway continues: “in proclaiming the advent of ‘European nihilism,’ [Nietzsche] does not mean to imply, as he is popularly understood to claim, that humankind now believes in nothing” (118). As Conway points out, nihilism is often understand to be a burning down, a hold-nothing-sacred, or, in Bogost’s words, a culling. Conway’s argument in this essay shows that Nietzsche’s understanding of nihilism, however, was actually more concerned with wiping away certain prejudices (specifically, those dealing with the projection of human values onto an essentially amoral world). Conway finds a double move in Nietzsche’s nihilistic project: a clearing away and a building up of a space for “a post-anthropocentric, or trans-human, orientation to philosophy” (118). Contrary to popular portrayals of nihilists (as in, for instance, the Coen Brother’s film The Big Lebowski), Nietzsche’s understanding of nihilism is not entirely a joyless, doom-laden, destruction of all we hold dear. Instead, the prospect of a post-anthropocentric philosophy opens up the space for a more direct experience of the world, free from an anthropocentric layer of mediation. One needs only think of the joy that mixes with Zarathustra’s sorrows to understand this.

In other words, returning to Bogost’s culling, Nietzsche’s understanding of nihilism suggests that delight should not be taken in the act of destruction but instead in the creation of the space for something new. Bogost, and many of the other recent pieces celebrating the death of the humanities, only offer a stereotypical nihilistic delight in proclaiming the death of the humanities, with little to say about the space for something else to be created (or, if they do offer models, it is often the old humanities under new names (see above)). In any case, I propose here a different model for the thinking about the “death” of the humanities.
As I previously suggested, I am not entirely sold on the necessity of a connection between humanism and the humanities. One could just as easily suggest that the humanities study humans in an untheorized, non-humanistic matter. Or, more provocatively, one could propose a different model of understanding the human as the dominant philosophical system of the humanities. Thus, I want to use this conclusion to suggest a non-humanist model of the humanities or, in other words, a transhumanities.

Rather than viewing the human as a stable, perfect, pinnacle of evolution, as we have seen, transhumanism suggests that the human is continuing to undergo evolution. These evolutionary processes often occur on levels both above (on the species level) and below (on the biological or spiritual level) humanism’s favored unit of analysis, the individual. This slight shift in vision opens up huge avenues for further exploration of transhumanities research. As examples, the following sections will offer brief possible arguments that could be made in other fields of humanities enquiry, when viewed from a transhuman perspective. First, I discuss several new media technologies from an evolutionary perspective to reach divergent conclusions about the evolutionary future of the human species. Then, I analyze a play from Early Modern England using the concept of the cyborg to suggest the transhistorical character of transhuman themes. Finally, this chapter will conclude with some observations on the importance of transhuman perspective in times that are increasingly fraught for both the academic humanities and the human species as a whole.

5.2 New Media–I Can Has Enlightenment?: Web 2.0, LOLcats, and the Emerging Global Brain

“Are we not experiencing the first symptoms of an aggregation of a still higher order, the birth of some single centre from the convergent beams of millions of elementary centres dispersed over the surface of the thinking
What’s so new about New Media? This question has been almost continuously asked since the emergence of the discipline in the 1990s. I, personally, prefer the term “emerging media,” as that more accurately captures the evolutionary nature of technology. In this section, which treats new/emerging media from such a transhuman, evolutionary perspective, I discuss technologies such as Twitter, RSS, and especially the image macro subculture as examples of a growing global brain, a transhuman consciousness whose future may be very immediate. When exploring contemporary technologies from an evolutionary perspective, we can better understand some of the excitement of and radical claims made by many contemporary transhumanists. Moreover, this section details how a transhuman perspective can dissolve older arguments in new media studies (“the Internet changes the way we read!”) and replace them with new avenues of scholarly exploration.

Before discussing this new global brain, some background terminology may be needed. Specifically, we must briefly discuss the concept of “Web 2.0” and how it is transforming life online. Applications such as Google Reader, Facebook, and Twitter represent a new approach to doing business on the Internet that many pundits have taken to calling Web 2.0. A general definition of this phenomenon from the blog of influential publisher and technology thinker, Tim O’Reilly, reads:

Web 2.0 is the business revolution in the computer industry caused by the move to the internet as platform, and an attempt to understand the rules for success on that new platform. Chief among those rules is this: Build applications that harness network effects to get better the more people use them. (This is what I’ve elsewhere called “harnessing collective intelligence.”). (O’Reilly)
As O’Reilly goes on to discuss, much of what has come to be labeled “Web 2.0” was embodied in Tim Berner-Lee’s original vision of the Internet during his early work designing it. However, during the initial Internet stock bubble of the late 1990s, the Internet drifted away from a network-centric, distributed system for meaning production and dissemination: instead “people tried to make the web into something else, that fought the internet, and lost” (O’Reilly). This era, referred to by Internet pundits as “Dot Bomb”\(^1\) was marked by an attempt to create online content that was not inherently enhanced by network phenomena\(^2\). Web 2.0 is seen as doing something else, something more powerful.

According to the ideology of Web 2.0, the Internet’s globe-spanning network allows for novel connections among people to be leveraged for profit. This model of capital accumulation is fueling a new boom in Internet business that is beginning to reach a fever pitch. Unlike earlier “Dot Bomb” failures like Boo.com—which “spent $188 million in just six months in an attempt create a global online fashion store”—or The Learning Company—which was “bought by Mattel in 1999 for $3.5 billion, sold for nothing in 2000”, these new Web 2.0 companies are not known for grandiose, if vague, business models that ultimately burn out when the venture capital dries up (“Dot Com Bubble”). Unlike these dot bomb companies that were, to use Boo.com as an example, trying to bring a high fashion boutique to the Internet and transplant a real-world business model into digital soil, Web 2.0 businesses seek to extract a profit from things that grow naturally within the medium of the web.

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\(^1\)In reference to the fact that many companies that crashed during this period had “Dot Com” in their names.

\(^2\)For instance, Amazon was originally just a bookstore that happened to exist online. As it moved forward (and became a leader in Web 2.0 business practice), especially with user reviews and customized recommendations, the company began to harness the social capabilities of a networked business environment.
Web 2.0 projects include sites like last.fm, Twitter, Facebook, MySpace, and many of the tools offered by Google (Docs, Reader, Mail, etc.). These sites take actions people normally perform in the course of using the Internet—like listening to music in the case of last.fm—and find novel ways to assemble content from millions of web users. This is called “crowd sourcing” and is seen as one of the truly new aspects of Internet business. On last.fm, users tell the site what music they are listening to—usually using some kind of output from an MP3 player like iTunes. Feeding this information into a database that contains the listening habits of potentially millions of other last.fm users, the website can then suggest to its users other music they might like and other people they might be interested in talking to, all based on the degree of compatibility shared in the profiles the service has assembled for each of its users. In other words, last.fm sources this information from the crowd of people using its service in order to provide some kind of meaning. Other Web 2.0 applications accomplish similar acts of collation and recommendation.

Unlike the dot bomb era of web applications, Web 2.0 harnesses the inherently social aspects of a medium defined by connection to produce content. The degree of novelty and usefulness of the connections drive users to a given site and ultimately determine whether a Web 2.0 company is able to harness its user base to turn a profit (usually through advertising). While I have provided a specifically capitalist take on Web 2.0, the social production of meaning and the leveraging of interconnectedness online does not always have to be motivated by the quest for profit; Wikipedia is usually mentioned, along with profit-oriented ventures, as a prime example of a Web 2.0 application. The incremental approach to knowledge production deployed on Wikipedia, in the sense that anyone can add to and improve an article, highlights the importance of facilitating social connections in a Web 2.0 environment.
An additionally important aspect of Web 2.0 from O’Reilly’s definitional argument is the mantra, “open your data and services for re-use by others, and re-use the data and services of others whenever possible.” Rather than lock up all of the data within a specific web application, Web 2.0 uses technologies like RSS (Really Simple Syndication) and SOAP (an acronym that no longer maps to a phrase, but refers to a protocol for communicating between web services). Both of these open standards allow users and developers to leverage the content being created within a Web 2.0 application for other, novel purposes. For instance, when I post to my blog, the blogging software (called Scanty) creates an entry in an RSS file that other websites can understand and use. Google Reader, as an example, takes these RSS files (called “feeds”) and assembles their content in a way that allows me to read the content being produced on any number of RSS-enabled sites (from stock tickers to blogs and news services like ESPN or CNN) from one, convenient location that functions analogously to a personalized newspaper. O’Reilly calls this approach to application design “small pieces loosely joined.” In other words, the approach favored by Web 2.0 service providers allows for sites like Tweme (a company that tracks the spread of ideas in the social networking world) to create a business model that heavily relies on another service (in this case Twitter) to feed data into its own set of data processing algorithms eventually producing new and novel meaning.

All of the applications discussed above have another central and important theme: in each case the users of a service generate the content that drives the service, rather than the service providers themselves. Even more than the social connectedness and the distributed content discussed above, this aspect of Web 2.0 appears most troubling yet, potentially, revolutionary. This observation will become more important later in the essay.

This sharing of data and the user-centric approach to content generation has changed the nature of life online: no longer do my online activities have to be confined to pas-
sively browsing and clicking around on the Internet (buying things on Amazon, reading
the latest issue of an online journal, etc.). In the era of Web 2.0, my browsing becomes
much more productive (writing product reviews on Amazon and blogging about an in-
teresting issue in contemporary critical theory are very typical Internet activities in a
Web 2.0 world). Thus, old capitalist concepts such as “production” and “consumption”
become indistinct as they merge into one continuous stream of activity.

This discussion mirrors one that has occurred in a much older debate about hypertext
(which is a scholarly conversation that, in a lot of ways, prefigured debates about the
contemporary nature of the Internet). In Johndan Johnson-Eilola and Amy C. Kimme
Hea’s summarization of hypertext’s history and possible futures, they mention an earlier
argument made by hypertext pioneer, Michael Joyce, showing that he

made an early and often quoted distinction between (a) hypertext that in-
vited exploration and (b) hypertext that invited active reader participation
in the construction of new links and nodes. We’ve built such an enormous
amount of the first type (exploratory) that we’ve almost completely forgot-
ten about the second (constructive). [Johnson-Eilola and Hea 419]

This characterization of hypertexts into exploratory and constructive—I prefer the term
“participatory”—provides a powerful framework for understanding the differences be-
tween the old era of Internet life and the new, Web 2.0 model of life online. The classic
rhetorical image from the early period of The Web, up until around 2005, is the surfer
riding the wave of information from site to site passively clicking on interesting hy-
perlinks. However, Web 2.0 thrives on solicited feedback, making the image of the
contemporary Internet user into something more akin to a Turning Machine, a device
from computer science theory that moves forward and backward, along an infinite data
tape, both reading and writing as necessary. The rhetorical image of the surfer in fact
masks the passivity inherent in Web 1.0 Internet use: people interested in building early
interest in the Internet wanted to use the countercultural images of the wild and liberated surfer to suggest a kind of online Utopianism. The image of the surfer used in this rhetoric of the Internet is the image of the surfer on the shore. Without a job, the surfer embodies a certain kind of California cool: open, wild, utterly free from the constraints of capitalist society. Rhetors who deploy this image forget that while the surfer may function in this way on the shore, in the ocean, the surfer is at the mercy of the wave. So too were these early Internet users: while the Internet’s openness and “Wild West” demeanor may have been liberating, browsing and clicking are only exploratory, not constructive. Web 2.0, instead, is about the simultaneous consumption and production of information: productive browsing, generative surfing.

Having made this point about the nature of Web 2.0, we can begin to consider these technologies from a transhuman perspective. Surprisingly, much of the existing discussion of the generative surfing model solicited by Web 2.0 technology has, as we will see below, already been cast in light of cognitive evolution. Web 1.0 was not seen as so much of a crisis, evolutionarily speaking, because, ultimately, the classic image of the web surfer still draws on a model of textual consumption that was easily understood from the perspective of an older, deeply ingrained book culture. This Web 2.0 prosumer, though, is something entirely other, engaging with the text on a different level. If we believe much of twentieth century continental philosophy’s suggestion that language speaks man, does changing our relationship to language change us as humans?

5.2.1 From Birdsong to Birdbrain: Does the Internet Make You Dumb?

One of the vanguard Web 2.0 applications is a website called Twitter. This site’s users “tweet” (keep in mind that Twitter’s logo is a giant, cartoonish bird) 140 character text
snippets to their “micro-blogs” that document the day-to-day activities that fall somewhere between utterly mundane observations about everyday life and content that could more justifiably leveraged into a blog post (not to mention a scholarly essay). Reading Twitter’s “Public Timeline” section, one can find posts in a multitude of languages and on a multitude of topics from “Watching GH on Sci-Fi. Wanna fight about it?” (posted by the user, davewasson) to “BBC: Man in court over girl’s stabbing: A student is due in court charged with the murder of a 1.. http://tinyurl.com/6znuqt” (posted by the user, headlinenews). As can be seen, the 140 character limit provides certain formal barriers to the construction of content, but Twitter serves as an interesting mass experiment in the budding online socius: it begs questions of what might happen, on a grand scale, when we can know what everyone is doing, all the time.

Nonetheless, this idea of tweeting 140 character updates throughout the day into Twitter’s grand, global birdsong provides an interesting and enlightening starting point for an exploration of the possible Human 2.0 that may be produced as people begin fully embracing the new linguistic aspects of Web 2.0. Moving from Twitter’s bird-themed metaphors to the minds of actual birds, we can begin to understand more of the changing cognitive patterns necessitated by this style of textual production. Fernando Nottebohm’s overview of the neurological aspects of learning and singing in song bird development contains some startling insights into the functioning of the animal mind and, when coupled with the cognitive demands of Web 2.0, suggests an interesting problem for any budding Human 2.0. As Nottebohm traces the chemical and neurological pathways of the telencephalon portion of the brain that are involved in the production and iterative learning of birdsong, he notes,

Several of the telencephalic nuclei that participate in the production and ac-

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3Some of these effects could begin to be felt during Iran’s recent election protests, which were primarily coordinated via distributed communication technologies like Twitter.
quisition of learned song are small in nestlings, before the onset of song development, and their volume, cell number, cell size, and connections grow during the subsequent weeks or months. As a result of these changes, many of the components of the circuits for the acquisition and production of learned song are formed and connected during the very period when song first develops (Nottebohm 759).

Nottebohm’s text indicates that in young songbirds the acquisition of new skill sets, specifically communication skill sets, actually alters the physical structure of the brain. Nottebohm goes on to show how birds not trained to sing never develop these pathways as a part of their maturation. His experiment begins to suggest on a neurological level that, as Marshall McLuhan theorized, new media rewires our brains. Such an observation may have serious implications for the millions of people tweeting away at their Twitter micro-blogs all across the globe. As we have already seen, Web 2.0 technologies, such as Twitter, dissolve distinctions between reading and writing and Twitter’s unceasing birdsong is one of the most accelerated examples. In this way, we can see that Twitter is refiguring our understanding of text, even beyond the earlier understanding of “hypertext.” Where early hypertext experiments invited a non-linear approach to reading and writing, there was still a single locus of textuality, a margin after which the reading and writing of one specific hypertext stopped. In Twitter, there are no margins, and conversation continues as one big entity composed of millions of writers, millions of little texts. One could easily make an argument about “The New Text” from these observations, but the transhuman perspective suggests, further, that not only is Twitter a mutation in textuality but also a mutation in us. Web 2.0 technologies, with their different and new ways of signing, are wiring our brains for different possibilities like hatchlings learning to sing.

In a much less scientific fashion than Nottebohm, Nicholas Carr’s cover story for *The Atlantic*, entitled “Is Google Making Us Stupid?,” deals with the same issues fac-
ing young birds: namely, Carr is concerned that using the Internet is actually rewiring the way we think and process information and, specifically text. As he writes, “a new email message, for instance, may announce its arrival as we’re glancing over the latest headlines at a newspaper’s site. The result is to scatter our attention and diffuse our concentration” (Carr 60). What Carr is discussing here is the interruptive nature of information processing under a primarily Web-mediated ecology of knowledge. Rather than spending a long amount of time following a single argument through a book-length, textual object, the reader of Web 2.0 texts may be interrupted by email or a pop-up add or an announcement that even more information has arrived in the queues of an RSS reader. *TWEET* *TWEET* *TWEET*. For Carr these distractions equate to a withering of previous modes of text processing. While Carr’s thesis is too harsh and limits his ability to understand what is really going on, the interruptive nature of online life is important to remember and will matter more later in the essay.

Carr worries that using the Internet is re-wiring our neural pathways in similar ways to Nottebohm’s description of birds learning to sing. As we acquire these new communication skills, Carr believes older, traditionally valued models of cognitive activity are passing away. Specifically, for Carr and for the present discussion of Human 2.0, he has become concerned that, online, “our ability to interpret text, to make the rich mental connections that form when we read deeply and without distraction, remains largely dis-engaged” (58). As a whole, Carr’s piece is overly alarmist, painting a negative, almost conspiratorial picture of Web 2.0 companies like Google: “the faster we surf across the Web—the more links we click and pages we view—the more opportunities Google and other companies gain to collect information about us and to feed us advertisements” (63). These paranoid sentiments are nothing new. The Luddite-esque commentary on the Internet is a standard rhetorical pattern and a common way of relating to many new
technologies throughout human history. It would have been nice to have read Carr’s opinions on some of the newer Web 2.0 technologies discussed above, as he is still operating with a model of the Internet that conforms to the exploratory model of hypertext (the surfer) and not the paradigm of constructive hypertexts being deployed in the Web 2.0 world. Are claims that the Internet further intensifies our passivity at the hands of multinational capital still valid in the age of social media and participatory content? As I have stated above, Web 2.0 suggests a less alienated, subtler relationship between capital, value, and labor that needs further exploration and largely marks these kind of anti-Internet, passivity critiques as increasingly out of touch with online life.

Having said that, what is novel about Carr’s claims has to do with the Internet’s effects on the way we actually think and operate our minds. For Carr, what is alarming about Web 2.0 is, as we saw, this interruptive nature of online life. Carr suggests that, in adapting to these new ways of reading and writing, our brains are losing the ability to focus on long, complex narratives and arguments, especially those demanded by novels. More suggestive, especially in the context of transhumanism, is Carr’s claim that the loss of the mind that can read a novel is the loss of humanity. To prove this point, he ends his piece by discussing Stanley Kubrick’s 2001:

In the world of 2001, people have become so machinelike that the most hu-

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4For instance, we could think of Jacques Derrida’s famous discussion, in “Plato’s Pharmacy,” of writing as both a medicine and a poison:

The god of writing is thus also a god of medicine. Of “medicine”: both a science and an occult drug. Of the remedy and the poison. The god of writing is the god of the pharmakon. And it is writing as a pharmakon that he presents to the king in the Phaedrus, with a humility as unsettling as a dare. (Derrida 94)

Derrida finds in Plato an account of writing in which it is seen as a useful new technology but also a dangerous threat to the old regime of oral communication.

5Curiously, Carr does not seem concerned about the waning of attention with regard to other media, such as film, a medium that would seem to demand this same kind of attention. Perhaps this bias towards the novel is symptom of the elitism that often underscores this rhetorical mode of talking about the Internet.
man character turns out to be a machine. That’s the essence of Kubrick’s dark prophecy: as we come to rely on computers to mediate our understanding of the world, it is our own intelligence that flattens into artificial intelligence. (63)

For Carr, “weakening our capacity for the kind of deep reading that emerged when an earlier technology, the printing press, made long and complex works of prose commonplace” is equal to being something less than fully human[6] In a world without the novel, Carr implies that our “thoughts and actions feel scripted” and that we will “go about [our] business with an almost robotic efficiency” (63).

Carr is pessimistic the aspects of Internet text consumption that appear to encourage traditional methods of learning: “thanks to the ubiquity of text on the Internet, not to mention the popularity of text-messaging on cell phones, we may well be reading more today than we did in the 1970s or 1980s, when television was our medium of choice” (58). The problem with this increase in reading, Carr tells us, is in the fact that this different reading is more akin to skimming than the long engagements with linear narrative solicited by the book. Paralleling earlier claims about television, Carr suggests that Web 2.0 will finally, once and for all, kill off our ability to focus entirely. The problem that Carr has in his argument is that he never manages to explain why this loss is bad. Carr, and many of the arguments made in this vein about the Internet, posit that losing humanity is a bad thing simply because being human is all we have ever known. As Michel Foucault writes at the conclusion to a work detailing the arrangements producing the concept of “the human” as understood by Carr:

If those arrangements were to disappear as they appeared, if some event of which we can at the moment do no more than sense the possibility - without knowing either what its form will be or what it promises - were to cause

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[6]Which may be true, in a sense, given Michel Foucault’s work in *The Order of Things* on revealing “the human” to be a concept produced by early modern print culture.
them to crumble, as the ground of classical thought did, at the end of the eighteenth century, then one can certainly wager that man would be erased, like a face drawn in sand at the edge of the sea. (Foucault 421)

In other words, the human that Carr mourns was only ever a construction of a specific historical moment. Now that that moment is waning, one wonders about the utility of retaining such an outdated understanding of what it means to be human. In continuing to explore the shape of Human 2.0, we most look to people who great this change with more optimism than Nicholas Carr.

5.2.2 The Pink Noise: Turning the Right Brain Into the Write Brain

Despite the pessimism displayed in the Carr piece discussed above, the claim that the Internet in general, and Web 2.0 in particular, atomizes our attention span and disrupts the logical high wire act of linear thought still holds validity. The question at hand is whether or not this change in cognition is dangerous (as the apocalyptic, dystopian visions that conclude Carr’s essay about Google suggests). For other thinkers of Web 2.0, the cognitive changes brought by the Internet are not bad at all. Chief among those who make this claim is entrepreneurship guru, Daniel H. Pink, whose book, A Whole New Mind, details a neuro-scientific perspective on the cognitive changes that go along with learning to tweet in Web 2.0.

For Pink, the reason that a mind capable of processing the linear narrative of the novel is withering at the hands of a “parallel” regime of textual consumption has to do with the changing nature of the global economy in the developed world. In A Whole New Mind, Pink explains this reconfiguration as a move from the Information Age to the “Conceptual Age.” The Conceptual Age, as he explains it, describes “an economy and a society built on the inventive, empathic, big-picture” which is replacing the more “logical, linear, computerlike [sic] capabilities of the Information Age” (Pink 2). As
Pink sees it, the forces of “Abundance, Asia, and Automation” are driving this configuration (3). Due to the success of industrial and information economies, commodities are forced to distinguish themselves based on issues of design and the promise of transcendence (30-36). Additionally, as developing nations switch from industrial to information economies, formally secure Information Age jobs, such as accountant and computer programmer positions, are being exported to these developing economies where the lower cost of living makes their services more competitive (36-40). The third force driving Pink’s new economic logic results from the increasingly sophisticated information technologies that make up the fabric of everyday life. Automation, according to Pink, makes the rote tasks of many information workers (especially the very mundane ones) easily accomplished by the non-expert without the assistance of a trained professional: boiler-plate legal contracts, online diagnosis systems, and auto-generating computer code have all contributed to a sea change within many Information Age professions (40-47). In each case, these three new economic forces have necessitated the developed work force to configure itself around the tasks it can still perform without competition from cheaper alternatives: namely creative, narrative, and empathic tasks that are still very difficult to outsource or automate.

In contrast to these negative trends and the declines in developed economies of information processing work, Pink sees the rise of creative positions within this new economic logic. He explains the differences between the linear, rational, logical model of Information Age work and parallel, high-concept, abstract work in the Conceptual Age through the differences between the left and right hemispheres of the human brain. In fact, Pink begins his discussion of the rise of the Conceptual Age with a brief history of the right brain within neuro-scientific discourse:

Call the first approach L-Directed Thinking. It is a form of thinking and an attitude to life that is characteristic of the left hemisphere of the
brain—sequential, literal, functional, textual, and analytic. ... Call the other approach R-Directed Thinking. It is a form of thinking and an attitude to life that is characteristic of the right hemisphere of the brain—simultaneous, metaphorical, aesthetic, contextual, and synthetic. (26)

For Pink, then, the culture of interruption and the new, Human 2.0 it evolves is actually a good thing (or, at least, not the apocalypse that Carr envisions). The media ecology of Web 2.0 is distributed and parallel, with conversations often entered in the middle and left before a conclusion is reached. While this compares to Carr’s association between linear thought and the human, Pink shows that the kind of thought solicited by Web 2.0 is, in fact, an underutilized aspect of our neurological wetware. Moreover, Pink’s model of the whole new mind, or Human 2.0 as we have taken to calling it here, is in line with Julian Huxley’s original definition of transhumanism: “man’s responsibility and destiny—to be an agent for the rest of the world in the job of realizing its inherent potentialities as fully as possible.” Pink is suggesting that reconfigurations in the global economy and reconfigurations in the way text is interacted with are not turning us into brainless automata, as Carr suggests, but are instead actualizing a transhuman, cognitive revolution.

5.2.3 The Intertwingularity Is Near: Moving From Hypertext to Hyperhuman

Seth Godin’s *Unleashing the Ideavirus* might be the ultimate statement on the death of postmodernism as the locus for avant-garde cultural production. Godin’s book—a self-help manual for business owners interested in exploiting William S. Burroughs’s concept of The Word Virus for profit—details how entrepreneurs, now-a-days, are primarily dealing in the trade of ideas as commodities. His book promises to open up the world of ideaviruses to his readers and is written in the tone one would expect in such
a self-help book. That said, Godin’s deployment of Burroughs’s theories of viruses in a common, business writing environment is suggestive of several of the mutations we have discussed.

Godin opens the book by detailing the problems with farming and manufacturing as business models. Essentially, he claims that both of these paradigms are too slow and costly. Thanks to the Internet, Godin suggests:

Ideas can now be carried in the ether. Because the medium for carrying ideas is fast and cheap, ideas move faster and cheaper! Whether it’s the image of the new VW Beetle (how long did it take for the idea of that car to find a place in your brain?) or the words of a new Stephen King novel (more than 600,000 people read it in the first week it was available online), the time it takes for an idea to circulate is approaching zero (Emphasis Added [Godin]).

While Godin’s points about the Internet may seem a bit dated ten years after the book went to press, it is still rather interesting to see it laid so clearly: ideas essentially circulate instantaneously. The Web 2.0 technologies we have been discussing are only intensifying this point, as more and more people are beginning to participate.\footnote{Increasingly, phrases in Portuguese, Indonesian, and Tagalog have shown up as “Trending Topics,” Twitter’s list of the most tweeted phrases on the Internet at any one moment.}

More than just suggesting the mundane idea that the Internet spreads ideas (theoretically we are all well aware of that by now), the approach of true instantaneous idea sharing is fascinating. Moreover, it suggests Ted Nelson’s vision of The Intertwingularity, from the dawn of digital computing. Writing in his very early, foundational hypertext, Computer Lib, Nelson observes an odd fact about computers and their non-linear manner of treating information:

EVERYTHING IS DEEPLY INTERTWINED. In an important sense there are no “subjects” at all; there is only all knowledge, since the cross-connections among the myriad topics of this world simply cannot be divided up neatly.
Hierarchical and sequential structures, especially popular since Gutenberg, are usually forced and artificial. Intertwingularity is not generally acknowledged—people keep pretending they can make things hierarchical, categorizable and sequential when they can’t.

While Nelson begins by talking about computers (and the system of hypertext he was envisioning), note that in this selection, he is talking about “everything,” especially things outside the confines of a screen. For Nelson, the hierarchy of the book is a fiction: the world exists more as a rhizomatic construction (as Deleuze and Guattari would have it) or, to use a computer term, a network. With Web 2.0 messaging technologies, the spread of ideas within this network is increasingly resembling something other than a broadcast model in which one content producer streams information to passive listeners. For Nelson, the increasing intertwingularity results from the connectedness between the hierarchy of the book and the primacy of the subject-object distinction during the era of print culture: if we live in a non-hierarchical world of things with agency, how can we privilege a human subject above a non-human agent? Nelson’s sentiments are also echoed in William S. Burrough’s *Ghost of Chance*, in which the pirate Captain Mission “does not fear Panic, the sudden, intolerable knowing that everything is alive. He was himself an emissary of Panic, the knowledge that man fears above all else: the truth of his origin” (Burroughs 3). In Nelson and Burrough’s vision, there are no subjects because there are no ways to figure out when one object ends and another begins. They are both interested in this ability of the network to reveal the highly constructed nature of the subject / object dualism inherent to the kind of outmoded humanism being overcome online. The world, then, is rendered a system of highly interconnected, interdependent meaning. For Nelson, especially, computers are the best way to see this.

From a specifically transhuman perspective, the growing intertwingularity is often discussed as the emergence of a unified, distributed, singular consciousness that is composed of individual humans but also exceeds them. As humans break down the barriers
they have constructed between themselves and the objects around them, the story goes, they begin to see that lacking isolated subjects, the univocal nature of being becomes apparent. As such, the connections between former individuals begin to be seen as connections between neurons in a larger brain. This theme is commonly discussed in popular science accounts of transhumanism and in science fiction stories. H.G. Wells is widely credited with introducing this idea in his 1937 essay “World Brain: The Idea of a Permanent World Encyclopaedia.” In it he writes that the storage of humanity’s literary legacy on microfilm is a fact of tremendous significance. It foreshadows a real intellectual unification of our race. The whole human memory can be, and probably in a short time will be, made accessible to every individual. And what is also of very great importance in this uncertain world where destruction becomes continually more frequent and unpredictable, is this, that photography affords now every facility for multiplying duplicates of this - which we may call? - this new all-human cerebrum. It need not be concentrated in any one single place. It need not be vulnerable as a human head or a human heart is vulnerable. It can be reproduced exactly and fully, in Peru, China, Iceland, Central Africa, or wherever else seems to afford an insurance against danger and interruption. It can have at once, the concentration of a craniate animal and the diffused vitality of an amoeba. (Wells)

In Wells’s article, the world brain is actually a large information repository, reflecting a belief in a split between mind and body. When one reads Wells’s original proposal of the concept of a world brain, it does not seem particularly revelatory (especially in light of the Internet). This is because Wells is interested, as we can see above, in a world brain that is all memory. In later iterations of the concept, though, the idea of a world brain will begin to reflect a more nuanced understanding of brain: one that contains the ability to think as well as remember.

In Arthur C. Clarke’s 1961 short story, “Dial F For Frankenstein,” a story that Tim Berners-Lee credits as inspiration for the work he did in creating the Internet, the world brain gets an upgrade from mere cerebrum to a fully functional mind. The story opens
At 0150 GMT on December 1, 1975, every telephone in the world started to ring. A quarter of a billion people picked up their receivers, to listen for a few seconds with annoyance or perplexity. Those who had been awakened in the middle of the night assumed that some far-off friend was calling, over the satellite telephone network that had gone into service, with such a blaze of publicity, the day before. But there was no voice on the line; only a sound, which to many seemed like the roaring of the sea; to others, like the vibrations of harp strings in the wind. And there were many more, in that moment, who recalled a secret sound of childhood—the noise of blood pulsing through the veins, heard when a shell is cupped over the ear. (Clarke 822)

A group of scientists analyzing the incident eventually realize that the event described above was the result of a global intelligence having been manufactured in the telephone switching system, after it was connected to a new satellite network. This global network attains sentience because it has a number of nodes equal to neurons in a human brain. While this image of spontaneous intelligence has been since been refuted (the Internet has many more nodes than the telecommunications network that Clarke has crossing the threshold to self-awareness in his story), the idea of a spontaneously emergent, global intelligence remains potent in science fiction and popular science discourse.

Clarke’s story is interesting not only because it marks the emergence of a new kind of global brain (one that thinks as well as remembers) but also in that it inaugurates a new era of concern about malevolent global brains in science fiction. Clarke’s story concludes with the observation that “it was far, far too late. For Homo sapiens, the telephone bell had tolled” (826). The new global brain has figured out that the scientists are plotting to disconnect the satellite network, thereby performing a “pre-frontal lobotomy” on the global brain, and moves to stop them. The story concludes by suggesting that this global intelligence is a malevolent threat to the human race. We can see in Clarke’s pessimism a mirror of Nicholas Carr’s pessimism about the Internet and the future of humanity. This pessimism will continue in many fictional examples throughout the next
decades, appearing in SF works such as the 1970 film *Colossus: The Forbin Project* and culminating in recent films such as *Terminator*, in which a malevolent intelligence emerges from a US missile defense computer system, and *The Matrix*.

Of course, as Rodney Brooks points out in *Flesh and Machines*, there a number of problems with assuming a global brain would immediately want to wipe out humanity, but it is also worthy of note that all of these texts see the creation of a global brain as other, something inhuman (Brooks 197-212). In “The World Brain,” Wells’s understood the new global brain that could be created by global telecommunications technology to be an adjunct to existing humans, not some other, as we see in Clarke’s story and those stories that follow his example. Perhaps a symptom of lingering humanism, Clarke’s account suggests that we can only grasp the idea of a global brain if it is presented as another human-like agent that is in competition with us. Instead, much of transhuman thought, especially the strands influenced by Teilhard and Stapledon, represents the concept of global brain as being composed of us, as humans. In this way, the global brain is seen, and discussed, as an evolutionary adjunct (more of a meta-brain, if you will) to our existing humanity. What is interesting and important to retain from Clarke’s story, though, is the idea that any kind of global brain might develop like a human brain: through various stages of intelligence before reaching a fully mature consciousness.

### 5.2.4 Laugh Out Loud Transhumanism: The Cat in the Machine

From this perspective, I would like to briefly discuss the Internet phenomenon called “LOLcats” and, specifically, would like to suggest that it constitutes an infantile discourse of an emergent, global brain similar to the one depicted in Clarke’s story. The phenomenon of “LOLcats” is a form of an “image macro” that has proliferated on the Internet since around 2005. Image macros, according to *Wikipedia*, “are used to em-
phasize a certain phrase (often an Internet meme\footnote{A “meme” is an idea that spreads like a virus and was coined by Richard Dawkins in \textit{The Selfish Gene}.}) by superimposing it over a related picture.” As the \textit{Wikipedia} entry also points out, the term originated on the forum site \textit{Something Awful} as a funny way to post a prefabricated response to another forum message:

\begin{quote}
\begin{center}
The name derived from the fact that the ‘macros’ were a short bit of text a user could enter that the forum software would automatically parse and expand into the code for a pre-defined image, relating to the computer science topic of a macro, defined as “a rule or pattern that specifies how a certain input sequence (often a sequence of characters) should be mapped to an output sequence (also often a sequence of characters) according to a defined procedure”
\end{center}
\end{quote}

Essentially an image macro combined a funny statement with an appropriate picture to produce an amusing way to respond through canned text. An example of an early image macro from \textit{Something Awful} can be seen in Figure\ref{fig:macro_example}. In this image macro, the picture of the surprised looking owl and the text, a condensation of “Oh, Really?,” is used a humorous way of expressing incredulity at a supposedly absurd statement made in conversation in forum discussion thread. On the forum, if someone typed a specific phrase into a post, something like “:orly:,” the image would be substituted.

LOLCats began as a specific kind of image macro on the Internet forum, 4\textit{Chan}, as part of something called “Caturday” itself a protest against another forum event, called “Furry Friday,” in which users post images of anthropomorphized animals engaged in various sexual acts (Grossman. \cite{lolcats_addendum}). While “Caturday” began with the general posting of images of cats in cute or funny situations, the practice of captioning the photos soon became commonplace. From these “Caturday” events, the idea of captioning cat images and posting them on the Internet spread and culminated in the creation of a website dedicated to the LOLcat phenomenon.
Figure 5.1: “O RLY?” – One of the earliest image macros to spread virally on the Internet. “O RLY?” is a condensation of “Oh Really?” and this image macro (and later variations) is often used to mock a ridiculous claim made in a forum post.

called ICANHASCHEEZBURGER (the origin of this name can be seen in one of the most famous LOLcat images in Figure 5.2). The name for this genre of image macro is taken from the common Internet practice of typing the phrase “lol” (short for “laugh out loud”) to express a moment of intense humor. As these cat images are meant to produce such laughs, the name caught on quickly.

As Lev Grossman observes, the LOLcat phenomenon is interesting because of how little else like it there is online right now. The great, weird Internet meme, which once thundered across the Net in vast herds, is becoming surprisingly scarce, which may be why LOLcats has a distinctly old-school, early 1990s, Usenet feel to it. It’s not based on a Saturday Night Live sketch, and nobody’s using it to get famous or sell anything. Yet.
We may be witnessing a revolution in user-generated content, but the more mainstream the Web gets, the more it looks like the mainstream: homogenous, opportunistic and commercial. It’s no longer a subculture; it’s just the culture. And don’t we have enough of that already? Are we facing a future without a weird, vital, creative phenomenon like LOLcats? Say it with me: “Do not want!” ("Creating a Cute Cat Frenzy")

Above, Grossman positions LOLcats as an anti-capitalist, spontaneous expression of human creativity. While it may be silly to suggest a revolutionary dimension to LOLcat images, David Foster Wallace, in a 1993 essay entitled “E Unibus Pluram: Television and U.S. Fiction,” suggests that something like LOLcats may be the future of the avant-garde:
My plangent cries about the impossibility of rebelling against an aura that promotes and attenuates all rebellion says more about my residency inside that aura, my own lack of vision, than it does about any exhaustion of U.S. fiction’s possibilities. The next real literary ‘rebels’ in this country might well emerge as some weird bunch of ‘anti-rebels,’ born oglers who dare to back away from ironic watching, who have the childish gall actually to endorse single-entendre values. Who treat old untrendy human troubles and emotions in U.S. life with reverence and conviction. Who eschew self-consciousness and fatigue. These anti-rebels would be outdated, of course, before they even start. Too sincere. (Wallace 192)

In the article, Wallace suggests that the ironic distance of postmodern fiction is no longer sustainable (or, at least, no longer avant-garde) due to television’s deployment of these same ironic gestures in the service of capitalist forces. His suggestion, in the above quote, is that a kind of radical sincerity may be the next (and only possible) step in the struggle against an increasingly ubiquitous capitalism. Wallace’s remarks resound with Grossman’s suggestion that LOLcats represent a persistence of the earlier, “Wild West” mentality of the Internet, when stupid bits of culture rapidly spread via email, YouTube, and other vectors. LOLcats have a political function because the resist the homogeneity of the Internet as Web 2.0 businesses convert a formerly lawless space into business as usual. Additionally, the anti-capitalism of LOLcats is accomplished through one of the most sincere means imaginable: people taking cute pictures of their cats and wanting to share them. Juxtaposing Wallace’s argument about the waning of the postmodern and Grossman’s point, one could almost suggest LOLcats as an avant-garde gesture of some kind of cultural logic that I would like to call a “new sincerity.”

In any case, extending the culturally avant-garde dimension of LOLcats, a transhuman perspective on the phenomenon suggests an evolutionary role for the images. LOLcats are unique among Internet memes in that the phenomenon seems to only be gaining momentum, even after so many years, especially in Internet time. Where early Inter-
net memes, such as “All Your Base Are Belong To Us”\(^9\) essentially circulated and then vanished, LOLcats suggests the creation of an entire vocabulary, almost a new language for talking about culture. Where earlier memes, such as the aforementioned “All Your Base,” certainly solicited user participation, the meme itself only ever consisted of the initial video of fractured, badly translated Japanese. With LOLcats, though, we can speak of an entire collection of memes, even pointing out that LOLcats has spawned several, cat-related sub-memes, such as the “Invisible X” meme illustrated in Figure 5.3 or the “I’m in ur X, Y-ing ur Z” meme illustrated in Figure 5.4. In these cases, Internet users create new images that conform to these sub-meme forms. All of this suggests that rather than the sharing of a single cultural artifact over and over again, as with the “All Your Base” meme, LOLcats can be thought of as an entire genre of meme.

Extending this idea a little further, we can begin to suggest that LOLcats function as a kind of language, broadly defined, for an emerging global consciousness. I use “language” in the way Roland Barthes uses it in *Mythologies* where it refers to “any significant unit of synthesis, whether verbal or visual” (Barthes 111). So while the texts of the LOLcats genre do not appear to conform to language in the sense of a grammar or a codified syntax, they are clearly a specific way of speaking (the stilted speech, the repeated and standardized sentence structure) and, more importantly, a way of signifying through image and text. In fact, a team of volunteers recently translated *The Bible* into LOLcat speak.

While one could claim that LOLcats is a heartening phenomenon due to the fact that this language of a collective human brain is cute and fuzzy (suggesting that, maybe, we are not as violent as the media leads us to believe), it is also inherently childish, as are many things that happen on the Internet. How can we claim a positive development in a

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\(^9\)See [http://knowyourmeme.com/memes/all-your-base-are-belong-to-us](http://knowyourmeme.com/memes/all-your-base-are-belong-to-us) for more information on this phenomenon.
Figure 5.3: “Invisible Bike” & “Invisible Snowboard” – The “Invisible x” was one of the first LOLcat sub-memes.

global brain, when that development takes the form of badly misspelled captions under pictures of cute and fuzzy animals?

Quite simply, in fact. One of the aspects of so much talk about global intelligence, especially those influenced by Teilhard or Aurobindo, is the idea of the spontaneous emergence of a fully formed, mature global brain. For instance, in Peter Russell’s *The Global Brain*, we find an account of the emergence of the “Gaiafield” (Russell’s term, coined after rejecting “noosphere” from Teilhard and “Supermind” from Aurobindo):
As the communication links within humanity increase, we will eventually reach a time when the billion of information exchanges shuttling through the networks at any one time would create similar patterns of coherence in the global brain to those found in the human brain. Gaia would then awaken and become her form of conscious. ([Russell](#) 111)
Russell goes on to suggest that “it could possibly happen within a few decades” (111). In Russell’s decidedly Utopian vision of the emergence of a global brain, the creation of the Gaiafield would see the birth of a fully formed consciousness that would operate not unlike our own. We can infer this from his use of the human brain as a referent in the selection above. The interesting point, though, that Russell misses and that Clarke sees is that any kind of global consciousness would first go through an infancy: after all, the “villain” in “Dial F For Frankenstein” is called “Baby.”

Moreover, we could argue that the nascent language of LOLcats is not, in fact, entirely stupid (unless one wants to label any art made by children “stupid”). Rather, the amusing spellings and odd sentence structure often deployed in the captions of these images fracture and rework the English language in the process of imagining a vocabulary for talking cats. As in Clarke’s story, where the malevolent actions of the global brain are actually revealed to be growing pains (“it would start looking around, and stretching its limbs. In fact, it would start to play, like any growing baby”), LOLcats creates a image-driven language in which the “normal” conventions of English are abandoned and a kind of free-wheeling language play is created.

Thinking beyond the linguistic elements of the LOLcat image macros, the images themselves represent a play with the possibilities of the online ecosystem. Thanks to the ubiquity of image editing software on modern computers (even to the point where one can make a LOLcat image on a website, without other software), the LOLcat phenomenon points toward a new, global conversation occurring in a language of memes. Before you are tempted to dismiss the English-centric nature of meme culture, the “Tenso” meme[^10] for instance, emerged in Brazil and spread across the globe without losing the Portuguese words used in the original form. By which I mean to suggest that

[^10]: http://knowyourmeme.com/memes/tenso
even if a user does know exactly what “tenso” means, tenso macros are still funny. In fact, the linguistic elements of an image macro are not as important as the deployment of written elements as another visual adornment within the image. This suggests that the captions, then, in LOLcat images are as important visually as they are at conveying a linguistic meaning (suggesting that using “teh” for “the” is actually directly important to the meaning of the image). In fact, we could continue to suggest that the misspellings actually re-present English, defamiliarizing English-speaking Internet users from their own language in a way that gets beyond the heated debates about English versus Spanish that so dominate American political life in an increasingly globalized world. LOLcats then are non-threatening vectors of a kind of post-national identity: we produce them as a means to think beyond our understanding of ourselves as citizens and subjects. Once again, we see how the idea of image macros, specifically LOLcat images, represents a kind of unprecedented, global play with the ubiquitous elements of postmodern life namely images and words.

So, while Nicholas Carr might suggest that making LOLCat images instead of reading Shakespeare is a sign that, in fact, we are being made stupid by the Internet, the point to draw here, from an evolutionary context, is that the Internet is channelling human evolution towards different ends. As transhumanists like Peter Russell and Pierre Teilhard de Chardin suggest, the increasing ubiquity of sign-circulating, “new media” technologies demand the evolution of new human patterns of being. While these kinds of emerging, global consciousnesses may be obsessed at the moment with the cute and the fuzzy, this is only to be expected as humanity becomes more and more familiar with the new toys in its new, global crib. Like songbirds, we are learning to deploy innate pattern recognition and combinatoric skills within the new contexts of a global information network.
While Web 2.0 is primarily debated, as we saw in the beginning of this piece, as a commercial phenomenon, the “crowd” that is sourced for value does not have to be commercial. In fact, as Tim O’Reilly makes clear, all Web 2.0 is trying to do is make money off of phenomena native to the Internet. In other words, crowds were sourcing LOLcats before they were making money for companies like Facebook. Web 2.0 then can be seen as an epiphenomenon, something that feeds off of an already naturally occurring event. Fredric Jameson, in explaining Hegel’s concept of “Absolute Spirit” in The Hegel Variations, offers the following:

What may well prove more congenial to a contemporary or a postmodern public is the invocation of Marx’s notion of “General Intellect” ... [which] evokes an historically new kind of general literacy in the mass public, most strikingly evinced in the trickling down of scientific knowledge (and technological know-how) in the population at large, a transformation that might also be described in terms of the displacement of a peasant (or feudal) mentality by a more general urban one (and in hindsight also comprehensible as a fundamental consequence of literacy and mass culture). At any rate, the hypothesis of such a social transformation in consciousness and mentality ... strengthens the renewed appeal of Hegel’s work and the revival of interest in it, in a postmodernity characterized by cynical reason and by what I will later on term plebeianization. (Jameson, The Hegel Variations 4)

For Marx, General Intellect was a way of concretizing Hegel’s quasi-religious “Zeitgeist,” the spirit of the age, in order to suggest the way that advances in technology and the mode of production manufacture new modes of being. Jameson’s specific connection of General Intellect to “technological know-how” and to literacy in the case of the birth of the urban mindset is most suggestive for thinking about Human 2.0 in the age of LOLcats. As we have seen, these image macros represent a transformation in both language and subjectivity online. This transformation is both mandated by the interruptive nature of online textuality and vehiculated through the increasing ubiquity of highly advanced computing technology (see Figure 5.5 for a LOLcat image I created in around
two minutes using Google Image Search and Big Huge Labs’s “LOLcat Generator”\footnote{http://bighugelabs.com/lolcat.php}.

Far from the cute distraction they often appear, I suggest that LOLcats are in fact the chief symptom of an emerging global intelligence. The participatory hypertext of the Internet has revealed that, as proto-Human 2.0 beings, we are increasingly enmeshed in a web of textuality that defies our ability to understand it. LOLcats are an attempt to understand this web and these new texts. In imagining a new language for cats trapped in a modernity they do not understand, we mirror our own feelings of confusion in a world that is becoming increasingly intertwingled. As our understanding of ourselves as autonomous subjects dissolve into an understanding of Earth as a single, global brain, we produce images of cats tortured by the everyday objects of modern life: fridges, computers, mirrors, furniture, snowboards, etc. in order to capture and displace this feeling onto our pets. Exchanging images of talking cats, we are exchanging images of ourselves. Like a cat trapped in a human’s world, we must come to terms with Human 2.0.

\begin{figure}[h]
\centering
\includegraphics[width=0.5\textwidth]{lolcat_image.png}
\caption{A LOLcat image produced by the author.}
\end{figure}
5.3 Early Modern British Literature—“To prove, by wit, worth in simplicity:” Cyborgs, Women, and the Informatics of Domination within *Love’s Labor’s Lost*

Having seen some of the contemporary ramifications of a coming transhumanism, it is now important to suggest a much longer history to the concepts associated with transhumanism. While this reading of *Love’s Labor’s Lost* specifically hinges on Donna Haraway’s concept of the cyborg, as Carey Wolfe suggests in *What Is Posthumanism?*, there is a clear intellectual connection between the cyborg and transhumanism (Wolfe xiii). By thus historicizing the cyborg, and by extension transhumanism, we can begin to conceptualize transhumanism as a cultural logic that now finds its moment of expression in the present.

To begin to think through the transhumanism in *Love’s Labor’s Lost*, we must first understand it as a play about orifices. With repeated occurrences of eyes, ear, mouths, and noses, the play is embedded in a culture of things moving into and out of the gateways between human surface and depth. While a majority of the critical discussion of orifices in the play has focused on the eyes, I would, instead, like to consider the mouth. As many have noted, the play is primarily concerned with complex language but is also deeply informed with discussions of eating. I will be considering eating differently from the terms deployed in many other considerations of Early Modern drama. Works such as *The Fury of Men’s Gullets: Ben Jonson and the Digestive Canal* by Bruce Boehrer (U of Pennsylvania P, 1997) and “The Gastric Epic: Trollis and Cressida” by David Hillman (*Shakespeare Quarterly* 48:3, 1997) are primarily concerned with the allegor-
ical uses of digestion during the period. While this essay does make passing reference to digestion, the primary concern is with oral traffic: eating and speaking. Throughout the play, in fact, the images of speaking and eating get conflated and confused in a way that Patricia Parker terms “preposterous.” Parker uses the term to connote “the reversal of pre for post, back for front, after for before, posterior for prior, end or sequel for beginning” (“Preposterous Reversals” 435-6). Parker argues that the play is a series of such preposterous events. I would like to discuss some of the specific preposterous reversals discussed in Parker’s essay, but I would also like to begin by suggesting that the confusion between eating and speaking is just as preposterous as some of the other events in the play.

The play starts in the court of Navarre, with the King and his men signing a pledge “not to see ladies, study, fast, not sleep” (1.1.48). In giving up food and signing the pledge, Dumaine observes, “Fat paunches have lean pates, and dainty bits / Make rich the ribs, but bankrupt quite the wits” (1.1.26-7). He rejects the fatty foods of an easy life for the rigors of intellect. Later in the play, Nathaniel mentions that Dull has never “fed of the dainties that are bred in a book,” referring to Dull’s inability to properly identify the deer they observe while hunting (4.2.24). Nathaniel argues that the dainty bits most valued among the male characters are not those of the roast but those of the page. Shakespeare is conflating the discourse of the male characters of the play with a fat man, made lazy by eating rich food, directly establishing that the wits of the courtiers are as bulbous as the loins of a gourmand. In this confusing of the terms of eating and learning, fatty communication is established as the central problem of the play.

The disruption of communication is, as stated, conflated with fat, an image of the food rejected by the men. When Costard vehemently expresses his desire for “a plain plantain” in the face of another linguistic onslaught in Act 3, he is asking for communication that is simple and nourishing without the fat that hangs from much of the courtly
discourse spoken by the other characters. Costard demands that the courtiers simply tell him what they want, rather than spin larger and more complex webs of language in which his rustic mind becomes entangled. The fatty communication of the court is continually buttressed by the direct language of many of the commoners and by the women of France. So, not only is fatty language a central problem of the play, straightforward language is held out as a tentative solution. Having established the problem of eating and speaking, I would like to then move to a consideration of other issues in the play, all the while maintaining the centrality of the problem of fatty, confused, jammed, noisy, and misrouted communication in the court of Navarre.

In expanding beyond the fat of the discourse, I would like to point towards a new understanding of the gender politics presented in the play. First, I will consider the stoppage of food intake at the beginning of the play in order to show how this fast merely opens up the space for a linguistic feast that follows. From there, I will briefly discuss the gender inversion of the play’s second fast, highlighting the manner in which the men come to occupy a feminized position with regards to the views on fasting dominant during the period. After this discussion, I will build up a description of the court of Navarre in terms of the discipline of cybernetics. This description will provide better insight into the complicated, systemic nature of message exchange within Love’s Labor’s Lost. All this discussion of food, language, and gender will end with the application of Donna Haraway’s cyborg to the women of France. The double implications of this application are, first, a better understanding of the ways gender and language intersect and, second, the manner in which the cyborg, a figure commonly associated with postmodern high technology, works as a model of historical resistance that has existed for as long as men and women have been able to manipulate language. In this application, I perform a preposterous reading of Shakespeare that articulates the past as a zone of contact with the future and renders literary history as a non-linear field.
5.3.1 “Not to see ladies, study, fast, not sleep:” fasting, feasting, and the politics of denial

Love’s Labor’s Lost proves a beneficial site for the exploration of mouths in the Shakespearean canon, as it is a play that begins and ends with commands to regulate eating. The King of Navarre’s announcement of the creation of an academe in which the scholars must forgo meals once a week and eat but once a day otherwise opens the action (1.1.39-40). Further, the scholars’ sexual consumption shall be closely policed, with dire consequences for any of the lords found in the company of a woman. This scholarly fast has the intention of focusing efforts on the intellectual, the pursuit of “the light of truth” in a world otherwise full of bodily pleasures (1.1.85). While the lords seek to deny themselves access to a gastronomical feast, they are instead preparing to gorge at the trough of knowledge. In the Arden edition of the play, H.R. Woudhuysen glosses the lines “To love, to wealth, to pomp, I pine and die, / With all these living in philosophy” by quoting Samuel Johnson: “I suppose he means that he finds ‘love, pomp, and wealth in philosophy’” (1.1.31-2). Dumaine, who speaks those lines, is going to replace eating—nourishing the body—with learning—nourishing the mind. While the academe would seem to be denying itself access to feasting, it is merely severed from feasts of the flesh: its members’ goals lie in creating a feast for the mind. This redirection of the feast is but a part of the larger problem posed by the academe’s fast at the play’s start.

In order to further understand the problem created by shifting the focus of feasting from the consumption of food to the excretion of language in Love’s Labor’s Lost, a discussion of Deleuze and Guattari’s views on mouths will be beneficial. In their discussion of Kafka and minor literature, Gilles Deleuze and Felix Guattari produce an interesting discussion of the tense relationship between eating and speaking. For the two philosophers, “the mouth” finds its “primitive territoriality in food,” which is to say
that the mouth is naturally suited to the act of eating (Deleuze and Guattari, *Kafka: Toward a Minor Literature* 19). In the act of speaking, the mouth is alienated from this bodily, biological homeland. This move produces a certain and acute tension between eating and speaking. They go on to state that “to speak . . . is to fast,” implying that all acts of speaking fundamentally move the mouth away from its original purpose (19). This conceptual break sheds light on my discussion of *Love’s Labor’s Lost* because the play continually enacts a struggle over the role of food in an intellectual community. The members of the academe of Navarre seek to increase their ability to do intellectual labor—writing and speaking—by denying the mouth access to its “primitive” function. By privileging the nourishing of the mind over the nourishing of the body, the academe wants to affect a move not only away from the bodily pleasures gained by eating but also away from nature itself. They are also attempting, as David Glimp has argued, to find a form of “indulgence that allows for no surfeit, or a surfeit that in fact overcomes waste and decay” (Glimp 70). This consumption of facts and excretion of language is contrasted with the embodied acts of eating and defecating that the academe views as base. The mouths of Navarre are employed in unnatural acts.

Nancy Gutierrez has elsewhere established that male fasting in the Shakespearean canon is represented as “abnormal and unnatural” (Gutierrez 79). She bases this claim on the moral stance on asceticism at the time. Gutierrez argues that the Middle Ages viewed fasting and other acts denying the flesh as a means to “release the soul from its earthly claims so that a closer relationship with God could be achieved” (80). Contrasting this, “Renaissance moralists explicitly discouraged extreme abstinence for the very reason that it inhibited proper worship” (80). Instead, “an inner abstinence” was held as the preferred model during the period in which *Love’s Labor’s Lost* was written (80). By standing both against the body and the moral order of the world, the Navarre academy continually drives towards an entirely unnatural position. This unnatural position is the
first of the play’s many preposterous reversals.

In addition to the politics of the mouth and the anti-moral activities at play in Navarre, the sexual politics of the court are questioned as unnatural. The King of Navarre seeks to deny access to the worldly pleasures and pleasant distractions afforded by the female body. While doing so, he also denies access to the means of human reproduction. Costard states this rather simply after being found with Jaquenetta: “such is the simplicity of man to hearken after the flesh” (1.1.213-4). Just as the pursuit of linguistic ability deterritorializes the mouth, so the denial of sexual contact removes the body from its “primitive territoriality” (Deleuze and Guattari, Kafka: Toward a Minor Literature 19). By further denying the flesh, the men once again sever ties to the world of material embodiment, instead attempting to seek a “god-like” perspective of the world and to gain access to things men “should not know” (1.1.56-8). This divorce from embodiment is, for Gutierrez, a set of practices that “prevent the male characters from looking outside themselves” (Gutierrez 80). While this is perhaps true, it would seem, as well, that the royals of Navarre are attempting, also, to move beyond the base activities of the body: a life of the mind. As Glimp suggests, the royals of Navarre are attempting to escape becoming “the food of time,” hoping, instead, to move “outside of time, inheriting all the treasures of eternity in the form of knowledge” (Glimp 70). Immortality is ultimately what is at stake in the academe. Instead of existing on the surfaces of the earth and in the thralls of temporal existence, the scholars wish to view things from above and outside, to gain access to the larger, immortal truths of the world. In this way, the academe would seem to be constructed both against the natural order and the divine order of the world. By denying the flesh, the men of Navarre attempt to move the human perspective into the realm of the divine.

As mentioned previously, Gutierrez’s essay on fasting and Renaissance drama presents a convincing historical model for representations of self denial. So far, only
one of her models for fasting has been discussed in this essay. She, in fact, constructs two models: one male and one female. Male fasting is that which is done by “ascetic-minded scholars” and “languishing courtly lovers” (Gutierrez 79). In contrast, women fast as a “way of proving themselves chaste and loyal wives” (79). She expands this model when discussing popular representations of “fasting girls” during the period by claiming that these girls were held up as symbols of “God’s goodness and might” (83).

In Gutierrez’s model, a woman fasting is doing so to attempt to prove her worth as a moral individual and a model of Renaissance womanhood. Before discussing the popular origins of these fasting figures and the double standard they enact, though, Gutierrez draws examples from several Shakespeare plays, including *Love’s Labor’s Lost*. The problem, though, with her usage of the play is that she only discusses the initial fast. As previously mentioned, *Love’s Labor’s Lost* is important because it both begins and ends with fasting. Instead of using this flaw to reject Gutierrez’s argument, I would like to analyze why this exclusion is made. By exploring the second fast in terms of male and female fasting, the gender politics of *Love’s Labor’s Lost* begin to more clearly emerge.

Upon learning of her father’s death, the Princess declares an end to the merriments of the play’s preceding acts. In asking her to remain in Navarre, the King insists that his love is true, and not a product of the academe’s denial of sexual pleasure. Rejecting this, the Princess instructs him in how he may prove the truth of his love:

```
Your oath I will not trust, but go with speed
To some forlorn and naked hermitage,
There stay until the twelve celestial signs
Have brought about the annual reckoning.
If the austere insociable life
Change not your offer made in heat of blood;
If frosts and fasts, hard lodging and thin weeds,
Nip not the gaudy blossoms of your love (5.2.788-95)
```

This command toward fasting is interesting for a number of reasons. Unlike the terms of
the academe, it values both the “insociable life” and “hard lodging and thin weeds.” This fast is not a redirection of feasting from body to mind. Instead, it is both a fast of food and words, as the “insociable” is a call to linguistic isolation, to silence. The Princess is not interested in the repetition of the rhetorical fancies of the Navarre academe: she wants the royals to fast both mind and body in order to prove the moral character of their love. This dual fast is where tension arises with Gutierrez’s arguments about male and female fasting in Shakespeare. According to her argument, women in Renaissance drama fast in order to prove their worth as lovers, unlike the “abnormal and unnatural” fasting of men (Gutierrez 79). If we are to take Gutierrez at her word, the second fast in *Love’s Labor’s Lost* would seem to point towards the men inhabiting a feminized position at play’s end. The Princess, in this call to feminine fasting, attempts to break down some of the gender discrimination inherent in the Navarre court. Correctly identifying that the royals of the court, even the more logical and realistic Berowne, desire them as sexual objects, not as integrated individuals, the Princess desires to move the fasting towards the production of relationships between “faithful friend[s]” (5.2.822). By asking the men to inhabit a traditionally feminine position, the Princess attempts to subvert gender norms and manipulate the conventions of Renaissance relationships in order to establish cross-gender pairings based on equality. I will return to this figure of friendship and gender play later in the essay, as it is important for establishing the cyborg identity of the Princess, but, at the moment, I would like to move from the fasts that bookend the play and begin to consider the feast that represents the meat of the action.

5.3.2 “The painted flourish of your praise:” Wit, Noise

One characteristic of Carnival celebrations in Renaissance Italy, as documented by M.J. Anderson, is an acknowledgement of the cyclical nature of feasting and fasting in daily
Having discussed the opening and closing fasts of the play, I would like to shift consideration to the “great feast of languages” that makes up the bulk of the action (5.1.35). As established previously, the fast of the academe is merely a redirection of feasting from food to language and the complicated character of this feast of words has been oft discussed. *Love’s Labor’s Lost* is frequently mentioned as being difficult to perform, due to the difficulty modern audiences have in understanding its complex language (Woudhuysen 1). In considering the linguistic difficulties of the play, I would like to discuss the academe in terms of cybernetics and argue for the exclusionary nature of its system of message interchange.

Cybernetics is a discipline dedicated to attacking “the problem of control and communication in general” (Weiner 17). Emerging after World War II, the interdisciplinary science sought to expand the understanding of message interchange between elements within a larger system. A system, in cybernetics, is defined as “an ensemble of elements called sub-systems, which inter-action [sic] and form an organized whole” (Teodorescu-Brinzeu 351). By studying the messages through which sub-systems interact, a better understanding and streamlining of the system as a whole can be established. Cyberneticians, also, struggle against noise and entropy, both of which disrupt messages and seek to decrease the order of the system. In other words, cybernetics is the science of minimizing chaotic behavior in communication.

Rather than proposing to analyze *Love’s Labor’s Lost* in terms of system theory, I would like to consider the Navarre academe as a message system that seeks to deploy specifically coded messages towards the attainment of knowledge and the manipulation of the female body. Unlike the cybernetic systems described by Weiner and other early cyberneticians, the men of Navarre value messages not for their simple ability to encode complex meaning, but for the complex, poetic form of the message (regardless of the intelligibility of meaning). This is one of the meanings of the word “wit” as it
is repeatedly used in the play. In Navarre, wit is the means of preferred message exchange, the medium for their many messages. When reading Armado’s letter, the King describes him as having “a mint of phrases in his brain, / One who the music of his own vain tongue / Doth ravish like enchanting harmony” (1.1.163-5). Then, the king goes on to state, “But I protest I love to hear him lie” (1.1.173). Despite acknowledging the untrustworthy character of his meaning, the King enjoys Armado’s presence due to the pleasing form of the messages. The complex, intellectually rigorous poetic form of courtly poetry informs the structure of the academe’s discourse, as Woudhuysen argues in the introduction to the play’s third Arden edition.

By placing primary value on complexity, the system instantiated by the King of Navarre at the beginning of the play establishes a discursive system that seeks to exclude women. As Eve Sanders has documented, “in the wake of humanist and religious reform, literacy spread through defined channels in ways that reinforced social distinctions” (Sanders 1). She goes on to state that these pedagogical practices sought to divide students into “male and female subjects” (1). While men were taught to read and write in ways that reinforced their “virility,” women were taught to read and write in ways that enhanced their “virtue” (2). Women, who were significantly less educated than men, were often taught to read with “works of orthodox piety” (13). All of these facts not only limited the access of women to reading but also established them as different kinds of readers. Not only were women educated from texts that enforced social ideas of women as quiet pillars of virtue, they were also limited in access to literacy and to the classical texts upon which the academe of Navarre base their discourse system. By valuing complex rhetoric as a means of ideal communication, the men of the academe hope to exclude women from their system.

In addition to excluding women from participation in the system, the men also desire the objectification of the female body. Berowne mentions, when speaking of the
goals of his wooing, that he desires “A woman that is like a German Clock,” which the third Arden edition of the play glosses as referring to “elaborate” mechanisms that “were more valued as ornaments than reliable time-pieces” (3.1.185). Instead of desiring women who are their intellectual equals or able to participate in the linguistic games of the academe, Berowne and his peers want women who will look good but not necessarily work meticulously on the inside. The men continually value the surface of the female body, as in the masque sequence in which they plan to use the tokens given to the women of France as identifiers. When engaging with the women, who have exchanged tokens, the men are unable to differentiate among the women: intellectually they do not recognize their beloveds, being only concerned with surfaces. In this obsession with the surfaces of the female body, the men apply their interests in linguistic surfaces to the feminine. What happens, though, when these pretty tokens begin to reveal their depth and prove able to participate as equals within this complex linguistic web?

The goal of any cybernetic system is to prevent the presence of noise. There are two major, competing models of noise within the discourse of cybernetics and I would like to consider each, momentarily. Claude Shannon, in formulating information theory, views noise as part of a “binary distinction between signal and noise” in which information is the signal and noise disrupts the homeostatic nature of the cybernetic system (Hayles 452). Donald MacKay, on the other hand, treats noise as reflexive, a “difference in the state of the receiver’s mind before and after the message arrived” in which information is data valued by the receiver and noise is data that has no value (452). In other words, noise is information, according to MacKay’s model.

Noise, in the context of Navarre, is played by the characters who do not choose to participate in the displays of wit, or participate incorrectly: the men of the court are making class, race, and sex based distinctions between those who can participate in the discourse and those who are merely in the background. While this distinction clearly
relates to the reflexive model of noise, the men choose to exclude these groups because, for the men, they represent “the stops that hinder study” which relates more closely to the homeostatic model of noise (1.1.70). In either case, both models of noise can be said to be present within the cybernetic system of the academy, and the men attempt to exclude the noisy Other from participating in order to keep the flow of information uninterrupted.

As Jacques Attali has noted, “a network can be destroyed by noises that attack and transform it” (Attali 33). By limiting the presence of noise, outside voices, the men of the Navarre academe wish to maintain the stability of their system. They do this through excluding and silencing those they view as vectors of noise: food, commoners, and women. As we have seen, the linguistic ramifications and strictures of the academe seek to accomplish noise reduction within the network. The reason, however, to do this is that noise, polyvocality in this case, “frees the . . . imagination” of those involved in the network (33). By streamlining the avenues of communications, a cybernetic system can be directed towards maximum efficiency. This streamlining often comes at the cost of outside voices of dissent, a failure of the imagination. There is danger in such streamlining and the women of the play recognize these dangers. However, to continue to explore the ramifications of these noisy agents within this cybernetic system, I would like to build up the figure of the cyborg as means of both amplifying noise and freeing imaginations.

5.3.3 “I hear your grace hath sworn out housekeeping:” The tongue of the cyborg

What is meant by the reference to “housekeeping” in 1.1.104? Woudhusysen glosses the line, in the Arden, as meaning “to do without hospitality” (1.1.104n). This is clearly one
of the implications that could be drawn from the reference. In addition to hospitality, David Glimp discusses the reference in regards to the “oeconomy”, or the economy of the household (Glimp 71). He then goes on to expand this reference to a discussion of the “carefully defined relationships” between a lord and “his wife, his children, and his servants” (72). Glimp is primarily interested in articulating the tension between the domestic economy manifested on the Renaissance stage and the national political system of early modern England, but I would like to further discuss the gendered implications of this oath against housekeeping.

As has already been shown, the Navarre academe is attempting to divorce itself, through knowledge practices, from embodied realities. This departure would seem to be a further implication of the Princess’s words: the housekeeping that is sworn out is the material, embodied, day-to-day practices of living. The Princess, in this early scene, reveals her understanding that the intellectual life of the court is not grounded in the real. As we have seen, the patriarchal society of Navarre has constructed a cybernetic system based on complicated, courtly rhetorical discourse that values the exclusion and objectification of the female body. This system is constructed, as the Princess astutely observes, by the swearing out of housekeeping: in addition to casting out women, the traditional housekeepers, the society of Navarre has also thrown out the material in order to focus on the rhetorical. At the very first encounter with the King, the princess has shown a deep understanding of the cybernetic message system of the Navarre academe.

More important than merely recognizing the nature of the system, the women are able to effectively manipulate it not through resistance to the actions of the system but by becoming involved in the “deadly game” being played by the men of Navarre (Haraway 161). By participating in the system, but for different, disruptive ends, the women of the play begin to inhabit the role of what Donna Haraway terms “the cyborg.” First named in the mid-1980s as a model for Marxist, political resistance in an age that was
rapidly moving away from the forms of capitalism described by Marx, the cyborg is “an ironic political myth faithful to feminism, socialism, and materialism,” “a hybrid of machine and organism,” and a creature that “populates worlds ambiguously natural and crafted” (149). The application of these creatures that emerge from science fiction to the theatre of Early Modern England would appear limited, but it is important to note that Haraway’s essay refuses to provide the cyborg with an origin story: the cyborg “is the illegitimate offspring of militarism and patriarchal capitalism,” in all its various, historical incarnations. To speak of it only in terms of machines implanted in the body, as well, is to limit the ramifications of the cyborg. Haraway uses the cyborg, instead, to draw attention to the ways in which human political action does not have to occur through identity with a larger history of oppression but affinity between disparate social units (155). The cyborg is political, not technological.

While the cyborg evokes a specific set of postmodern body-manipulating technologies drawn from cutting edge applications of computing and biology, access to a communication system is what allows cyborg politics to occur. As Haraway writes, “cyborg politics is the struggle for language and the struggle against perfect communication, against the one code that translates all meaning perfectly” (176). While clearly important to structuring political resistance in the contemporary world, the cyborg is a historical figure: as long as the terms of communication are able to be contested, the cyborg may emerge. The usage of code is important in Haraway’s work on naming the cyborg. In her myth system, a code is a specific system of language tropes that seeks to shut down discourse and causes “resistance to instrumental control [to] disappear” (164). By contesting the emergence of translating codes, the cyborg is able to manipulate systems of dominance towards more productive ends. Ultimately, the cyborg is committed to moving beyond traditional boundaries (between genders, for instance) and to more fully participating in a hitherto exclusionary discursive system. By participating—but partic-
ipating with a different agenda—Donna Haraway suggests that the cyborg will be more capable of resisting the forces that seek to specifically structure and limit discourse. The cyborg is a myth of participatory resistance: active, disruptive involvement instead of passive protest.

As has been shown previously, the Navarre academe represents such a coded message system, which Haraway terms “the informatics of domination” ([161]). She locates the informatics of domination in the move from “all work to all play” inherent in the retooling of the contemporary, Western economy from industry to information, but she also suggests one cause is the increasing militarization of everyday life ([161]). This militarization is key, as repeated references to soldiering and warfare litter the romantic play of Love’s Labor’s Lost. In this way, the action of the men, in their coded linguistic system, while attempting to seduce the women, play the “deadly game” of domination described by Haraway ([161]). After learning of the love interests present in all of his comrades, the King suggests the men begin the wooing in earnest by commanding: “And, soldiers, to the field!” (4.3.340). In doing so, he suggests that the world of love is merely a battlefield with different strategies and different means of combat. This application of martial language to the courtship illustrates the militarism that lies at the heart of all of the court of Navarre’s actions. At the play’s opening, the King declares that his scholars are “brave conquerors” warring “against [their] own affections” and attempting to conquer death through the acquisition of knowledge (1.1.8-9). This militarization of other fields of action illustrates the militarism lying at the center of the informatics of domination within the play. The men of the play are unable to think outside of the glories of combat, their traditional role within Western, Judeo-Christian patriarchy. The war of wooing waged by the men may be an idle game, but it is, as all games within the informatics of domination, a game with deadly and serious consequences due to the militarized nature of the system.
The stakes of the wooing in *Love’s Labor’s Lost* are dangerously high. The Princess acknowledges the apocalyptic ramifications of the game. When asked by the King, at the end of the play, to remain in Navarre, she declares the time spent playing in the kingdom is “A time, methinks, too short / To make a world-without-end bargain in” (5.2.765-6). Woudhuysen glosses this phrase as meaning “forever and ever,” a reference to the Book of Common Prayer, but the phrase specifically speaks to the world after the second coming, after the apocalypse. Like the cyborgs Haraway identifies—who seek to “subvert the apocalypse of returning to nuclear dust in the manic compulsion to name the enemy”—the women recognize that the ends desired by the men of the court is the fall into wifehood that Catherine Belsey identifies as occurring at the end of many Shakespearean comedies (151; Belsey 647). It is not the end of the world in nuclear fire, but the objectification at the heart of the men’s system is an end to their world of wit and independence, a relationship not based on friendship.

How, though, do the women play the deadly game of Navarre without falling victim to it? As previously established, Navarre is a system of complicated rhetoric, called “wit.” Similarly, the men of Navarre seek to read the women as they read their books. The women work to disrupt the wit and reading that occurs in the court of Navarre in ways similar to the cyborg’s ability to contest access to language through reading. Haraway says, “If we learn to read these webs of power and social life, we might learn new couplings, new coalitions” (Haraway 170). As Eve Sanders has argued, the women are able to work in Navarre because they are “acute readers, in some cases more so than the men” (Sanders 52). Sanders situates the manipulation of reading in the masque sequence. The women, by re-assigning the signifiers given them by men, assert their independence and resist external readings of their bodies. Further, by reading the webs of power in Navarre and confusing the men’s reading of their bodies, the women show they are not “inert signifiers to be interpreted by others” (54). To contest for terms of
discourse and to resist external interpretation is the goals of the cyborg.

In addition to resisting external reading, the women are effective at disputing the discursive system of the men. By offering up different, better interpretations of the men’s wit, the women can actively contest for the goals of the system (53). Irene Dash has noted that the women of the play are “undisturbed by direct language,” choosing to speak in a language that is clear, bawdy, and well informed (Dash 15). The women “insist on honesty, reject flattery, and dismiss flowery, unsubstantiated words” (15). By questioning the very terms of the language of the court, and deploying the wit it so values, the women reveal the “hollowness” that underscores the court’s system (15). The Princess and her attendants repeatedly halt the rhetorical flourishes of the men and offer up counter-interpretations of what has been said. When the King and Princess first speak, the shape of the discourse is immediately set:

KING: Fair princess, welcome to the court of Navarre.

PRINCESS: ‘Fair’ I give you back again, and ‘welcome’ I have not yet. The roof of this court is too high to be yours, and welcome to the wide fields too base to be mine.

KING: You shall be welcome, madame, to my court.

PRINCESS: I will be welcome then. Conduct me thither. (2.1.90-6)

The terms are thus immediately contested. Refusing to be wooed by the complicated, flowery character of the King’s language, the Princess, instead, immediately shifts the focus from form to content. This deconstruction continues throughout the play, until Berowne prophetically declares, “Speak for yourselves. My wit is at an end” (5.2.430). Forced to continue to spar with a group of women adept at rhetorical flourishes, Berowne ultimately realizes that he cannot continue to use rhetoric to mask the hollowness of his language. At that moment, the men realize that they have been bested by a group of women more adept at language and reading.
The women’s ability to form affinity groups accounts for their ability to read successfully. By identifying across boundaries, the cyborg is able to make the goal more important than any sense of a shared history of trauma. In *Love’s Labor’s Lost*, the Princess settles a dispute between Katherine and Boyet by suggesting that “This civil war of wits were much better used / On Navarre and his bookmen, for here ‘tis abused” (2.1.225-6). Instead of struggling among themselves and despite being separated by gender, the Princess recognizes that Boyet and Katherine are both more threatened by the men of Navarre. This temporary deferral of minor disputes is key to the formation of an affinity politics. After declaring the end to this “civil war of wits,” the women of the court and Boyet are more effectively able to move against the designs of the men of Navarre. Boyet assists the women against the other men who view Boyet only as a foreigner. Towards the beginning of the final scene, he enters, informing the women of the approaching men and the “Encounters mounted . . . Against [their] peace” (5.2.82-3). Instead of identifying with the royal men of Navarre (with whom he shares more identity), he assists the women of France because of the affinity they share in desiring to disrupt the academe’s designs on the female body.

Having successfully formed affinity units and gained access to the courtly language at the play’s end, the women have called for the men to assume a position of feminized fasting, in order to establish the veracity of their love. This gender play, though, also marks the women as having successfully redirected the scope and trajectory of Navarre’s linguistic feast. Not only have they successfully entered into the male discursive system of the court, they have manipulated it to more equitable, productive ends. By gaining control of the masculine discourse, the Princess and her attendants are passing for men, not unlike the instances of female to male transvestism present in many of the other comedies in the canon. Catherine Belsey, in discussing this passing, argues that these acts of crossdressing and misidentification disrupt “sexual difference
itself” (Belsey 642). In her argument, the women-as-men characters, as performed by men during the period, allow the issue of absolute gender to remain “unresolved, releasing for the audience the possibility of glimpsing a disruption of sexual difference” in the gender-blurred figure of the man-playing-woman-playing-man onstage (642). Going on to discuss the daring identity politics of *Twelfth Night*, Belsey concludes that these bodily transformations, even the most radical, ultimately end with the passing heroine dwindling “into wife” (647).

When a heroine bodily passes as male in Shakespeare, the order of gender is ultimately restored, after offering the audience a glimpse of disruption. At the end of *Love’s Labor’s Lost*, though, there is no decline into wifehood. Instead, the play ends unresolved, holding out the promise of order restored, but never allowing it to materialize. The play of gender threatens to continue. This continuation can occur because the heroines of *Love’s Labor’s Lost* never attempt to bodily pass as men. Instead, they are intellectually engaging as women with a masculine discursive system. While passing in other Shakespearean comedies could be read as the disruptive participation of the cyborg, it is a solitary act, without the important affinity networks afforded by cyborg politics. This communalism is why the discursive, intellectual passing of the women of France is so much more disruptive and so much more dangerous to the men of Navarre.

This fear of linguistic disruption of the wooing, discursive system established in Navarre reveals why the men of the play desire to dismember the dangerous body of cyborg women. The punishment meted out to a woman found within the walls of the academe is the “pain of losing her tongue” (1.1.122-3). This is especially painful not merely in silencing the mouth of the woman, which Patricia Parker describes as being stereotypically unable to be kept shut, but because it limits the ability of the woman to master the codes of the court (Parker and Hutson 250). By openly defining the terms of the academe, the men dangerously hold out the ability to gain access to the secret
codes of the system for speakers whom they are attempting to exclude. The tongue of
the cyborg is the most important organ of its body, because after gaining access to the
codes, to move in a system of domination is to speak in tongues \cite{Haraway181}. Not
merely silence, the removal of a woman’s tongue takes away her agency, her ability to
“refuse to disappear on cue,” and to tell her own stories instead of the ones authored for
her \cite{177}. Without a tongue, a cyborg cannot communicate. Without communication, a
cyborg cannot resist.

5.3.4 Coda: Preposterous Literary Studies

Cyborgs in Shakespeare? When taken literally, the very idea seems absurd, but this
entire essay has sought to author such a preposterous reading of \textit{Love’s Labor’s Lost}.
More than merely documenting moments of reversal, from pre to post, speaking to eat-
ing, woman to man, and man to woman, this essay has sought to suggest a preposterous
model of literary history itself. In \textit{Quoting Caravaggio: Contemporary Art, Prepos-
terous History}, Mieke Bal appropriates Patricia Parker’s work on preposterousness as a
model of cultural history. For Bal, the postmodern appropriation, quotation, and ma-
nipulation of Caravaggio’s paintings suggests a mutation in the perception of both the
new work and the older image. These paintings “put what came chronologically first . . .
as an aftereffect behind . . . its later recycling,” suggesting that an engagement between
past and present texts mutates the very way we can understand a work of art \cite{Bal7}.
This new understanding is one of the most powerful, and oft overlooked, abilities of
readings that rely on contemporary theoretical texts that seem unrelated to the literary
past.

Of course, such theorization is not without violence. As Bal writes, “quoting Car-
avaggio changes his work forever . . . it specifies what and how our gaze sees” \cite{1}. In
using Donna Haraway’s highly postmodern and ambiguous myth-making as a lever on Shakespearean comedy, our understanding of both texts changes. Not only do we see the past in Haraway’s contemporary scholarship, we find the future in Shakespeare’s play. Bal’s text on the Baroque calls this process “entanglement,” a model of cultural history that “neither entails something that is simply relativism nor allows universalism or absolutism to assert itself” (25). By escaping from the powerlessness of postmodern relativism and from the burden imposed by tradition, this concept of entanglement, as an approach to literary practice, frees the imagination to take flight within the complex map of entangled literary, philosophical, and critical texts that constitutes the domain of textual studies. A preposterous approach to scholarship is, in this way, capable of producing new and novel connections between disciplinary fields that highlights the connected nature of all cultural history in a way not captured within the arbitrary constructions of historical and disciplinary categories. Moving freely through the entangled thicket of our cultural past and present represents a possible future for literary scholarship.

In addition, this preposterous reading has shown how the politics of the cyborg, which speak a politics of the transhuman as well, suggests that certain aspects of transhuman existence (affinity, communication, evolution) are in fact much older than previously thought. So, while we have seen transhumanism’s “emergence” during the 20th century, we can now begin to suggest that the evolutionary logic of transhumanism is, in fact, much older. Now that it has found its moment of expression, what work can be done?

5.4 Transhumanism as Cultural Dominant

Since Chapter[1] we have been discussing the concept of transhumanism in a number of ways. That first chapter sought to raise the question of defining transhumanism: is it an
ideology? is it a style? is it a discourse? It is the thesis of this final section, and this work as a whole, that transhumanism constitutes a cultural logic that, like postmodernism before it, is rising into the position of what Fredric Jameson calls in “Postmodernism or the Cultural Logic of a Late Capitalism” a “cultural dominant.” In that essay, he writes:

One of the concerns frequently aroused by periodizing hypotheses is that these tend to obliterate difference, and to project an idea of the historical period as massive homogeneity (bounded on either side by inexplicable ‘chronological’ metamorphoses and punctuation marks). This is, however, precisely why it seems to me essential to grasp ‘postmodernism’ not as a style, but rather as a cultural dominant: a conception which allows for the presence and coexistence of a range of very different, yet subordinate features. (Jameson, *Postmodernism, or, The Cultural Logic of Late Capitalism* 3-4)

For Jameson, the cultural dominant is the central organizing principle (or collection of axioms) that underscores artistic, political, and economic production in a given moment. His postmodernism essay then can be seen to stand as an attempt to trace out the history, origins, and shape of this new cultural logic (hence the title). Jameson concludes the essay with the rather famous discussion of the role cognitive mapping plays in the postmodern. This enunciation of this concept is the best starting point for the claim that transhumanism constitutes the cultural dominant that follows after postmodernism.

For Jameson, cognitive mapping is the response to the collapse of traditional modes of meaning in late capitalism. As Jameson makes the case, this rise of late capitalism represents a new global awareness thanks to communications media and a “waning of affect” as the traditional bourgeois ego of modernity dissolves. For Jameson, this new world system represents a fundamental crisis in political art: how does one resist when resistance is now coded as one brand amongst many in an economy driven by the exchange of cultural signifiers? For Jameson, then, traditional Marxist responses no longer have value: the shape of capitalism must change and so must aesthetic responses to it.
For Jameson, the first step in the creation of a new political art in the age of late capitalism is a process he calls “cognitive mapping.” Drawing on Kevin Lynch’s *The Image of the City*, Jameson says cognitive mapping “involves the practical reconquest of a sense of place, and the construction or reconstruction of an articulated ensemble which can be retained in memory and which the individual subject can map and remap along the moments of mobile, alternative trajectories” (59). In Lynch’s works, these processes are applicable to life in the modernist city, but for Jameson, such tools now take on global significance: the alienation felt in an anonymous city are now the global conditions of being. For Jameson, the chief political task of the postmodern is “to enable a situational representation on the part of the individual subject to that vaster and properly unrepresentable totality” represented by an unknown, complex multinational capital (59). This political act, then, is cognitive mapping: the deeply personal attempt to remap the landscape of the postmodern with an eye toward producing an understanding of the new shape of totality.

A common misconception about cognitive mapping is that it has something inherently to do with the character of the postmodern, as though cognitive mapping were itself a feature of the postmodern. A careful reading of Jameson’s essay, however, reveals that his thinking about mapping suggests that it is, in fact, the start of a tentative political resistance to postmodernism itself:

This is not, then, clearly a call for a return to some older kind of machinery, some older and more transparent national space, or some more traditional and reassuring perspectival or mimetic enclave: the new political art—if it is indeed possible at all—will have to hold to the truth of postmodernism, that is, to say, to its fundamental object—the world space of multinational capital—at the same time at which it achieves a breakthrough to some as yet unimaginable new mode of representing this last, in which we may again begin to grasp our positioning as individual and collective subjects and regain a capacity to act and struggle which is at present neutralized by our spatial as well as our social confusion. (62)
For Jameson, then, the act of mapping points towards the creation of a new politics of resistance.

It is the thesis of this dissertation that the act of grasping “our positioning as individual and collective subjects” within “the world space of multinational capital” is fundamentally transhuman. This is the meaning of the section on LOLcats: the Internet meme is one act of cognitive mapping, a possible beginning of an answer to the problem of the human in the age of a global humanity. Transhumanism, in many ways, gives a name to the politics of the era beyond postmodernism, that which Jameson hopes to gain access to via cognitive mapping. If, then, we are beginning to see the emergence of a cultural production based on cognitive mapping (as opposed to the cultural productions of the postmodern, which only cry out for such a mapping as a response).

As with LOLcats, which we saw as a symptom of a coming intertwingularity, contemporary cultural production is increasingly beginning to look different from the aesthetic strictures of postmodernism, as outlined in the Jameson piece. While we have already seen how this cultural production operates in “low” or “popular” cultural production, more avant-garde or artistically inclined production also evinces an increasing awareness of global intelligence and transhumanism. One such example of this kind of cultural production is the recent filmic genre that could be called the “visualizing globalization” film. Beginning in 2000 with films such as Traffic and Amores Perros, this genre of cinema is concerned with the growing web connecting humanity on an affective level. In Traffic, for instance, the drug trade across the US-Mexican border is taken as an occasion to explore the intersecting lives of a multitude of individuals who all see their lives destroyed by this illicit industry. In telling the story of the occupants of several cars involved in a fatal car accident in contemporary Mexico City, Amores Perros maps the intersections between rich and poor, revolutionary and apolitical, etc. are mapped for the viewer. Other examples of this genre would include Y Tu Mamá También (2001),
In each case, the basic story of these films involves some sort of violent confrontation (car accidents provoke the plot of Amorres Perros, 21 Grams, and Crash, for instance) forces a group of characters (and, by extension, the audience) to confront the connections that exceed their unique subject-positions. In many ways, the films themselves, more than the so-called postmodern art documented by Jameson and other thinkers of this period, visualize the breakdown of subjecthood at the hands of a multinational world. More importantly, though, this sense of global interconnectedness, panic in Burroughs or intertwingularity in Nelson, is substituted for the crisis of the subject. Those who successfully navigate the crises of these film plots do so through an ability to make connections across arbitrary social boundaries; most characters, however, are destroyed in order that we may learn a lesson as viewers.

In any case, just as LOLcats represent an experimentation in the global meaning-making technologies of the noösphere, this new genre, that attempts to visualize the global nature of our society, represents an experiment in the kinds of politics that comes after the postmodern, as a result of cognitive mapping. These films suggest a new kind of subject and, more importantly, a new way of thinking about the globe that transcends the limits imposed by the subject / object duality of an outdated humanism. Just as the women of Navarre, above, attempt to navigate the gender politics of their era, so do these films show the increasing importance of affinity and connection in mapping the new world space created by global capitalism. This model of connection, affinity, and an intertwingled post-humanism is, like the postmodern before it, coming into its moment as cultural dominant. Jameson writes

it may indeed be conceded that all of the features of postmodernism I am about to enumerate can be detected, full-blown, in this or that preceding modernism (including such astonishing genealogical precursors as Gertrude
Stein, Raymond Roussel, or Marcel Duchamp, who may be considered outright postmodernists, avant la lettre). What has not been taken into account by this view is, however, the social position of the older modernism, or better still, its passionate repudiation by an older Victorian and post-Victorian bourgeoisie, for whom its forms and ethos are received as being variously ugly, dissonant, obscure, scandalous, immoral, subversive and generally ‘anti-social’. It will be argued here that a mutation in the sphere of culture has rendered such attitudes archaic ...

The first point to be made about the conception of periodization in dominance, therefore, is that even if all the constitutive features of postmodernism were identical and continuous with those of an older modernism—a position I feel to be demonstrably erroneous but which only an even lengthier analysis of modernism proper could dispel—the two phenomena would still remain utterly distinct in their meaning and social function, owing to the very different positioning of postmodernism in the economic system of late capital, and beyond that, to the transformation of the very sphere of culture in contemporary society. (4)

In other words, as with the cyborgs in Loves Labours Lost, postmodern cultural production (or at least the aesthetic strategies assembled under that name) exist in a transhistorical fashion (going beyond Jameson’s modernist examples, one could think of Tristram Shandy as embodying certain elements of the postmodern) that found their correct moment of expression (the moment in which their logic could be best expressed) in the late capitalism of the 1960s. The question that remains to be answered, though, is that if postmodernism is modernism shifted into the mutated world space of late capitalism, what has changed to promote the transhuman to cultural dominant?

The answer, of course, is us. As Jameson writes in “Postmodernism,”

I am proposing the motion that we are here in the presence of something like a mutation in built space itself. My implication is that we ourselves, the human subjects who happen into this new space, have not kept pace with that evolution; there has been a mutation in the object, unaccompanied as yet by any equivalent mutation in the subject; we do not yet possess the perceptual equipment to match this new hyperspace, as I will call it, in part because our perceptual habits were formed in that older kind of space I have called the space of high modernism. The newer architecture therefore—like many of
the other cultural products I have evoked in the preceding remarks—stands as something like an imperative to grow new organs, to expand our sensorium and our body to some new, as yet unimaginable, perhaps ultimately impossible, dimensions. (47)

This quotation begins the infamous section in which Jameson becomes lost in the lobby of the Bonaventura hotel in downtown Los Angeles. An under-analyzed aspect of this section is this call to evolution. For Jameson, the alien landscape of the Bonaventura and, by extension, the alien landscape of the global world space of late capitalism itself exerts a simple axiomatic call: “EVOLVE!” In this moment in his account of the postmodern, Jameson suggests that as organisms we must evolve to meet the challenges of the postmodern, we must “grow new organs” and “expand our sensorium and our body to some new, as yet unimaginable ... dimensions.” This call to answer the evolution pressures of global capital might be the most singular moment in Jameson’s entire oeuvre. Given the conclusion to “Postmodernism,” Jameson himself does not even appear to know what to make of the claims made in the above selection.

While, as we have seen, cognitive mapping is a strategy tied to the emergence of a global, transhuman intelligence, Jameson’s description of cognitive mapping, as we saw above, fall back on the same sort of things we normally expect from Jameson: reanimation of the political, engagement with Party-based political resistance, etc.. The evolutionary challenge posed by the space of the Bonaventura drops, like a bad dream, from Jameson’s conclusion and his account of cognitive mapping. This is the most frustrating aspect of reading Jameson from a transhuman perspective. There are moments, throughout his body of work, in which these visions of an evolving humanity pop up, only to be tamped back down by an over-arching commitment to an outdated model of

As Ian Buchanan has noted in Deleuzism, the main critical response to “Postmodernism” has taken the form of visiting the Bonaventura and finding that it is not as baffling as Jameson makes it appear. Obviously, this response misses the entire point of Jameson’s essay.
political action. Jameson’s dream of a Party blind him to the evolutionary destiny of the species.

What kind of a politics does the transhuman suggest, then? In concluding this section, I would like to imagine a world in which Timothy Leary’s “The Cyber-punk: The Individual As Reality Pilot” takes the place of Jameson’s “Postmodernism: The Cultural Logic of Late Capital” as the central statement on the last twenty or so years of human intellectual history. Leary’s essay, which stands as a program essay for the switch from LSD to digital computers as the chief tool for cognitive evolution, attempts to map this world space of late capital, described by Jameson, in terms that are free from older, modernist models of politics and subjects. For Leary, the political action of the present fully embraces the evolutionary call of the Bonaventura.

In Leary’s essay, the figure of the cyberpunk, a figure popularized by SF writers such as William Gibson and Bruce Sterling, becomes a model for being in the space of the postmodern. Leary suggests that, like the cyborg in Shakespeare, the concept of the cyberpunk is actually transhistorical:

The classical Old West-World model for the Cyber-punk is Prometheus, a technological genius who “stole” fire from the Gods and gave it to humanity. Prometheus also taught his gene-pool many useful arts and sciences. According to the official version of the legend, he/she was sentenced to the ultimate torture for these unauthorized transmissions of Classified Information. Prometheus was exiled. In his/her own version of the myth (unauthorized) Prometheus (a.k.a., the Pied Piper) uses his/her skills to escape the sinking kinship, taking with him the cream of the gene-pool. (T. Leary, “The Cyber-Punk: The Individual as Reality Pilot” 252)

For Leary, these cyber-punks, strongly individualist beings who have a deep understanding of technology, “were tolerated only at moments when innovation and change were necessary” (253). Now, though, “the world has become too dynamic, complex and diversified, too cross-linked by the global immediacies of modern (quantum) communica-
tion, for stability of thought or dependability of behavior to be successful” (253). Leary’s essay continues by exploring a definitional argument about the term “cybernetics”. For Leary, Norbert Weiner’s original definition of cybernetics poses a serious problem for the future of human civilization. Weiner, as Leary points out, claimed that cybernetics comes from the Greek word *kubernetes*, meaning “pilot”. However, as Leary goes on to show, Weiner’s application of this concept of “pilot” to his new science of control and communication in information systems actually draws on the Latin understanding of the concept in which *kubernetes* becomes *gubernates*, “this basic verb ‘gubernare’ means to control the actions or behavior of, to direct, to exercise sovereign authority, to regulate, to keep under, to restrain, to steer. This Roman concept is obviously very different from the original notion of ‘pilot’” (256). In the Greek mindset, pilots, “sailing the seven seas without maps or navigational equipment, [were] forced to develop independence of thought” (254). As Leary continues “the Athenian cyber-punk, the pilot, made his/her own navigational decisions” (254).

While intimately connected with Jameson’s cognitive mapping, Leary lays bare the evolutionary and post-Party implications of this act of navigation in ways that Jameson does not. The difference between pilot and governor, unacknowledged in the cybernetic discourse that made use of the Greek into Latin shift of vocabulary, is also mirrored in the need to shift to a politics beyond the Party in the figure of the transhuman. Transhumanism, as we have seen, represents an evolution in thought itself, a refusal to think in terms laid out by others. For Leary, the digital computer becomes an agent of evolutionary change. It is important to connect the research on bird-song seen in the LOLcats section above to Leary’s account of the computer, here: the cyber-punk is someone whose brain has been rewired by technology or, in Jameson’s terms, has grown new organs. This act of growing new organs, as we have seen, is part and parcel with the evolutionary overcoming of the human that is a core belief of transhumanism.
In this way, we can begin to see that the shift from postmodernism to transhumanism as cultural dominant, in Jameson’s understanding of the concept, is not, this time, due to a shift in capitalism (as with the shift from modernism to postmodernism). Jameson and Leary both acknowledge that the world space of late capitalism exert inherent evolutionary pressure on the human and demand the need for new patterns of mental activity. One could argue, in fact, that the aesthetics of transhumanism described in this section (LOLcats and the visualizing globalization film) are inherently postmodern. This is probably true, but just as we saw in Jameson where postmodernism is modernism in a different economic context, aesthetic transhumanism is postmodernism in a radically different evolutionary context.

5.5 New Humans, New Humanities

“There is no need to fear or hope, but only to look for new weapons.”

– Gilles Deleuze, “Postscript on the Societies of Control”

If transhumanism is the new cultural dominant, replacing postmodernism’s uncertainty about the future of the human with a specific model for the future evolution of the species, what else from postmodernism can we be done with? This chapter began by discussing the celebration of the death of the humanities by a number of key figures in the discipline. In the case of Bogost, this sense of joy felt at the decline of the humanities is part and parcel with the giddiness experienced by subjects as they dissolve in the postmodern. For Jameson, aesthetic production prior to the postmodern hinged on a

[15] While I focused on Ian Bogost, Stanley Fish and Mark Taylor could have all easily stood in as key figures in this suicidal celebration.

[16] Without going into too much detail, I have substituted Jean Baudrillard’s vocabulary from The Ecstasy of Communication for Jameson’s, as, despite both making the same essential point about the waning of affect in the postmodern, Baudrillard’s concept of “giddiness” is much more apropos than Jameson’s
logic of expression. For him,

The very concept of expression presupposes indeed some separation within the subject, and along with that a whole metaphysics of the inside and the outside, of the wordless pain within the monad and the moment in which, often cathartically, that ‘emotion’ is then projected out and externalized, as gesture or cry, as desperate communication and the outward dramatization of inward feeling. (Jameson, *Postmodernism, or, The Cultural Logic of Late Capitalism* 19)

As Jameson clarifies, that which we call Theory in English departments “has among other things been committed to the mission of criticizing and discrediting this very hermeneutic model of the inside and the outside and of stigmatizing such models as ideological and metaphysical” (19) Theory, Jameson argues, instead seeks to replace a model of human depth with the free play of surfaces: “suffice it merely to observe that here too depth is replaced by surface, or by multiple surfaces (what is often called intertextuality is in that sense no longer a matter of depth)” (19) What have been the consequences for the humanities as a result of this view becoming dominant within the various discourses?

One of the results of theory (beyond a lot of excellent work that asked highly necessary questions) has been the decoupling of textuality from a notion of reality, at least in Jameson’s formulation of theory as quoted above. Bogost’s complaint against the humanities begins from this observation as well, for his complaint against these disciplines is that they lack real-world connections (remember, he says that the humanities lack “a real world. A world of humans, things, and ideas. A world of the commonplace. A world that prepares jello salads. A world that litigates, that chews gum, that mixes cement. A world that rusts, that photosynthesizes, that ebbs”). For Bogost, theory positions a free-play amongst surfaces as the work of textual scholars and that in some way, similar concept of “intensities.” Jameson’s borrowing from Baudrillard in the “Postmodernism” essay is something that should be more greatly explored, in any case.
this kind of scholarship does not point out to a real-world. I have already pointed out some of the flaws in Bogost’s argument, but I would like to take up a critique again, given what we have learned about the transhumanities from the preceding sections.

For Bogost, the humanities are inherently flawed, whereas, as we have seen, his argument is actually against the perspective imported into the disciplines by the post-modern theory described by Jameson. To assume the equation “theory=humanities” is to welcome serious danger. It is as much a flaw to think that the current trend in the humanities is equal to the discipline as it is to assume that the current configuration of the human is the only possible mode of being. In order to show the wrong-headedness of Bogost’s conflation, we could turn to an earlier theoretical debate occurring at an earlier moment in Jameson’s oeuvre.

Before beginning the work on postmodernism for which he is most famous, Jameson was primarily an advocate for Marxist literary criticism. In *Marxism and Form*, his second book, he details the importance of this critical position. In his essay “Towards Dialectical Criticism,” Jameson articulates a theory of the logic of content, which captures the manner in which the concrete world of the social expresses itself in an artistic work (with the author merely serving as a vehicle for this overarching logic). He goes on to state:

> The logic of content is in the long run, we have said, social and historical in character. For it is clear that to articulate the relationship between the artistic fact as such and the larger social and historical reality to which it corresponds requires a gradual enlargement of critical focus, a widening of the scope of a critic’s reflection, which not every critic is prepared to effect, nor is it indeed required for every job of critical analysis. Yet to omit this enlargement, this movement from intrinsic to extrinsic, is itself an ideological act, to the degree to which it encourages belief in some ahistorical essence of art and of cultural activity in general. (*Marxism and form* 331-2)
Does this sound familiar? While Bogost has accused theory of foreclosing a real world, Jameson is talking about the New Criticism of the 1950s and 1960s. These critics, Jameson argue, drive back “the historical dimension of literature” into “the notion of Language or medium” in order to “stop their work at the boundaries while still seeming to have given a complete (and nonhistorical) account of the work of art” (332). For Jameson, this foreclosure of the outside of a text is the foreclosure of its full meaning. In other words, Jameson is calling, in 1974, for a literary criticism that points to a world of potato salad (or whatever Bogost was talking about). What is interesting, though, about *Marxism and Form* is that these claims are not made in an essay calling for the destruction of the humanities.

The difference between Jameson’s 1974 claim and Bogost’s 2010 claim is that, in 1974, Jameson is still operating against the backdrop of a humanities discipline that still believes in some kind of meaning. Whereas many people have taken “Postmodernism” to be a celebration of postmodern culture, that essay does not actually perform such a celebration: Jameson is merely cataloging the effects of late capitalism on the aesthetic. In fact, his discussion of contemporary theory (quoted above) appears to be downright disparaging and Jameson appears to rhetorically position himself outside of theory itself (despite doing much to introduce French poststructuralism to the US). In other words, Jameson appears concerned about theory’s waning of meaning within the study of text. Despite this concern, the arguments made by theorists have won the day in humanities departments to the degree that Bogost’s call for a reengagement with the real cannot even imagine such an argument occurring in humanities departments. We may have won the war against meaning, but what has that gotten us?
In a series of blog posts, Stanley Fish takes up the theme of the crisis in the humanities. In the first part, he offers that university administrators increasingly cut money from the humanities because if your criteria are productivity, efficiency and consumer satisfaction, it makes perfect sense to withdraw funds and material support from the humanities — which do not earn their keep and often draw the ire of a public suspicious of what humanities teachers do in the classroom — and leave standing programs that have a more obvious relationship to a state’s economic prosperity and produce results the man or woman in the street can recognize and appreciate.

He claims here that the problem is that humanities programs cannot justify the work they do to a “man or woman in the street” and therefore provide no value. In the second part of his account, though, Fish suggests that these are the wrong questions to be asking:

When it comes to justifying the humanities, the wrong questions are what benefits do you provide for society (I’m not denying there are some) and are you cost-effective. The right question is how do you — that is, your program of research and teaching — fit into what we are supposed to be doing as a university.

In other words, for Fish, the question of justifying the humanities should be put in terms of “scholars who work in a field and are excited by a new argument or a new proof and by the scholars in neighboring or even distant fields who look over and see a model or a vocabulary that will help them negotiate an impasse in their work.” As factories for ideas, the humanities can be successful within the broader goal of a university (understood in opposition to the increasing conversion to trade schools by state legislatures and business-minded administrators), Fish argues. Bogost’s contempt for the humanities is suggestive on this point: the problem with the humanities under theory is that “they”

(being workers in other departments) know what “we” do. The methods and modes from our departments have not changed, we are still the navel-gazing theorists we are stereotyped as being.

Following the death of Deleuze, a commonplace in academic circles is the question of who will be the next big theorist (as Deleuze capped off a run, roughly, from Derrida to Foucault to Deleuze in terms of big French names to throw around). This search for the next big theorist has, at this point, taken on the characteristics of futures market: “Žižek is up this week!”, “Sell Virilio!”, “Badiou is a solid long-term investment!”, etc.. To ask a question as to the next big theorist is to miss the point entirely. Theory was an approach to doing literary analysis that had its moment, just like New Criticism or structuralism before it. The question beyond next big theorist relates to the next methodology: how will we reinvent the humanities in the same way that theory did?

One of the rhetorical operations running throughout transhumanism is the process of grasping the human race as a single entity. We saw this most forcefully expressed in Teilhard’s concept of the noösphere. As we saw in Chapter 3 the process of actualizing the noösphere involves an increasing global awareness of all of and an increasing internalization of these concerns. From a cosmic perspective, does this action described by Teilhard not rather closely mirror the action of cognitive mapping as described by Jameson? Then, it could be argued that when Jameson is discussing “a situational representation on the part of the individual subject to that vaster and properly unrepresentable totality,” that unrepresentable totality might, in fact, be the coming transhumanism of the noösphere and not the space of global capital as Jameson suggests (Postmodernism, or, The Cultural Logic of Late Capitalism 59). Thus imagined, then, the operations of

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18 The formation of this question in relation to TV reality shows like “The Next Food Network Star” and “America’s Next Top Model” should not be considered coincidental. As we will see, theory has become a celebrity discourse that no longer focuses on methodology or craft but instead on name value.
cognitive mapping become a process, not just of imagining a new political art, but also of imagining the noösphere itself.

Following this observation, we can likewise claim that part of the cultural function of art is the mapping of the species as a coherent and emergent intelligence. In this way, we can begin to suggest that the humanities, as disciplines primarily concerned with this aesthetic production, are the chief site for the exploration of the coming transhumanity. Rather than allied with the sinking ship of humanism, as Bogost would have it, this orients humanities scholarship, all of it, toward the future of the human. Moreover, this new focus of the humanities plays an increased emphasis on pedagogy within our disciplines. As we must increasingly prepare for a transhuman future through cognitively mapping our relationship with the noösphere, by exploring as much of a wide range of human experience as possible, both historically and geographically, humanities pedagogy can be seen as providing guidance in the creation of a coming transhumanity.

Ultimately, then, we may not be able to tell the specific future of the human race, but through transhumanism and its evolutionary perspective, we can begin to grasp the fact that humanity both has a future and that that future is going to be radically new. In adopting this perspective as humanities scholars, we are given the opportunity to reimagine our own future and re-think the relationship between our work and the future.


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