Recombinant Media: The Mutation of Subjectivity in a Post-Print Culture

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### **ABSTRACT**

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"Recombinant Media: The Mutation of Subjectivity in a Post-Print Culture" argues that subjectivity in American literary postmodernism is a transformation of the subject produced by print technology. This transformation comes about as a result of cultural shifts in media priority and the changes media themselves undergo as they incorporate techniques of other media. This study examines how the representation and production of subjectivity in several print objects is affected by the incorporation of techniques more characteristic of non-print media such as film, electronics, and music.

The introduction traces the rise of non-print media such as film, electricity, and radio and argues that these media both augment and deform is such a way that print media then produces "recombinant media" which dramatically alter the subject normally produced by print. The first chapter considers how *Gravity's Rainbow* hybridizes its own media body to create from its reader a retribalized, cybernetic subject. The second chapter traces the origins of this mutated, postmodern subject back to Ralph Ellison's *Invisible Man*, arguing that the pressures of electricity and speech mutate Invisible Man into the prototype of the hacker. The third chapter considers Dwayne McDuffie's and Gregory Wright's comic series *Deathlok* as a print object that remediates electronics and cinema in order to interpret cyborg consciousness in terms of race, especially insofar as both can be described by W. E. B. DuBois's concept of double-consciousness. The fourth chapter revisits Thomas Pynchon's *Gravity's Rainbow*, arguing that the novel's critique of capitalism is conducted by the remediation of film, electricity, comics, textiles, and music. The conclusion suggests that Ellison's *Invisible Man*, Pynchon's *Gravity's Rainbow*, and McDuffie's and Wright's *Deathlok* forecast the end of print by mutating the subject of print culture into a species of networked cybernetic subject.

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## INTRODUCTION

## Recombinant Media and You

HOW PRINT BECAME A POST-PRINT MEDIUM

Recombinant media recombine other media forms and by so doing multiply the kinds of subjectivity which can and, ultimately, do exist. The idea is not a new one. Marshall McLuhan's *The Gutenberg Galaxy* created a framework by which to understand how something so ubiquitous as print has shaped subjectivity, our perceptions, and the very modes by which we perceive in the first place. McLuhan's insight is that certain physical characteristics of print—linearity, visuality, and uniformity—affect how we interpret non-print media. Among other things, McLuhan has prompted us to consider how human consciousness is altered through its interactions with different types of media.

The central argument of this text—that the rise of cinematic, electric, and electronic media produced a new kind of subject, the cybernetic subject in particular—seems obvious to the extent it follows McLuhan's insight that media alter the sense ratios of human perception. Indeed, the proliferation of studies of the Internet, video games, television, and film, and the assertions of such studies that in the twentieth century these "new" media have displaced print as the dominant media form all but obviate the need for a study regarding the kinds of cybernetic subjectivity made possible by the advent of "new" media. What makes this study notable is its argument that print has been transformed by these new media, becoming both the agent of its own superannuation and an agent of its own radical mutation. "Recombinant Media" takes as its subject print objects, arguing after Jay David Bolter and Richard Grusin that by means of remediation print has itself become a post-print medium capable of producing one strand of cybernetic subjectivity.

In *Remediation: Understanding New Media*, Bolter and Grusin assert that all mediation is the remediation of prior media. Bolter and Grusin refer to the necessity that all media redeploy other media (and can in their turn be redeployed) as "the double logic of remediation." They formulate this double logic in three ways: 1) "Remediation as the mediation of mediation," which refers to the

fact that all mediation is always the remediation of another mediation, there is no such thing as a first-order mediation 2) "Remediation as the inseparability of mediation and reality," which can be recast as the fact that media are real even at the same time they mediate the Real, and 3) "Remediation as reform," that media have the ability to reshape reality (55-56).

With regard to the present study, the most important aspect of Bolter's and Grusin's assertions regarding the mediation of media and the Real is the idea that media are themselves real and that they have the capacity to reshape reality (formulations 2 and 3). Both points signal that media and the Real are recursively structured. This recursive aspect of media is important because it gives structure to the cybernetic subject I consider in the chapters which follow. The general outline of the cyborg ontology I describe resembles the rhizomatic structure of what Deleuze and Guattari identify as the body without organs. More specifically, I consider the print subject as it is reconstituted in print media that have incorporated into themselves non-print media such as film, electricity, electronics, and video games. These recombinant media, I assert, are the birthing ground of a species of a networked cybernetic subject. The specific objects that comprise my primary subject texts are Thomas Pynchon's *Gravity's Rainbow* Ralph Ellison's *Invisible Man*, and Dwayne McDuffie's and Gregory Wright's *Deathlok*. These print objects, like the subjects to whom they give rise—Tyrone Slothrop, Invisible Man, and Deathlok—are themselves cybernetic networks, products of the meshing of humans, machines, organisms, and mechanisms.

Like Bolter and Grusin, I believe "technology [...] is articulated through a network of formal, material, and social practices" (67). I further believe that media and subjectivity are socially and materially constituted hybrids, but with regard to cybernetic subjectivity, these hybrids are not integrated wholes as much as they are ensembles of discrete elements which stubbornly occupy disparate ontological orders. My thinking is highly influenced by the work Adrian Mackenzie has done regarding the technical ensembles which populate and shape human culture, work which brings to light the philosophical writings of Gilbert Simondon (*Transductions*).

More generally, media, as we traditionally understand it, is the mediation of consciousness, the representation of perception. Media are comprised of artifacts designed to produce (or reproduce)

distinct states of consciousness and perception. In this sense, the body itself is a mediating organ, so it is perhaps not surprising that media objects can be understood as organs of a body comprised of many disparate parts. The historical relationship between cybernetic subjects and the ontological dimensions of the media in which these subjects have taken shape begins after human culture can be said properly to have harvested electricity. My primary argument is that the shift from print media to non-print media such as film and electronics mutates the subject produced by print. Though primarily concerned about the decline of literature in print, Leslie Fiedler also believed that the subject (of liberal humanism) was being mutated out of existence. The essay in which he takes note of these mutants is also the first sustained usage of the word postmodernism to describe the cultural and artistic sensibility of the second half of the twentieth century. For Fiedler, the shift away from literature in print and the consequent mutation of subjectivity marks the start of postmodernism.

### MUTANTS IN OUR MIDST: REPRODUCTIVE CRISIS IN THE POSTMODERN AGE

American postmodernism began as a reaction against orthodox culture and authoritarian institutions, as first documented by Leslie Fielder in "The New Mutants." In 1965, Leslie Fiedler identifies a countercultural trend in teenagers' rejection of a "bourgeois-Protestant version of Humanism" (511) in favor of a orgasm-obsessed and drug-dependent hedonism; young mens' rejection of stereotypical masculinity in favor of "the cavalier role once [...] surrendered to women: that of being beautiful and being loved" (519); and the "new barbarian[s']" repudiation of the Christian conception of the "soul" in order to embrace "'soul music' or even 'soul food'" (515). Fiedler explains that "[i]t is all part of the attempt of the generation under twenty-five [...] to become Negro, even as they attempt to become poor or pre-rational." An early chronicler of postmodernism and "posthumanism," Fiedler understands that the control and nature of subjectivity is at stake in the postmodern age. The "new mutants" reject the bourgeois-Protestant, heteronormative Establishment by fashioning and occupying subject positions that are sexually ambiguous, chemically altered, and ethnically negroid, characteristics shared with the network

subjects produced by the remediation of non-print media in *Invisible Man*, *Gravity's Rainbow*, and *Deathlok*. What Fiedler identifies as postmodernism in 1965 is the transformation of straight white male subjects into stoned "black" androgynous ones. And the tenor of Fiedler's reportage is unmistakable, betrayed by the epithet "new barbarian" and observations such as "what survives of bourgeois marriage and the bourgeois family is a target which the new barbarians join the old homosexuals in reviling, seeking to replace Mom, Pop and the kids with a neo-Whitmanian gaggle of giggling *camerados*" (519).

Fiedler's consternation about the "new mutants' " rejection of humanism and cultural orthodoxy is a reaction to the liberatory and revolutionary politics of subjectival reconstitution in the United States circa 1965. From a larger perspective, Fiedler recognizes that postmodernism brings with it the possibility of a subject position that is not as fully imbricated in the reproduction of the means of production in which he has a vested stake. The new mutants are negroid, intoxicated, and effeminate, in league with "the old homosexuals" in destroying the heteronormative nuclear family. What Fiedler's outrage (if so strong a word can be used) targets is not the alternative lifestyle choices of the younger generation, but the *threat* this group represents to the continued existence of the reproductive nuclear family which is the stronghold wherein the subject of Western humanism is produced. Even the title of his article, "The New Mutants," suggests an anxiety about reproduction, where mutation is the to-be-feared introduction of an unprecedented and unpredictable deformation of genetic lines of descent. The multiplication of these postmodern subjects threatens to replace heteronormative reproductive society with a vaguely homosexual political alliance of "new mutants."

From Fiedler's perspective, the new mutants threaten to replace the nuclear family with a "gaggle of giggling *camerados*" and to mutate all America's fine young men into long-haired, pot-smoking hippies. Fiedler's anxieties about social reproduction focus on the absurdity of men seeking to adopt the role of women ("that of being beautiful and being loved"), the dangers of the outright rejection of institutional education, and the similarities of drug-altered consciousness to

insanity. The possibility of such a culture is, for Fiedler, comparable to a science-fiction nightmare. He writes

I am not now interested in analyzing [...] the diction and imagery which have passed from Science Fiction into post-Modernist literature, but rather in coming to terms with the prophetic content common to both: with the myth rather than the modes of Science Fiction. But that myth is quite simply the myth of the end of man, of the transcendence or transformation of the human—a vision quite different from that of the extinction of our species by the Bomb, which seems stereotype rather than archetype and consequently the source of editorials rather than poems. More fruitful artistically is the prospect of the radical transformation (under the impact of advanced technology and the transfer of traditional human functions to machines) of *homo sapiens* into something else: the emergence—to use the language of Science Fiction itself—of "mutants" among us. (382)

In a single paragraph, Fielder argues that the conjunction of technology and human genetic lines will produce a post-human, post-modern species whose proliferation is more palpable a threat to the continued existence of *homo sapiens* than the Bomb. These new mutants are monsters among us. Like the pod people in *Invasion of the Body Snatchers*, they reproduce by replacing people who already exist, and their growing numbers signal the extinction of the human race. Furthermore, unlike the "stereotype" of the extinction of the human race by nuclear warfare, the threat of the neobarbarian hordes is archetypally resonant, seems more real than the "exaggerated" threat of mutually assured destruction.

In addition to anxieties concerning the reproductive future of heteronormative society, these postmodern mutants also disturb Fiedler because they are anti-Humanist, rejecting as they do the established system of letters that has produced Western culture's greatest literary achievements. According to Fiedler, one of the ways postmodernist literature rejects the accepted values of Western letters which culminated in modernism is by turning to popular culture. Early literary postmodernism bridges the gap between high and low art by turning to the genres of the Western,

Science Fiction, and Pornography, which are those "most associated with exploitation by the mass media" (469). By turning to popular genres associated with mass exploitation, Fiedler argues, postmodernist authors reject the modernist tenet that art be a produced by an elite avant-garde. But for an art world that founds itself upon the aura of artistic works, creating value through scarcity, such a rejection threatens to destroy the very notion of art itself.

For Fiedler and a generation of critics like him, the second half of the twentieth century threatened to disrupt the continued production of an entire species known as humanists. Fielder's essay identifies this threat in the figure of countercultural hordes breeding their humanistic forbears out of existence. Put another way, Fiedler's alarm is about the displacement of literary media by a low culture consumed and propagated by a mass of postmodern mutants. While high literature continued to be produced well after 1965, the threat to Western humanist subjectivity which Fiedler identifies is very real. At this time, Western culture, and 1960's American counterculture in particular, was in massive flux. Fiedler believed that postmodern literature and its engagement with popular culture would bring an end to Western literature as he knew it. Fielder was, of course, right, but the changes American literature underwent did not bring an end to literature as whole. In fact, it turned out that one of America's most important literary works in the second half of the twentieth century would be a work of postmodernism.

That work is Thomas Pynchon's *Gravity's Rainbow*, a novel which I argue seeks to disrupt, just as Fiedler feared, the literary establishment of Western culture. *Gravity's Rainbow* also justifies other aspects of Fiedler's fear. For one, Tyrone Slothrop is a subject who is being mutated by means of remediated media. Film, electricity, and chemicals attenuate the literary character of Slothrop's subjectivity, distributing that subjectivity across "The Zone" of war-torn Europe. The cybernation of Tyrone Slothrop is mirrored and figured in the body of the novel itself as well as many of the major characters in the novel. For example, Grigori the Octopus is a monster who metonymically figures both Slothrop and the novel. All three are (or become) rhizomatic entities whose components are transformed by mediation through film and electricity. The theme of monstrousness also finds echoes in the rocket which overshadows the events of the novel and

other more obvious monsters such as the Giant Adenoid of Sir Blatherard Osmo. The Giant Adenoid, Grigori the Octopus, the Rocket, Tyrone Slothrop, and *Gravity's Rainbow* are avatars of a monstrous cybernetic rhizome that attaches to itself components of differing ontologies by means of remediation.

In addition to becoming a cyborg, Tyrone Slothrop has a racially hybrid unconscious, and the nature of his identification has consequences for the nature of the subject he mutates into by the end of the novel. Slothrop's cross-racial identification, the novel's culling material from popular culture and cinema, and the novel's determination to break the machines which produce print subjectivity fulfill Fiedler's predictions about what postmodern mutants would do to Western culture.

As I demonstrate in my discussion of *Gravity's Rainbow*, Pynchon's partial aim was to write a novel that responds to what Marshal McLuhan identifies as a pathology of Western print culture. McLuhan believed that print technology shaped the character of Western culture such that the perceptions of literate Westerners were isolated rather than unified, fragmented rather than integrated, and visual rather than aural. Such characteristics ensured that Westerners had little sense of their interconnection to each other let alone their connection to the non-literates with whom they shared the Earth, both living and non-living, organic and inorganic. McLuhan saw that Western culture was rapidly changing as a result of electric technology and the development of new media, and he asserted that new media based on new technologies were extending our bodies and changing our perceptions. However, what McLuhan didn't do is notice that humans and non-humans were becoming part of a larger entity that was neither living nor not-living.

THE MUTAGENESIS OF SUBJECTIVITY IN A POST-PRINT CULTURE

In a culture like ours, long accustomed to splitting and dividing all things as a means of control, it is sometimes a bit of a shock to be reminded that, in operational and practical fact, the medium is the message.

- Marshall McLuhan, Understanding Media

In the natural world, speciation events give rise to new species gradually. Mutants are usually interfertile with non-mutant members of the same species making it difficult to recognize speciation

events as they happen. When Marshal McLuhan considers the effect of the extension of ourselves in media and how such extensions alter the nature and quality of our perceptions, he intuits the mutagenic properties of media but doesn't articulate them as such. He does not quite recognize the implications of his own discovery and so chooses language that obscures the nature, scale, and significance of his insight: that media are agents of mutation. McLuhan understands that media extend the human perceptual system, but for him media are mere prostheses. McLuhan recognizes that unlike most prostheses media "leave no part of us untouched, unaffected, unaltered," that by enhancing our perceptual abilities media "work us over completely" (Massage 26). Occupying a later phase in the transformative history of bodily technologies, we can see that these media extensions do more than change the modes and ratios of our perceptions. As they extend the reach of our sensory organs, media evolve us, altering our subjectivities. This is not merely the advent of a cyborg ontology, though it is partly that, too. The radical extension of human perception by media adds to the evolutionary pressures bearing upon the human organism. We have since passed the material and ontological conditions recognized by Donna Haraway—a condition which began when humans first started wearing clothes—and are becoming beings whose media interconnection to each other affects us more than our existence as individuals. Through media we are greater than the sum of ourselves and we evolve in response to shifts in media, in response to changes in our modes of perception. We are immersed in media and we change as they change.

Even if McLuhan doesn't identify these changes as speciation events, he does recognize that "[a]ny understanding of social and cultural change is impossible without a knowledge of the way media work as environments" (Massage 26). In The Gutenberg Galaxy, McLuhan shows how print culture transformed subjectivity from an interdependent, undifferentiated, and oral character to a discrete, private, and visual one, or in other words, how the emphases and pressures of a print environment birthed a new species of subjectivity. McLuhan doesn't recognize these environmentally induced changes as the birth of a new species because he is tightly focused on the boundaries between our bodies and our machines, not the entity that results once the human body has been technologically extended. McLuhan sometimes considers machines extensions of the

human body and other times considers them separate from the human body. This dual perspective—which imagines a human body with distinct boundaries as well as a cyborg anatomy of indefinite limits—keeps McLuhan from being able to see that humans, machines, animals, and material are the interconnected components of a much larger entity that is neither an extension of man nor a new kind of organism.

For McLuhan, machines and media are products of "autoamputation." Unable to tolerate the sensory input of one or more organs, the nervous system isolates the input of the overloaded organs and, in McLuhan's myth of technological genesis, externalizes those offended organs. McLuhan coordinates Hans Selye's and Adolphe Jonas' theory of disease with his own theory of media and technology, arguing that

[w]ith the arrival of electric technology, man extended, or set outside himself, a live model of the central nervous system itself. To the degree that this is so, it is a development that suggests a desperate and suicidal autoamputation, as if the central nervous system could no longer depend on the physical organs to be protective buffers against the slings and arrows of outrageous mechanism. (*Understanding Media* 43)

But if the technological extension of the human body is a means of protecting us from unbearable stimuli, the advent of electric technology may be not "desperate and suicidal," but instead an adaptive and possibly advantageous morphological change. Going back to postmodernism's countercultural new mutants, the sociocultural changes Fiedler signs of species extinction—chemical alteration, cross-racial identification, transgenderism, and popular culture—are actually adaptations to a changing cultural landscape wherein distinctions which had been shaped by legacy media and the modes of perception honed by interacting with those media are losing their relevance. This is the possibility explored in American fiction by authors such as Ralph Ellison and Thomas Pynchon, and in popular culture by Dwayne McDuffie. These writers reengineer the machinery of conventional narrative and by so doing deform subjectivity to the extent of producing new subjectival species. By examining the resulting subjectivities we may

better understand how changes in technology, communication, and society affect us individually and collectively.

The emergence of an electronic cybernetic network mediates human beings into a collective cyborg entity, and such a transformation has the potential to rechannel the energies of industrial production and information overflow. In the language of schizoanalysis (Deleuze and Guattari), the cybernetic network is a body without organs on whose recording surface the deterritorialized and overcoded flows of society (capital) attach with the possibility of scrambling the codes.

The forces driving media and technological change, then, are not just sources of overstimulation, catalysts of autoamputation; they are also vectors that insert new machines into existing chains of production, recoding the behavioral and social flows that produce subjectivity. In the cultural shift from print to digital media, the cybernetic network attaches these recoded flows to itself, in rare cases simultaneously detaching them from the body of capital. When Invisible Man discovers he can "contain the electricity" which the staff of the Liberty Paints factory hospital shoot through his body, and when Michael Collins's brain gains control of the cyborg body into which it has been placed, components and material belonging to capitalist production are subverted and repurposed as part of an alternate network of production that works against the functioning of capital. In such cases, the cybernetic network produces a mutant subjectivity, one whose origins in the reengineered flows of capital equip it to inhabit a changing cultural landscape. By reorganizing the molecular forces of production into new molar aggregates, the cybernetic network makes revolution a possibility.

Revolutionary reorganization is exactly what McLuhan imagines will happen as electronic technology turns the subjects of print literacy into nomads of the global village. But this is no normal transformation. Users who find themselves immersed in the electric flows and bit streams of the emerging cybernetic network are not only deracinated from the systems of capital already in place. They are also turned inside out. McLuhan opines

By putting our physical bodies inside our extended nervous systems, by means of electric media, we set up a dynamic by which all previous technologies that are mere extensions of hands and feet and teeth and bodily heat-controls—all such extensions of our bodies, including cities—will be translated into information systems. Electromagnetic technology requires utter human docility and quiescence of meditation such as befits an organism that now wears its brain outside its skull and its nerves outside its hide. (*Understanding Media* 57)

McLuhan neglects to consider that the components of a cybernetic system do not necessarily behave as a single organism. Furthermore, there is no reason the human components enmeshed and connected by a cybernetic network need limit their activity to avoid pain, since networked organisms have not necessarily extended the neurological pathways through which pain is transmitted. McLuhan's thinking is so imprecise because organism is an ill-fitting metaphor for the entity created by the interconnection of components from disparate ontological orders. Organisms are capable of transforming inert matter into organic tissue, but this is not the same as incorporating organic, machinic, and non-living components into a system wherein ontological diversity is maintained.

Perhaps the most evocative representation of an informatic network in which several diverse ontological orders are preserved is William Gibson's notion of cyberspace. At the beginning of the third millennium, McLuhan's prediction that even human cities "will be translated into information systems" seems correct but in the wrong direction. Rather than mediating the Real as data, contemporary information systems strive to mediate data as simulations of the Real. Much effort has gone into rendering data as landscapes. In the realm of computer science, such renderings come in the form of attempts to create a "virtual reality," the representation of data as a first-person cinematic perspective. In the realm of literature and popular culture, William Gibson's cyberspace has captured the imagination of many millions, evoking a widespread vision of computer data represented as a cityscape.

The opening of William Gibson's *Neuromancer* paints a nostalgic vision of cyberspace as a dreamed "matrix" of "bright lattices of logic unfolding across [a] colorless void. . . ." (4-5). Ellipses draw Henry Dorsett Case's memory of this cyberspatial matrix into a signifier for an

actual urban landscape known as "The Sprawl." Here, Case has entered into what Baudrillard recognizes as the hyperreal. Case apprehends the reality of The Sprawl as an ersatz version of the matrix, itself a simulacral space. The representation of data as landscape destabilizes our perception of actual landscapes, transforming real spaces into potential sources of data. Also in *Neuromancer*, the defamiliarization of perception in order to reveal underlying patterns is compared to the separation of sensory stimuli and perception which occurs due to the chemical alteration of consciousness. Making his way through the confusing urban landscape of Ninsei, Case is reminded of "a run in the matrix. Get wasted enough [...] and it was possible to see Ninsei as a field of data, the way the matrix had once reminded him of proteins linking to distinguish cell specialties" (17). The comparison of computer data to urban landscape to biochemical markers suggests that these things can be modulated, or transduced, one into the other. The connection between machines, environment, and organism here is not metaphorical as McLuhan's notion of an organism whose organs have been prosthetically extended, but metonymic, where the association of one domain and another is made by means of mediation. McDuffie's and Wright's *Deathlok* pays careful attention to articulating the connection between these ontological orders by visually rendering the cybernation of a human brain as the rhizomatic extension of the human body to a gigantic electronic circuit.

Thinking metonymically—forging an association between intertwined humans and machines and the advent of a new species—the ontological nature of ensembles comprised of organic, mechanical, and electronic components would be clearer. Such thinking reveals that while electric technology does to some extent invert the containership of tissue and the human body, thus turning humans inside-out, the resulting interconnected organs-machines who share media and technical organs with each other in fact comprise a larger entity that is neither human nor machine. The cybernetic networks which obtain in the interconnection of ontologically diverse components—as in the instance of the telecommunicational network which results when two people use cellular telephones to talk to one another—does not cause humans to develop neurological extensions beyond the threshold of their congenital bodies. Rather, the cybernetic network becomes populated

by beings whose uncertain anatomical boundaries overlap. The overlap which obtains is where media connect the different elements of organs-machines whose morphology is highly variable, similar to the morphology of an amoeba, octopus, or rhizome. Interconnected by filaments of optical fiber and their streams of data propagating through bands of the electromagnetic spectrum, cybernated humans are components of a morphologically-variable bioelectric rhizome, amalgams of flesh and metal, blood and silicon, nerves and circuitry.

BLACK TO THE FUTURE: THE RETRIBALIZATION OF LITERATES BY ELECTRIC TECHNOLOGY

[...] Western man, were he determined to cling to fragmented and individualist ways that he has derived from the printed word in particular, would be well advised to scrap all his electric technology since the telegraph. The implosive [...] character of the electric technology plays the disk or film of Western man backward, into the heart of tribal darkness, or into what Joseph Conrad called "the Africa within."

- Marshall McLuhan, Understanding Media

The nature of the changes which electronic technology brings to society induce in McLuhan both anxiety and hope, inspiring retrotopian fantasies about a collective turn to "the Africa within" as well as triggering nightmares wherein human beings are transformed into the reproductive organs of machines. According to McLuhan, the cybernetic network will retribalize us within a unified field of electronic interdependence that is tactile, not visual, simultaneous rather than linear, bionic instead of organic, and black more than it is white. Such changes may seem to be a series of unlikely dualistic outcomes since the contemporary discourse of technology does not obviously tend toward the tactile over the visual, does not seem to favor the fluid instead of the systematic. Certainly, the mythic vision of cybernetic technology does not apparently privilege blackness above whiteness, but a closer analysis of a specific strain of the postmodern subject—one that shows up Thomas Pynchon's Tyrone Slothrop—reveals a figure who in the early phase of electric technology wrote a cybernetically prescient novel where just such unlikely outcomes obtain, a novel of antitheses so powerful he chooses to cloak his insights, and the novel's eponymous protagonist, in a socio-technological mantle of Invisibility.

Ellison's proto-postmodern work articulates a metaphorics of electricity, a discourse that powers Invisible Man's quest for self-understanding and illuminates the labyrinthine architectures of Invisible Man's psychology and the social spaces through which he moves. Not only is Invisible Man invisible, but also are the energies of electricity and speech which course through his body. Invisible Man is an important component in the system of capital which hopes both to coopt and quarantine his oratory power. Invisible Man's voice, like electricity, has the power of motive force, disconnecting disenfranchised others from a racially oppressive system of capital and reconnecting them to a growing network of radicalized subalterns. Invisible Man is able to achieve this in part by transducing invisible forms of energy into visible ones, speech into print and electricity into light.

I view the electrified sanctuary in which Invisible Man recuperates his powers as an early node in the cybernetic network to come, a narrative enclosure exemplifying the ways in which racial subalterns can siphon energy from power grids undetected, a proto-postmodern parable for transdermal aliens. Ralph Ellison's *Invisible Man* reintegrates the modernist subject split by racial oppression by granting that subject access to the reintegrative fields of oration, music, and light. Social optics have removed Invisible Man from the realm of the visible, and he reintegrates the pieces of his fractured identity by immersing himself in the annealing glow of incandescent light. Whereas in Lacan's myth of mirror stage the specular image provides the optical means by which infants unify their fragmentary sensory perceptions, the specular image is for Invisible Man already found to be void. Social optics have rendered Invisible Man invisible and his specular image empty. Ellison's *Invisible Man* provides an alternative to Lacan's myth of subjectival integration by refiguring self-identity in the flow of invisible electrical current. Invisible Man waits in his hole of 1,369 lights for the advent of a cybernetic network through which racial subalterns can appropriate the energy of the hegemonic Monopolated Light & Power and transform that energy into integrative light which gives visible substance to their once invisible selves. Invisible Man is a subject who is network-ready. Like the power grid from which he drains energy, Invisible Man is an amalgamated entity, one given integral form, in the Liberty Paints factory hospital, by surges of

electrical current which stimulate primal memories of a nearly forgotten racial consciousness. This narrative segment, more than any other in *Invisible Man*, places the novel within a distinct literary ancestry by marking it as a descendant of Wollstonecraft's own fable about the conjunction of organism and galvanism, as well as reappearing in the diegetic phenotype of Invisible Man's postmodern brother, Tyrone Slothrop.

Very few think of Ralph Ellison as a primary literary relative, let alone ancestor, of Thomas Pynchon. Despite its deep concern with the effects of technology on subjectivity, Ellison's *Invisible Man* is rarely considered outside the specific contexts of race and class. Invisible Man is one of the most important novels to explore the connection between being and technology, but it has rarely been placed in the lineage of works which deal with the transformations to human subjectivity brought about by electronic media. This book's third chapter attempts to remove this blind spot from postmodern criticism's visual field, a scotoma which suggests invisibility plagues not only Invisible Man but also the novel itself. A notable exception to this critical blindness is Wai Chee Dimock's work on "A Theory of Resonance," where she discusses the "traveling frequencies of literary texts" (1061). Her model of literary transmission has something in common with McLuhan's ideas about the oral character of electric media, though she speaks primarily about print. I believe that the general oversight of Invisible Man's role in the history of cybernetics has partial origins in the kind of ambivalence McLuhan expresses once he begins to understand how cybernation will forever mutate the subjects of print culture.

McLuhan's theories about the tribal nature of pre- and post-literate societies reflect a xenophilia that to some degree idealizes and oversimplifies the nature of actual tribal societies. For example, at the center of his global village is a "heart of darkness" modeled after the heart of non-literate cultures, a heart that is unmistakably African. McLuhan describes this return to "the Africa within" (which like all returns is achieved by a progression into the future, in this case a future cybernetic network) as something capable of disrupting the subject effects of print. Like the subject sutured to a chain of signification, print culture looks back to the future toward a mythical point of origin,

retroactively constituting itself by making the future the electrified terminus of a nostalgically recollected past. McLuhan explains how

[...] the electric implosion now brings oral and tribal ear-culture to the literate West. Not only does the visual, specialist, and fragmented Westerner have now to live in closest daily association with all the ancient oral cultures of the earth, but his own electric technology now begins to translate the visual or eye man back into the tribal and oral pattern with its seamless web of kinship and interdependence. (*Understanding Media* 51; emphasis added)

The return to "the Africa within" is the translation, or mutation, of one media species into another, but the agent of this transformation is electric media, itself an extension of the human nervous system. The mutation of print subjectivity is effected by immersing literates within the field of electric technology. Put another way, literates mutate into cybernetic nomads once their nervous systems have so far extended that they are engulfed by their own nervous systems, inverting the containership of the nervous system and the bodies of these mutant nomads. The result is not only the mutation of the subjectivally atomized visual literates of Western print culture, but a transformation of the entire system of cultural production that obtained after the advent of Gutenberg technology.

The inverted topological relationship between cybernated humans' bodies and their nervous systems produces a rhizomatic nodule that extends itself outward into the electrical network, but paradoxically this hyperextension is also a submersion of the body from which emanates, making the body of the cybernated human one that is both contained and boundless: contained because the cybernated body is inside the network and boundless because that body's media organs extend into the network itself. Cybernetic technology renders the threshold of the human "body" indistinct.

This indistinctness confuses the direction of the return to "the Africa within" because the interior of the cybernetic network is nowhere and everywhere. Even if this confusion was not partly the effect of the difference between language and topology, the idea that an "Africa" exists in the interior of digital culture's shared body (without organs) begs the question of where that Africa

came from, especially if we are "returning" to it. As McLuhan explains, the Africa is there because that's where we put it.

The print phase [...] has encountered today the new organic and biological modes of the electronic world. That is, it is now interpenetrated at its extreme development of mechanism by the electro-biological [....] And it is this reversal of character which makes our age "connatural," as it were, with non-literate cultures. We have no more difficulty in understanding the native or non-literate experience, simply because we have recreated it electronically within our own culture.

(Gutenberg Galaxy 46)

The heart of darkness residing at the center of Western culture's cybernetic network is a virtual machine built by the very beings who at once populate and comprise that network. The tribal culture to which we are returning is a piece of electric technology implanted in the body of the digital network. In other words, the "Africa within" is a technological simulation, a technoracial pacemaker. Like the tin man in *The Wizard of Oz*, the cybernetic network and its assimilated humans are in search of a heart. This tableau is reworked in the print objects I have chosen for this study.

Pynchon's *Gravity's Rainbow* seeks to disrupt the working of the organs-machines of print culture by grafting the presumably oral and holistic Herero onto the body of Western media. Invisible Man resists the exploitative Brotherhood, avoids his grandfather's prophetic words, and subverts the institutions of racist America that threaten to transform him into a simulacral automaton, an organic parody of human affect. At one point, Invisible Man becomes a literal human organ, the *vox humana* of the Liberty Paints factory hospital, the human heart at the center of capital's rehabilitative apparatus. In *Deathlok*, the metonymic body of capital is crystallized as a cybernetic weapons system into which the brain of a black man is placed. As a cybernetic weapons system, Deathlok rewrites the famous example of the anti-aircraft gun and gunner imagined by Norbert Wiener uses in *The Humans Uses of Human Beings* (61-62), the book wherein Wiener coins the term "cybernetic." In all of these cases—*Gravity's Rainbow's* reengineering of the

organs-machines of print culture by grafting the perceptual modes of the Herero, the extension of systems of capital by assimilating Invisible Man as an organic component, and the cybernation of Michael Collins's brain within an anthropoidal killing machine—the domain of the cybernetic has components of African descent, making blackness a fundamental aspect of cybernating systems of capital.

To describe the apparent objects of print culture as organs, machines, and cybernetic agents may seem the overextension of a metaphor. However, my purpose is not to abuse the resources of metaphor, but to change the ways in which we describe—and so understand—how various media produce subjectivities. *Invisible Man* reconceives the racial subject under post-Industrial capital in terms of the systems which seek to cybernate it, in the process changing the modernist landscape into a proto-postmodern one. *Gravity's Rainbow* mutates print subjectivity by hybridizing print and film, critiquing capital and its own role in the reproduction of capital, and short-circuiting the operation of machines designed to produce death. *Deathlok* is a media object (de)formed by racial pressures present in the print machinery of the comics publishing industry, and it revists the crisis masculinity experiences when the reproduction of the bourgeois family is threatened, offering the possibility of a subaltern cyborg existence that offers opportunity for changing the system. All three of these quintessentially American narratives—*Invisible Man*, *Gravity's Rainbow*, and *Deathlok*—also consider how cyborg ontology affects and is affected by blackness.

The blackification of Western cybernetic systems is, in these narratives, an effect of mediatization, something McLuhan and Quentin Fiore make clear in *The Medium is the Massage:* An Inventory of Effects, which illustrates one way to build a media heart of darkness. McLuhan and Fiore explain that "[e]lectric circuitry profoundly involves men with one another. Information pours upon us, instantaneously and continuously[....] Our electrically-configured world has forced us to move from the habit of data classification to the mode of pattern recognition" (63), and as if to provide the new mutant cyborgs with data from which to abstract a pattern, they provide a page view which shows the magnified image of an integrated circuit resting on the tip of a finger.

Compared to the sharp, lineal architecture of the integrated circuit's plane, the fingertip presents a

dumb phallic proportion, a knobby, organic bludgeon whose possible utility seems trivial compared to the indecipherable potential etched onto the chip's surface. The highly articulated pathways of the chip's inlaid circuits are similar to the blurry whorls of the finger in that they both trace lines of flow. But where the circuits indicate some cybernetically comprehensible function, the finger's ridges at most provide an imprecise identifier to the body from which they come. In this image, a human digit presents to our gaze an organ of digital logic, but the two entities might also be understood as coming together as one, the image both representation and actualization of the grafting of the electronic onto the organic.

The page view following this photo-bibliographic representation/incarnation of a cyborg body and its component elements displays a tribal community of blacks unified by the oratorical presence of a single man, whose role in his community can be taken as an analogy for McLuhan's own shamanistic role in the print community (*Massage* 66-67). This image of a half-naked tribal community is nothing more than a photorealistic metaphor for "the Africa within," the photo-bibliographic fabrication of a racial consciousness that lies in the dark "interior" of the cybernetic network. Like that technologically contrived dark heart, the image is a simulation, the graphical construction of what it pretends to be, for this tribe can never be anything more than a visual chimera of the coming "global village." The cybernetic recoding of the flows of capital and the social reorganization that may result will hardly resemble the African tribe in the image, culturally or otherwise.

If the cybernetic network undoes the linear logic of print culture, it does so with the aid of print. The succession of the two views sets up an equation whose sign of equivalence is the reader's transition from one view to the next. The recto side of the first view denotes the object depicted: "Solid integrated circuit enlarged several hundred times." On the other side of the equation, the succeeding view's recto side "denotes" its image as "[t]he new electronic interdependence recreates the world in the image of a global village" (67). This is not a mistake of grammar; it is the paradox of giving name to the performative. The photograph of the gathered members of an African tribe is the transformation of the world into a global village; it is the process of retribalizing literates in a

post-print culture, and this process uses the tools of print culture (namely the book) to undo the transformations wrought upon subjectivity by print. The remediation of photography forces a metonymic association between primitivism, blackness, and cyborg genesis in an effort to "reverse" the "progress" of Western print culture, giving material shape to a print object which seeks to disrupt the production of print subjectivity.

McLuhan's xenophilia shows itself as a problem no more clearly than when one stops to consider that tribal communities of the contemporary era are not ancestors of, but cousins to, the cyborgs who populate these late-century electric networks. McLuhan is himself ambivalent about the prospect of an electrically induced retribalization since it would turn literates into digital nomads, a species that by definition would no longer be members of print culture. On the one hand, McLuhan believed electric media had the power to enfold the isolated members of Western culture within a mutually responsible global consciousness. On the other, he feared that the inverted containership of the cybernetic body and the autoamputation of our perceptual organs would spell the end of print subjectivity. Like Derrida and Fiedler who, respectively, foresaw the end of structuralism and the death of humanism in the beginning of the postmodern era, McLuhan had some fear that the shift from print media to electric technology would mean the death of a species, his species.

MORE TRANSHUMAN THAN HUMAN: THE BIRTH OF THE POSTMODERN SUBJECT

The cybernetic subject I consider in the following pages is, as I mentioned earlier, one strand of the postmodern subject, which has much in common with the subject described by poststructuralist thought. Poststructuralist theory postulates a subject neither autonomous nor integrated, a condition deriving primarily from the structuralist proposition that systems (of language in particular) are governed by universal rules that restrict and determine the ways in which subjects can express themselves. In this view, the (post)structuralist subject no longer speaks as much as it is spoken.

At the end of his inauguration of poststructuralist thought, "Structure, Sign and Play in the Discourse of the Human Sciences," Jacques Derrida recognizes a new form of critical subjectivity

whose *conception*, *formation*, *gestation*, and *labor* we are only catching a glimpse of today. I employ these words, I admit, with a glance toward those who, in a society from which I do not exclude myself, turn their eyes away when faced by the as yet unnamable which is proclaiming itself and which can do so, as is necessary whenever a birth is in the offing, only under the species of the nonspecies, in the *formless*, *mute*, *infant*, *and terrifying form of monstrosity*. ("Structure" 165; second emphasis added)

Fiedler and Derrida both interpret the change that is overtaking culture as a birth of some sort. For Fielder, this "birth" is a mutation of those men upon whom the current social order depends for its reproduction. This appropriation of the reproductive organs of society by an alien species is a patently biological threat, but Fiedler's anxiety has a mechanical as well as a biological vector. Fielder believes that the transfer of traditional human functions to machines" is another component of the "radical transformation . . . of *homo sapiens*" into a different species. For Fiedler, the continuing automatization of human affect will have the same impact upon the human race as widespread mutation would. Furthermore, the mutation of *homo sapiens* and the automatization of humanity invoke feelings that Fiedler finds similar to the feelings invoked by the threat of nuclear annihilation. If only on a rhetorical level, Fiedler interprets the coming cultural change as the death knell of the human species and he expresses great anxiety about what will be born in the place of humankind.

Derrida is more ambivalent about the possible birth of a new species in place of contemporary homo philosophicus. He no longer can tolerate the history of Western ontotheology which limits play and, so, he conceives a ludic epistemology. However, poised on the verge of witnessing the "birth" of just such a species capable of forging a ludic epistemology—one which would move humankind beyond the human—Derrida feels the need to avert his eyes. Derrida's language reveals a horrified fascination of the birth of this heretofore nonexistent species, and though he explicitly develops the term "play" as the foundational category of this *anti*-structural epistemology, the end of his article hardly conveys the traditional sense of the term. Instead, Derrida's rhetoric

communicates a sense of the grotesque and abominable, a sense that the coming change is the genesis of a "nonspecies" whose birth comes "in the formless, mute, infant, and terrifying form of monstrosity."

Where the two strands come together—that is, where American counter-culture and French poststructuralism find their common ground—is the postmodernist subject. The American academy, if we can take Fiedler to be representative of that institution, was at odds with the counter-cultural revolution taking place during the late 1960s. French philosophy, if Derrida can be considered representative, had grown weary of structuralism. Both the neo-barbarians and the French poststructuralists developed new languages and alternate subject positions in order to transcend Western bourgeois humanism. However, oddly enough, the birth of the postmodernist/poststructuralist subject resulted in a monstrosity, a monstrosity that in many respects was dead on arrival. Early postmodernism was concerned with the possibility of subjectival extinction, but the efforts of the French poststructuralists and the iconoclasm of the American radical left seemed to speed the death of the subject rather than to resuscitate it.

"Recombinant Media" traces the genetic threads of monstrosity through poststructuralism and postmodernism into a transhuman cybernetic network subject. In my first chapter, I outline the contours of this cybernating postmodern subject which finds analogues in Tyrone Slothrop, a Giant Adenoid, the Octopus Grigori, and even the hybrid body of the novel itself. The novel's construction of these mutant and monstrous subjects is part of the novel's attempt to create a monster strong enough to disrupt the organs-machines which produce print subjectivity. The project is the motive of what Pynchon in one interview termed "the Luddite novel," and my argument is that *Gravity's Rainbow* is just such a novel, a book designed to offset the systems of technology which threaten the world with technological annihilation, especially in the form of the Bomb. The hybridized cyborg subject articulated by *Gravity's Rainbow*, I argue, is in this sense a monster similar to the subject envisioned by Derrida and Fiedler, and remediation is the means by which the organless body of this Luddite novel is constructed. In the case of *Gravity's Rainbow*, the novel incorporates disparate media such as film, textiles, electricity, and painting in ways that

destabilize the integrity of its own print machinery. The progression of novel's themes and its development of rhetorical figures is non-linear, and this non-linearity makes *Gravity's Rainbow* a book which, according to Derrida, signals "the end of the book" (*Of Grammatology* 86).

In my second chapter, I describe the lines of racial filiation which connect Tyrone Slothrop and Western culture to African Americans, follow the dispersion of subjectivity into an electric network, and trace the opposition to oppressive systems of production back to Ralph Ellison's *Invisible Man*. In my view, Invisible Man is mediated by racist systems of production. He becomes an organic component in the system of American capital in the middle of the twentieth century. By the novel's end, Invisible Man has discovered how to rechannel the flows which code production on the monopolated body of racist capital into the first node of an alternate network. Invisible Man hacks the System before Western culture has realized that a communications network even exists as such. By removing himself from the cybernetic network of American capital and constructing the first node of a nascent subaltern network, Invisible Man pioneers the strategies by which future hackers will oppose Western systems of capital. As a transducer of invisible energies into visible ones, Invisible Man remediates speech into print in the same way a modems modulate digital data into analog signals. Invisible Man is one of the "machines within the machine."

The third chapter of "Recombinant Media" turns to a late Twentieth-Century mass cultural treatment of the subject described by Ellison and Pynchon. In that chapter, I consider how the relationship between black writers and the largely white comics publishing industry produces symptoms in the body of a mass cultural object, Dwayne McDuffie's and Gregory White's *Deathlok*. As a bi-racial writing team, McDuffie and Wright produce a narrative that reflects the conflict present in the racially-biased world of comics publishing. The comic has at its diegetic center a cyborg weapons system comprised of an indestructible metal body, a decaying organic cranium, a natural-language artificial intelligence, and a black man's brain. The hybrid cybernetic being possessed of a double-consciousness is akin to the one W. E. B. DuBois describes in "The Souls of Black Folk," except in the case of Deathlok issues surrounding the conjunction of organism and machinery are added to issues of racial difference.

In my final chapter, I revisit *Gravity's Rainbow* to examine more carefully the imbricated systems of capital that comprise Western culture's print-based organs machines. I consider the way in which various human, machinic, and environmental components are aligned on the body of capital and how such alignments comprise a body without organs capable of arrogating entities from many disparate ontological orders. I conclude this chapter with a discussion of how *Gravity's Rainbow* itself makes subversive use of the machinery of capital to disrupt the production of print subjectivity which has alienated people from each other and the world in which they live. The fate of subjectivity at the end of Pynchon's novel is uncertain, depending as it does on the outcome of the cybernation of humans and non-humans. In the place of familiar print subjectivities, the novel attempts to produce a hybrid subject whose form is comparable to a monster's. With an eye to describing the nature of such a monstrosity, I now turn to Thomas Pynchon's *Gravity's Rainbow*.

### CHAPTER ONE

The Beginning of the End of the Book: *Gravity's Rainbow* and the Decline of Print Culture

THE END OF THE BOOK: GRAVITY'S RAINBOW'S GROTESQUE MEDIA CYBORG BODY

[t]he end of linear writing is indeed the end of the book, even if, even today, it is within the form of a book that new writings—literary or theoretical—allow themselves to be, for better or for worse, encased. It is less a question of confi[n]ing new writings to the envelope of a book than of finally reading what wrote itself between the lines in the volumes.

—Jacques Derrida, Of Grammatology

Derrida finds in non-linear writing the beginning of the end of the book, even if that non-linear writing comes in the *form* of a book. Derrida's predictions concerning the ramifications of non-linear writing for books as objects post-date by nearly twenty years Vannevar Bush's description of the "memex" machine, but Derrida forecasts the metamorphosis of print during the electronic age in a way Bush did not. Like McLuhan, Derrida recognizes that non-linear writing will change text-based media irrevocably and to some extent this change is also an effect of the electronicization of text-based media. However, Derrida imagines a paradoxical object, a book that is not a book and seems to have written between its lines something that is "the end of the book." Derrida imagines an hybrid media object, a book which remediates non-print media to so great an extent it no longer can be considered a book. The central argument of this chapter is that *Gravity's Rainbow* is just such a object.

Which is to say, *Gravity's Rainbow* is not merely a book but also an agent of morphological change, a cultural mutagen, a cybernetic object whose operation opposes the easy workings of print culture and its aggregated machines. Among other things, *Gravity's Rainbow* traces the mutation of Tyrone Slothrop from a print subject to a cybernetic one, not only modeling the genesis of a network subject from the remnants of an increasingly moribund print subjectivity, but also providing a procedural template which (allegorically) sketches one pathway by which subjectivity

may be re-formed by media shift. Many who have been conditioned by (and so are invested in) print find Slothrop's transformation disturbing, perceiving over the course of the novel that Slothrop ceases to be.

The last time readers see Slothrop, he stands looking at "a very thick rainbow" as "his chest fills and he stands crying, not a thing in his head, just feeling natural. . . . " (626). For the novel's remainder, little mention is made of Slothrop's existence in The Zone until an informal recital at the home of Stefan Utgarthaloki during which Slothrop "has become one plucked albatross. Plucked, hell—stripped. Scattered all over the Zone. It's doubtful if he can ever be "found" again, in the conventional sense of 'positively identified and detained.' Only feathers . . . redundant or regenerable organs [...]" (712). Correspondingly, many critics have understood this "scattering" as the dissolution and disintegration of Slothrop as a subject.<sup>3</sup> While it is true there are "few people who can still see Slothrop as any sort of integral creature any more" (740), it is still possible to do so, just as Seaman Bodine does above. However, located in a culture still largely shaped by print, many readers of Gravity's Rainbow interpret the infamous scattering of Slothrop's consciousness as loss. One of the things I explore in this chapter is the ways in which Slothrop's scattering can be understood as the dissolution not of subjectivity per se but as a deconstruction of the subject conditioned by print and the reconstitution of the resulting parts into a schizo-cybernetic subject, one that has much in common with those whom Deleuze and Guattari would identify as nomads inhabiting smooth space. In this view, Slothrop escapes the bounds of the print culture which contain him rather than being dissolved within its borders. In such a reading, the boundaries of the object within which Slothrop is (re)constituted is not a mere novel, but an object that redeploys several types of media within its boundaries, print merely being of one of these.

As an hybrid media object designed to obstruct the easy reproduction of the subjects and mechanisms that support the linear rationalism of print culture, the novel's narrative structure articulates a smooth space comprised of fragments of the stratified culture in which it is embedded. By hybridizing (among other things) print, electricity, and film, the novel recombines the discrete strata of print culture into a contiguous surface whose media characteristics are better described as

intensities rather than qualities. The hybridization of different media is nowhere more apparent than in the novel's apocalyptic ending which combines film, music, and print into a single space (i.e. the page). There at the novel's end, we are the audience who chants, "Come-on! Start-the-show!" only to find "[t]he screen is a dim page spread before us, white and silent" (760). The appeal for the show to start signals that "white and silent" are signifiers of absence. However, since both screen and page are fused, characteristics of these different media flow as intensities through this passage's signifiers.

In the context of print, the "white" page might indicate the absence of ink, while in a cinematic context "white" could mean the absence of celluloid. "Silent" functions a bit more ambiguously. "Silence" is a fundamental characteristic of print as a medium. Printed words are neither more nor less silent than white space. "Silent" in a cinematic context indicates the lack of audible sound, but not necessarily the absence of the Symbolic, especially in the case of silent films made before talkies became common in the late 1920s. The word "silent" shifts in its intensity as a signifier of the Symbolic depending whether the context is typographic or cinematic, and should the context be limited to one medium or the other, absence (or presence) is still not guaranteed. Given the fluidity of media characteristics at the "end" of Gravity's Rainbow, the stratified distinctions between different media no longer maintain as those media are recombined into a single object such that "[t]he screen is a dim page spread before us." Gravity's Rainbow produces an hybrid media object whose signifiers fluctuate depending on which medium they are understood to emulate. Theorists of media such as Paul Virilio, Marshall McLuhan, Sherry Turkle, George Landow, and Mark C. Taylor have talked extensively of the effect of media on subjectivity and social collectives, but with the exception of McLuhan, discussions of media hybridity to date have largely been relegated to studies of "new" media, often considered synonymous with digital media. My point is to emphasize the importance of understanding recombinant media not only in terms of the kinds of subjectivity they produce (though that, too), but also in terms of the effects of media hybridization on media themselves. I am especially concerned about the hybridization of non-electronic forms of

media such as print and film. But before analyzing the novel's hybrid form, it will be useful to make sense of the novel's use of popular culture.

In his analysis of literary hybridity, M. M. Bakhtin studies the interaction between different spoken languages and the representation of languages in the novel. Concerning the latter, Bakhtin understands a "language" to be a mode or register of representation characteristic of a way of thinking or an ideological position, what is commonly referred to as a "discourse" in contemporary criticism. Bakhtin explains that "the novelistic hybrid is an artistically organized system for bringing different languages in contact with one another, a system having as its goal the illumination of one language by means of another [...]" (Dialogic 361). Bakhtin's analysis can also be applied to cultural forms, especially in the case of *Gravity's Rainbow*. Not only does Gravity's Rainbow seek to complicate the production of print subjectivity, but Pynchon's tendency to incorporate elements from popular culture into his erudite and ambitious prose has an effect similar to the one Bakhtin identifies as the carnivalesque. Tied to folk culture, the carnivalesque is a "nonofficial, extraecclesiastical and extrapolitical aspect of the world, of man, and of human relations" (Rabelais 6) which makes use of laughter, obscenity, and the grotesque. By using figures and texts from popular culture such as Plastic Man, Hansel and Gretel, King Kong, The Wizard of Oz, and The Blob, Pynchon destabilizes the hierarchy of high and low cultural forms, a move that aligns Gravity's Rainbow with the 1960s counterculture that challenged dominant culture by turning to folk music, handcrafts, and grassroots organizing.

Of course, there are many differences between *Gravity's Rainbow* and 1960s counterculture. Stefan Mattesich conceives of this difference in terms of "escape" versus "revolution." Building on the work of Theodore Roszak, Mattesich argues that disaffiliated members of affluent society "rebelled" against society in a way that in fact was

a complex *fulfillment* of that society's desire [...] repeat[ing] its plenitude in all the gestures of excess, satiation, or power with which we are familiar. Jimi Hendrix's guitar licks, the crowds at Woodstock, Berkeley love-ins, the Black Panthers armed with machine guns, Abbie Hoffman's guerrilla theater—no matter how outrageous,

these actions expressed the deepest superfluous tendencies of the society they outraged[ $\dots$ ] (3)

While 1960s counterculture cannot be reduced to the actions of a small number of disaffected rich kids, Mattesich's argument—that certain of counterculture's iconic figures are in fact extensions of the very operations of capital it seeks to disrupt—is compelling. *Gravity's Rainbow* is in this sense no different; it attempts to disrupt the dominant (print) culture by altering the output of its machines, producing recombinant media that mutate individual subjects and assemble cybernetic collectives. However, the novel's use of popular culture has done nothing to detract from its status as a literary nonpareil, let alone diminish the production of literary print artifacts. Since the early 1970s, popular cultural objects have attracted the attention of literary and cultural critics precisely to the extent they can be said to be expressions of an "authentic" mass audience. This counteraction of political intention is characteristic of the machineries of late Twentieth-century capitalism: political affect is strengthened in the same stroke that it is coopted. What *Gravity's Rainbow* does do, however, is open up possibilities for subjectivities that resist the easy workings of print culture.

In addition to its turn toward popular culture, *Gravity's Rainbow* can be construed partially as a Bakhtinian media object because of its grotesque form. Part of the novel's grotesque form is due to its amalgamation of disparate media. The proliferation and accretion of electricity, photographs, film, song, writing, maps, and symbols makes the novel a devourer of media, or a mediaphage. *Gravity's Rainbow* appetite for various media can be compared to the insatiable hunger of carnivalesque figures such as Sancho Panza and Pantagruel (*Rabelais* 22, 331), where in the case of mediaphagism an irrepressible media hybrid is produced. *Gravity's Rainbow* is not only a grotesque media hybrid. It can be considered also a grotesque textual body, one that lumps together multiple genres such as documentary, romance, burlesque, pornography, horror, and science fiction from multiple types of media including film, print, cartoon, and song. None of this is to mention explicit carnivalesque episodes such as Pirate Prentice's affirmation of life in the face of death-delivering rockets by cooking a banquet banana breakfast (8-10), Roger Mexico's and Seaman Bodine's subversion of a dinner party's studied civility with an alliterative list of scatological

cuisine (715), or Mexico's spirited disruption of one of "Their" meetings by urinating on the attending board members (636). While such episodes are important especially in light of the novel's opposition to hegemony, they are secondary to the novel's grotesque media body. Bakhtin explains that "[t]he distinctive character of [the grotesque] body is its open unfinished nature, its interaction with the world" (*Rabelais* 281). The grotesque body is "not separated from the rest of the world. It is not a closed, completed unit; it is unfinished, outgrows itself, transgresses its own limits" (26). Like the Blob, the grotesque body is "most fully and concretely revealed in the act of eating; the body transgresses here its own limits: it swallows, devours, rends the world apart, is enriched and grows at the world's expense" (281).

This phagic aspect of *Gravity's Rainbow*, by which it incorporates so many genres and media, produces a body that is characterologically similar to the grotesque bodies comprised by the dismembered bodies of saints (*Rabelais* 349-351) and the bodies detailed in the "Hippocratic anthology" (355). These bodies are syncretic, incorporating all manner of disparate parts, and it is by means of this syncretism that such bodies (and *Gravity's Rainbow*, in particular) are embedded in the world. The novel synthesizes a membranous interface that is structurally similar to the membranes through which capital and power flow in WW II Europe and 1970s Western print culture. Bakhtin says of the grotesque body that "the confines dividing it from the world are obscured, and it is most frequently shown open and with its interior exposed. Its exterior aspect is not distinct from the inside, and the exchange between the body and the world is constantly emphasized" (355). The porous surface of the grotesque body is reflected in *Gravity's Rainbow's* own structure, a "structure" which has much in common also with Delueze's and Guattari's body without organs.

Of the many genres present in the novel's body, two—science fiction and horror—are especially important to understanding why the novel seeks to deform the subject produced by the machinery of print culture. These genres form the core of what Pynchon terms the "Luddite" novel, a genre which warns about the dangers posed by technology. As a Luddite novel, *Gravity's Rainbow* analyzes and critiques rationalist and scientific discourses. The novel critiques Western

rationalist scientific activity for producing technologized forms of death which are, ironically, meant to delay death. By means of technoscience, Western print culture alienates itself from death, producing a racist social order that psychologically projects and literally visits death onto non-Western others. *Gravity's Rainbow* attempts to break and reorganize the machines driving such technoscientific racist activity.

In summary form, *Gravity's Rainbow* mounts an attack against print culture in the form of a "Luddite novel" by these three means: 1) it suggests that the ascendance of film in print culture demands an adaptive method of reading that interprets the world in both cinematic as well as textual terms; 2) the novel exposes and critiques the false recursivity of capitalist production as well as its own implication in that system; 3) and *Gravity's Rainbow* examines how technical machines designed to avoid death often short-circuit rather than lengthen the pathways between life and death.

In the larger context of late Twentieth-century American literature, Pynchon's novel is not the only one to use non-linear narrative as a means of critiquing the social and political organization of Western culture. William Burroughs, Ishmael Reed, Philip K. Dick, Donald Barthelme and others have all written books which make use of postmodern narrative technique to call attention to the ideological contradictions of American society. However, *Gravity's Rainbow* is one of a few that attacks the system of print which produced it, and it does so as the very kind of paradoxical object that Derrida identifies as announcing the beginning of the end of the book.

My overall argument is that *Gravity's Rainbow* does this by transforming the print subject into a cybernetic one. McLuhan believed that the technological extension of the human body is a means of protecting us from unbearable stimuli, but where he sees the advent of electric technology as "desperate and suicidal" (*Understanding Media* 43), *Gravity's Rainbow* explores the possibility that the cybernation of the human organism is perhaps an adaptive and advantageous morphological change. *Gravity's Rainbow* reengineers the machinery of conventional narrative and by doing so deforms literary subjectivity to the extent of producing a new subjectival species, a mutant subjectivity through which we may better understand how changes in technology, and

communication shape our shared environment and affect our relationships with each other and with organic and machinic non-humans. Properly understood and intentionally undertaken, the mediation of humans, machines, organisms, and material to produce a cybernetic network might simultaneously throttle the flows of industrial production and the streams of electronic information on which the racist and ontologically separatist network of globalizing Western capital feeds.

In a letter to a graduate student writing a dissertation on the Bondelzwarts, Thomas Pynchon explains that "since reading McLuhan especially, and stuff here and there on comparative religion" he feels that the similarities between the near-genocide of the Herero by the Germans in 1904 and the atrocities committed (again by the Germans) in World War II point to a sociocultural psychopathology. Adapting McLuhan's theories about the socially disconnected nature of subjectivity in print culture, a disconnection which separates people from their moral duties to each other, Pynchon locates the origins of such cultural psychopathologies in the analytical and linear rationalism of Western culture. In contrast to this rationalism is the unified and integrated world view of peoples such as the African Herero, Vietnamese Buddhists, and North American Indians. Pynchon explains that he feels

the number done on the Herero head by the Germans is the same number done on the American Indian head by our own colonists and what is now being done on the Buddhist head in Vietnam by the Christianity [sic] minority in Saigon and their advisors: the imposition of a culture valuing analysis and differentiation on a culture that valued unity and integration. (Letter to T. F. Hirsch)

In the last paragraph of his letter, Pynchon remarks "[h]opefully this will all show up, before long, in another novel." There is enough evidence here to make the case that *Gravity's Rainbow* is an attack on the subject of post-Gutenberg, Cartesian rationalism, that the high literary watermark of American postmodernism is a munition of bibliobiological warfare designed to recombine the machines of subjectival genesis embedded in Western culture. *Gravity's Rainbow* is an attempt to recode the flows of North American letters, a weapon designed to retribalize print subjectivity.

Gravity's Rainbow explores the effects that technologies of death such as the V-2 Rocket have upon subjectivity, using the conventions of popular genres such as science fiction and horror to alert us to the inevitable outcomes of myths propagated by the desire for immortality, purity, and perfection. The novel also splits the subject across different racial types. One of Pynchon's primary concerns is to detail the ways in which racial difference is produced not only by strands of genetic code but also by strands of discursive code, the way in which race is a function that goes beyond skin and morphology, how the social machines of language and custom conjoin to produce race as a transdermal effect. Gravity's Rainbow conceives the problematic of race within a black-white paradigm, which marks it as a typically American novel, especially given that the novel is largely set in World War II. The treatment of race within a black-white paradigm on the one hand oversimplifies the problem of race, but this oversimplification reflects the American context in which the terminals of African and European human genetic orders form one of the essential binaries of Western capital. The novel's articulation of a transdermal racial subjectivity partially resists the operation of the organs of capital which rely on such racial binaries.

The publication of *Gravity's Rainbow* happens at a moment when the pressures of a new technological milieu are forcing subjectival speciation and transforming cultural organization. In addition to prototyping a tribal, cyborg subject, *Gravity's Rainbow* seeks to upset the well-ordered balance of "The System," a system that mistakes linearity for causation and engineers "rationalized forms of death" in the hopes of achieving a technologized immortality. By developing a narrative to hinder the easy construction of sequential models of thought and causation, *Gravity's Rainbow* hopes to fracture the apparatus which conditions social and technical machines to operate in the service of capital.

FRANKENSTEIN'S MONSTER AND THE LUDDITE NOVEL

To insist on the miraculous is to deny to the machine at least some of its claims on us, to assert the limited wish that living things, earthly and otherwise, may on occasion become Bad and Big enough to take part in transcendent doings. By this theory, for example King Kong (?-1933) becomes your classic Luddite saint. The final dialogue in the movie, you recall, goes: "Well, the airplanes got him." "No . . . it was Beauty killed the Beast." In which again we encounter the same Snovian disjunction, only different, between the human and the technological.

—Thomas Pynchon, "Is It O.K. to Be a Luddite?"

Gravity's Rainbow is a sprawling testament to the dangers of technologization. In "Is It O.K. to Be a Luddite," Pynchon explains that the threat posed to the "worth" of human beings by the knitting machines of 19th-century England inspired the need for "the Badass," some "golem," "hulk," or "superhero" who will resist the overwhelming force embodied by machinery. Thus was born King Ludd, progenitor of the clan of the Luddites. Pynchon argues that Mary Wollstonecraft Shelley's Frankenstein could be the best example of the "Luddite novel," if such a genre existed, a "warning of what can happen when technology and those who practice it, get out of hand." His remarks clarify his own sense of the generic status of *Gravity's Rainbow* which, like *Frankenstein*, is an attack on technology that dehumanizes by claiming human lives and concentrating human labor. As the exemplar of the Luddite novel, Shelley's Frankenstein also pioneers two of the genres hybridized by Gravity's Rainbow: horror and science fiction. It is no accident that these two genres figure so prominently in the structure of Pynchon's novel since these genres owe much of their development to popular culture and film. The Luddite novel is in this sense a novel for "the people" in the sense that it addresses issues of labor with signifiers drawn from popular culture, however rarefied the final object. Like Ned Ludd and his followers, the Luddite novel seeks to break the machines designed to replace human elements in the body of capital.

The target Pynchon aims at with *Gravity's Rainbow*, however, is not the technical machines that destroy people, not the V-2 rocket, which for all its deadly payload and lethal accuracy concerns Pynchon primarily as a symbol. Indeed, a nuclear bomb shadows the entire novel, but it does not interrupt it. The "screaming [which] comes across the sky" at the novel's start suggests a

passing missile, perhaps much like the rocket which descends at the novel's end, but both missiles, if such they both be, give structure to the novel whose title poetically insinuates the inevitable parabolic trajectory all rockets take. There is an unresolvable tension between destruction and integration in the novel's treatment of the Rocket which keeps it from being unequivocally "bad." The Rocket is a cyborg entity whose existence partially constitutes complex collectives that mobilize humans as well as non-humans. The Rocket, though it terminates life, is not what Pynchon is after.

Pynchon is after the machinery of print and its production of linear, rationalist modes of thought. *Gravity's Rainbow* targets print culture and print subjects themselves, and the accuracy of its aim can be measured by the early reaction of well-trained critics of literature, critics such as John Gardner who believed Pynchon would "die of intellectual blight, academic narrowness, or fakery" (qtd in Clerc 4). Even stronger testimony to the power of *Gravity's Rainbow's* anti-print organs-machines<sup>4</sup> is the distance between the reaction of the 1973 Pulitzer jurors, who unanimously voted to award Pynchon the prize for fiction, and the Pulitzer advisory panel, who overturned the jurors' decision. As a result of that disagreement, no Pulitzer for fiction was awarded in 1973.

Like McLuhan, Pynchon feels that print literacy privileges sequence and analysis over holism. This privileging isolates the subjects of Western print culture and keeps the culture from being integrated and harmonious.<sup>5</sup> To disrupt the production of print subjects is to begin the work of retribalizing them into a more harmonious whole.<sup>6</sup> One of the ways that *Gravity's Rainbow* disrupts the production of print subjectivity is by troubling the reading protocols of print subjects. By incorporating narrative effects from non-print media—film in particular—*Gravity's Rainbow* attempts to retribalize the monads of Western print culture into a more socially cohesive whole. On the one hand, this frustration of the protocols of print literacy was bound to trigger the hostility of literary critics precisely to the extent that it enables alternative modes of apprehending the world. In its closing passages, the novel in fact anticipates the conflict between film and print cultures by figuring its own end as the apocalyptic hybridization of cinematic and bibliographic media.

At the end of the novel, just as "Descent" begins, an anonymous crowd clamors

Come-on! Start-the-show! Come-on! Start-the-show! The screen is a dim page spread before us, white and silent. The film has broken, or a projector bulb has burned out. It was difficult even for us, old fans who've always been at the movies (haven't we?) to tell which before the darkness swept in. The last image was too immediate for any eye to register. It may have been a human figure, dreaming of an early evening in each great capital luminous enough to tell him he will never die, coming to wish on the first star. But it was not a star, it was falling, a bright angel of death. And in the darkening and awful expanse of screen something has kept on, a film we have not learned to see . . . it is now a close up of the face, a face we all know—

Here film and print become one, each signifying aspects of the other. The novel's end coincides with the "end" of the film, but that ending is neither natural nor definitive since it (the novel / the film) encourages us to "[f]ollow the bouncing ball" to the tune of a song "[t]hey never taught anyone to sing, [...] a hymn by William Slothrop, centuries forgotten and out of print[...]" (760). This last image is a complex conjoining of several media: film, print, and song. The song unites its singers in the simultaneous field of their own harmonized voices. McLuhan asserts that the aural character of oral societies is distinct from the visual character of literate societies and that electric technology recreates the conditions of pre-literate tribal culture an a global scale.<sup>7</sup> The end of Gravity's Rainbow places its reader in the aural field of a song which also has a bibliographical dimension. However, this dimension is effectively zero because the song is "no longer in print," no longer being reproduced by the machinery of print culture except for the fact that it is available to the audience/readers watching/reading the film/novel. This unavailability suggests that the present reader stands in a place that is about to be annihilated, a time just before the erasure of all bibliographic traces of William Slothrop's hymn. The conjunction of several media here attempts to integrate its individual addressees into a simultaneously singing/viewing/reading collective, and this integration comes at the end of the novel, at the end of the production of marks on the page, a time after the "film has broken" and light, "white and silent," dominates the field of vision. This

conjunction is coded as the blinding white flash of Apocalypse, broken film becomes white page becomes nuclear detonation.

This apocalypse of hybridizing media can only be understood as the conjunction of all these forms, not the priority of any one over the others. The "dim page [which] spreads before us" narratively fuses with the broken film. Either bright light shines directly onto the screen or the "projector bulb has burned out." It is uncertain which. This indeterminacy of the state of the media is paralleled by uncertainty of the "human figure," who "in each great capital luminous enough to tell him he will never die" imagines something the narrative refuses to specify as anything more substantial than "dreaming." Here the novel becomes an "illuminated" typescript reassuring someone of his or her immortality, a wish whose star is "not a star," but rather "a bright angel of death." This dream of immortality is precisely what Pynchon's Luddite novel warns against. Much of *Gravity's Rainbow* considers the paradox of the bid to achieve immortality through technology. For example, in the quest to extend life, science kills uncountable numbers of lab animals, many of them trivially and inhumanely. The novel warns against such "rationalized forms of death—death in the service of the one species cursed with the knowledge that it will die" (230). When people use technology to pursue immortality they obscure their production of death, and Gravity's Rainbow opposes such efforts by using print technology to make a monster of itself. Just as Frankenstein made his bid to achieve immortality by creating a living being from the remnants of corpses and electricity, so Gravity's Rainbow creates a "monster," a "Badass," or "hulk" out of remnants of several media, and this "golem" warns of the apocalypse which follows the pursuit of immortality.

The morphological nature of such monsters can be usefully compared to what Deleuze and Guattari identify as the rhizome (*Thousand Plateaus* 3-25). The rhizome's parts (plateaus) are multiply connected, so much so that "the rhizome connects any point to any other point" (21). As a result, the rhizome is

[u]nlike a structure, which is defined by a set of points and positions, [...] the rhizome is made only of lines: lines of segmentarity and stratification as its

dimensions, and the line of flight or deterritorialization as the maximum dimension after which the multiplicity undergoes metamorphosis, changes in natures. (21) Though impossible to visualize,<sup>8</sup> the rhizome can be understood in some senses as a body without organs (BwO), not so much an "object" as the interconnections between various processes, organs, forms, contours, crystallizations, and signifiers. Deleuze and Guattari state that "the BwO is that glacial reality where the alluvions, sedimentations, coagulations, foldings, and recoilings that compose an organism—and also a signification and subject—occur" (159).<sup>9</sup> The body without organs is in this sense pure potential even as it is comprised by the actual.

With regard to the ontology of books, Deleuze and Guattari assert that

[t]here is no difference between what a book talks about and how it is made.

Therefore a book also has no object. As an assemblage, a book has only itself, in connection with other assemblages and in relation to other bodies without organs[. .

. .] A book exists only through the outside and on the outside. A book itself is a machine. (*Thousand Plateaus* 4)

In their estimation, books already are part of the technical and are machinic, capable of producing something other than themselves. Given they are also bodies without organs, it is not surprising that they also can be elements within cybernetic organisms, themselves assemblages of organic and machinic elements. It is important to keep in mind that cyborgs are parts-objects of bodies without organs, realizations of the potential of machines and organisms to collectivize. That is, they are always parts of larger systems such as factories, corporations, or a nation-states, systems with their own principles of organization.

As mentioned above, *Gravity's Rainbow* opposes the workings of the print culture and the capitalist system in which it is embedded. This aligns the novel's political affect with that of 1960s counterculture, both of which Stefan Mattesich compellingly argues are implicated in the excesses of the existing capitalist system. Mattesich argues that *Gravity's Rainbow*, like 1960s counterculture, attempts to

tell the story of the emergent system of late capitalism[....] To tell the story of that system is to evoke the loss of an intelligible world in which one's choices and preferences, actions and desires, carry with them a sense of consequence and value. With the coalescence of consumption as a primary interpellative fact of social life, enmeshing the subject within the spectral structures of global markets and the ideological "freedom" of commerce, new narrative forms are needed to grasp the "event" that this development presupposes. *Gravity's Rainbow* can be understood as an attempt to meet this new cultural imperative by dramatizing an experience of disorientation in the basic teleological and dialectic space of the "book" (14-15).

This is to say that *Gravity's Rainbow* "reiterates" the conditions which lead subjects to find their "freedom" within the "spectral structures of global markets," which is no freedom at all. Mattesich believes that Tyrone Slothrop's "entropic slide into equivalence and solipsism" is the novel's "performative 'meaning,' " and that in order "to read Slothrop as a sign of the text's desire, and that desire as the decoded code of its broken allegorical machine," one must construe entropy as an "actuating principle of resistance" (19). In other words, entropy is necessary because it engenders a resistance to its own effects. Such circular reasoning is precisely the object of *Gravity's Rainbow* critique, even as the novel makes use of such reasoning. Mattesich identifies a constitutive paradox in the rationale of *Gravity's Rainbow* counter-hegemonic strategy, and such constitutive paradoxes provide a potential model for the kinds of objects *Gravity's Rainbow* seeks to dismantle as well as the kind of entity it is: a body without organs. Reading along these lines, the body without organs which *Gravity's Rainbow* constitutes is a fractally structured cybernetic organism, one implicated in the very operations of the print culture it seeks to disrupt.

One of the specific actions of such machines, or any machine for that matter, is the processing of some form of energy into a different form. Automobiles translate fuel into kinetic energy, pulleys translate linear kinetic energy into angular kinetic energy, computers turn electricity into information streams, dams turn flowing water into electricity, and so on. In each of these cases, what serves as a supply of energy is finite, and the action of a machine obscures this finitude by

either interrupting its own action or by being coupled to a machine that itself interrupts its access to some associated flow of energy. Deleuze and Guattari assert that "[e]very machine, in the first place, is related to a continual material flow (*hylè*) that it cuts into" (*Anti-Oedipus* 36). The paradox is that "[f]ar from being the opposite of continuity, the break or interruption conditions this continuity: it presupposes or defines what it cuts into as an ideal continuity." Interruptions in the activity of machines idealize the associative flows to which those machines are connected. The stuttered continuity of these conditioned flows perfectly resembles the output of any machine. In other words, "every machine functions as a break in the flow in relation to the machine to which it is connected, but at the same time is also a flow itself, or the production of a flow, in relation to the machine connected to it" (*Anti-Oedipus* 36).

The stuttered functioning which characterizes the action of coupled organs-machines is present also in movie cameras that produce individual frames from the idealized temporal flow of reality. In comparing the novel to film, critics such as Charles Clerc and Hanjo Berressem go as far to compare the gaps between the novel's episodes with the spaces between the frames of a film.<sup>10</sup> The novel itself connects film to other technologies, notably rocketry. One such connection occurs after Slothrop sees in the "stairstep gables that front so many [. . .] north-German buildings" at Cuxhaven repeating "Zonal shapes," which outside of his awareness suggest the divisional elements "forced" to continuousness by integral calculus in mathematics, a process the novel compares to the persistence of vision in cinema (567). Integral calculus uses a mathematical sleight of hand to compute (among other things) the area of surfaces bounded by curves. Such areas include the area beneath a parabola, which is the shape of ballistic trajectories. The connection between rocket science and film comes when the novel narrates the history of mathematics and flight analysis, a history which begins three hundred years prior to WW II when

mathematicians were learning to break the cannonball's rise and fall into stairsteps of range and height,  $\Delta x$  and  $\Delta y$ , allowing them to grow smaller and smaller, approaching zero as armies of eternally shrinking midgets galloped upstairs and down again, the patter of their diminishing feet growing finer, smoothing out into

continuous sound. This analytic legacy has been handed down intact—it brought the technicians at Peenemünde to peer at the Askania films of Rocket flights, frame by frame,  $\Delta x$  by  $\Delta y$ , flightless themselves . . . film and calculus, both pornographies of flight. Reminders of impotence and abstraction, the stone Treppengiebel shapes, whole and shattered, appear now over the green plains, and last a while, and go away[...] (567)

The relationship between printing and the rise of science has been studied in considerable detail by Elizabeth Eisenstein, who observes that prior to advent of print which afforded the accurate duplication of images

[o]bservational science throughout the age of scribes was perpetually enfeebled by the way words drifted apart from pictures, and labels became detached from things. Uncertainty as to which star, plant, or human organ was being designated by a given diagram or treatise—like the question of which coastline was being sighted from a vessel at sea—plagued investigators throughout the age of scribes. (*Printing Revolution* 202)

Print's ability to exactly reproduce diagrams facilitated the exchange of data among scientists. While Eisenstein's conclusion stands at some distance from McLuhan's conjecture that print cultivated alphabetic modes of literacy in the world outside of books, Eisenstein's point does reinforce the idea that visual reproducibility is one of the foundations upon which Western science is built. This is the same point made when *Gravity's Rainbow* connects the developments of rocket science to the kinds of precise visual analysis made possible by film. The analytical character of print (in terms of images and diagrams) corresponds to the analytical potential of film, and it is this analytical capability which enables Western science to measure and describe the natural world with such a high degree of accuracy.

Another way of looking at it is to say that Western science has machines which can cut into ideal flows such as curved surfaces and ballistic trajectories. The camera is one such machine, capable of cutting into the flow of time with enough precision and consistency that scientists can

use its output to trace the flight of rockets. By segmenting rocket flight paths into smaller and smaller increments of  $\Delta t$  such that  $\Delta t$  approaches zero (or its cinematic equivalent), cameras help scientists to compute the instantaneous velocity of a missile at any time. Movie cameras (and integral calculus) turn the flight paths of rockets into ideal flows by segmenting them into infinitesimal arcs of  $\Delta t$  over  $\Delta t$ , and this segmentative mechanism of the motion picture camera has a counterpart embedded in the machinery of print.

Gravity's Rainbow is itself a machine that alters the flows of the machinery of print culture. In schizoanalytical terms, the novel is a machine that conditions the flow of print culture, and as such it could be said to assisting in its production. This is the paradoxical insight Mattesich encounters regarding the fractal structure of the novel, its tendency to promote the very activity it disrupts. The novel is fractally structured and contains figures that are organized in the way it is organized. It describes and contains organs-machines with similarly linked strata. To consider the novel in schizoanalytical terms reveals the interconnections between the world of things and ideas, the links between the material and the immaterial. These links also render the full scope of the elements which comprise such an assemblage. The novel is one such assemblage, comprised of similarly constructed parts which stitch together human and non-human, machinic and organic, and embodied and incorporeal components. Few bodies of critical theory reveal the subtle nature of these linkages better than the work of Deleuze and Guattari. 12

LORD OSMO'S GIANT ADENOID: INTERCEPTED TRANSMISSIONS AND THE GROTESQUE BODY WITHOUT

ORGANS

Lord Blatherard Osmo's fantasized adenoid is one of the novel's monstrous figures whose form and growth reflects on the novel's own. Lord Blatherard Osmo is the fictional attaché to Novi Pazar for the British Foreign Office. In the late 1870s, England found itself involved in the intensification of the Austro-Russian rivalry at the end of the Crimean War. Under Disraeli, England refused to approve the Berlin Memorandum of 1876 which would have facilitated peace in the Balkans, and fighting continued until the Treaty of Berlin in 1878. As a result of this treaty,

Austria-Hungary was allowed to garrison the area between Montenegro and Serbia, which includes Novi Pazar. In 1908, Austria-Hungary planned to build a railway that would run through Novi Pazar and which would complete the encirclement of Serbia. Lord Blatherard Osmo's position as an attaché is "an obscure penance for the previous century of British policy on the Eastern Question" (*Gravity's Rainbow* 14) at which center lies Novi Pazar.

Lord Osmo's fantasy (which Pirate Prentice encounters as a fantasist surrogate in the employ of The Firm) is that he "proceeds to get *assimilated* by his own growing Adenoid, some horrible transformation of cell plasma it is quite beyond Edwardian medicine to explain" (15). After swallowing Lord Osmo, the Adenoid travels in a circular path around the heart of London, starting at Mayfair and moving to East End. It then moves north and westward to Hampstead Heath, completing its circle at St. James (Weisenberger 23). During its circular journey, the Adenoid has "not [been] swallowing up its victims at random, no, the fiendish Adenoid has a *master plan*, it's choosing only certain personalities useful to it" (*Gravity's Rainbow* 15).

Eventually, Pirate/Osmo is called upon to "establish liaison with the Adenoid," who now "occupies all of St. James's." This is both the crux and meaning of Osmo's fantasy: he is at once cause of and solution to the Adenoid. Though Osmo has been assimilated by the Adenoid, he is called upon to play the role of ambassador to the Adenoid, which seems now more landmass than organism. Osmo is both outside and inside the Adenoid. This episode presents a topological impossibility unless one considers the Adenoid a rhizome that metonymically contains the apparatus of the novel, an assemblage that contains itself as well as being contained by it. Deleuze and Guattari explain that as an assemblage, a book cannot be considered part of a

tripartite division between a field of reality (the world) and a field of representation (the book) and a field of subjectivity (the author). Rather, an assemblage establishes connections between certain multiplicities drawn from each of these orders, so that a book has no sequel nor the world as its object nor one or several authors as its subject. In short, we think that one cannot write sufficiently in the name of an outside. The outside has no image, no signification, no subjectivity. (23)

The Adenoid has grown beyond the boundaries of Osmo's body to become a surrogate for Osmo himself. Literally (within the figurative landscape of the novel), the Adenoid is a part of Lord Blatherard Osmo, and insofar as it is taken to be equivalent to him, it is a synecdoche for the entire man. Furthermore, Osmo's assimilation by his own Adenoid extends the assimilative powers of what Bakhtin calls the "gaping mouth" (*Rabelais* 325-341) to the lymphatic tissue of the nasopharynx. The transference of these assimilative powers from the gastrointestinal tract to the adenoids transforms the nasopharynx into a phagic system.

One of the most renowned fantasies involving the hybridization of the gastrointestinal tract and the olfactory system is Freud's "The Dream of Irma's Injection." In the dream, Freud "look[s] down her [Irma's] throat" and notices "a big white patch" and "extensive whitish grey scabs upon some remarkable curly structures which were evidently modeled on the turbinal bones of the nose" (*Dreams* 141-141). In his analysis of this dream, Freud makes two connections between the "turbinal" structures he finds in Irma's throat which provide some insight into the themes and structure of the giant Adenoid episode.

In real life, someone Freud refers to as Dr. M. had attracted "scientific attention to some very remarkable connections between the turbinal bones and the female organs of sex" (150). Also in real life, Freud sent Irma to Dr. M. "to see whether her gastric pains might be of nasal origin." Freud determines that the dream symbol of Irma's turbinal bones is an example of condensation and displacement. The image condenses an image of Irma's friend whom Freud believed would have been a better patient than Irma because the friend would "have opened her mouth properly" (143) and his knowledge of Dr. M.'s "suppurative rhinitis" (150). Freud details the conjunction of the female reproductive organs, the nasopharynx, and the gastrointestinal tract, elements which recall the grotesque body whose "same features (gaping jaws and depths) also appear in the open womb of Pantagruel's mother" (*Rabelais* 339). The symbol of suppurating turbinal bones superimposed onto the throat is a vision of what Bakhtin describes as "[t]he grotesque body [which] has no facade, no impenetrable surface[. . . .] It represents the fertile depth or the convexities of procreation and conception. It swallows and generates, gives and takes" (339). The

Adenoid is such a body, able to exceed the limits of the body which originally contained it by "some horrible transformation of cell plasma." Characteristics of the nose, the mouth, and the womb are present in the Adenoid which is able to absorb "an entire observation post with a deluge of some disgusting orange mucus in which the unfortunate men are *digested*—not screaming but actually laughing, *enjoying themselves*. . . ." (15). Uterine, nasal, and oral characteristics are also present in the hybridized structures dreamed by Freud.

The second interesting connection Freud makes analyzing these "remarkable curly structures" suggests a possible source for the Adenoid episode. Pirate/Osmo is called upon to "establish liaison" with the Adenoid, and a détente results between the Adenoid and the British government. During these conversations, "alienists in black seven-button suits, admirers of Dr. Freud" administer shovelfuls of cocaine to the "throbbing gland-creature," smearing the substance against the Adenoid's "loathsome grayish flank." Freud interprets the curly structures he dreamed as a sign of his preoccupation with his own health, writing that

[t]he scabs on the turbinal bones recalled a worry about my own state health. I was making frequent use of cocaine at the time to reduce some troublesome nasal swellings, and I had heard a few days earlier that one of my women patients who had followed my example had developed an extensive necrosis of the nasal mucous membrane (*Dreams* 144).

Freud's use of cocaine is by his account medicinal, meant to "reduce some troublesome nasal swellings," but he recognizes a latent concern that cocaine may be damaging his nasal passages. Outside this expression of worry, when Freud mentions the use of cocaine in *The Interpretation of Dreams*, it is in relation to its use as an anesthetic. In the Adenoid episode, Osmo/Pirate's intercession and the administration of cocaine by "admirers of Dr. Freud" evidently distract the Adenoid from its "master plan" to absorb more "personalities useful to it," a plan that amounts to "a new election, a preterition abroad in England that throws the Home Office into hysterical and painful episodes of indecision . . ." (15).

The theme of preterition in *Gravity's Rainbow* has been well studied. Interestingly, Joseph W. Slade forges a link between Calvinist predestination and the late capitalist belief "in the inevitable hegemony of the Elect [the wealthy] if only because [they] have made their institutions perpetual" (157-158). In Slade's view, an operational equivalence and a line of descent both can be traced from Calvinist predestination to Western capitalism, especially insofar as both are seen to be the inevitable outcome of transindividual forces such as God and multinational corporations. The Adenoid's selection of "useful" personalities is similarly inscrutable, serving the purpose of an indefinite "new election" and creating an hysterical "new preterition." While the Adenoid's progress is not inevitable in the same way predestination and capitalism are, its circuit around the heart of London is unstoppable, and the growth and maintenance of the rhizomatic Adenoid connects it to consumption, assimilation, and anesthetization which to some degree also characterize capitalism and proselytizing religions. The Adenoid's grotesque assimilative capacity is especially disturbing since absorption by the Adenoid is enjoyable. Like immersion within the system of consumer culture, assimilation into the body of the Adenoid has its pleasures, and like the spiritual and economic Elect, those lucky enough to become a part of the Adenoid's master plan do not seem to mind their fates.

Whereas condensation produces in Freud's dream hybridized "curly structures" that symbolize Freud's anxieties about his health, his sexual interest in Irma, and his professional concern over her failure to improve, the hybridization of several biological systems turns the Adenoid into something more than a "troublesome nasal swelling." The Adenoid is essentially a body without organs able to assimilate arbitrary elements into its own structure. The Adenoid detaches discrete and disparate components from London's production apparatus—the affluent garment and retailer's district of Mayfair, the docks and ethnically diverse East End, and the centers of governmental power in Whitehall—and reterritorializes them into its own rhizomatic structure.

In light of the way the Adenoid intermittently detaches coded flows from London and reterritorializes them, the Adenoid can be said to be a bio-machine whose stuttered operation turns London into a conditioned flow. The machinic operation of the Adenoid is the result of the abilities

it acquires as the result of hybridization: the incorporation of digestive, assimilative, and reproductive capacities of the bodily systems fused within Osmo's fantasy. Coupled to the Adenoid, London becomes an interrupted, and so idealized, flow as an effect of a fantasy-machine, which is different than saying that Osmo's vision of London as a conditioned flow is only a fantasy. The ontological forms and operational behavior presented in the Adenoid episode, fantasized though they are, are actual even if they are immaterial. Furthermore, because these coupled machines and flows are to some degree operationally consistent and structurally integrated, they can serve as models for organs-machines of which they are a part. In this case, the Adenoid's coupling with London mirrors the novel's coupling with World War II. Both the Adenoid and the novel are machines conditioning the flows of the machines to which they are connected. Of course, there are always other machines in the chain, machines conditioning the flows of other machines. The Adenoid episode emphasizes such connection produces disconnection, re-placement displacement.

The Adenoid bio-machine re-places the productive assemblies of London's capital-machine as the result of Osmo/Pirate's fantasy-machine which itself interrupts the operation of the nation-state-machine. Displacement/interruption operates on the level of the interface between these systems. The diplomatic activity between London and Novi Pazar is displaced by Lord Blatherard Osmo's fantasy. In his fantasy, Osmo is displaced by his own Adenoid, and Pirate Prentice is the fantasist surrogate who displaces Osmo in his own fantasy. In the end, even the collective which comprises Lord Blatherard Osmo is absorbed by a blob-like body. The Adenoid, placated by Osmo/Pirate and anesthetized by cocaine, seems to return "[e]arly in 1939, [when Lord Blatherard Osmo] was discovered mysteriously suffocated in a bathtub full of tapioca pudding [. . .]" (16).

Osmo's drowning in tapioca pudding places Osmo's fantasy in the same category as Freud's patient's dream of the burning boy which Lacan terms an "encounter with the real" (*Four Concepts* 53). Lacan argues that the patient's dream is an encounter with an "unassimilable" traumatic kernel, and that what wakes the father is something inside the dream. Lacan notes that the external world can be "represented by the accident, the noise, the small element of reality" and suggests that the

dreamer is woken by "the other reality hidden behind the lack of that which takes the place of representation" (60). In other words, the dreamer is woken by something which is obscured by reality, a reality that stands in the place of the dream's representation after the dreamer has woken.<sup>15</sup> What wakes the father is something inside his dream, not the noise which he senses even while asleep. Zizek explains that Lacan arrives at this conclusion by way of the Freudian hypothesis that dreams prolong sleep by masking external stimuli. Zizek considers that

[f]irst he [the father of the burning boy] constructs a dream, a story which enables him to prolong his sleep, to avoid awakening into reality. But the thing that he encounters in the dream, the reality of his desire, the Lacanian real [...] is more terrifying than so-called external realty itself, and that is why he awakens: to escape the Real of his desire, which announces itself in the terrifying dream. He escapes into so-called reality to be able to continue to sleep, to maintain his blindness, to elude awakening into the real of his desire. (*Sublime Object* 45)

The replacing of the dream's reality by mundane reality covers over the "real" of the dreamer's desire. 

16 The end of the Adenoid episode engulfs Lord Blatherard Osmo in a tub of pudding, arguably similar in consistency to the plasmic body of the hybridized Adenoid. The desire of the text is the propagation of a "badass" strong enough to oppose the organization of print culture's machines. This desire is metonymically represented by the Adenoid and its mechanism is apparent in both the displacements/interruptions which take place in the episode as well as the Adenoid's protean morphology which enables it to assimilate organs-machines outside of itself.

Osmo's diplomatic attention to Novi Pazar is interrupted by the start of World War I, after which the "Eastern Question" became moot. The war-machine interrupted/displaced the nation-state machine. The chained interruptions of one system by another—the conditioning of flows through machinic action—should not be understood as a failure of the apparatus. These breaks in the flows are the absolute circumstance by which flows are conditioned. Machines work at the very points of their breakdowns. The machinic nature of the Adenoid makes it a cyborg, and this is not only on

the level of metaphor. The Adenoid is a cyborg in the full sense of the word given its machinic propagation.

The father of cybernetics, Norbert Wiener, describes cybernetics as "a larger field which includes not only the study of language but the study of messages as a means of controlling machinery and society [...]" (15). Because the encryption, transmission, and interruption of information streams figure prominently in the Adenoid episode, and because the Adenoid can be understood as a organ-machine, this episode dramatizes the operative modes and interrelationships of organs-machines within a cybernetic regime, which in this case means primarily the arrogation of the informational channels of one system by another. Osmo communicates on behalf of England's Foreign Office with representatives of Novi Pazar, and Pirate Prentice intercepts the content of Lord Blatherard Osmo's fantasy. Within the fantasy, the Adenoid threatens Government offices which are "so dispersed that communication among them is highly uncertain—postmen are being snatched off of their rounds by stiff-pimpled Adenoid tentacles of fluorescent beige, telegraph wires are apt to go down at any whim of the Adenoid" (15-16). In fact, the diplomatic situation interrupted/displaced by Osmo's fantasy is one where channels of communication are obscured, a context where

spies with foreign hybrid names lurked in all the stations of the Ottoman rump, code messages in a dozen Slavic tongues were being tattooed on bare upper lips over which operatives then grew mustaches, to be shaved off only by authorized crypto officers and skin then grafted over the messages by the Firms' plastic surgeons . . . their lips were palimpsests of secret flesh, scarred and unnaturally white, by which they all knew each other. (16)

The transformation, transmission, and deciphering of information in the Adenoid episode reflect not only the Cold War era emphasis placed on military intelligence by Russia and the United States but also the informatic relationship between the systems that comprise the ensembles mobilized in transnational theaters of diplomacy. These diplomatic theaters are collections of apparatuses bound by information-transmitting ligatures. Thus, the pre-World War I European

political milieu can be understood as a grotesque body whose subsystems are entwined by fibrous lines of communication. *Gravity's Rainbow* articulates turn-of-the-century prewar Europe as a grotesque cybernetic body without organs, a rhizome whose nodes are connected by informatic tendrils. The behavior of this rhizomatic body is to reterritorialize the flows of other systems into its own reproduction. This strategy is also the strategy of the Adenoid and of the hegemonic Firm. Regarding Novi Pazar, Lord Blatherard Osmo's fantasy, Pirate Prentice's fantasy surrogacy, and the realization of Osmo's desire in his own suffocation in tapioca pudding, "[s]ome have seen in this the hand of the Firm" (*Gravity's Rainbow* 16). Even larger than these—England's Foreign Office, the Adenoid, Europe, the Firm—is the body of the novel itself.

Both the structure of the giant Adenoid and certain of the themes in this passage reveal their origins in the body without organs. The body without organs functions as a surface on which coded flows (systems of production) are attached. The material and immaterial instantiations of the body without organs are parts-objects comprising the BwO's strata. Lord Blatherard Osmo's Adenoid fantasy features displacement, rhizomatic extension, and organ surrogacy and these functions reveal the Adenoid's structuration as well as the modes by which the novel itself assembles and organizes its own partial objects. This rhizomatic ontology is distributed in other systems and figures contained in *Gravity's Rainbow*. The figure to which I would like next to turn also has tendrils, though of a more determined kind than those of the adenoid.

OCEANSIDE HORROR IN THE MANNER OF A FAUVE: SIMULATION, REMEDIATION, AND A GIANT MOLLUSK Grigori is a giant octopus. Edward Pointsman conditions Grigori as a test subject in his ongoing observation of Slothrop. Initially, Pointsman rejects Kevin Spectro's suggestion to condition the reflexes of the giant octopus, arguing that

the whole thrust of this Slothrop scheme *has* to be auditory, the *reversal* is auditory. . . . I've seen an octopus brain or two in my time, mate, and don't think I haven't noticed those great blooming optic lobes. Eh? You're trying to palm off a

visual creature on me. What's there to see when the damned things come down? (52)

The "reversal" to which Pointsman refers is the reversal of acoustic chronology that occurs in the supersonic flight of V-2 rockets. <sup>17</sup> Pointsman wants a subject (preferably human) whose neurophysiology matches Slothrop's which Pointsman deduces must be more acoustically than visually oriented since there is nothing to see prior to a V-2 rocket strike. Spectro emphasizes that other aspects of octopi make them ideal test subjects, especially that "they are docile under surgery. They can survive massive removals of brain tissue. Their unconditioned response to prey is *very* reliable—show them a crab, WHAM! out wiv the old tentacle[...]" (52).

While Spectro partially recuperates the octopus's visually-biased nervous system as an asset, offering that in V-2 strikes one can see a "fiery red ball. Falling like a meteor," he does not realize that Octopus Grigori may be an ideal subject not despite but because of his visual orientation. In McLuhan's analysis, subjects of print culture inhabit a signifying space that is visually organized. Insofar as Slothrop is a subject shaped by print media, the visually-biased Octopus Grigori is an animal subject who is likely to provide insight into Slothrop's modes of perception. Pointsman presumes Slothrop's auditory orientation without considering that just prior to a V-2 rocket strike that there is nothing to hear as well as nothing to see. In fact, the V-2 moves faster than the sound of its arrival, so in this sense there is even less to hear than see. Pointsman seems to infer that the V2's inversion of acoustic chronology must be reflected in the out-of-phase geographical coincidence of Slothrop's sexual encounters and subsequent V-2 rocket strikes.

Other aspects also make the Octopus Grigori subplot of particular interest. The scene where Slothrop, Bloat, and Tantivy encounter three women and, later, Grigori blends elements of the horror movie and comedy. David Seed writes that these "two familiar genres (horror movie and musical) [. . .] by virtue of their familiarity give the reader temporary relief from the more Gothic effects of nightmare and threat" (198). Though the incorporation of these filmic genres strategically

manipulates conventions of popular genres, the effect, I will argue, does not diminish the effects of nightmare and threat but shifts them higher into the workings of the novel itself. Much of what makes the Grigori subplot interesting is due to its remediation of cinema.

Though the significance of cinema in *Gravity's Rainbow* has been well studied by prominent critics such as Alec McHoul and David Wills, Charles Clerc, Scott Simmon, and Hanjo Berressem, not enough consideration has been given to the effect that the remediation of film has on the constitution of subjectivity in a print milieu. <sup>18</sup> Berressem does develop a framework that accounts for the differences between the signifying mechanisms of film, which is analog, and print, which is digital. Berressem uses the work of Anthony Wilden to argue that the novel's use of film

adds to the signifying material and provides the word with precisely that mode of signification it lacks, adding to the text something that is "outside" language because "language—in so far as it is a primarily digital instrument syntactically complex enough to transmit certain kinds of information with considerable precision—is incapable of properly representing the rich and ambiguous semantics of analog communication" (qtd in Berressem 184)

Given that Berressem recognizes a tension between the signifying apparatuses of film and print, it is somewhat disappointing that he concludes "both media deal with the tragic situation of consciousness dreaming of a state in which it is absent" (185). Film reinforces the "always already mediated" nature of the real, and the life of the subject which results from such mediation "is always phantasmatic." In Berressem's reading, the gaps in signification which lie at the heart of film and print as signifying systems result in a lack around which subjectivity forms, and this condition is a "tragic situation of consciousness." Charles Clerc's reading of "Film in *Gravity's Rainbow*" concentrates on themes from different films such as *King Kong, Dracula*, as well as how "[e]diting methods and optical effects are used on occasion in precise ways" (141), but his conclusion regarding the effect of film on Slothrop's subjectivity is that "[c]inema has contributed immeasurably to his loss of being" (132). Such readings elegize the loss of Slothrop as subject because they do not recognize that over the course of the novel he is not so much lost as he is

transformed. The extended use of cinematic metaphors, technique, and signifying mechanisms in the Octopus Grigori subplot (and the rest of the novel) demand a mode of interpretation that accounts for the subject effects film has as a medium. The lack of subjectivity studies of *Gravity's Rainbow* which do consider the significant impact of film let alone its specific subject effects is surprising especially since *Gravity's Rainbow* is so hostile to the very modalities of print in which most literary critics are invested.

In spite of the prominence of lack in his analysis of filmic subjectivity, Berressem proves one the more adaptable of critics who treat the question of the interaction between film and print. He argues that in *Gravity's Rainbow* film is an "artificial buffer that language inserts between itself and its self-destruction, lodging the desire for its own annihilation into a virtual space: the 'written filmic' (185-186). Berressem understands that the "final convergence of writing and consciousness is mirrored in the text's formal dispersal" and that "this dispersal is only partial and is a *fragmentation* rather than a *destruction*" (186). Berressem connects the partial annihilation of the text to its remediation of film but does not comment further as to *why* such remediation is happening, why the novel stages the moment of its own destruction by producing the written filmic. As I discuss above, the textual impulses revealed in the novel's apocalyptic hybridization of media point to a desire to fashion a monstrous media body able at least to warn the subjects of print culture that the pursuit of immortality through (print) technology will lead only to annihilation. In this light, the written filmic is not a buffer language produces to delay its own self-destruction, but the form of a monstrous media hybrid able to contaminate the sterile and pure typographical space that the machinery of print requires for its own production and maintenance.

In a similar way, the Octopus Grigori subplot stages the hybridization of (at least) two media dimensions—film and print—except that the interaction between these two dimensions is dramatized in the meeting of subjects whose neurophysiologies are dissimilar. In particular, the Octopus Grigori subplot invokes themes which stage Slothrop's separation from the realm of print and his integration into a cinematic domain. The novel's dramatization of the tension between film and print not only suggests the mediated nature of human perception and consciousness but also

that there is a cultural priority of film as a perception-altering medium over and against the power of the novel to do the same.

This postmodern irony—where the production of a postmodern *novel* relinquishes its claim to cultural dominance by dramatizing the rise of another medium while at the same time assimilating that medium's abilities—is the result of the novel's phagic cyberneticism by means of which it strategically appropriates systemic elements which will serve its larger purpose, which I have been arguing is to disrupt the production of print culture. In a very real way, then, Pynchon's Luddite novel conceives a monster stitched out of various media parts just as Shelley's Luddite novel births a monster pieced together from human remnants. Where Frankenstein's monster enters the Symbolic by means of print artifacts—which "consisted of Paradise Lost, a volume of Plutarch's Lives, and the Sorrows of Werter" (Shelley 167)—Tyrone Slothrop is led out of the symbolic by encountering organs-machines which impair the smooth operation of the subsystems of print culture.

Incorporating cinematic technique, the Octopus Grigori episode dramatizes the conflict between a visually constituted subject (Grigori) and a print subject in the process of transforming (Slothrop). As I mentioned earlier, Clerc makes note how in the novel

[e]diting methods and optical effects are used on occasion in precise ways: for "a shy fade-in" by Greta; in "cutaways" from Katje to the Octopus Grigori on film at "The White Visitation"; in a "dissolve" as Pirate Prentice and Katje dance; by "camouflage in German Expressionist ripples"; in "Gnostic symbolism in the lighting scheme of the two shadows, Cain's and Abel's" in *Alpdrücken*. (141)

Clerc concludes that this use of camera technique enables Pynchon to "be screenwriter, director, and composer all at the same time. Certainly in several of the filmic scenes, Pynchon displays an innate sense of musical effectiveness" (142). Such an estimation of Pynchon's cinematic capability does little to help us understand how film significantly changes the terms under which the novel constitutes its meaning as an hybrid media object.

In "A Denial of Difference: Theories of Cinematic Identification," Anne Friedberg argues that cinema encourages viewers to misidentify themselves through optical stimuli. The problem with such specular mis-identification is that Western capitalism (i.e. Hollywood) uses it in the service of commodity fetishism—to sell "Jimmy Dean Whole Hog Pork Sausage, Roy Rogers hamburgers, Paul Newman salad dressing and spaghetti sauce, [and] the 'Shirley Temple' cocktail" (Friedberg 44)—which encourages spectators to associate viewing with both devouring and becoming. Cinema in the service of commodity fetishism turns the eye into an organ which devours the images it encounters, and in this way the spectating subject "becomes" the images offered to it as spectacle. The visual propagation of consumer culture through such a "process of identification is designed to encourage a denial of one's identity, or to have one construct identity based on the model of the other, mimetically repeating, maintaining the illusion that one is actually inhabiting the body of the ego ideal" (44). Friedberg assesses the mechanism of cinematic identification as one that turns the eye into a phagic body, an organ that devours whatever it sees. Like the unconscious, "[t]he eye is an organ which will devour but not disgorge" (45). Friedberg compares this tableau to Lacan's mirror stage since "[1]ike the child positioned in front of the mirror, the cinema spectator, positioned in front of the cinema screen, constructs an imaginary notion of wholeness, of a unified body. Yet unlike the mirror, the cinema screen does not offer an image of oneself" (40).

It is no coincidence that the phagic eye resembles the giant Adenoid insofar as both have inherited attributes of the gastrointestinal tract. The acquisition of multiple biological functions by a single organ recalls the "gaping mouth" that Bakhtin identifies as a common symbol of the medieval grotesque body (*Rabelais* 346-349). These "jaws of hell" represented entryways to the interior of the earth where birth and death take place. The phagic eye constitutes cinematic subjectivity much in the same way that grotesque bodies are anatomized in medieval mystery, a "genre [that] often concerned itself with dismembered bodies, their roasting, burning, and swallowing" (347). By way of example, Bakhtin notes the medieval mystery entitled "The Mystery of St. Quentin' [in which] there is a long enumeration of verbs (more than one hundred of them) referring to bodily tortures: the victims were to be burned, mutilated, torn apart, and so forth.

We have here a grotesque dismemberment, an anatomization" (347)

The multiplicity of methods for anatomizing the medieval grotesque body parallels the multiplicity of editing and shooting techniques by which the phagic eye is fed by cinema: dissolves, fades, cutaways, cross-cutting, reverse-angle shots, long shots, close-ups, superimposition, split screens, zooming, tracking, etc. The proliferation of cinematographic "parts" (episodes, scenes, sequences, characters, conversations, action, etc.) is the means by which a film is anatomized, and this anatomy is the one with which spectating subjects (mis)identify. As Friedberg notes, "the conventions of cinematic representation enforce a metonymy of the body; a face, a hand, a leg, all cut up. A star, like most human forms in cinema, is not presented as a unified body. In fact, it is often precisely this metonymy which is transformed into part-object commodities" (41). Friedberg's analysis provides a means of understanding, first of all, the voracity of the scopophagic organ—the devouring eye—as well as providing a clue to understanding the multiple avatars of Slothrop's transformation without, as Clerc does, accusing Slothrop of having "been brainwashed by all the movies he has ever seen" ("Film" 130). On the other hand, Slothrop's cinematic predisposition is, as Clerc notes, "the perfect instrument by which Pynchon can show impressionability and convey the enormous influence of cinema upon the human psyche," and this predisposition mirrors the reader's own tendency to be sutured into the text which I will discuss in the following analysis.

The initial description of the setting of the Octopus Grigori scene combines elements of the literary and the cinematic. The novel's narrative eye notices "[u]p in the wind is a scavenging of gulls, sliding easy, side to side, wings hung out still, now and then a small shrug, only to gather lift for this weaving, unweaving, white and slow faro shuffle off invisible thumbs. . . ." (181). The metonymic association of flying seagulls with a "faro shuffle" is certainly a literary effect, as is the succeeding temporal reference to "[y]esterday's first glance." Cinematic elements populate the scene with the description of the Casino Hermann Goering, which is "flat white and the palms in black sawtooth, hardly moving. . . . But this morning the trees in the sun now are back to green.

Leftward, far away, the ancient aqueduct loops crumbling[. . . .]" This description makes reference

to temporal differences in a way that would be almost impossible in a purely visual medium: "this morning" s compared to "[y]esterday's first glance." Even so, it places "the ancient aqueduct loops" to the left of the Casino Hermann Goering, suggesting a distinction similar to the one between screen left and screen right common in cinema. The scene's cinematographic flatness is echoed in the Casino's "flat white" facade and the palms' "black sawtooth." The incorporation of the dimension of film results in a flattening of the scene, but the loss of spatial dimensionality is recuperated as a dimensional capacity between film and print.

This dimensional capacity is especially noticeable as a contrapuntal rhythm between the episode's events, Slothrop's memories, and the embedded past of the landscape. As Slothrop "watches the amazing foreign morning," he "perversely [...] waits for a sudden noise to begin his day, a first rocket. Aware all the time he's in the wake of a great war gone north, and that the only explosions around here will have to be champagne corks, motors of sleek Hispano-Suizas, the odd amorous slap[...]" (181). Slothrop's psyche is at odds with the setting in which he finds himself. Habituated to war, he expects to hear the explosions of ordnance but comes to understand that the landscape of Southern France experiences only explosions of celebration.

Housed nearby, Bloat and Tantivy enter Slothrop's room, and while Slothrop shaves, Tantivy strikes up a conversation with three young women on the street below the balcony.

"But come with us," the girls are calling above the waves, two of them holding up an enormous wicker basket out of which lean sleek green wine bottles and rough-crusted loaves still from under their white cloth steaming in little wisps feathering off of chestnut glazes and paler split streaks, "come—sur la plage . . ."

(183)

The invitation makes Tantivy dream of "[s]omething by an Impressionist. A Fauve." Slothrop finishes shaving, "flicking witch hazel off his hands. The smell in the room brings back a moment of Berkshire Saturdays—bottles of plum and amber tonics, fly-studded paper twists swayed by the overhead fan, twinges of pain from blunt scissors. . . ." The movement from the scene's ostensible action (the conversation between the three women and Tantivy) to Slothrop's psychic interior sets

up a tension between the two domains. The cinematic aspect of the scene that describes "three pretty girls' faces, upturned, straw-haloed by a giant sun-hat, smiles dazzling, eyes mysterious as the sea behind them" does not intersect with the literary revelation of Slothrop's memories of being groomed as child on "Berkshire Saturdays." As this tension is manufactured, a sense that the scene is a veil creeps into the text's and Slothrop's consciousness.

In *The Four Fundamental Concepts of Psychoanalysis* Lacan elaborates the possibility of something capable of taming the gaze and terms this the *dompte-regard*. He recalls the tale of Zeuxis and Parrhasios wherein Zeuxis paints a *trompe-l'oeil* of grapes so realistic it attracts birds. However, Parrhasios "triumphs over him for having painted on the wall a veil, a veil so lifelike that Zeuxis, turning towards [Parrhasios] said, *Well, and now show us what you have painted behind it*" (103). Lacan argues that Zeuxis's painting merely represents grapes to birds, whereas Parrhasios's veil "incites [Zeuxis] to ask what is behind it" (112). For Lacan, deceiving a human requires the illusion of something that seems to stand in the way, the illusion of a veil. The orchestration of the events which unfold during the Octopus Grigori episode produce a *mise en scène*, which illusion is just such a veil.

First, the entire scene seems orchestrated from the outset. Bloat and Tantivy ask for advice on seducing women, and Slothrop detects "something about the way [Bloat] talks to Slothrop, patronizing? maybe nervous . . ." (182) The reasons for Bloat's seeming nervousness are ambiguous, plausibly his anticipation of the events to come. At the very least, Bloat's tone causes Slothrop to suspect something. As if to distract Slothrop from his thoughts, "Bloat leaps from the bed and seeks to enlighten Slothrop with "The Englishman's Very Shy," a song that characterizes American men as possessors of "That recklessness transatlantic, / That women find so romantic," a recklessness British men, despite their good looks, lack. Tantivy's and Bloat's obviously rehearsed attempt to persuade Slothrop they need his help is "coincidentally" followed by the appearance of three attractive and available women who happen to be carrying enough food for a beach picnic for all six of them. The six walk along the beach with "the girls confiding quite a lot to each other with side glances for their escorts" (185), which the narrative notes "ought to be good for a bit of the

heh, heh, early paranoia here, a sort of pick-me-up to help face what's sure to come later in the day. But it isn't. Much too good a morning for that." The narrative notes something suspicious in the behavior of the women, but dispels that suspicion by noting the perfection of the scene. The scene's veil does not flutter despite the breeze that blows across. The entire scene is an illusion behind which The Firm (or something) gathers information about Slothrop.

The Lacanian veil which arrests Slothrop's attention—a seaside *mise en scène* which positions three mostly anonymous women, a picnic basket full of wine and bread, Tantivy, Bloat, Slothrop, Katje Borgesius, a giant octopus, and a crab—calls to mind an "Impressionist painting," as Tantivy puts it. The scene's descriptions reinforce the flattening of space introduced by the scene's cinematic apparatus much in the same way cubists call attention to the canvas by flattening modeled objects and fracturing the painting space to capture different moments in time. The scene draws attention to its artificiality and, like a Fauve, the *mise en scène* contains props vividly colored. For example, Slothrop's shirt is an authentic "SOUVENIR OF HONOLULU" replete with "fellows in [an] outrigger canoe" and "hibiscus blossoms." The beach picnic itself "is wine, bread, smiling, sun diffracting through the fine gratings of long dancers' hair, swung, flipped, never still, a dazzle of violet, sorrel, saffron, emerald. . . . For a moment you can let the world go, solid forms gone afracturing [. . . ]" (185). Apparently produced by sunlight passing through the dancers' hair, the four colors comprise a small rainbow. 

19 This prismatic refraction of sunlight through the dancers' hair occurs at the idyllic scene's turning point, as "Bloat, smug, gesturing over at the rocks and a tide pool nearby," says to Slothrop, "You're getting 'the eye,' old man" (185-186).

Slothrop sees a woman (Katje Borgesius) who "must have come out of the sea," and as he uncorks a bottle of wine, "the biggest fucking octopus Slothrop has ever seen outside of the movies, Jackson [. . .] has just risen up out of the water and squirmed halfway up the rocks" (186). Slothrop attempts to rescue Borgesius from the octopus. As he does so, she "clutches at Slothrop's Hawaiian shirt [. . .] and who was to know that among her last things would be vulgar-faced hula girls, ukeleles, and surfriders all in comic-book colors" (186). Here, as the scene transforms from Fauvist seashore paradise to pelagic horror movie, the four-hued pattern of the episode's "comic"

beginning returns in the form of comic-book colors. Scott McCloud discusses the introduction of color into American comics by means of the "four-color" process (185-192). According to McCloud, the economics of color printing on newsprint encouraged publishers to streamline the color process by using three shades of the primary colors and one shade of black. The color produced by this process, often referred to as "flat-color," has no gradation, and so has a "tendency to emphasize the *shape* of objects" (McCloud 188). Furthermore, to offset the darkness of newsprint, publishers favored "costumed heroes [who] were clad in *bright*, *primary colors* and fought in a *bright primary world*" (188). The flatness of the film screen, the painted canvas, and the comic book panel impart an aura of fabricatedness to the Octopus Grigori episode, and this prearranged quality is reinforced by the simplicity and strength of the colors pervading the scene.

The theme of flatness is the topological result of the remediation of several media types. In this case, painting, print, and textiles are incorporated into the representational apparatus of the scene. The superposition of these striated planes of media produces a smooth representational space: the machinery of this episode is a body without organs that miraculates several media types, ultimately diminishing the dominance of print as a medium by itself. The synthesis of a rhizomatic network in the Octopus Grigori scene (among others) compresses several distinct planes of media into one. If the rhizomatic lines of this scene flatten several media dimensions into one, then the anatomization of this episode has the same effect on media that painting, cinema, and illustration have on multidimensional spaces. That is, the representational apparatuses of painting, cinema, and illustration flatten the objects they mediate by reducing n spatial dimensions to n-1 (or fewer) dimensions. In a very real way, the creation of a smooth space from the striated planes of several media types can be compared to the circularization of structure which occurs in figures such as the benzene ring, the disintegration/reconstruction of Rocket 00000, the capitalization of German corporate debt, and the novel which begins and ends with a rocket's descent. <sup>20</sup> By compressing several media into a single space, this episode challenges the representational ability of print as a stand-alone medium, producing in the process a fractally organized hybrid media object.

The fractal organization of this episode does not of course concern its geometry, despite the planar characteristics of the media types represented. More to the point, the various media incorporated resemble each other in terms of how they operate, namely, their tendency to flatten their objects of representation. In this episode, flatness due to compression applies not only to space but also to color. Significantly, film, comics, and painting represent color more directly than alphabetic text which, overwhelmingly, is black and white. Through the use of signifiers such as "violet," "sorrel," and "saffron," printed text produces "flattened" colors. This is a crucial point because it is easy to overlook the significance of color given that the object we are dealing with is a book printed in black-and-white. The Grigori episode foregrounds color as a dimension in which interpretation and affect are indeterminate, subject to manipulation. The significance of color for shaping interpretation calls into question the dominance of black-and-white print as a medium which represents color as flat. The struggle for chromatic control is signaled, first, when Tantivy perceives the scene as a "Fauve," which suggests that the scene's colors do not correspond to an objective representation of color as might be encountered in a trompe l'oeil, but to an expressive use of color such as that which distinguishes Fauvist painting. The characteristically vivid colors of a Fauve repeat themselves in Slothrop's Hawaiian shirt, and his decision to wear the shirt is an affront to Tantivy's sensibility, even though Tantivy is the one to perceive the scene's "Fauvist" color. When Slothrop dons his Hawaiian shirt, Tantivy asks

"God almighty, what is that supposed to be?"

"What's what?" Slothrop's face nothing but innocent as he slips into and begins to button the object in question.

"You're joking, of course. The young ladies are waiting, Slothrop, do put on something civilized, there's a good chap—"

"All set," Slothrop on the way past the mirror combing his hair into the usual sporty Bing Crosby pompadour.

"You can't expect us to be seen with—"

"My brother Hogan sent it to me," Slothrop lets him know, "for my birthday, all the way from the Pacific. See on the back? [...] it sez SOUVENIR OF HONOLULU. This is the authentic item, Mucker-Maffick, not some cheap imitation."

"Dear God," moans Tantivy, trailing him forlornly out of the room shading his eyes from the shirt, which glows slightly in the dimness of the corridor. (183-184)

Slothrop defends himself by claiming authenticity. The real question, of course, is what object his shirt is an authentic example of. With its printed mural of ukeleles, surfriders, and hula girls, the shirt literally and figuratively fabricates a tropical paradise as both souvenir and unreachable destination. The scene depicted on the shirt presents a utopia that itself mirrors the French Riviera setting in which Slothrop and the others find themselves. When Slothrop combs his hair into a "Bing Crosby pompadour," he assumes locally the larger media role Crosby himself played in popularizing the Aloha shirt during the late 1930s, which itself was the commercial articulation of Hawaii as paradisal territory of the United States. Slothrop's assertion of authenticity for a fabricated utopia asserts also the episode's authenticity, whose comic book color and cinematic flatness distort the landscape and its contained objects in the same way a Fauve does the objects it represents. It even "glows slightly in the dimness of the corridor" in the same way bright primaries glow against the dim pulp on which they are printed.

From another perspective, Slothrop's shirt is a distortion of the actual territory it represents. It is an "authentic" distortion. The authenticity of his shirt as signifier makes it an object akin to Parrhasios's veil, a signifier which indicates something exists "behind" it, presumably an encounter of Hawaii as paradisal territory. As souvenir, the shirt points with garish colors to its wearer as a (potential) sojourner to and from tropical paradise. By wearing this authentic souvenir, Slothrop becomes a genuine tourist. The shirt as a system of signification—the shirt's authenticity, Slothrop's "encounter" with Hawaii, the simulacral representation of Hawaii as paradisal island—is a veil that points to something beyond the materiality of signification, even though Slothrop may never have been to Hawaii (his brother has) and Hawaii can only exists as paradise

insofar as it is signified as such. The beyond signaled by this system of signification is the domain of erotics, the shirt a symbol of masculine sexuality and power, a phallus. Like the V-2 rocket, Slothrop's Hawaiian shirt is an element in a network of signification that is connected, through Slothrop, to sex and death, a point that becomes clear when the shirt at which Borgesius clutches, with its "vulgar-faced hula girls," is numbered "among her last things" (186). The entire scene is itself a rhizome that extends lines of connection between sex, death, commodification, representation, and simulation.

Tantivy's idea of "something civilized" turns out to be the very "Norfolk jacket" on his own back, which comes

from a Savile row establishment whose fitting rooms are actually decorated with portraits of all the venerable sheep—some nobly posed up on crags, others in pensive, soft close-ups—from where the original fog-silvered wool was sheared.

"Must be woven out of that barbed wire," is Slothrop's opinion, "what girl'd want to get near anything like that?"

"Ah, but, but would any woman in her right mind want to be within ten miles of that-that ghastly shirt, eh?" (184)

This repeats the theme struck in Bloat's and Tantivy's song about "That recklessness transatlantic / That women find so romantic" (182). Tantivy understands Slothrop intuitively knows more about seducing women than he does, but his first reaction to Slothrop's virile display of comic-book color is to cover it with a wool jacket, and this on the French Riviera. An opposition is made here between civilization and "recklessness," indifference and arousal, Norfolk and Hawaii, and North and South. It is the same dichotomy the novel articulates between white and black, purity and hybridity, metropolis and outpost, life and shit. Even at this stage of the novel, Slothrop's relationship to Western print culture and its system of civilization is an ambivalent one. Slothrop declines Tantivy's offer and instead

produces a gaudy yellow, green and orange display handkerchief, and over Tantivy's groans of horror arranges it in his friend's jacket pocket so as to stick out in three points.

"There!" beaming, "that's what you call real sharp!"

They emerge into sunlight. Gulls begin to wail, the garment on Slothrop blazes into a refulgent life of its own. Tantivy squeezes his eyes shut. When he opens them, the girls are all attached to Slothrop, stroking the shirt, nibbling at its collar-points, cooing in French. (184).

Despite the erotic allure of Slothrop's shirt—which like any good body with out organs is able to "attach" other organs-machines to itself, initiating couplings at its collar-points through which sexuality is conditioned as an idealized flow—it is still only a souvenir.

That Slothrop's Hawaiian shirt is an authentic "SOUVENIR OF HONOLULU" disguises the fact that, like the episode itself, it is a simulation. It presents a model of a U.S. territory as a tropical paradise that is chromatically and spatially flat and semantically anchored to a system of reading, and this model not only mirrors the world (episode) in which it is embedded, but it also stands in the place of the actual territory in which it was manufactured. In the Octopus Grigori scene, Slothrop's shirt mirrors the action occurring in the French Riviera, a *mise en scène* fabricated by operatives working for The White Visitation, making the shirt an unintended simulation of a simulation. As an artifact of consumer culture, Slothrop's shirt and its effect on the scene and Hawaii conforms to Jean Baudrillard's analysis of consumption as "the exaltation of signs based on the denial of the reality of things" ("Mass Media Culture" 63).

Baudrillard argues that the reenactment of "that which is already no more" should not be confused with simple nostalgia since such reenactments are the "farcical resurrection and parodic evocation" of things which are "'consumed' in the original sense of the word" (63). Any such simulation stands in the place of an original, legendary reference thereby consuming it, annihilating the referent in favor of a signifier that operates unencumbered by origins. The extraordinary detail of Slothrop's shirt—with its ukeleles, hula-girls, surfriders, outrigger canoes, and hibiscus

blossoms—places it within the realm of what Baudrillard identifies as kitsch, which "can best be defined as a *pseudo-object*, which is to say a simulation, copy, facsimile, or stereotype; as the paucity of true signification and the overabundance of signs, allegorical references, or disparate connotations; as the exaltation of detail, and as the saturation by detail" (75). This aspect of kitsch—the proliferation of detail which does not advance meaning—is one means by which the simulation of this scene increases its own activity. The authenticity of Slothrop's shirt, like the authenticity of the episode itself, disguises the fact that it is a veil behind which nothing stands, that the point of the entire episode is the fabrication of a model. As a result, authenticity is not about the shirt's content but about its status as a simulation. Slothrop's claim of authenticity reduces to the assertion that his shirt can act as a substitute for the territory in which it was produced. Baudrillard warns that

We should be careful not to interpret this immense enterprise for producing artifacts, makeup, pseudo-objects and pseudo-events that invades our everyday existence as the denaturation or falsification of authentic "content". Given everything mentioned thus far, we can readily see that the misappropriation of meaning, depoliticisation of politics, deculturation of culture, and desexualisation of the body in mass media consumption is situated quite beyond the "tendentious" reinterpretation of *content*. It is in *form* that everything has changed: everywhere there is, in lieu and in place of the real, its substitution by a "neo-real" entirely produced from a combination of coded elements. An immense *process of simulation* has taken place throughout all of everyday life, in the image of those "simulation models" on which operational and computer sciences are based. One "fabricates" a model by combining characteristics or elements of the real; and, by making them "act out" a future event, structure or situation, tactical conclusions can be drawn and applied to reality. It can be used as an analytical tool under controlled scientific conditions. In mass communications, this procedure assumes *the force of* 

reality, abolishing and volatilising the latter in favour of that neo-reality of a model materialised by the medium itself. (92)

With regard to the Octopus Grigori scene, the production of simulation supersedes the reality in which it is embedded. Grigori's training—the repeated simulations of encounters with Borgesius—shapes the actual meeting which takes place in reality. In this case, the relationship inverts the normal hierarchy of the symbolic and the real. In normal circumstances, the real contains the symbolic and the systems which support it. Simulations, on the other hand, are a special order of semiological space whose express purpose is to reshape the real. Adrian Mackenzie describes this phenomenon in *Transductions* when analyzing the simulation of nuclear weapons.

Mackenzie notes that a nuclear weapon's "detonation remains an exceptional event that can only be seen at a distance on the horizon, as a blinding flash of light and, even then, inevitably as a highly mediated image drawn from stock film footage taken at a time when atmospheric tests were still being conducted" (59). Increasing concern about the dangers of radioactive contamination after the explosion of large-yield hydrogen devices by the US in November 1952 and the Soviet Union in August 1953 (among others) culminated in the signing of the Limited Test Ban Treaty by the United States, the United Kingdom, and the U.S.S.R in 1963 ("Limited Test Ban Treaty"). The result of the Limited Test Ban Treaty was to prohibit the spatial, atmospheric, and aquatic detonation of nuclear devices, thus relegating the scientific observation of above-ground nuclear detonations to simulation technologies. In addition to the uncertainty of their operation,

[n]uclear weapons were and are surrounded by massive simulations because no one quite knows what would happen in a conflict fought with them. Nuclear weapons stand as a kind of discursive limit for contemporary technologies, and their polarizing influence on the Cold War still propagates many second order effects in the domain of cultures, technologies, and politics. (Mackenzie 60)

While arranging a meeting between Borgesius and Slothrop may not require the precision it takes to initiate a chain reaction in a mass of nuclear isotope, simulating a meeting between the two is not far removed from the simulation of the detonation of a warhead. That is, researchers at The White

Visitation are studying the connection between Slothrop's sexual activity and the detonation of V-2 rockets, so a simulation of an encounter between Slothrop and a potential sexual partner is only one remove from the simulation of the detonation of a V-2 rocket itself. The scene places Slothrop's unpremeditated (but predictable) responses to stimuli within a psychosociological template to yield a predictable (because simulated) outcome: boy meets girl; boy falls for girl; girl spies on boy.

We can see the tension between reality and its simulacral replacement in the paranoia that develops in Slothrop. After Bloat conjures a crab which Slothrop throws "out to sea, and the octopus, with an eager splash and gurgle, strikes out in pursuit" (187)—thus saving Borgesius—Slothrop notices a "mixture of recognition and sudden shrewdness in her face . . . " (188). Borgesius's face suggests to Slothrop that she knows more about the recent sequence of events than it reveals. That is, her face is a veil, and it triggers in Slothrop an auditory-visual hallucination where

voices begin to take on a touch of metal, each word a hard-edged clap, and the light, though as bright as before, is less able to illuminate . . . it's a Puritan reflex of seeking other orders behind the visible, also known as paranoia, filtering in. Pale lines of force whir in the sea air . . . pacts sworn to in rooms since shelled back to their plan views, not quite by accident of war, suggest themselves. Oh, that was no "found" crab, Ace—no random octopus or girl, uh-uh. Structure and detail come later, but the conniving around him now he feels instantly, in his heart. (188)

Slothrop's paranoid sense that the day's events had been planned beforehand has no object except the staged events themselves. Though he "feels instantly, in his heart" that the beach picnic and Grigori's appearance are part of a larger hidden plan which is unfolding around him, his paranoia has no specific object except the detection of a scripted scheme of events. What is paramount in Slothrop's mind is that a model contrived in "rooms since shelled back to their plan views" has replaced the authenticity of this scene along the French Riviera. The modeling and execution of those plans turn the scene into an iteration of a simulation probably itself executed many times in advance. As with Slothrop's Hawaiian shirt, authenticity signals nothing so much about the scene

as its status as a simulation. Uneasy, Slothrop queries Borgesius about the events which have transpired. Borgesius smiles and asks

"Did you know all the time about the octopus? I thought so because it was so like a dance—all of you."

"No. Honestly, I didn't. You mean you thought it was just a practical joke or something?"

"Little Tyrone," she whispers suddenly, taking his arm with a big phony smile for the others. Little? He's twice her size, "Please—be very careful. . . ."

That's all[. . . ] The beach is empty now except for fifty gray gulls sitting watching the water. White heaps of cumulus pose out at sea, hard-surfaced, cherubblown—palm leaves stir, all down the esplanade[. . . .] Katje squeezes Slothrop's arm and tells him just what he wants to hear about now: "Perhaps, after all, we were meant to meet. . . ." (188-189)

Borgesius subtly warns Slothrop against peering too intensely at the artifice of the episode's events, asking him to "Please—be very careful." She then placates him by affirming a connection between them in terms of fate when here fate takes the form of predictive simulation. If Slothrop and Borgesius were "meant to meet," that meaning is the product of a complex system of semiosis involving the cinematic conditioning of a giant octopus, the infiltration of Slothrop's social network with agents of The White Visitation, and the coordination of several ensembles of humans and non-humans. The fabricated aspect of the encounters between Tantivy, Bloat, Slothrop, and three French women and, later, Slothrop, Borgesius, and Grigori redound upon the machinery of the novel itself. The novel establishes a comic-book-colored horror sequence in which Slothrop uneasily moves across the space between text-based and image-based media in a staged encounter between him and the visually-oriented organ-machine Grigori. The dramatized encounter remediates several forms of visual media in a way that calls into question the capabilities of print as a text-based, black-and-white medium. The tension produced by this print artifact simultaneously

supplementing and degrading its means of transmission is mirrored in Slothrop's apprehension about the plot he detects unfolding around him.

Just before querying Borgesius about the unusual turn of events, Slothrop scrutinizes each of the persons gathered. His deliberation begins as movement out of the idyll of "the simple day, birds and sunlight, girls and wine, [which] has sneaked away from him" (188) and into a liminal space between perception and projection. Rather than being expelled from an Edenic sanctuary for acquiring knowledge, Slothrop becomes paranoid after the paradise's surreptitious departure. Slothrop understands that Tantivy, who is "getting drunk, more relaxed and funnier as the bottles empty," merely "is a messenger from Slothrop's pre-octopus past. Bloat, on the other hand, sits perfectly sober, mustache unruffled, regulation uniform, watching Slothrop closely. His companion Ghislaine [...] shifts her round bottom in the sand, writing marginal commentaries around the text of Bloat" (188). In Slothrop's mind, the encounter with Grigori distinctly divides his life into pre-and post-octopus pieces. In his post-octopus (post-rhizomatic) life, Slothrop apprehends Tantivy as a "messenger" who presumably delivered Bloat as a text for Slothrop to read and/or Slothrop as a text for Bloat to read. The two meanings are intricated because of the reciprocal nature of intersubjectivity which here is coded as the interaction between print-based and film-based modes of perception.

For example, Slothrop "keeps an eye on" Ghislaine, who "looks over only once, [with] her eyes grow[ing] wide and cryptic" (188). Attempting to read the "marginal commentaries around the text of Bloat," Slothrop looks to Ghislaine, the author of those commentaries, only to encounter her eyes which are "wide and cryptic." Slothrop's strategy to read Bloat as a printed text with marginalia is cut short by Ghislaine's illegible gaze, an object more closely associated with visual media. Similarly, when Slothrop turns his eye from Tantivy to Bloat, he finds Bloat's gaze directed squarely at him. In fact, the scene's transition from comedy to horror happens when Bloat directs Slothrop's gaze "over at the rocks and a tide pool nearby" (185) where Borgesius stands to point out that Slothrop is "getting 'the eye' " from her. The exchange of glances and the anti-parallel connections between subjects through lines of sight constitute a scopic network of relations the

analysis of which would be at least partly served by theories of specular and cinematic identification. At the same time, it is important to keep in mind that the articulation of subjectivity in this episode very much depends upon the network of relationships which establishes itself between sentient entities and the way this network is affected by the various media which are incorporated into the episode. For one, the rhizomatic propagation of the media characteristics of this episode affects Slothrop's psychological disposition. As the apparatus designed to gather information about Slothrop comes into visibility, Slothrop attends to the exchange of gazes that enmesh him with greater care, becoming increasingly paranoid as a network of gazes proliferates around him. Unfortunately for him, Slothrop attracts the gaze, an attraction both symbolized and literalized by his brightly-colored Hawaiian shirt. Slothrop is an authentic spectacle, of interest as a simulation of the exotic. Attention is drawn to him precisely because he seems to stand before something which lies just beyond him. The chromatically powerful and sexually magnetic Slothrop is a surface or veil behind whom, his observers assume, a connection between sex and death lies.

Lacan discusses some of ramifications of Merleau-Ponty's *Visible et l'invisible* regarding visual phenomenology. Lacan believes that Merleau-Ponty establishes "the dependence of the visible on that which places us under the eye of the seer" (*Four Concepts* 72). What Merleau-Ponty refers to as the eye, Lacan argues, is a metaphor for "something prior to [a seer's] eye," and so he reformulates the equation by circumscribing "the pre-existence of a gaze—I see only from one point, but in my existence I am looked at from all sides" (72). Turning back to Slothrop's increasing scopic paranoia, it can be said that he finds the gaze coming at him from all sides.

Lacan's insight reveals that in this episode the gaze takes the form of an intersubjective network, a rhizome whose lines of flight are lines of sight. As a rhizome, this scopic network can be expected to have "neither beginning nor end, but always a middle (*milieu*) from which it grows and overspills" (*Thousand Plateaus* 21). Slothrop's paranoia is this object, built from the lines of sight directed at him. Slothrop stands at the center of a network of gazes, and his paranoia grows from this center. Slothrop's paranoia can be compared to the smooth space the episode fabricates from the discrete strata of several media. The characteristics of one medium connect up to the

characteristics of the others, with printed text being at the "center" of it all. The rhizomatic network of media is linked to the rhizomatic network of gazes, with the printed text and Slothrop in their contextual centers.

Slothrop's subjectival antithesis in this episode is the giant octopus itself. The scientists of The White Visitation assume Slothrop responds sexually to some acoustic signal associated with V-2 rockets. Slothrop's presumed acoustic orientation distinguishes him from Grigori, whose nervous system predisposes him to respond to visual stimuli. Placed in a milieu wherein subjectivity is constituted by a visual network, Grigori is himself a rhizome that physically connects Borgesius and Slothrop. The use of Octopus Grigori to effect this meeting brings into play the tentacular character of the rhizome and the phagic aspect of the scopophilic subject. At the moment when Grigori has hold of Borgesius and Slothrop, the octopus literalizes the rhizomatic lines of connection extended by the body without organs. The octopus "wraps one long sucker-studded tentacle around her neck [...] another around her waist," while Borgesius grips Slothrop's shirt, "cloth furrowing in tangents to her terror" (186). Borgesius's hand dramatically and structurally repeats the grip of the octopus on her, suggesting that the two grips are motivated by similar (or identical) forces, in this case emanating from The Firm. In any case, Grigori has been trained to "attack" Borgesius, and Borgesius has been instructed to make liaison with Slothrop.

References to the Grigori episode in other parts of the book circulate around footage shot of Borgesius in Pirate Prentice's London maisonette. <sup>21</sup> Katje finally sees this footage after The White Visitation has been abandoned, some time after it had been used to condition Grigori. She finds "the cans of film, stacked carelessly by Webley Silvernail," and after threading a reel she sees "a face so strange that she has recognized the mediaeval [sic] rooms before she does herself" (533). Borgesius's alienation from her cinematic image lines up with the articulation of cinematic identification advanced by Friedberg, who as emphasizes that the "screen does not offer an image of oneself" (40). In this case, the difference is that the screen does offer Borgesius an image of herself. Her alienation from her own cinematic image suggests that the mediating apparatus of the camera is the cause of her alienation which would not obtain in the specular context where her

actions would be reflected in real time. Borgesius experiences a variation of what McLuhan identifies as the significance of the Greek myth of Narcissus, which is that people "at once become fascinated by any extension of themselves in any material other than themselves" (*Understanding Media* 41). After Borgesius recognizes herself in the footage and is consequently

[f]ascinated, she stares at twenty minutes of herself in Pre-Piscean fugue. What on earth did they use it for? The answer to that one's in the can too, and it isn't long before she finds it—Octopus Grigori in his tank, watching the Katje footage. Clip after clip: flickering screen and cutaways to Octopus G., staring—each with its typewritten date, showing the improvement in the creature's conditioned reflex. (533)

Octopus Grigori's conditioning makes him a quintessential cinematic subject. Trained by watching footage of Borgesius day after day, Grigori is sutured into the "film" of the beach scene the moment he sees Borgesius. Borgesius notes that octopuses "are very optical, aren't they[?] I hadn't known. It saw me. Me. I don't look like a crab" (188), which avoids the obvious reason Grigori went after her: he has been trained to do so. Grigori's "unconditioned response to prey is very reliable" (52) as is his conditioned response to Borgesius. Grigori's cinematic subjectivity is a "model of introjective identification [that] is consistent with the acquisitive forms of incorporation commanded by a consumer economy" (Friedberg 44). Grigori reliably responds to the visual signs of prey by reaching out to devour it. Insofar as Grigori's being is concerned, seeing is equivalent to eating is equivalent to becoming: Friedberg's model of scopophagic subjectivity.

Borgesius, on the other hand, is a filmic subject constituted by her existence within the text of a film. The footage used to train Grigori was shot by a "secret cameraman" (Pirate Prentice) in Prentice's maisonette, with Osbie Feel preparing and consuming various hallucinogenic substances. The episode begins by revealing to the reader that "[i]n silence, hidden from her, the camera follows as she moves deliberately nowhere longlegged about the rooms" (92). The silence of the camera is mirrored by the silence of Borgesius's interior. While the cameraman captures her perfected visual appearance (from one point of view), he cannot know what she does: "that inside

herself, enclosed in the *soignée* surface of dear fabric and dead cells, she is corruption and ashes" (94). Borgesius's beautiful appearance belies a corrupted interior that harbors knowledge of her "smelling out at least three crypto-Jewish families" (97) in cooperation with the Dutch Fascist Party. The extreme disparity between Borgesius's appearance and her interior sense of self while being filmed produces a tension similar to the alienation she later feels when she sees her cinematic image at The White Visitation.

Lacan considers the fracturing of the subject due to the distance between appearance and being, writing that this split "comes into play, quite obviously, both in sexual union and in the struggle to the death. In both situations, the being breaks up, in an extraordinary way, between itself and that paper tiger it shows to the other" (*Four Concepts* 107). Here, Lacan is specifically referring to display and intimidation in "the natural world," especially as it relates to non-human animals. The difference between humans and other animals is that a person "isolates the function of the screen and plays with it. [A human], in effect knows how to play with the mask as that beyond which there is a gaze. The screen here is a locus of mediation" (107).

What Lacan so eloquently captures is how projected appearance is manipulated by humans in order to signify with regard to sex and death. As a cinematic signifier, Borgesius's screen image is manipulated by an ensemble of humans to transform Grigori into a connection machine. By dint of his training, Grigori becomes part of a courtship ritual between Slothrop and Borgesius. While Grigori does not represent a real death threat, the physical connection established between Slothrop and Borgesius signals death as an intensity proportional to the extent Borgesius is constructed as prey by the scopophagic Grigori, which in its turn depends on Slothrop's perception of the relation between Borgesius and Grigori. Slothrop's role is integral, something indicated by the frock Borgesius wears in both the training footage and the seaside attack. During the filming of Grigori's training footage, Borgesius herself "admires the frock they have brought her from Harvey Nicholls, a sheer crepe that flows in from padded shoulders down to a deep point between her breasts, a rich cocoa shade known as 'nigger' in this country [England]" (94). Slothrop is deeply connected to blacks as are other of the novel's non-black characters (notably Tchitcherine), and

Borgesius's wearing of a "nigger"-colored frock would speak to Slothrop's identification with blacks.<sup>22</sup>

The tension regarding those aspects of the novel's representational apparatus which derive from print and those which derive from film presents itself in the Octopus Grigori subplot in the form of the cinematization of Slothrop's and others' subjectivities. Grigori becomes a cinematic subject through repeated viewings of the footage of Borgesius. While Borgesius is being filmed, her subjectivity is determined in a filmic context that splits her subjectivity between her appearance and her being. There is also the subject position created by the camera apparatus itself. The novel notes that during the filming of Borgesius, "[i]n silence, hidden from her, the camera follows" (92). In any completed footage, the geometral plane which constitutes the cinematic signifier eclipses the self with a spectating subject.<sup>23</sup> Building on Jean-Pierre Oudart's work on cinematic subjectivity, Stephen Heath notes that after the initial jubilant recognition spectators experience when watching film (a recognition that resembles the *jouissance* of the specularly constituted subject)

[a] wareness of the frame then breaks this initial relation, the image now seen in its limits; the space which, just before, was the pure extent of the spectator's pleasure becomes a problem of representation, of being there-for—there for an absent field, outside of the image ("the fourth wall"), for the phantom character that the spectator's imagination poses in response to the problem: "the Absent One". (87)

The "Absent One" is potentialized or encoded by the secret cameraman who films Borgesius. The position of the Absent One is actualized or decoded once the film is printed and screened for the octopus. Heath further clarifies that the Absent One is a process, one that marks the imaginary position a spectator creates when watching a film, which when that position is filled "frees the spectator's imaginary once again for the renewal of the movement" (88-89). The movement of the spectating subject—between close identification with the Absent One and the suture holding the filmic text together—conditions the flow of a film's signifying chain in a back-and-forth movement characteristic of machines coupled to each other. The signifying system of a film, then, can be read as a body without organs that appropriates spectators and connects them to the imaginary position

implied by the image on the screen (i. e. the Absent One). During his training, Grigori is the spectating subject coupled to the footage's implied Absent One. This Absent One is then mapped into the French Riviera beach scene itself as soon as Grigori makes his appearance. Because the scene has been simulated in Grigori's cinematic conditioning, Grigori's presence as an actor introduces elements of the text of the Borgesius footage into the scene. It is not "as if" the oceanside picnic is a part of Grigori's cinematic training; the oceanside picnic becomes an iteration of the cinematically simulated encounter between Borgesius and Grigori. In this episode, events of the real world derive from a simulation by transforming the cinematic apparatus of an Absent One and a sutured spectator into a conditioned octopus. Grigori decompresses the information coded in the training footage when he wraps a tentacle around Borgesius, which he could only do only in his imaginary as a subject sutured to a filmic text.

In the Octopus Grigori episode, simulation technology operates cybernetically, providing a means for the scientists of The White Visitation to control the encounter between Borgesius and Slothrop. The cybernetic aspect of these means of control is reflected in the production and processing of information from one context (a scientific laboratory) to another (the uncontrolled environment of the French Riviera). Grigori's training is the encoding of a cinematic apparatus and his later presence and actions are the subsequent transmission and decoding of that cinematic apparatus. Grigori is a modulator and demodulator of an informatically encoded cinematic apparatus, a cinematic modem in the form of a mollusk. Such a cybernetic reading demystifies the technical nature of cybernetics and the forms of subjectivity which appear in an organo-machinic context. It demonstrates how subjectivity is transformed by the coupling of diverse media and how organisms are transformed, if not exactly into cyborgs, then into cybernetic agents who deform/reform the milieus in which they are enmeshed. As cybernetic rhizomes, both Grigori and the text of the novel intricate disparate ontological orders to produce smooth spaces comprised of lines of flight along which organisms and organs, automata and machines, and media and subjects (re)align into complex ensembles. There are also potential psycho-subjectival advantages to describing such ensembles in terms that reflect the complex entanglement of the components

involved. Slothrop's "Puritan reflex of seeking other orders behind the visible" (188) is a paranoid mode of reading that reduces the complexity of the interconnections between disparate media and discrete elements. A more precise accounting of the "[p]ale lines of force [which] whir in the sea air" in terms of real, if intangible, connections between machinic and organic elements might have helped Slothrop understand the ways in which he is constituted (rather than threatened) by the ensemble in which he is enmeshed.

Though a non-paranoid subjective constellation can be only a matter of speculation for Slothrop at this point in the novel, a cybernetic reading of this episode does reveal that the transference of characteristics across different media produces a map of the effects that simulation exerts on real events. For example, the remediation of both film and painting flattens the episode's narrative perspective, and this flattening of perspective corresponds to the "flattening" of the scene's events due to the manipulations of The White Visitation, a flattening further reflected in Slothrop's consciousness as he considers how the day's events originated in "rooms since shelled back to their plan views" (188). Another example of remediation mapping the effects of simulation can be seen in Slothrop's shirt. The remediation of the shirt draws attention to the representation and circulation of Hawaii as utopia, and this effect of signification is mirrored by the agents of The White Visitation transforming the French Riviera into a seaside paradise. The events which bring Slothrop and Borgesius together are the product of a simulation technology that can be compared to the commercialization of Hawaii as a romantic destination by means of the Aloha shirt.

The interconnection between remediation and simulation also destabilizes the novel's signifying apparatus. This episode makes explicit a connection between media and simulation, emphasizing the power of media to fabricate events. This is not the well-worn observation that media construct a perceptual reality that affects how humans behave, though this characteristic of media should not be disregarded. Nor does the episode draw attention to the idea that "the medium is the message," which is about how media, by altering our ratios of perception, change the scale and nature of human activity, though this also should not be ignored. By dramatizing the incorporation of several forms of media (remediation) through the encoding, transmission, and decoding of signals among

disparate informatic orders, this episode highlights how recombined media produce a cybernetic rhizome that can miraculate even the print apparatus of the novel itself. Media and simulations produce hybrid bodies from biological and mechanical elements, rhizomes giving rise to cyborg collectives.

Simulation offers limited control over reality by extending rhizomatic lines which transmit information across ontological orders—mechanical, cinematic, institutional, biological, animal, human, social, etc. In this sense, simulation proliferates and connects bio-machinery that transduces flows through diverse ontologies. Simulations create hybridized networks that span time, space, and orders of being, which suggests that simulations are essentially media. The remediation of several media in the Octopus Grigori episode creates an hybrid whose operation can be directly compared to the miraculating action of the collective known as The White Visitation. By engineering hybrid media forms, the novel draws attention to the ways in which bodies without organs appropriate radicalized and embedded elements from diverse contexts. The novel itself is complicit in such activity, even (especially) when it points to the covert activity of agencies like The Firm, The White Visitation, and the British Foreign Office, or when it complicates the workings of its own print apparatus by, for example, remediating film.

Berressem argues that by remediating film the novel "lures and inserts the reader more firmly into its narrative system, drawing [the reader] into a hypnosis, reinforcing what Moore calls the 'dreamlikeness' of the novel" (160). By incorporating film, the novel sutures readers to its print apparatus. However, it is important to remember that the system into which readers are "more firmly" inserted is no longer a pure system of print. The novel's remediation of film, according to Berressem, draws attention away from the text's print apparatus and toward the absorbed film apparatus. Berressem explains that

[w]hereas the presence of a camera in a film points directly toward film as a medium and to its artificiality, the presence—even if indirect—of a camera in a text disguised as film points to a more general artificiality realized within the filmic *aspect* of the novel without touching the dissimulated text itself. (160)

In this sense, the cinematic apparatus is a lure which disguises the text's own artificiality. My argument is that such a lure destabilizes the print machinery of the novel beyond repair. The insertion of an obviously artificial means of production such as film (and printed textiles, painted canvases, and colored comic books) irreversibly fractures the novel's print machinery. As a print object, the novel comes under suspicion not only for dissimulating film, but also for *simulating print*. The text, as I have already pointed out, is a simulation that hybridizes a smooth media space from the strata of several disparate media, themselves simulations also.

Such recursive simulacral hybridity begets the novel a monstrous form, one comparable to the tentacular bodies of the Giant Adenoid and Octopus Grigori. The novel uses the conventions of cinema to code these rhizomatic hybrids—whose multiple elements are stitched together through cybernetic lines of communication—as monsters. These monsters are models for the literary "badass" that the novel constructs, a Luddite novel strong, big, and ugly enough to challenge the juggernaut of print technology which—like The White Visitation that represents the machinery of Western science—connects ultimately to the body of capital, itself a body without organs in whose strata are entangled reproduction and death.

DISAPPEARING INTO THE ZONE: THE EMPLOTMENT OF TYRONE SLOTHROP'S CYBERNETIC SCATTERING *Gravity's Rainbow* disrupts the easy production of print subjectivity. In addition to the remediation of non-print media and the undercutting of its own print apparatus, and the figuration of monsters whose morphology mirrors that of the novel, *Gravity's Rainbow* also destabilizes the literary machinery of character by refusing to sustain the existence of a main character. Besides World War II and the Rocket, Tyrone Slothrop is the closest thing to a protagonist the novel has. However Slothrop, as we have already partially seen, is the conjunction of many systems of surveillance and the confluence of many different selves.

Undoubtedly, the number of transformations Slothrop undergoes—zoot suiter, Max Schlepzig, Plastic Man, Plechazunga, a crossroads—reflects his emplotted scattering. Kurt Mondaugen

explains that "[p]ersonal density [...] is directly proportional to temporal bandwidth" and that "[t]he more you dwell in the past and in the future, the thicker your bandwidth, the more solid your persona. But the narrower your sense of Now, the more tenuous you are" (509). Slothrop's multiple avatars suggest a plasticity of self, that he possesses a fictive core which can be molded into many different persona objects. Slothrop's multiple personalities are not spontaneous, taking their shape from different specific circumstances. Taken together, they suggest that Slothrop's apparent self is the product of the technicity articulated between the persons, institutions, machines, animals, and environments at any given time. Baudrillard describes this schizophrenic articulation of self by noting that

[t]he schizophrenic is not, as generally claimed, characterized by his loss of touch

with reality, but by the absolute proximity to and total instantaneousness with things, this overexposure to the transparency of the world. Stripped of a stage and crossed over without the least obstacle, the schizophrenic cannot produce the limits of his very being, he can no longer produce himself as a mirror. He becomes a pure screen, a pure absorption and resorption surface of the influent networks. (26-27) The rhizomatic networks which situate and produce Slothrop transform him into a schizophrenic transducer. By the novel's end, Slothrop is a coded flow inextricably articulated into the system. This articulation, as has been noted, has been interpreted as loss by many critics. However, if Slothrop is lost, it is only because he was never "there" in the first place, being a product of the various systems in which he is enmeshed. My interpretation of Slothrop's scattering counters this pessimistic view.

Slothrop's various personae are evidence of his susceptibility and responsiveness to the "influent networks" in which he is enmeshed. His scattering is his complete diffusion into those networks, his entrance into the machine. The text provides analeptical evidence of Slothrop's teenage desire to become part of a machine. Slothrop's father, who hypocritically sold Lyle Bland surveillance rights to his son, is concerned that his son might be engaging in a new fad of "keying waves" which involves the application of electricity to the head. Broderick's analogy for

understanding what his son is doing are the chemically-initiated "vacations" which Broderick and his friends took to "some pretty 'weird' areas" (698). Slothrop objects that keying waves "isn't like *dope* at all," challenging his father by asking him

- —But you always came back, didn't you[?]
- —What?
- —I meant it was always understood that *this* would still be here when you got back, just the same, exactly the same, right?
- —Well ha-ha guess that's why we called 'em *vacations*, son! Cause you always do come back to old Realityland, don't you[?]
  - —*You* always *did*.
- —Listen Tyrone, you don't know how dangerous that stuff is. Suppose someday you just plug in and go away and never come back? Eh?
- —Ho, ho! Don't I wish! What do you think every electrofreak dreams about? You're such an old fuddyduddy! A-and who sez it's a dream, huh? M-maybe it *exists*. Maybe there is a Machine to take us away, take us completely, suck us out through the electrodes out of the skull 'n' into the Machine and live there forever with all the other souls it's got stored there. *It* could decide who it would suck out, a-and when. Dope never gave you immortality. *You* hadda come back, every time, into a dying hunk of smelly *meat*! but *We* can live forever, in a clean, honest, purified Electroworld—
- —Shit that's what I get, havin' a double Virgo fer a son. . . . (698-699)

  As a teenage cyborg, Slothrop responds to his father's words of warning with an Oedipal challenge of his father's allegiance to what he calls "Realityland," as opposed to "the Machine" that would take Slothrop away. While Broderick's hypocritical caution runs counter to his having sold the rights to his son's surveillance to quite a different machine, it does provide Slothrop something to define himself against. The position of the novel regarding young Slothrop's advocacy of uploading consciousness into an electronic network is unstated, but given Slothrop dreams of

achieving immortality through a machine, it is likely that Slothrop's youthful point of view is at best zany. However, as an adult Slothrop experiences just such a dissipative cybernation which intricates him within the flows of The Zone's attached organs-machines. Additionally, young Slothrop's electronic precociousness is the literary birthing ground of a whole genre of science fiction known as cyberpunk. While Slothrop's vision of cybernetic absorption differs from his final diffusion into the rhizomatic network of capital, it indicates a predisposition to electricity as a medium nonetheless.

The second avatar of Slothrop's personality I'm going to examine also is part of a literary genealogy, but in this case more ancestor than descendant. In light of Mondaugen's theory of personality bandwidth, Slothrop's identity as a black gives him a literary bandwidth that goes at least as far back as Frederick Douglass and as far forward as Henry Dorsett Case. While phenotypically white, Slothrop can psychologically be identified as black. This is not only emblematic of the novel's concern with the plight of non-whites subject to the colonial impulse of capital controlled largely by whites, but also of the novel's construction of race as a transdermal effect. The agonistic relationships between blacks and whites in the novel—Enzian and Tchitcherine, the Herero and the Germans—finds an uneasy reciprocal constitution in Tyrone Slothrop in a scene that echoes Ralph Ellison's Invisible Man's cybernetic conditioning in the Liberty Paints factory hospital.

The resemblance between Slothrop and Invisible Man becomes particularly clear when Tyrone Slothrop is placed under the influence of sodium amytal for purposes of interrogation. In that scene, agents of PISCES (Psychological Intelligence Schemes for Expediting Surrender) ask Slothrop about his memories of blacks in Roxbury, Massachusetts. The location of the scene is unclear as are the identities of Slothrop's interrogators. Combined with Pynchon's elliptical narrative technique, the dislocation and alienation of Slothrop's interview while under the influence of sodium amytal make the scene reminiscent of Invisible Man's reconditioning in the factory hospital. In addition to these narrative similarities, jazz music and dancing introduce the possibility that at some level of consciousness Slothrop is black, or at least acts black.

The scene has a numerical outline characteristic of a mathematical proof or philosophical proposition, and re-presents an exchange of letters and transcripts of dialogue regarding "The Kenosha Kid" and various military and medical personnel who populate Slothrop's subconscious. The Kenosha Kid is a reference both to a Colonel from Kenosha, Wisconsin, and a kind of jazz dance. The permutations of the phrase "You Never did the Kenosha Kid" suggest the destabilization of Slothrop's consciousness under the effects of sodium amytal and that this destabilization is on some level equivalent to the proliferation and meshing of genres and media types. Furthermore, the fact that the clash of media and generic types cannot be interpreted as the effect of sodium amytal on Slothrop's consciousness until several hundred words into the episode ties this passage to Invisible Man's interrogation at the Liberty Paints factory hospital. The alienation between the narration, such as it is, and Slothrop's consciousness is similar to the alienation Invisible Man experiences when narrating the effects of electricity on his body. The narrative calls direct attention to this technique:

These changes on the text "You never did the Kenosha Kid" are occupying Slothrop's awareness as the doctor leans in out of the white overhead to wake him and begin the session. The needle slips without pain into the vein just outboard of the hollow in the crook of his elbow: 10% Sodium Amytal, one cc at a time, as needed. (61)

Once the session begins, an agent of PISCES reminds Slothrop "we were talking last time about the Negroes, in Roxbury," causing Slothrop to hear the lyrics of an unnamed jazz tune. Slothrop then sees "Black faces, white tablecloth, gleaming *very sharp knives* lined up by saucers . . . tobacco and 'gage' smoke richly blended, eye-reddening and tart as wine, yowza gwine smoke a little ob dis hyah sheeit gib de wrinkles in mah *brain* a process! straighten 'em all right out, sho nuf!" Perplexed, the interrogator asks "That was 'sho nuf,' Slothrop?" (62)

Here, the narrative texture tied to Slothrop's consciousness begins to "sound" black. So black, in fact, that the presumably white interrogator working on PISCES's behalf has to ask whether he said "sho nuf." Slothrop responds irritably, asking his interrogators not to "make it too . . ." but the

sentence is never completed. We cannot be sure if Slothrop resists the translation of vocally performed blackness into print; if he is concerned about the strength of the "gage" smoke; or if he is protesting the increasing effects of sodium amytal. The narrative does not care to distinguish between these things.

In what follows, Slothrop fantasizes that he vomits in the men's room of the Roseland Ballroom. As he is vomiting, his harmonica, "a jive accessory," falls into the toilet. Slothrop is attached to his harmonica, a signifier of his jazz "roots," and he considers that "[e]ither he lets the harp go, his silver chances of song, or he has to follow" (63).

This presents Slothrop with a problem because

If Slothrop follows that harp down the toilet it'll have to be headfirst, which is not so good, cause it leaves his ass up in the air helpless, and with Negroes around that's just what a fella doesn't want, his face down in some fetid unknown darkness and brown fingers, strong and sure, all at once undoing his belt, unbuttoning his fly, strong hands holding his legs apart—and he feels the cold Lysol air on his thighs as down come the boxer shorts too, now, with the colorful bass lures and trout flies on them. He struggles to work himself farther into the toilet hole as dimly, up through the smelly water, comes the sound of a whole dark gang of awful Negroes come yelling happily into the white men's room, converging on poor wriggling Slothrop, jiving around the way they do singing, "Slip the talcum to me, Malcolm!" (64)

Slothrop's drug-induced fantasy of being sodomized by black men while trying to salvage his harmonica from a toilet filled with feces is a metaphor for the cultural appropriation of black culture by whites in the form of jazz. Jazz played by whites can be read as a form of blackface. Subconsciously (because he is under the influence of sodium amytal), Tyrone Slothrop connects his maintenance of a black identity with being sexually violated by the very black men with whom he identifies. His fear of being violated in some ways is a symptom of the fact that race is as much a performance as it is an essence.

Eric Lott identifies this fear in Ralph Ellison's remarks about the resonance of clowning in blackface minstrelsy. Ellison notes that "[w]hen the white man steps behind the mask of the [blackface] trickster his freedom is circumscribed by the fear he is not simply miming a personification of his disorder and chaos but that he will become in fact that which he intends only to symbolize" (qtd in Lott 25). Lott notes that "[t]he black mask offered a way to play with collective fears of a degraded and threatening—and male—Other while at the same time maintaining some symbolic control over them" (25).

In the hands of Thomas Pynchon, Invisible Man's interrogation scene becomes a vehicle by which to critique the continued maintenance of a subconscious black identity in jazz music. When Slothrop tries to retrieve the artifact with which he maintains his black identity from the toilet, he unconsciously believes that he will be gang-raped by black men. This suggests that the cultural appropriation of black performance in jazz is cover for the rape fantasies of white men and that the maintenance of this cultural appropriation can be compared to retrieving harmonicas from shit-filled toilets, at least in the minds of white men under the influence of truth serum.

Set during World War II, the scene of Slothrop's interrogation contains traces of Ellison's own narrative technique, which itself speaks in the transformative moment of American culture after World War II. The era of McCarthy which intervenes between Ellison and Pynchon cannot stop the massive transformation of a culture shifting from print to electric media. Nor could it escape the social demand for racial equality embodied by the Civil Rights movement and the radical rejection of Authority which fueled 1960s counterculture and, according to Leslie Fiedler, birthed postmodernism. Pynchon's postmodernist concern is inextricably tied to the questions of racial and media hybridization which Ralph Ellison posed nearly thirty years earlier in *Invisible Man*. The intersection of postmodern narrative and race consciousness enables Pynchon to critique the cultural theft by means of which white people can act black while at the same time oppressing blacks. It also destabilizes the very boundaries of blackness and whiteness insofar as such things are performances.

Gravity's Rainbow is a powerful and dizzying critique of the racist capitalist system enabled by the apparatus of print. I have attempted to demonstrate the advantages of understanding the novel as an anti-print organ-machine that deterritorializes the flows of print and capital and reattaches them to its own hybrid media body. I have also argued that Tyrone Slothrop is a mutant print subject, one who is transformed by the networks which contain and shape him as a cybernetic subject. His transformation takes many forms and at least two of these forms combine to make Slothrop a (performative) black cyborg whose personal bandwidth spans the distance from post-1945 American literature to pre-millennial American popular culture: Ralph Ellison's Invisible Man and Dwayne McDuffie's and Gregory Wright's Deathlok.

## **CHAPTER TWO**

Ralph Ellison's Invisible Man: Prototype for a Black Cyborg Subject

RETHINKING "POSTMODERN BLACKNESS"

In "Postmodern Blackness," hooks recalls an argument at a dinner party where she and one other guest were the only black people present. hooks's unnamed interlocutor asserts that hooks's attempt to understand "the significance of postmodernism for contemporary black experience" is a waste of time because "th[at] stuff does not relate in any way to what's happening with black people." hooks argues that "racism is perpetuated when blackness is associated solely with concrete gut level experience conceived either as opposing or having no connection to abstract thinking and the production of critical theory."

I agree with hooks that theories of blackness should be in dialogue with postmodern critical theory. As she notes, because postmodernism questions theories of identity based on essence, it is positioned to "challenge notions of universality and static over-determined identity within mass culture and mass consciousness." hooks is concerned to further a "radical postmodernism [which] calls attention to those sensibilities which are shared across the boundaries of class, gender, and race, and which could be fertile ground for the construction of empathy—ties that would promote recognition of common commitments and serve as a base for solidarity and coalition."

My own approach in this chapter will be to extend theories of cybernetic identity in ways that account for the racial character of a cyborg described in Ralph Ellison's *Invisible Man*. Ellison's novel is particularly important because its experimental modernist style makes it a progenitor of the postmodern subject. Invisible Man's lack of identity and radical alienation from the systems of capital which attempt to appropriate him anticipate the alienation of postmodern subjectivity from the systems (language, capital, the Symbolic, etc.) which compromise its agency. Invisible Man is one of the most important literary parables regarding African-American identity in post-war American literature, and its influence extends into the more generalized theater of the literary exploration of subjectivity through narrative experimentation. Given its experimentation with

language, innovation of narrative technique, investigation of matters of race, articulation of the relationship between the individual and post-Industrial capital, and its remediation of non-print and electric media, *Invisible Man* initiates a radical mutation of the subject produced by print subjectivity, anticipating the further mutation of print subjectivity in works such as Thomas Pynchon's *Gravity's Rainbow*. Ellison's study of the reformation of African-American subjectivity in post-war, post-industrial America is located at the intersection of forces so powerful that even articulations of this cybernetic subject can be found in popular culture, namely Dwayne McDuffie's and Gregory Wright's *Deathlok*.<sup>24</sup> The prototype of this cybernetic subject is Ralph Ellison's Invisible Man, the first hacker to appropriate and redirect the flows of the American power grid in an effort to communicate to subalterns like himself.

Invisible Man is especially important because it is one of the first American novels to examine the relationship between an individualized self and a network. What normally are markers of individuality—speech patterns, gustatory predilections, locomotive behavior, sartorial appearance, physiological idiosyncrasies, melanin productivity—become markers of group association, of membership within a network. It is easy to read Invisible Man's plight as a personal struggle to find identity within a modernizing social framework, but to read that struggle for identity also as one that produces network effects is to read somewhat against the grain of liberal humanistic individualism, to raise at least a partial objection to the obvious traces of Emersonian self-reliance laid down in the novel and to reconceive Invisible Man as a prototype of a racial schizoid subject, one whose relation to other (potential) schizoid subjects constitute a rhizome of a specific kind, a pack.

Building upon the work of Elias Canetti, Deleuze and Guattari distinguish between masses comprised of paranoid individuals and packs comprised of schizoid subjects. For mass multiplicities (as opposed to singular or individual multiplicities such as a self), Deleuze and Guattari recognize the qualities of "large quantity, divisibility and equality of the members, [. . .] one-way hierarchy, [and] organization of territoriality or territorialization," characteristics which contrast with the characteristics of packs such as "small or restricted numbers, dispersion, [. . .]

qualitative metamorphoses, [... the] impossibility of a fixed totalization or hierarchization, a Brownian variability in directions, [and] lines of deterritorialization" (*Thousand Plateaus* 33). Organizations like The Brotherhood, Liberty Paints, and the college that Invisible Man attended are masses whereas the young black men who fight each other in the Battle Royal, the gathering of people at an eviction in Harlem, and the subjects who occupy a space similar to that occupied by Invisible Man at the novel's beginning and end are schizoid members of packs. The affiliated members of these packs are nodes of rhizomatic networks where hierarchy is indeterminate (multiple, shifting) and individuality subordinated to location within the system. Between these two forms of social organization, Invisible Man discovers a form of agency that enables him to game the system in ways that destabilize it.

The systems between which Invisible Man finds his identity use race as a way of distinguishing its members, most obviously the system of capital which constructs race as a category of labor. Individuals who appear to be black are plugged to the system of capital as machines. Lucius Brockway asserts in the Liberty Paints factory, "[W]e the machines inside the machine" (217). American capital dehumanizes individuals who are (identified as) black, transforming them into automatons and incorporating their labor into a larger system of machines. In the realm of schizoanalysis, all organisms are, of course, machines. But some of those organsmachines are also human. The racist system of capital which prevails in post-Reconstruction America strips black organs-machines of their humanity. Read another way, the history of the North American slave trade in the 17th and 18th centuries was the transformation of human organs-machines into non-human machines, a process that deracinated organs-machines from their native production networks, subjected them to a dangerous migration (the Middle Passage), and attached those organs-machines which survived to an alien network, one in which the power of determination lay outside the control of these reterritorialized organisms. Once upon the North American continent, native black Africans were then subjected to further processes of dehumanization to facilitate their functioning on the body of American capital as slaves. Such protocols of dehumanization which under slavery augmented available surpluses of labor continue

to operate even after the ensembles which instituted them (plantations) have transformed into alternate systems of capitalization. *Invisible Man* dramatizes the processes that dehumanize African-Americans and turns them into zombies attached to the body of capital in an attempt to call attention to them. The automatization and zombification of black organs-machines is one of the novel's most important themes, and the novel's protagonist is able to some extent to resist being so appropriated only after understanding how post-Industrial capital can be subverted by assuming a role in the system. At first, however, Invisible Man is unaware of the means by which he is dehumanized even as he believes he is fulfilling his destiny as one of Booker T. Washington's educated elite.

One of the subjects who does recognize this process of automatization happening to Invisible Man is the veteran outside the Golden Day who declares to Norton, a "trustee of consciousness," that Invisible Man

has eyes and ears and a good distended African nose, but he fails to understand the simple facts of life[. . . .] He registers with his senses but short-circuits his brain. Nothing has meaning. He takes it in but he doesn't digest it. Already he is—well bless my soul! Behold! a walking zombie! already he's learned to repress not only his emotions but his humanity. He's invisible, a walking personification of the Negative, the most perfect achievement of your dreams, sir! The mechanical man!" (94).

There are other examples of the mechanization and automatization of humans throughout the novel: Tod Clifton's Sambo doll, Mary's Jolly Nigger Bank, Invisible Man's himself when he first descends into his hole. All of these are products of the transformed, rearticulated, and extended machinery of conversion used to turn African organisms into slave-machines.

The boundary between animal and machine is often construed as an ontological barrier. Ellison's *Invisible Man* reconfigures this boundary as an interface whose primary substance is electricity. The transformative capacity of electricity was not widely acknowledged until McLuhan, nearly twenty years later, identifies it as a medium whose "implosive factor [ . . . ] alters the position

of the Negro, the teen-ager, and some other groups. They can no longer be *contained*, in the political sense of limited association. They are now *involved* in our lives, as we in theirs, thanks to the electric media" (*Understanding Media 5*). McLuhan recognizes that electricity has the ability to couple disparate ontological orders, thereby operating as what Mackenzie and Simondon identify as transducers. McLuhan's remark conceives of teenagers and blacks as orders distinct from, presumably, the order of adult, white males. Ellison explores how electricity, as an interface between organism and machine, mediatizes blacks (black men) into the system of capital and the effects this mediatization has upon the subjects so transformed. Most importantly, Ellison finds a cyborg identity in Invisible Man that apprehends race as a transdermal effect of network connections. As a result of this, Invisible Man is able to negotiate an unprecedented subject position, that of a hacker who occupies the first node of a network yet to come. In his hole of 1,369 lights powered by energy he appropriates, undetected, from Monopolated Light & Power, Invisible Man is perhaps American literature's first bona fide network hacker.

## HOT WIRED: PLUGGING BLACKS INTO THE BODY OF CAPITAL

Concerning the conjunction of lived black experience and the often theoretical discourses which comprise postmodernity, Ellison's Invisible Man provides a literary model of precisely the kind of subject for which hooks seems to be searching. Invisible Man is a subject caught between worlds and his in-betweenness forces him to abstract his lived experience as a black in terms that reflect the forces of post-Industrialization, the physics of light and electromagnetism, and the concepts of cybernetics (even at the same moment Norbert Wiener is creating the field of cybernetics). In addition the empirical and abstract discourses that contribute to his subjectivity, Invisible Man is also a subject caught between the worlds of black and white, print and electricity, human and machine. Published in 1947, two short years after World War II, *Invisible Man* is a novel that stands between modernism and postmodernism, making Invisible Man one of the progenitors of the postmodern subject. He exists in the spaces between well-defined subjectivities, a space where racial and cybernetic hybrids proliferate.

The medium that connects, or plugs, Invisible Man to the system is electricity. His injection inside the electrified flow of capital happens at a smoker attended by "[a]ll of the town's big shots [who] were there in their tuxedos, wolfing down the buffet foods, drinking beer and whiskey and smoking black cigars." These big shots enact their power first in the form of a prelude which opens onto a "battle royal" between Invisible Man and nine other anonymous and blindfolded black men. This first tableau is a fantasy of (foreclosed) interracial sexual desire wherein black male sexual interest is provoked then repressed through humiliation and fear, and the agency of a white female is erased, replaced by a form of automatism. The process of dehumanization to which the "stark naked" "magnificent blond" is subjected parallels the dehumanization of the black men, who are forced to repress their involuntary sexual responses. This process of dehumanization, or automatization, is replicated in the battle itself as well as the electrified money-grab that follows. What is not immediately obvious is the way in which electricity figures both as a form of currency and a structuring mechanism in the system of capital. The flow of electricity traces lines of motive force between one system and another, thereby articulating a connection between disparate ontological orders.

It is important to keep in mind that the categories of currency, electricity, organism, and mechanism are terms that describe the conditions of capitalist production in *Invisible Man*, and that the novel studies the mediation of subjects within a system that extracts, stores, and recirculates labor. Invisible Man understands that entertaining the white men gathered at the smoker is, in fact, labor. Invisible Man recalls that

In those pre-invisible days I visualized myself as a potential Booker T.

Washington[...] I felt superior to [the other nine fellows] in my way, and I didn't like the manner in which we are all crowded together into the servants' elevator. Nor did they like my being there. In fact, as the warmly lighted floors flashed past the elevator we had words over the fact that I, by taking part in the fight, had knocked one of their friends out of a night's work (18).

The unidentified black men here resent Invisible Man just as the Luddites resented the knitting frames. The resentment cuts both ways, as Invisible Man distinguishes himself from the other black men in the elevator as a "potential Booker T. Washington." Washington's vision for African Americans was referred to by W. E. B. DuBois as "The Great Compromise" because it envisioned blacks as essential service providers for a white bourgeoisie. While Washington's vision subordinates blacks to whites in the network of production, it would have secured economic relevance for an entire class of blacks, with people like Washington and Invisible Man at the top of that class. Early on, Invisible Man believes his future will involve securing a place for blacks within the American system of production that would reflect, and so maintain, the racist attitudes of the nation as a whole. Due to his educational achievements and aspirations, Invisible Man identifies himself apart from other elements of this black entertainment network, a symptom of his selfishness and naivete. For now, Invisible Man's anonymous black companions resent his presence because he has taken the operational place of an element with whom the others are familiar. The identification that the others feel with the replaced element manifests as hostility to the replacement in the same way that Ned Ludd's followers expressed hostility toward the machines designed to replace them. Invisible Man's sense of superiority only emphasizes that he, in fact, does not belong in this network, and the events which transpire testify to this.

Invisible Man recalls that the appearance of the "stark naked" "magnificent blonde" is attended by

a dead silence[....] I tried to back away, but they [the nine other black men] were behind me and around me. Some of the boys stood with lowered heads, trembling. I felt a wave of irrational guilt and fear[....] Yet I was strongly attracted and looked in spite of myself. Had the price of looking been blindness, I would have looked. The hair was yellow like that of a circus kewpie doll, the face heavily powdered and rouged, as though to form an abstract mask, the eyes hollow and smeared a cool blue, the color of a baboon's butt[....] I wanted at one and the same time to run from the room, to sink through the floor, or go to her and cover her from my eyes

and the eyes of others with my body; to feel the soft thighs, to caress her and destroy her, to love her and murder her, to hide from her, and yet to stroke where below the small American flag tattooed upon her belly her thighs formed a capital V. I had a notion that of all in the room she saw only me with her impersonal eyes. (19)

Invisible Man and the other young men are confronted with an icon of sexual desirability in a context where black male sexual desire is taboo, provoked under the watchful eyes of powerful white men. Taken as an allegory for the preparation of black males into the system of American capital, this prelude to the battle royal trains these young black men-about-to-become-machines to not behave in accordance with their organismic impulses when in the presence of a sexual fetish. One of the first steps to making a better cyborg, where better means ready for insertion into a system of racist capital, is to repress the organism's sexual impulse. Similarly, The sexual fetishization of the white woman depends upon her dehumanization. Though the value of sexual signing is opposite in each case—a hyper-sexualized blond kewpie doll and neutered black boxers—they both exist in the space of cyborg ontology.

In *Invisible Man*, light, electricity, and sound are the primary media in which the components of cyborg ontology is constructed. Concerning the domain of the visible, lines of sight are generally paths toward disempowered subject positions. For example, in his specular identification with the automatized woman, Invisible Man finds (Modernistic) primitivist characteristics which signal that the woman has affinity with descendants of Africans, a group disempowered in the context of American capital. Invisible Man's identification comes at the precise moment when Invisible Man notices that "the face [was] heavily powdered and rouged, as though to form an abstract mask." The mask abstracts the woman's racial identity in the same way that DuBois's veil abstracts black identity and, more to the point, the same way that DeKooning's, and Picasso's "African masks" abstract the personhood of the female figures they paint. The veil theme is made explicit as she begins to dance with "the smoke of a hundred cigars clinging to her like the thinnest of veils" (19). A further hint of her "blackness" comes in the smear of "cool blue" which suggests to Invisible

Man a "baboon's butt," an animal native to continental Africa and whose associations with primitivism and signaling of a trickster identity are patent. In conflict with these intimations of the exotic, the woman is branded as a domestic product by the "American flag tattooed upon her belly," below which Invisible Man wishes to "stroke." The point of connection and so alienation comes in his imagined sense that he is the only object in her visual field, but the specular identification Invisible Man shares with the kewpie doll woman is undercut by the fact that what he imagines to be an intimate and singular connection—"of all in the room she saw only me"—comes to him through a set of "impersonal eyes." Despite her being in his presence, her gaze is no more penetrating than the gaze of a two-dimensional image, and Invisible Man's sense of significance is equivalent to the feeling he might have while gazing into the eyes of a pin-up girl.

In this scene, the alienation of specular identification finds its motivating object in the actions of the white men who have staged this sexual fantasy. The fetishization of race under the sign of sexuality forces a large, powerful, black man to "plead to go home" because his "dark red fighting trunks [are] much too small to conceal the erection which project[s] from him" at the same time it allows a drunken white man to sink his "beefy fingers" into the "soft flesh" of a sexualized automaton (20). The tactile aspect of the sexual and racial fetishization is in this instance separated from its visual aspect.

The woman, in particular, has an ocular reaction that contradicts her facial reaction and it is this separate visual signal which Invisible Man reads as subjectival affinity. Invisible Man narrates that the drunken white men

caught her just as she reached the door, raised her from the floor, and tossed her as college boys are tossed at a hazing, and above her fixed-smiling lips I saw the terror and disgust in her eyes, almost like my own terror and that which I saw in some of the other boys (20).

Here, the woman carries in her eyes a look of terror "almost like" the terror Invisible Man feels. Here there is an equivalence between the sexual fetishization of the woman as a blonde kewpie doll—an icon of sexual desirability and white supremacy—and the half-naked young black men

about to box each while other blindfolded. The repression of black male sexual desire and the provocation of white female sexual disgust are products of the maintenance of an oppressive white male sexual power, a power predicated by the transformation of the white woman and the black men into desirable objects. While the woman's dehumanization is complete once she has been transformed into a hypersexual automaton, the black men's sexualities are further channeled into disorganized violence. The scene, then, traces a logical pathway between black male desire for a white female sexual fetish and incoherent, black-on-black violence. The desiring apparatus of the black males is disconnected from the production of desire and reconnected to human boxing machines.

Their desires disconnected from desiring-production, their abilities to determine the directions of their actions nullified, their lines of sight obscured by blindfolds, and their senses of perspective limited to the spectacle of the battle royal itself, these young black men have been taken off the grid, so to speak, their labor and desiring-production decoupled from any network not connected to the system of capital controlled by the white bankers, lawyers, and priests who both desire and fear the young blacks they have recruited. In the interregnum of their disconnection from systems of production, the black boxing machines fight one against the other as schizoid subjects, members of a pack who are together in their aloneness. Invisible Man recounts that "[e]veryone fought hysterically. It was complete anarchy[....] No group fought together for long. Two, three, four, fought one, then turned to fight each other, were themselves attacked" (23). Disconnected from each other, these blind, black men form a schizoid pack of automatons who randomly aggregate into unintentional cooperatives and only to dissociate back into radicalized nomadic components. Disconnected as they are, these black boxing machines are now ready to be plugged to the electrified body of capital.

After Invisible Man is KO'd by Tatlock, "attendants in white jackets [roll] the portable ring away and [place] a small square[. . .] rug" in the boxing ring's place (26). The M.C. then calls, "Come on up here boys and get your money." Invisible Man sees "the rug covered with coins of all dimensions and a few crumpled bills," but finds himself especially excited about "the gold

pieces" (26). The rug and the objects upon it are a metaphor for the body of capital, and the fact of the rug's electrification makes it a literary illustration of what Deleuze and Guattari identify as the body without organs. The connection of things to the rug is made palpable by the invisible force of electricity. Invisible man recalls that he

lunged for a yellow coin on the blue design of the carpet, touching it and sending a surprised shriek to join those rising around me. I tried frantically to remove my hand but could not let go. A hot, violent force tore through my body, shaking me like a wet rat. The rug was electrified. The hair bristled up on my head as I shook myself free. My muscles jumped, my nerves jangled, writhed. But I saw that this was not stopping the other boys. Laughing in fear and embarrassment, some were holding back and scooping up the coins knocked off by the painful contortions of others. The men roared above us as we struggled. (27).

The young men cannot easily "let go" of the objects which they have chosen to grab. Their muscles involuntarily contract once they have come into contact with conductive objects lying upon the rug. Considered in terms of the equivalence of electricity and capital networks, attachment to commodified objects "plugs" one into the system. Connection to the system of capital represented by the electrified rug and the tokens that can transmit capital produces a muscular cathexis onto the (represented) body of capital. This cathexis is an investment in the system of capital that exceeds the intentions and awareness of those who come into contact with the system. The young black men are unaware of how they are being manipulated in their attempts to grab the most highly conductive signifiers of capital. This scene provides a model of the ability of capital to attach objects, in this case organisms, to its recording surface. Once capital comes into contact with an organism, the organism attaches to the system by means of its own motive force, as if electrified into place. The circulation of capital forces muscles to connect and stay connected to the capital-conducting objects arrayed upon its surface.

Increasingly aware of the system which grabs at him with the very same force he uses to grab at it, Invisible man begins "trying to avoid the coppers and to get greenbacks and the gold," and he

makes the counterintuitive discovery that he "could contain the electricity—a contradiction, but it works" (27). Invisible Man's ability to contain the shocks that the system sends to his body threatens to limit or disrupt the spectacle of (at least) his involuntary twitching. Just as Invisible Man makes this discovery and uses it to limit the recoil his body experiences when it comes into contact with electricity-conducting objects, he notes, "the men began to push us onto the rug. Laughing embarrassedly, we struggled out of their hands and kept after the coins. We were all wet and slippery and hard to hold (27)." This recalls the blonde woman's efforts to avoid the beefy fingers of the men chasing after her. Just as the woman first eludes the clutches of the drunken men by "mov[ing] around the floor in graceful circles, [...] slipping and sliding over the polished floor" (20), so do the black men initially elude the men who try to push them back onto the rug in order to laugh at the spectacle of their "connecting" to the system. Once the men catch the woman, they "raised her from the floor, and tossed her as college boys are tossed at a hazing." A similar scene takes place when the men finally grab one of the young black men, with the exception that after he is "lifted into the air, glistening with sweat like a circus seal," he is then "dropped, his wet back landing flush upon the charged rug" (27). Invisible man "hear[s] him yell and [sees] him literally dance upon his back, his elbows beating a frenzied tattoo upon the floor, his muscles twitching like the flesh of a horse stung by many flies."

As mentioned earlier, the parallels between the fate of the woman and the black men suggest that both are fetish objects produced by a system controlled by powerful white men. Importantly, both types of people—white women and black men—are transformed into things whose agency is overwhelmed by the system to which they are connected. In this sense, they are automatized, a point that is underscored when the M.C. tells the men that "You get all you grab," and one blond man affirms with a wink, "'That's right, Sambo'" (26).

The Sambo doll's grotesque gestures and gyrations are comparable to the bodily behavior of real African Americans who are connected to the system of capital and whose struggle in that system is entertainment for the wealthy and powerful. The stereotype of the black entertainer, especially the black entertainer in blackface, is a metonymic crystallization of the figure of the

Sambo that produces by entertaining and whose show is a series of hideous facial exaggerations and grotesque physical contortions. Also of interest is the teratogenic property of electricity in this scene. Electricity induces involuntary dancing, transforming young black men into dancing machines whose paroxysms makes them laughable monsters, parodies of self-possessed humans.<sup>25</sup>

The spectacle of the young men jerking and spasming on the electrified rug provides the white men with some assurance that their own place in the system of capital is not a bad one. After all, they are above the humiliating positions in which the black men find themselves, and it is for their pleasure that the black men "labor." However, it is not enough that their bodies react to the invisible electricity. The white men want the connection to be stronger, want to eliminate the margin of indetermination in which Invisible Man recognizes that the charge of the rug can be momentarily "contained" and that the electricity flowing through the rug does not racially discriminate. By forcing the black men into the rug, the white men reduce the black men's ability to contain the shocks to their bodies and prevent them from seeing the possibility of extending the reach of the electric network to the spectators themselves. Invisible man responds to the intensified efforts of the white men to force them onto the rug by "grabb[ing] the leg of a chair. It was occupied and [Invisible Man] held on desperately" (28). Invisible Man recalls that the chair's occupant then shouted

"Leggo, nigger! Leggo!"

The huge face wavered down to mine as he tried to push me free. But my body was slippery and he was too drunk. It was Mr. Colcord, who owned a chain of movie houses and "entertainment palaces." Each time he grabbed me I slipped out of his hands. It became a real struggle. I feared the rug more than I did the drunk, so I held on, surprising myself for a moment by trying to topple him upon the rug. It was such an enormous idea that I found myself actually carrying it out. (28)

Invisible Man's spontaneous and intuitive impulse to extend the reach of the electric network to include the men who have staged the spectacle is, of course, doomed to fail since the rules which control how the network may be populated is determined by the white men. Even so, the point is clear that the energy which makes a real-time framework out of the bodies and tokens through which it runs can be extended to include any body, black or white. Like capital, electricity has an inherent ability to appropriate the flows with which it comes into contact.

In other words, electricity tends to mediatize objects, to inject them into a media network. Unlike the social networks that are hierarchical at their core, the structure of electric networks can easily be affected by rearranging and establishing connections at a lower level. As a result, electric networks resemble rhizomes whereas social networks more closely resemble trees, what Deleuze and Guattari identify as arboreal structures. Tree structures distinguish between leaves, branches, trunks, and roots. Systems of control in arborescent networks tend to be centralized and to privilege trunks, whereas systems of control in rhizomatic networks focus on communication between nodes. Invisible Man's reflex to topple the owner of the cinematic and theatrical entertainment networks, Mr. Colcord, into the power grid manifested by the electrified rug and its connected elements is also an attempt to remediate the structures of media power itself. The audacity of Invisible Man's move is matched only by his naivete in attempting to do so under the surveillance of Mr. Colcord himself. By the end of the novel, which is also the novel's beginning, Invisible Man has learned to do his hacking surreptitiously, secretly stealing energy from the power grid in his hole of lights.

In the battle royal, black men are turned into fetish objects whose labor is entertainment. The organizers of the battle royal reshape these black men first in terms of their sexuality. The young men are trained to repress their sexual desire. That repressed desire is then connected to the production of disorganized violence and, later, random clutches at signifiers of capital some of which turn out in the end to be the simulation of the representation of capital: "the gold pieces [Invisible Man] had scrambled for were brass pocket tokens advertising a certain make of automobile" (32). The electricity that in 1947 was being used to establish a power grid to drive

dispersed mechanical elements of American capital also was being used to build a media network to connect organisms to that system of capital. Unavoidably, the dermal qualities (e.g. presence of melanocytes) of networked humans affect both the content transmitted through those media connections and the reception of that content. However, this passage suggests that race may be a transdermal effect when the melanocyte-deficient Mr. Colcord is nearly toppled onto the electrified rug. Had this occurred, he, too, would have beat "a frenzied tattoo upon the floor" as readily and with as much dexterity as any young black man.

The notion of blackness not just as performance, but as an effect of the circulation of electricity suggests that blackness is not a category intrinsic to subjects who are black. Rather, blackness is the result of the way in which flows cause certain organs-machines to behave and that the interpretation of such behavior as one thing or another (in this case blackness) depends upon the framework which is constituted by the very enactment of such behaviors. In other words, blackness is neither intrinsic nor extrinsic to any individual or even group of individuals, but is the product of the articulation of networks which populate the "black" networks on an ad hoc basis. This explains why notions of race are so susceptible to destabilization: race is not static but the dynamic effect of the flow of invisible forces, like electricity and capital, across intricated organs-machines.

Invisible Man and the nine other black men who participate in the Battle Royal and who are disconnected from each other in preparation for their reconnection to the system of American capital are network subjects whose ontologies are subject to the flux of electricity, capital, and sex. Invisible Man is unique among these men because he, unlike the others, can be distinguished by his failure/refusal to occupy the subject position in which he finds himself at the smoker. Later, when Invisible Man is forced to leave college, his attempts to find identity as a laborer in the reproductive system of capital is thwarted both by Bledsoe's damning letters of recommendation and by Invisible Man's subjectival intractability, a condition so pernicious that doctors use electroconvulsive therapy to rehabilitate him. The notion of race as a transdermal effect of network connection, the ability of electricity to prepare organisms for connection to the system of American

capital, and the teratogenic properties of electricity as a transformative agent are key themes in both the Battle Royal scene and in Invisible Man's rehabilitation in the Liberty Paints factory hospital.

PAINT, DROPS, HEARTBEATS, AND ONTOLOGICAL HYBRIDIZATION: INVISIBLE MAN'S REVENGE

After having become part of a machinery used to produce pigment for other machines and artifacts, Invisible Man is issued a new identity by the doctors and scientists of the Liberty Paints factory hospital. Keeping in mind Invisible Man's brief employment under the supervision of, first, Kimbro and, later, Lucius Brockway, Invisible Man's reculturation by the doctors in the factory hospital can be understood as a the surgical removal of Invisible Man's organism from a cybernetic network designed to maintain the supremacy of racially white persons and physically white institutions. At the same time Invisible Man is removed from this network, he is also enabled to live without direct connection to external networks, to live "off the grid," so to speak, and this freedom is apparent in his attitude toward Bledsoe and Norton, two of the most powerful and oppressive figures in Invisible Man's life as a networked organism.

Talking about Invisible Man in terms of networks and cybernetic organisms may seem, at first blush, the overextension of a metaphor or even the distortion of the text under the view of a thickly ground critical lens, but a closer look at the language Ellison uses with regard to Invisible Man's cognizance of the significance of his work for Kimbro reveals spatio-temporal relationships which draw out similarities between organisms and organizations. These relationships become apparent to Invisible Man as he considers the significance of his being in the Liberty Paints factory, mixing ten drops of black dope into every bucket of Optic White paint. Such cognitive synthesis is potentially threatening to the system, and for this reason Kimbro warns Invisible man, "You have to follow instructions and you're going to be doing things you don't understand" (199). When Invisible Man points out the visibly obvious—that black drops are being added to the white paint—Kimbro yells, "You just do what you're told!" Where Kimbro trusts the chemistry by which Optic White is produced, Invisible Man cannot let go of the apparent contradiction in the production of a colorless pigment. More importantly, Invisible man intuits that his factory work establishes connections

between bodies and buildings, skin and surfaces, and paint and blood. He understands that his work in Liberty Paints is to some extent an act of hybridization, and in his indignity at being told not to think Invisible Man hybridizes Kimbro himself.

Peeved, Invisible Man figures "[t]o hell with him. Just a flunkey, a northern redneck, a Yankee cracker!" (200) and directly returns to his thinking. Invisible Man's mental slurring of Kimbro is not as throwaway as it might first appear, containing as it does a strategy of hybridization by which Invisible Man seeks to gain control of a more powerful white man, Norton, a trustee of the college Invisible Man attended. Invisible Man weakens Kimbro's authority by pointing out to himself that Kimbro is a "northern redneck," a species of being whose hybridity gives Kimbro a social rank lower than other northern whites. Kimbro is a "Yankee cracker," a northern version of an undereducated farm laborer. Invisible Man crystallizes the discrepancy between Kimbro's white skin and Kimbro's position as a factory "flunkey," which separation is identical to the one which obtains between Optic White paint and the buildings it is used to cover. The paint which gives government buildings their pure white appearance is a skin for the objects underneath, much like the melanin-rich dermis that renders persons of African descent invisible. The distance between what should be Kimbro's right of access according to his skin and Kimbro's position within the workings of the paint factory is also the gap between blacks' theoretical access to civil rights and the actual positions they occupy in the production of American capital. Race and class are inextricably intertwined, and a low ranking in the hierarchy of production hybridizes and compromises the social prophylaxis white skin usually provides.

Invisible Man connects the skin of people with the oil-based "skin" he mixes at the factory. His first thought is whether the Optic White Liberty paint he mixes is the same "used on the campus," or

something made exclusively for the government. Perhaps it was of a better quality, a special mix. And in my mind I could see the brightly trimmed and freshly decorated campus buildings[. . . .] The buildings had always seemed more impressive because they were the only buildings to receive regular paintings;

usually, the nearby houses and cabins were left untouched to become the dull grained gray of weathered wood. And I remembered how the splinters in some of the boards were raised from the grain by the wind, the sun and the rain until the clapboards shone with a satiny, silvery, silver-fish sheen: Like Trueblood's cabin, or the Golden Day . . . The Golden Day had once been painted white; now its paint was flaking away[. . . .] Damn that Golden Day! But it was strange how life connected up; because I had carried Mr. Norton to the old rundown building with rotting paint I was here. If, I thought, one could slow down his heartbeats and memory to the tempo of the black drops falling so slowly into the bucket yet reacting so swiftly, it would seem like a sequence in a feverish dream[. . . .] (201)

The regular application of paint to the exterior of the college's buildings make the buildings "more impressive" than the surrounding buildings. The maintenance of the college's building's surfaces protects those buildings from falling into decay, certainly, but it also serves an ideology that propagates and maintains class division by aesthetic means. Because the college's buildings are so carefully maintained, they stand out in Invisible man's mind to the point that he can "see the brightly trimmed and freshly decorated campus buildings as they appeared on spring mornings—after the fall painting and the light winter snows, with a cloud riding over and a darting bird above—framed by the trees and encircling vines" (201). The interplay between the buildings and the organic elements of the landscape ("fall painting," "light winter snows," and "a darting bird above") signal a conventionalized academic architectural aesthetic which stands in stark contrast to "the splinters in [. . . ] the boards" and "the dull grained gray of weathered wood" which characterize the structures inhabited by lower-class blacks, buildings which include Jim Trueblood's cabin and the Golden Day.

The Golden Day, of course, is a symbol suggesting both apocalyptic event and utopian afterworld. According to one patient/veteran, 5:30 at the Golden Day is where and when the "allembracing, absolute Armistice, the end of the world" will occur (74). In the Golden Day all persons and their myriad fates are intertwined. From the vantage of hindsight, Invisible Man

Day, though Invisible Man at first is unable to comprehend the fact that a black veteran with some talent for neurosurgery had been beaten by ten masked whites for saving the life of (presumably) a white man and forced to flee his city of residence (93). When Invisible Man responds dumbly to the veteran's plight, the veteran remarks that Invisible Man is "a walking zombie," that "he's learned to repress not only his emotions but his humanity" (94). To Norton, a trustee of the college, the surgeon/veteran presents Invisible Man as "the most perfect achievement of your dreams, sir! The mechanical man!"

As a representative of the college, Norton's "destiny" is to transform organisms into mechanisms, zombifying blacks by educating them to serve white benefactors. The veteran challenges Norton on this point, accusing Norton of being insensible. The veteran tells Norton

You cannot see or hear or smell the truth of what you see—and you, looking for destiny! It's classic! And the boy, this automaton, he was made of the very mud of the region and he sees far less than you. Poor stumblers, neither of you can see the other. To you he is a mark on the scorecard of your achievement, a thing and not a man; a child, or even less—a black amorphous thing. And you, for all your power, are not a man to him, but a God, a force— (95)

According to the veteran, the transformation of humans into mechanisms dehumanizes the transformer as well as the transformed. The cybernated human loses any claim to humanity by the very fact of being an automaton while the technologist is deified, turned into a force. The veteran criticizes Norton for his hubristic ambition to automatize blacks and Invisible Man for allowing his humanity to be so appropriated and deployed.

When Invisible Man recalls this trip with Mr. Norton to the Golden Day in the Liberty Paints factory, he associates flaking paint, white privilege, and black squalor. Invisible Man traces from a past event the spatio-temporal threads that are knotted within the Liberty Paints factory. Invisible Man connects the fact that institutions like the college maintain their white appearance using paint produced in factories like the very one in which he finds himself with the fact that his interaction

with Norton resulted in his ejection from the college and later placed him in the paint factory. Both literally and figuratively, Norton's and Bledsoe's manipulation of Invisible Man maintains the black college's whiteness, the whiteness of its buildings and the myth of whiteness that a well-educated black servant class supports. After contemplating the entanglement of Norton, the college buildings, and his mixing of black drops into white paint, Invisible Man fantasizes for Norton a cyborg anatomy.

Invisible Man considers "it was strange how life connected up," but he does not consider that his brain is the thing that establishes these connections. The first part of Invisible Man's fantasized anatomization involves him gaining control over both Norton's autonomic system and cognitive apparatus. Invisible Man thinks about the possibility of "slow[ing] down [Norton's] heartbeats and memory," and it is clear that Invisible Man wishes he had such control. Invisible Man's fantasy of controlling so significant a component of the system of capital in which he is himself embedded is symptomatic of Invisible Man's real world oppression and his invisibility. In his fantasy, Invisible Man synchronizes Norton's neurobiological activity with the broken flow of "black drops falling so slowly into the bucket."

In his fantasy, Invisible Man transforms Norton into a racial cyborg by slowing Norton's heartbeat and thoughts—two of the most important processes in any organism—and then synchronizing those neurophysiological processes to the production of paint, itself a metaphor for the construction of a racial purity that depends on racial hybridization. Norton becomes a cyborg whose cardiovascular system and psychological apparatus are tied to the rhythms of a factory that in its turn produces the substance of racial purity by absorbing a racial other, and Invisible Man's fantasy is the means by which Norton's cyborg constitution is realized. Because Invisible Man's fantasy ends with his explicit acknowledgement of the fantasy's dreamlike aspect—"it would seem like a sequence in a feverish dream"—and he locates that fantasy within the realm of simulacral production, Invisible Man's fantasy can be identified as a desiring-machine that recodes the territorialized flows of an ideologically racist organ-machine by coupling a white cyborg's neurophysiology with the production of the material substrate used to symbolize racial purity and

white supremacy. To some degree, the fantasy is a fulfillment of Invisible Man's wishes to have control over so powerful a white man and his desire to get revenge for being turned into "the perfect achievement of [Norton's] dreams"—a "mechanical man" (94). Just as Norton's desiring production created Invisible Man (transforming his organism into a mechanism), Invisible Man's fantasy, in fact, turns Norton into a cyborg. Invisible Man's simulacral fantasy is an anti-racist machine engaged in desiring production. The downside of Invisible Man's desiring production, however, is that though it raises his awareness of Norton's machinic couplings and the contributions his production makes to the myth of white supremacy, it does little to change the actual production of these components of American capital. This "problem" is characteristic of much of the novel and is largely the result of Ellison's taking the first steps necessary to rearticulating the relationship between African Americans and the production of American capital in a post-slavery economy.

Maureen F. Curtin also takes note that Ellison's literary technique is perhaps more than it might seem. According to Curtin, Ellison does not use invisibility strictly in terms of metaphor which she argues that many critical readings of *Invisible Man* do in order to "make assertions about the novel's universality and value" (10). Curtin argues that Ellison's notions of invisibility are developed "in the context of x-ray, a powerful technology that had long since captured the popular imagination." Being an invisible technology, x-ray may be relevant, especially insofar as the "glass and nickel box" (233) Invisible man finds himself in recalls the x-ray apparatus with which Ellison was familiar (Curtin 53 N19). However, it is without question that invisible x-ray energy is subordinated to invisible electrical energy insofar as the novel never explicitly names x-ray energy. My interest in Curtin's work here applies to her sense that Ellison, by developing a poetics of x-ray, was directly opposing the work of writers like Hemingway who wrote in a "style stripped of unessentials" that for Ellison was "opposed to the deep thought and feeling necessary to profound art" (qtd in Curtin 47). Examining Ellison's remarks in *Shadow and Act*, Curtin notes that

[i]n a curious turn, Ellison predicts that the writer's progeny, his literature, will display the marks of his exposure, apparently suffering deformities such that

the literature will lack any number of vital organs. Although such a state might invoke, for some, Deleuze Guattari's concept of the Body without Organs, the juxtaposition would seem unfruitful since Ellison deems the condition degenerative and not suggestive of a "body all the more alive and teeming . . . populated by multiplicities." <sup>26</sup> (47)

Of course, my disagreement with Curtin could not be stronger. While Ellison does consider a poetics of x-ray as degenerative, it is by no means settled that those who pursue such (according to Ellison's measure) have articulated BwOs. Avoiding the inevitable back-and-forth of describing the product of a poetics of x-ray, it is clear that *Invisible Man* finds his sense of self enabled by the interconnection of organs-machines by electricity, regardless of whether such network subjectivities can be evaluated as good or bad. In fact, it is important that Invisible Man uses the electricity which once connected him to the body of American capital to produce a subaltern network identity, suggesting that networks and BwOs are neither good nor bad but only contextually determined as such.

Returning to Invisible Man's disconnection from the body of capital in the Liberty Paints factory, the relationship of individuals to the larger system of industrialized production is dramatized in the story Lucius Brockway tells of his history with the factory. Brockway is Invisible Man's second supervisor, and he is from the start paranoid about being replaced. Brockway tells Invisible Man that he has

to watch them personnel fellows. One of them thinks he's going to git me out of here, when he ought to know by now he's wasting his time. Lucius Brockway not only intends to protect hisself, he *knows how* to do it! Everybody knows I been here ever since there's been a here—even helped dig the first foundation. The Old Man hired me, nobody else; and, by God, it'll take the Old Man to fire me! (209)

Brockway's placement within the Liberty Paints factory is mythical, going back before the company even had an apparatus of production in place. Given the metaphorical nature of the Liberty Paints factory, Brockway can be recognized as a representative for those whose technical

knowledge was essential to building the infrastructure of American capitalism but whose racial and class status deprived them of both recognition fair compensation. Brockway and those he represents are systems experts whose expertise is as important to the growth of American capital as those investors, managers, and bosses at the top of corporate hierarchies. More to the point, while the "heads" of such corporate systems have been comprised nearly exclusively by whites, the "works" of these corporations were populated by blacks and other persons of color in addition to whites.

With "the roar of [its] furnaces" and its "intricate network of pipes" (208), the works within which Brockway labors suggests Liberty Paints' corporate loins more than its corporate head. Brockway and his hydro-mechanical network of valves, furnaces, pipes, and gauges occupy the center and foundation of everything that comprises Liberty Paints. In many ways, Brockway can be interpreted as the spiritual, mechanical and hydraulical father of the company. He did, after all, help "the Old Man make up that slogan. 'If It's Optic White, It's the Right White' " (217), which slogan gives the lie to Liberty Paints' interest in "tryin' to work up something about the other colors, talking about rainbows or something[...]" (217-218). Liberty Paints is fundamentally concerned in generating capital by synthesizing and distributing material that promotes a system of white supremacy. Ironically, the material substrate that advances the company's reputation as the provider of "the Right White" not only has absorbed blackness, but it also represents the concentrated labor of Lucius Brockway's black hands.

A great deal of Brockway's importance to Liberty Paints is his influence on the production of the Right White. Brockway explains that even the Old Man

knows the reason our paint is so good is because of the way Lucius Brockway puts the pressure on them oils and resins before they even leaves the tanks[...] They thinks 'cause everything down here is done by machinery, that's all there is to it. They crazy! Ain't a continental thing that happens down here that ain't as iffen I done put my black hands into it! Them machines just do the cooking, these here hands right here do the sweeting. (218)

While Brockway syntactically distinguishes between "the machinery" and his own hands, he understands that his organism is embedded in the works, a component part of the factory. For Brockway, this embeddedness transforms him into a machine. Brockway's assessment of his importance to Liberty Paints is that his are the hands that "do the sweeting," putting an essential but hard to define finishing touch on the base material of the resins and oils which go into Optic White. On a fundamental level, Brockway takes so much pride in his role in the production of Optic White he overlooks the obvious, that his are also the hands that do the sweating.

Committed to his job, Brockway warns Invisible Man to keep close watch on the gauges, "to keep an eye on 'em. You caint forgit down here, 'cause if you do, you liable to blow up something. They got all this machinery, but that ain't everything; we the machines inside the machine" (217). Brockway understands that the intrication of organism and mechanism transforms humans, but he fails to grasp the fact that for all of his indispensability he is undercompensated. Essential to the operation of a company that maintains the appearance of government monuments and college buildings, Brockway is satisfied to have received a mere "three-hundred-dollar bonus" for helping coin the slogan upon which the company is built. His failure to estimate accurately his intrinsic worth is related to his failure to recognize that he is connected to the other humans in the employ of Liberty Paints at the same time he is connected to the factory's machinery.

When Brockway learns of Invisible Man's encounter with the union the other workers are forming, he reacts violently not necessarily because his job is threatened. With his knowledge of the intricate network of valves in the factory's basement, Brockway is, after all, indispensable. Rather, Brockway understands that contact with the union will ultimately transform him, coupling him to a subnetwork of the factory. On the one hand he says that the union is "after my job," but on the other he recognizes that "[f]or one of us to join one of them damn unions is like we was to bite the hand of the man who teached us to bathe in a bathtub!" (228). The union threatens to disconnect Brockway from "the hand of the man" and to reconnect him to a network of humans who are also embedded in the factory's machinery.

Though Brockway knows Invisible Man poses no real threat to his job, Invisible Man is doomed from the start to become Brockway's victim. Brockway's identification with the "Old Man" does not allow him to alter his connection to other components in the system. Brockway's dedication and subservience to the production of a material that helps advance a racist ideology prevents him from recognizing his real worth and his connection to others. Brockway sabotages the machinery used to "sweet" the paint and blows Invisible Man right out of the network. A man like Brockway, who refuses to network with other organisms like himself though he recognizes his embeddedness in a larger network of organisms and machines, could only be expected to dismantle whatever part of the machine that threatened to transform him. Invisible Man's experience in the workings of the paint factory is a metaphor for his unfitness to exist within the machinery of capital, and Invisible Man's final ejection from the conventional framework of American capital is made complete with his reconditioning in the factory hospital.

Invisible Man's reconditioning in the factory hospital is pivotal to my understanding of the novel as a whole. Invisible Man's encounter with the doctors and scientists of the factory hospital is a metaphor for both Invisible Man's poor fit with the system of capital, insofar as that system can be understood as a network of machines and organisms, and as a symbol that prefigures his literal relationship to the Brotherhood. In the factory hospital, Invisible Man is transformed into the "voice" of the machine and this transformation anticipates and elucidates the topology of Invisible Man's position within the Brotherhood.

## "A MACHINE MY MOTHER?": SCREAMS, MACHINES, AND ELECTRIFIED BLACKNESS

The sense of dislocation which begins Invisible Man's surreal experience in the factory hospital is due partly to his violent extrication from the factory's system of production. Invisible Man experiences the factory explosion as a "wet blast of black emptiness that was somehow a bath of whiteness" (230). The blast lifts him from the factory's basement floor, but rather than perceiving that he falls back onto the floor, Invisible Man senses a kind of "suspension." He recalls that after this suspension

I seemed to sprawl in an interval of clarity beneath a pile of broken machinery, my head pressed back against a huge wheel, my body splattered with a stinking goo. Somewhere an engine ground in furious futility, grating loudly until a pain shot around the curve of my head and bounced me off into blackness for a distance, only to strike another pain that lobbed me back. And in that clear instant of consciousness I opened my eyes to a blinding flash. (230)

Where before the explosion, Invisible Man was coherently integrated within the apparatus of the paint factory, afterwards Invisible Man finds himself atop an incoherent and nonfunctional heap of goo-spattered components. The explosion completes Invisible Man's radical alienation from a network which produces a material substrate used to maintain the whiteness of government and academic buildings, which maintenance is associated with the maintenance of white racial supremacy.

Unfit for a position in the Liberty Paints factory apparatus, the factory's doctors seek to rehabilitate Invisible Man by means of electricity. Initially, readers are as disoriented as Invisible Man must have been when he first wakes to the fact that he "was sitting in a cold, white rigid chair" with a man "looking at [him] out of a bright third eye that glowed from the center of his forehead" (231). Invisible Man finds himself the object of a disinterested scientific gaze. In Ellison's novel, this detached scientific attitude is reified in the reflector attached to the doctor's head, the "eye" of scientific objectivity, the opening of which will bring about the dissolution of Invisible Man as a subject of capital and begin his reconstitution as an embedded component in the machinery of the hospital.

In the first phase of his reconstitution, Invisible Man finds he has been placed inside "a kind of glass and nickel box" (233). There is "a panel arrayed with coils and dials" (232) which presumably allows the hospital staff to control the electricity running through the box. In what follows, Invisible Man is transformed from a subject recently disconnected from a machinery of production into an organ contained within an electrified rehabilitative apparatus. Invisible Man's disorientation is an extension of his alienation from the machinery of production, and it manifests

itself here as a disconnection from his own body even as it is being subjected to agonizing jolts of electricity. Invisible Man recalls

I raised my eyes, seeing two indefinite young women in white, looking down at me. A third, a desert of heat waves away, sat at a panel arrayed with coils and dials. Where was I? From far below me a barber-chair thumping began and I felt myself rise on the tip of the sound from the floor. A face was now level with mine, looking closely and saying something without meaning. A whirring began that snapped and cracked with static, and suddenly I seemed to be crushed between the floor and ceiling. Two forces tore savagely at my stomach and back. A flash of cold-edged heat enclosed me. I was pounded between crushing electrical pressures; pumped between live electrodes like an accordion between a player's hands. My lungs were compressed like a bellows and each time my breath returned I yelled, punctuating the rhythmical action of the nodes. (232)

Invisible Man's human identity dissolves as he is assimilated by the machine and, in the process, turned into a machine.

For example, there are Invisible Man's yells which "punctuated the rhythmical action of the nodes." Invisible Man's very voice here activates in reaction to the electricity-producing apparatus. This scene is a metonym for Invisible Man's experience in The Brotherhood. That is, after Invisible Man leaves the paint factory he becomes a speech generator plugged into the machinery of The Brotherhood. This situation is anticipated by his rehabilitation in the factory hospital, where he finds that he has become the machinery's "hidden organ." Invisible Man recalls being subjected to "the stabbing pulses of the machine," and at some point hearing "[s]trains of music, a Sunday air, drift[ing] from a distance. [....] The voices droned harmoniously. Was it a radio I heard—a phonograph? The *vox humana* of a hidden organ? If so, what organ and where?" (233-34).<sup>27</sup> The irony here is that where *vox humana* usually refers to the stops used to imitate human voices in a musical instrument called the organ, Invisible Man is the human component of a machine that

produces human sounds. Invisible Man is himself the machine's hidden "organ," and his machinic integration immerses him in a simultaneous field of "voices dron[ing] harmoniously."

Elsewhere, I have remarked upon McLuhan's theories that subjects of print culture apprehend the world visually and in linear succession whereas as subjects of non-print cultures (and oral cultures in particular) apprehend the world aurally and as a simultaneity. In this scene, Invisible Man is disconnected from the strictly visual domain of print and immersed in the simultaneous field of song and music. Invisible Man is removed from the successive linear realm of print culture and reinscribed in the simultaneous field of electric harmonization. He hears "[s]trains of music" and sees "a uniformed military band arrayed decorously in concert" (234). Invisible Man's identity has been so destabilized by his exposure to electricity and his subjectival shift from the linear and successive modalities of print to the simultaneity of music and dance that when the hospital doctors interrogate him about his identity, he cannot recall his own name.

Unable to elicit an answer regarding his name, a factory doctor scribbles on a card "WHAT IS YOUR MOTHER'S NAME?" causing Invisible Man to think

*Mother*, who *was* my mother? Mother, the one who screams when you suffer—but who? This was stupid, you always knew your mother's name. Who was it that screamed? Mother? But the scream came from the machine. A machine my mother? . . . Clearly, I was out of my head. (240)

Invisible Man is not so much out of his head as his head has been made part of a cybernetic being whose boundaries overlap the threshold of his own biological body. Invisible Man focuses on the screams as clues to the identity of his mother, but those screams erupt from his own lungs and have as their motivation surges of electrical current which run between the nodes of a machine. If mother is the "one who screams when you suffer," then Invisible Man's mother is his own cybernetically extended self. Invisible Man is born of a machine that dissolves his former organic identity and integrates him in such a way that he becomes its "hidden organ." The application of electricity to the organism of Invisible Man produces a larger cyborg body from the components of an integrated and networked machinery.

Invisible Man's integration into the machine also destabilizes his status as a person of African descent. The integration of his literate being within an electrified *vox humana* suggests, of course, the use of military instruments such as the trumpet and the trombone by black jazz artists. This electrified harmony which uses Invisible Man's voice to play music also causes Invisible Man to dance. Invisible Man recalls

My teeth chattered. I closed my eyes and bit my lips to smother my screams. Warm blood filled my mouth. Between my lids I saw a circle of hands and faces, dazzling with light. Some were scribbling upon charts.

"Look, he's dancing," someone called.

"No, really?"

An oily face looked in. "They really do have rhythm, don't they? Get hot, boy! Get hot!" it said with a laugh.

And suddenly my bewilderment suspended and I wanted to be angry, murderously angry. But somehow the pulse of current smashing through my body prevented me. Something had been disconnected. (237)

Invisible Man's indignation for being racially stereotyped is a theme repeated throughout the novel. Here, the jerks and spasms of his electrocuted body are interpreted as signs of his ability to dance, that he really does have rhythm. Invisible Man knows, of course, that whatever rhythm he has has been given to him by the power of electricity and that his white auditors mistake his dance as a symptom of blackness when in fact his blackness is electrified performance. Curtin reads this passage in a similar way, arguing that Invisible Man's electroconvulsive performance as "a kind of blackface that prompts his ostensibly disinterested doctors to adapt x-ray film and electric shock therapy together, to induce an 'unmistakable' performance of blackness and then capture it as an interior essential truth" (41). Eric Lott discusses the performative nature of blackness in *Love and Theft* with regard to Frederick Douglass's dissatisfaction with the performance of a blackface troupe. According to Douglass, the troupe's presentation was "not even a tolerable representation of the character of colored people" (qtd in Lott 36). Lott suggests that Douglass's ability to discern

that the troupe's "attempts at [performing blackness] showed them to possess a plentiful lack of it" indicates that "'[b]lackness,' [. . .] is not innate but produced, a cultural construction," and that this cultural construction can be performed. In Invisible Man's case, he dances as if he were black, which is to say that he is acting black. In the instance of his electrically-induced dancing, Invisible Man is involuntarily black, as would be anybody exposed to the same electrical pressures. The scene is one wherein race is the effect of network connections, as is the electrified money grab scene wherein Mr. Colcord nearly becomes black himself.

In the Liberty Paint factory hospital scene, then, Invisible Man's exposure to electricity destabilizes his identity as a black man by connecting his involuntary response to electricity to racial performance while at the same time bolstering that racial identity when he finds himself immersed in the simultaneous field of music as opposed to the successive and linear progression characteristic of print media. In McLuhanian terms, Invisible Man finds himself retribalized through the medium of electricity into the cyborg body of capital, and his interrogation concerning his origins and identity is a lesson in electric literacy.

In addition to destabilizing his status as a subject of print literacy, the scene in the Liberty Paints Factory hospital also establishes electricity as a media interface between organism and machine. It recalls the way in which the electrified rug in the Battle Royal scene connects black men to the representation and flow of capital. Ellison's representation is not so much critique as it is observation, wherein the condition of blackness becomes a transdermal effect, more the product of connection between inorganic and organic systems that determine the subjectivity of networked bodies than the result of the innate essence of those bodies. Admittedly, the novel to a large degree focuses on optical networking. Invisible Man notes that the "invisibility to which I refer occurs because of a peculiar disposition of the eyes of those with whom I come in contact. A matter of the construction of their *inner* eyes, those eyes with which they look through their physical eyes upon reality" (3). However, the invisibility of the medium of electricity suggests that it is as important a medium as light. Indeed, light is the visible portion of the electromagnetic spectrum which in other

circumstances is invisible, just as laboring bodies and their connected machines are the visible aspects of pervasive but invisible capital.

NETWORK OF ONE: HACKING THE GRID FOR FUN AND PROFIT

When Invisible Man "discovered that [he] could contain the electricity—a contradiction, but it works" (27), he is caught in a spectacle of extending capital and he just begins to recognize that its medium of dissemination is electricity. His next encounter with electricity knocks him off the grid of conventional labor and re-places him in the machinery of a rehabilitating apparatus. He becomes the voicebox, the hidden organ, of a cybernetic network at whose controls sit white-clad white nurses and doctors. The parallels to the post-Reconstruction resocialization of blacks under the paternal eye of social science are unmistakable. But this second exposure to electricity does retrain Invisible Man. He learns that his involuntary actions can be read as black. His actions are interpreted by a racist culture as black, and this sets the stage for him to make the discovery that he can, in fact, change his identity by acting and dressing in ways that suit his purpose: he becomes both "rind and heart" (498).

Reverend B. P. Rinehart is a "Spiritual Technologist" who advertises that he can help followers "BEHOLD THE INVISIBLE!" (495). Rinehart and his many avatars are the key to revealing the invisible, which, in the end is still the invisible. To enjoin one to behold the invisible is to encourage one to see nothing at all. Looking at "the polished lenses of the glasses" he wore while mistaken for Rinehart, Invisible Man admits, "I had been trying simply to turn them into a disguise but they had become a political instrument instead; for if Rinehart could use them in his work, no doubt I could use them in mine. It was too simple, and yet they had already opened up a new section of reality for me" (499). Invisible Man understands that "somewhere between Rinehart and invisibility there were great potentialities" for political and social change (510-11). Invisible Man finds that one of the best places to effect such changes is as a machine within the system, as a hacker hooked up to the network.

Invisible Man resists the idea that certain factions of people (the black people of Harlem in particular) should be sacrificed in The Brotherhood's larger struggle for power. When Brother Hambro insists that The Brotherhood "judge[s] through cultivating scientific objectivity," Invisible Man chides Hambro, "Don't kid yourself[. . . ] The only scientific objectivity is a machine" (505). Hambro unconvincingly distinguishes The Brotherhood's approach as "[d]iscipline, not machinery," but Invisible Man has heard enough after having been exposed to the spiritual technology of Rinehart who encourages people to behold the invisible. Once he sees the fact of his own invisibility, Invisible Man recalls

So I'd accept it, I'd explore it, rine and heart. I'd plunge into it with both feet and they'd gag. Oh, but wouldn't they gag[....] I'd overcome them with yeses, undermine them with grins, I'd agree them to death and destruction[....]

That was a risk they had never dreamt of in their philosophy. Nor did they know that they could discipline themselves to destruction, that saying "yes" could destroy them. Oh, I'd yes them, but wouldn't I yes them! I'd yes them till they puked and rolled in it. All they wanted of me was one belch of affirmation and I'd bellow it out loud. Yes! yes! yes! That was all anyone wanted of us, that we should be heard and not seen, and then heard only in on big optimistic chorus of yassuh, yassuh, yassuh! All right, I'd yea, yea, and oui, oui, and si, si and see, see them too; and I'd walk around in their guts with hobnailed boots. Even those super-big shots whom I'd never seen at committee meetings. They wanted a machine? Very well, I'd become supersensitive confirmer of their misconceptions, and just to hold their confidence I'd try to be right part of the time. (508-09)

Invisible Man accepts the rind and heart, the revealing of the invisible (which remains invisible), at the same time he accepts his invisibility. He interprets this position as being on the inside of their system. He would "walk around in their guts with hobnailed boots." By affirming "their" discipline, he would situate himself on the inside of their organs-machines, the interior

spaces of their collective cyborg body. The degradation of his humanity into an automaton, a Sambo doll, would be not be a sacrifice like Brother Tod Clifton's death, but a strategy. Invisible Man understands that the desire to make of him and others like him an obedient "confirmer of [...] misconceptions" is to become "a machine." And so he becomes one. Notwithstanding an earlier assertion that Invisible Man rejects a cyborg subjectivity, Curtin also reads this passage as a moment where "the invisible man dedicates his energy to re-creating his hospital hybridity; this time, though, he becomes a man-machine so that he can penetrate the Brotherhood's opaque mechanisms and sabotage their activities[...]" (57). Here, Curtin's arguments align directly with mine own, which is that Invisible Man has understood that he can use cybernation and hybridization against the system that seeks to subordinate him using the same means.<sup>28</sup>

Having fully embraced his cyborg ontology, Invisible Man leaves the surface world and instead of choosing to give in to the "passion to return into that 'heart of darkness' across the Mason-Dixon line" (579), he chooses to occupy his hole of darkness. That hole, of course, is full of the invisible which, he explains,

is why I fight my battle with Monopolated Light & Power. The deeper reason, I mean: It allows me to feel my vital aliveness. I also fight them for taking so much of my money before I learned to protect myself. In my hole in the basement there are exactly 1,369 lights. I've wired the entire ceiling, every inch of it. And not with fluorescent bulbs, but with the older, more-expensive-to-operate kind, the filament type. An act of sabotage you know. I've already begun to wire the wall. A junk man I know, a man of vision, has supplied me with wire and sockets. Nothing, storm or flood, must get in the way of our need for light and ever more and brighter light. The truth is the light and the light is the truth. When I finish all four walls, then I'll start on the floor. Just how long that will go, I don't know. Yet when you have lived invisible as long as I have you develop a certain ingenuity. I'll solve the problem. And maybe I'll invent a gadget to place my coffee pot on the fire while I lie in bed, and invent a gadget to warm my bed[...] Though invisible, I am in the

great American tradition of tinkers. That makes me kin to Ford, Edison, and

Franklin. Call me, since I have a theory and a concept, a "thinker-tinker." (7) Invisible Man battles the powers-that-be by siphoning energy from the power grid controlled by a utilities monopoly. His act of "sabotage" is an ongoing project of wiring the walls, ceiling, and floor of his hole to fill it with "light," with truth. At the end of this passage, Invisible Man lays claim to a venerable ancestry of American hackers (all of them white), thus completing his third encounter with electricity and effecting the modulation of electricity through incandescent bulbs into light. This modulation is identical to the modulation of other invisible energies, such as the voice, into visible forms, such as print. Though electricity cybernates Invisible Man in a field of simultaneity—"If a sharecropper could attend college by working during summers as a waiter and factory hand or as a musician and then graduate to become a doctor, why couldn't all those things be done at one and the same time?" (509)—Invisible Man is able to "contain the electricity—a contradiction"—and transform it back into print. Invisible Man modulates and demodulates energy from one form to another, changes electricity to light, voice to print, monopolation to radicalization, turns masses into packs. Invisible Man is a modem, and in his room with 1,369 lights (an anagram of the year, 1936, that Ellison moved from Tuskegee to New York) he reminds us that "Who knows but that, on the lower frequencies, I speak for you?" (581).

## CHAPTER THREE

# Recombinant Media Technique in Late Twentieth-Century Popular Culture

#### CYBORGS@HOME

Remediation is a technique among whose effects can be counted not only the deformation and extension of media types (e. g. the incorporation of cinematic effects within a text such as *Gravity's Rainbow*), but also the production of hybridized subjects whose forms straddle the domains of the substantial and the immaterial. I have demonstrated, for example, how remediation works to reshape the subject positions of Tyrone Slothrop in *Gravity's Rainbow* and Invisible Man in *Invisible Man*. In Ellison's *Invisible Man*, remediation is the means by which a human being becomes an organic component of a larger networked body. Invisible Man's remediation is the effect of the circulation of electricity through the machinery of capital and the body of race. Invisible Man is able eventually to manipulate the connection of his body to the body (without organs) of American capital by making himself the first node on an alternate informatic network, one that transduces electricity into speech and speech into print. Invisible Man's transformation from a human being into a networked organ also destabilizes the category of race by causing it to circulate as an effect of electricity. Where the electricity flows so does performative blackness.

The transformation of blackness from a dermal characteristic to a transdermal effect by means of remediation also describes the process by which Tyrone Slothrop becomes partly black. Discombobulated by sodium amytal and asked to think about the blacks of Roxbury, Massachusetts, Slothrop transforms into a linguistically performative black. In American literature, the pervasiveness of the theme of race relations between blacks and whites is due in no small part to the history of slavery in the United States. Undoubtedly, the oppression of blacks under the system of American slavery—itself an extension of early American capital—has had profound and far-reaching social, economic, and historical consequences. With regard to the present study and the cybernation of subjectivity, the history of slavery in the United States has forged a relationship between organism, mechanism, race, and capital such that the treatment of cybernetics often

involves, in some form or another, the representation of blackness. The traces of connection between cybernation and blackness can also be found in what McLuhan called the neurological extensions of man and the rise of what he called the global village, in the dispersion and transduction of Tyrone Slothrop into The Zone, in the cybernation of Invisible Man within the machinery of the Brotherhood, and in Invisible Man's resistance of that cybernation by containing the electricity which courses through him and siphoning the energy flowing through Monopolated Light & Power's power grid.

This is not to say that the realm of the cybernetic is at root a racial domain. It is to acknowledge, however, that cybernation in the United States, as a matter of history, is intimately bound up with race. As I have already discussed, *Invisible Man* is rarely mentioned in discussions of texts that articulate species of cybernetic subject, let alone cybernetic subjectivity as an effect of remediation. It is almost as if Invisible Man's blackness makes him invisible as an cybernetic subject, despite the high visibility (canonically) of the object in which his voice is represented. Ellison's *Invisible Man* is especially important because it articulates a cybernetic subject far earlier than most literary critics recognize, at a time when Norbert Wiener was just articulating the field of cybernetics. Pynchon's *Gravity's Rainbow* also articulates a cybernetic organism—not the least of which is the anti-print organ-machine of the novel itself. However, it must be admitted that these avatars of remediated cybernetic subjectivity are early moments in the mutation of print subjectivity within what I call recombinant media. To date, the most intensive cybernation of subjectivity takes place within non-print media such as film, television, and electronics. These non-print media are the natural domain of science fiction proper.

For this chapter, I have chosen Dwayne McDuffie's and Gregory Wright's *Deathlok* as an example of an object of popular culture which documents significant changes to subjectivity in the shift from print to non-print media. The extensive and intensive cybernation of subjectivity within McDuffie's and Wright's *Deathlok* parallels and extends the transformations to the subject initiated by Pynchon and Ellison. Examined in the limited context of McLuhan's theories concerning media extension, Pynchon's construction of an anti-print organ-machine, and Ellison's exploration of the

relationship between electricity, race, and capital, *Deathlok* can be examined as a significant example of a popular science-fiction text in which subjectivity is deindividuated and reconstituted in the form of networks.

## FEAR OF A BLACK COMIC

In 1990, Marvel Comics published a four-part mini-series starring a character named Deathlok. The 1990 mini-series in question is a revisitation of the "Deathlok the Demolisher" series originally published by Marvel Comics between October 1974 and July 1975<sup>29</sup> One of the writers, Dwayne McDuffie, explains that the new mini-series "sold so well that Greg Wright and I were awarded an ongoing series immediately after" (McDuffie "Script Links"). Published between July 1991 and April 1994, the 1990 mini-series rewrites the original Deathlok narrative by changing the race of Deathlok's organic components. Whereas in the original Deathlok series, Luther Manning, a white, is the primary source for the organic components incorporated into the Deathlok cyborg, in the mini-series, Michael Collins, a black, is the owner of the brain that is implanted into the Deathlok cyborg.

Michael Collins programs artificial limbs for Cybertek Systems Incorporated, the "applied cybernetics" division of Roxxon Oil, a multinational technology conglomerate. Collins is a pacifist, and when he learns that his research is being used to further a cyborg weapons project, he notifies the head of Roxxon, Harlan Ryker. Ryker betrays Collins by tranquilizing him and ordering Cybertek's surgeons to implant Collins's brain inside the very Deathlok cyborg for which Collins's research was being surreptitiously appropriated (mini-series #1, 13-14). The remainder of the mini-series (as well as the 1991-1994 monthly series), traces Collins's attempts to find his original organic body while "trapped" inside the Deathlok cyborg. At the end of the mini-series, Collins must decide between providing evidence against Harlan Ryker for illegally trading arms or remaining silent in exchange for Ryker replacing Collin's brain into its original organic body (mini-series #4, 43-44).

The meshing of organic and machinic elements in the Deathlok 1990 mini-series and the 1991-1994 series could have resembled the stories of any number of conventionalized cyborg narratives if, that is, Deathlok's brain were not the brain of a black man. The introduction of organic components of African descent make the 1990 Deathlok comics an ideal subject texts to study the parallels between cyborg ontology and racial subjectivity. Indeed, readers of the series have expressed appreciation that the new Deathlok series, unlike most mainstream comics, addresses issues of race.

One such reader, Nicolas Demers confesses to being "immediately fascinated. The mind of a pacifist stuck inside a killer machine? Wow, what a concept!" ("Comics Reviews"). Demers further notes that the "series' uniqueness didn't end there, though. You see, Michael Collins was a Black man, and proud of it; I'm pretty sure one of the writers, Dwayne McDuffie, was too. Black people (characters *and* writers) are rare enough in comics, let alone Black people who actually make points about racism and other forms of prejudice." Demers further explains that the two writers of the Deathlok series, Gregory Wright and Dwayne McDuffie, alternated writing responsibilities. According to Demers, the storylines written by McDuffie "were more interesting, original, and made the political points. Those written by Wright were... well, not so interesting[....]"30

This fan points out some of the problems in the racially-biased publication system of mainstream comics. The introduction of race into the plotline of the Deathlok series (as well as the introduction of a pacifist ideology in an action-oriented comic franchise) complicates the plots of the series in ways that most titles published by Marvel Comics are not. Such complexities likely are perceived by comics publishers to adversely affect readership or, more importantly, sales. Presumably, the target demographic for superhero comic books—adolescent, white males—purchase superhero comic books in part because they identify with the superheroes themselves, making racial difference likely to be interpreted (by management) as a barrier to such identification.<sup>31</sup> In addition to the problem of racial difference at the level of story, there is evidence of racial conflict in the professional and creative relationships in comics publishing. In this regard, the new *Deathlok* series is an ideal text because the dynamic between *Deathlok's* black and white

co-writers (respectively, McDuffie and Wright) and the relationship between black artists and the largely white editorial and managing staff at Marvel Comics produces symptoms on the body of the comic itself. Ultimately, the tension of differing racial opinions and perceptions are reflected in the representations and content of the comics themselves. Another place where racial tensions in the comics industry is documented is in a Yahoo email group known as MilestoneComics. This largely anecdotal evidence is worth considering since not only does it reveal the racial opinions and perceptions of people who work in the comics industry but also of Dwayne McDuffie, who cowrote the *Deathlok* series.

From 31 July through 5 August 2002, subscribers to a Yahoo email group named MilestoneComics debated how race affects the comics industry both in terms of representation and employment.<sup>32</sup> The issue of race is raised by Emma Lathan who considers the dearth of black women superheroes, noting that the only one who is "well known is Storm from the X-Men and as long as I can remember except in the dark ages of the 70s and early 80s [...] they have fudged her ethnicity" (post 8125). Someone writing under the screen name jamesastaten2000 recalls several black female superheroes (post 8131), Captain Marvel among them, to which Dwayne McDuffie responds as the writer of a special issue of *Captain Marvel* (post 8133). jamesastaten2000 then notes that if McDuffie "didn't seem to be a pariah at marvel" that Marvel should allow McDuffie to co-write a mini-series featuring the character into whom Captain Marvel had transformed (i.e. Photon; post 8136).

At this point in the exchange, McDuffie explains that it has been ten years since he last worked with Marvel, but speculates "[m]aybe something will come of" the recent "positive talks" he has had with them (post 8137). krstoo2000 expresses outrage over the fact that a writer as accomplished as McDuffie "has to cross his fingers and wait to hear from those mother#%kers [sic]" (post 8144).<sup>33</sup> krstoo2000 feels that Marvel "should be pounding [McDuffie's] door off the hinges," adding that "[t]he way McDuffie and other minorities are marginalized within this industry, while unknown white creators are built up and then treated like gods is sickening."

Two such "unknown white creators" whom krsrtoo2000 mentions are Mark Millar and Brian Michael Bendis, both of whom krstoo2000 believes have no more ability than McDuffie. William Satterwhite (wsatterwhite1), rebuts that Bendis and Millar had both published widely with independent comic publishers before being hired by mainstream publishers, adding "with absolutely no disrespect intended to Dwayne, I don't think it's out of line to say Bendis is a better writer" (post 8148). krstoo2000 responds that while Millar and Bendis may have "worked their way up," Millar is not a better writer than McDuffie and that the original point that Millar and Bendis were relatively unknown prior to Marvel taking notice of them stands (post 8153). krstoo2000's implication is that both Millar and Bendis benefited from being white. krstoo2000 writes

I worked at Diamond<sup>34</sup> for years, [. . .] in the Graphics unit putting together PREVIEWS catalogue[s] and [a] web site featuring EVERY comic to hit the stores, and I still don't recall hearing about those cats. Daniel Way is a perfect example. He's being talked about as the next big thing[. . . .] winning a Xeric Grant legitimizes the big deal they (Marvel & Axel Alonso) is making over him. Another white guy writing a story dealing with an inner city character[. . . .] Is there no non-white creator in the industry that doesn't deserve the kind of push these white guys get? [. . . .] If you think being white has NOTHING to do with winning awards created by whites in the first place, you are sadly mistaken.

krstoo2000's observation is highly impressionistic, based on little more than several arbitrarily-chosen facts, and enables Satterwhite to come back with explanations other than racial preference for why artists of color might be passed over for writing opportunities (e.g. labor surplus; post 8159). The argument between krstoo2000 and Satterwhite is at this point inconclusive, however, in a following post, krstoo2000 challenges Satterwhite to "name 3, 2 or even 1 black indy writer out of the 'million' that any of the mainstream companies (Marvel, DC) has picked up and given the same chance that was given to the white ones (Millar, Bendis, Johns and now Way)" (post 8164).

Danny Donovan (impulse545@aol.com) wonders "isn't the guy that's writing that Marvel Knights team book, black? I thought he made that low budget movie about inner city life or some such," even while he admits, "I can't even remember his name let alone what he looks like" (post 8165).<sup>35</sup> Donovan offers the possibility that a writer for a major comic series is black, but the possibility is nothing more than an illusion, no more substantial than an association between a film about ex-breakdancers living in the projects and a face and name which he cannot remember. Assisted by racial optimism, Donovan's faulty memory transforms a non-black Latino, John Figueroa, into a black American, a transformation which generates the possibility that a black *can* be the writer for a major superhero comic series. As it turns out, this mythical black writer is no more substantial than a full-fledged superhero.

Rather than conjure a myth of the successful mainstream black comics writer, Satterwhite points to "Christopher Priest and Dwayne McDuffie [both of whom] are veterans of the comic book industry," and both of whom are black. Satterwhite tries to reassure krstoo2000 by writing,

I'm not disagreeing with what I think your main point is (that there is a good deal of racism in this industry), I just think you are using some pretty bad arguments. There is no way you can say Priest and McDuffie haven't had a chance to show how good they are, because they have had an opp[o]rtunity and they have proven that they [are] damn good writers. (post 8159)

Satterwhite agrees on the one hand that racism does prevail in the industry, but disagrees with krstoo2000's (admittedly arbitrary) references to instances in which relatively unknown white writers were given highly desirable writing assignments for mainstream monthlies. Satterwhite is basically saying that racism does exist, but not in the way krstoo2000 imagines it.

To Satterwhite's assertion that there is "no way you can say Priest and McDuffie haven't had a chance to show how good they are," McDuffie himself responds

I can say it easily. I've *still* never had a regular assignment from the big 2 [i.e. Marvel and DC]. My only regular writing assignment on a book I didn't create was X-O Manowar, \*ten years\* after entering the business. Last year I asked if I could

do an issue of Justice League Adventures. DC said no. I'm good enough to storyedit the show, I'm not good enough to \*pitch\* the comic book based on it? How about this, in 1988 [McDuffie probably means 1998] I co-wrote Deathlok with my friend Greg Wright, who is white (and who I don't think it's unfair to say was a lesser writer than I was at the time). Based on the success of that book, Greg got 5 regular, monthly assignments. I got...none[...] But let's say you're right. Pr[ie]st and I got our shots. So did Doeselle. That's three people in twenty years. We're the only three people good enough in the past 20 years? Please. I had three guys at Milestone alone who were ready. They didn't get a shot. Who did? Matt Wayne and John Rozum, two excellent writers who are also white. Race remains an issue, especially in writing and editorial positions. (post 8175)

However arbitrary krstoo2000's observations, they are verified by at least one black working within the industry. McDuffie presents a fact: he was not given the same opportunity his white cowriter was given despite the success of the 1990's-era *Deathlok* series. McDuffie's point, as he mentions later (post 8181), is not that whites are given opportunities they do not deserve; McDuffie is more interested in finding out why "certain people don't get chances" at all.

The answer, of course, lies in the minds of those who exert editorial control over comics content and who manage the creative teams of mainstream monthlies. Undoubtedly, hiring practices within the comics industry depend upon what managers and editors think adolescent boys want to read. Given that Marvel's most recognizable character asset is *Spider-Man*, it would make sense that the readership of that comic is the pattern for many other superhero comics franchises.<sup>36</sup> On the eve of the June 2004 release of *Spider-Man* 2, Marvel's editor-in-chief, Joe Quesada, was asked "What if Peter Parker [. . .] had had to deal with the problems of being black in addition to adjusting to his powers when he was first introduced in 1962?" Quesada acknowledges "[c]ertainly, he would have had to had dealt with a different set of problems," but his feeling about whether a black Spider-Man would have been as well-loved as a white Spider-Man is unclear (Robinson). Quesada speculates

I would venture to say that maybe 99 percent of our readers were white maybe[....] you have a question of whether the consumer would have been ready to accept the character. Would they have been as receptive to Spider-Man if he had been drawn black? I don't know. Given what I know about the times, perhaps not. One of the beautifully universal things about Spider-Man is that the character wears a full mask. Anyone could be under that costume. (Robinson)

Quesada's remarks are incoherent because, like objections to krstoo2000's observations about racial bias in comics industry hiring, they are based on an impossible object. In this case, the object of desire is a subject who has no racial position, one who would read *Spider-Man* without any reaction to Spider-Man's racial identity. Essentially, such a subject is presumed not to know about race. With such a subject in mind (or not in mind, as the case may be), Quesada can speak about Spider-Man's "universal" appeal since "[a]nyone could be under that costume." But Quesada makes very clear that in 1962 such a subject was not likely to be found among Marvel's readership since "maybe 99 percent of [Marvel's] readers were white," readers who might not have been as receptive of Spider-Man if he had been black, despite that Spider-Man's costume covers his entire body. On the other hand, somewhere among the other one percent of Marvel's hypothetical 1962 readership, there are black readers who accept *Spider-Man* despite that Peter Parker is white. Whiteness for such readers is a transcendental signifier, one that does not disrupt the pleasures of identification. If readers can identify with comic book characters across race, they are likely to do so only moving in the direction of hegemony. When Quesada says, "[a]nyone could be under that costume," he is right, as long as that anyone is white.

The impossible object around which the discussion over the MilestoneComics email group revolves is a racially unbiased comics industry. This impossible industry is what underwrites Satterwhite's reply to krstoo2000. On the one hand Satterwhite is "not disagreeing" with krstoo2000's "main point [that] is there is a good deal of racism in [the comics] industry," but on the other (and there are many others), Satterwhite believes krstoo2000 is "using some pretty bad arguments" (post 8159). Satterwhite objects to each and every one of krstoo2000's examples of

racism in the comics industry (and the culture at large), even though Satterwhite claims to agree that racism does exist in the comics industry. Racism is everywhere and nowhere. The comics industry is racist but empirical evidence of racism cannot be obtained because Satterwhite is in fact talking about a different industry. When krstoo2000 submits that "[t]he title of Cornell West's book says it all 'Race Matters,' "Satterwhite can respond, "Again, I don't disagree. I just think it would be more worthwhile looking at the real issues and the real cases of racism instead of grasping for straws for where very likely are none."

What is known about the comics industry, and Marvel in particular, is that race is a very important factor when considering how a character will be received and, more importantly, what kinds of characters will be developed. One might also infer that storylines are accepted and rejected with some consideration of how representations of race will be received by a magazine's core readership and whether such representations will increase (or diminish) a book's buying audience. Such things had to be in the minds of the editors of the 1990's *Deathlok* series and their decision to alternate the writing responsibilities between McDuffie and Wright, the former addressing race in his story arcs and the latter writing more closely to the "standard Marvel superhero comic" (Foster 142).

This split in writing styles is what fan Nicolas Demers addresses (also mentioned above) in his analysis of the intermittent appearance of racial themes in the *Deathlok* series. Demers's enjoyment of McDuffie's treatment of race distinguishes Demers from the 1960's-era comics reader Joe Quesada imagines was the core audience for *Spider-Man*. Demers, a white Canadian, enjoys reading stories which deal with blackness.<sup>37</sup> In general, fan letters published in the *Deathlok* comic only occasionally addressed race, and when they did, they did so to applaud the writers for avoiding the "strange contractions, street slang, hand slapping and retro-disco costumes" (*Deathlok* 11) which characterize racial stereotypes.

A second category of fan letter address the other aspect in which *Deathlok* is an atypical comic superhero: he does not kill. Through *Deathlok's* three-year run, fans debated whether Deathlok's "no-killing" parameter should be rescinded.<sup>38</sup> In defense of Deathlok's pacifism (if one can call

fighting people without killing them pacifism) one reader writes, "what's the big deal about Deathlok not killing anyone? I mean, nobody complains when ol' Spidey knocks off some evildoers without putting them six feet under" (*Deathlok* 13).

Thomas Foster discusses the unconventionality of Deathlok as a superhero with regard to Deathlok's race and Deathlok's pacifism. In the first respect, Foster believes that the eventual move away from racial themes and toward standard superhero plotlines destroyed the readership of the comic. Foster explains that once McDuffie stopped writing *Deathlok* after issue 16, the series turned to the history of Deathlok's

previous incarnations by introducing a hideously complicated plot involving alternate timelines. This plot seems designed to appeal mainly to readers who knew the prior history of the comic book character rather than to readers interested in racial issues. As a result, the comic lost its audience and was cancelled after issue 34, ending an almost three-year run. (142)

What Foster conjures here is a readership from the mid-1970's (the era of the original *Deathlok the Demolisher* series) as imagined by the writers of the current series. This is the readership Foster argues the management was pitching. To his mind, this readership is distinct from "readers interested in racial issues." Foster makes the same assumptions about readership that Marvel's editorial board makes except in reverse: as a result of the new Deathlok series no longer addressing racial themes, "the comic lost its audience." Foster's explanation for the cancellation of the *Deathlok* series depends upon an impossible audience, one that cares neither one way nor the other about Deathlok's origins and who are primarily interested in racial issues. For comic fans, a character's prior history is important to understanding both the complexities of the current plot as well as determining the value of comics as fetishized commodity objects.

The second respect in which Foster addresses Deathlok's unconventional superheroism is Collins's pacifism. Foster argues that "this new version of *Deathlok* is clearly designed to intervene in the film genre of violent cyborg action heroes, like the Terminator, as well as to rewrite the racial implication of cyborg narratives" (142). Foster argues that because blackface

performances did not require one "to occupy a black body in order to be perceived by others as producing a culturally intelligible performance of 'blackness,' "African-American culture might be understood as prefiguring the concerns of virtual systems theory" (141). The points where Foster finds the convergence of race and cybernetics are: 1) Collins's forced habitation of Deathlok's body as an allegory of slavery (148); 2) Collins's original body which symbolizes "an originary state of physical and cultural integrity" that is interrupted by a corporeal "diaspora" (150); 3) the dilemma Deathlok experiences as an embodied cyborg which parallels the dilemma experienced by minority subjects when faced with the "promise of a new body held out by the democratic public sphere" (155); and 4) the multiplication of identities in cyberspace which should be "understood in relation to the historical situation of African-Americans and their modes of social existence" (161).

Rather than reading Deathlok allegorically, I will emphasize the ways in which Deathlok as an object in fact embodies the racial tensions of the culture that has produced him, reading him metonymically. In particular, the pressures which give editors pause with respect to treatments of race produce symptoms in the media body of *Deathlok*, one of those symptoms being the occultation of race by cybernetics. In other words, where Foster finds allegories, symbols, and parallels, I read the content of the Deathlok series partially as a materialization of the conflict between the creative and managerial teams at Marvel as well as a product of the fusing of human and machinic parts to produce a cyborg. Regarding race, I argue that Deathlok's embodiment—similar to the way Invisible Man's disembodiment transforms race from a dermal to a transdermal effect—transforms race from a dermal category to an endodermal category by locating Deathlok's blackness within the cyborg's brain. Race, in the *Deathlok* series, moves from the surface of the skin to the interior of the brain. What is most often construed as a matter of biological fact, race, is here dematerialized inside the depths of Collins's brain. In *Invisible Man*, we saw that race became a transdermal effect due to the influence of electricity. In the case of Deathlok, race moves so deep inside the (cyborg) body that it effectively can no longer be reached.

Deathlok is a post-human and post-racial embodiment of the coded flows deployed in and

through the network of editors, writers, pencilers, inkers, publishers, and readers which produce and are produced by the cyborg entity known as "Deathlok," an ensemble which at once obscures and liberates the significance of race by cybernating a black man's brain in an electro-mechanical body. Finally, the cybernetic organism embodied by components from several disparate ontological orders (print, human, popular culture, mechanical, etc.) demands an unconventional mode of apprehension, one not readily available to commentators such as Foster, nor even to Deathlok's putative creators. This shortcoming of perception is reflected in the representation of multiplicity and the singularity of subjectivity in the story arc "The Souls of Cyber-Folk," a shortcoming I hope to offset by analyzing the story and constitution of *Deathlok* as a network subjectivity which propagates by means of remediation.

Infant Identification and the Myth of the Mirror Stage: Deathlok's Machine/Brain Interface

The 4-issue mini-series which begins Deathlok's new series does not broach race as an issue,
despite that Michael Collins's brain is placed inside the Deathlok cyborg in issue 1. Neither does
the first book of the monthly series address race. These installments deal primarily with problems
of ontology and the representation of networks as individuals. Not until the monthly number 2,
when McDuffie gets full control as a writer, is race explicitly addressed. The outset of the new

Deathlok series, as well all the new series' preliminary material, subordinate racial issues to
cybernetic themes and corporate intrigue. In the early issues where Wright and McDuffie share
writing responsibilities, the topic of race remains unaddressed. In the same way that Collins's brain
is placed within the body of Deathlok and the visible aspects of his race are obscured, so too does
McDuffie's tendency to address racial themes recede when he becomes one component of a biracial co-authorship. When McDuffie writes with a white writer, the racial concern of his writing
fades when McDuffie assumes greater control over authorship, as he does with Deathlok monthly
number 2, race becomes a central topic.

One of the central issues of the new *Deathlok* series is Collins's alienation from the cyborg body in which his brain housed. Collins is a pacifist and is horrified when he realizes his brain has been placed inside a cybernetic weapons system. Foster connects Collins's "process of coming to embody all Collins despises" with "the larger process of assimilating into white society" (144). However, Collins's process of becoming a cyborg is not only alienating. It is also to some degree familiar and empowering, just as the process of assimilation does not only make him a subject isolated from others like himself but also seems to have left Collins a well-adjusted and highly connected individual. To better understand the nature of racial assimilation and organic cybernation as well as their relationship to each other as figured in *Deathlok*, it will be useful to look carefully at the moment when Collins becomes conscious of his integration into a cybernetic weapon.

Collins now finds himself an integral part of a killing machine. Given that he was formerly a pacifist and programmer of prosthetic devices, Collins understandably has become an object of his own loathing. Collins psychologically rejects the transformation to which he has been subjected in a tableau that combines elements of television and electronic media. However, rather than inducing spectatorial or interactive pleasure in Collins, the vision that greets Collins once he regains consciousness alienates him from the cyborg body his brain inhabits.

In the first issue of the mini-series, Deathlok is sent to the (fictional) South-American country Estrella to destroy organized resistance to the building of a dam. Collins regains consciousness in the middle of Deathlok's killing spree over a series of three panels (*Deathlok* mini-series 19-20). In the first panel, a yellow narrative box discloses a "pop" emanata to signify that Collins is coming to.<sup>39</sup> The second panel, contains three narrative boxes: two green ones which represent chatter from Deathlok's onboard computer, and another yellow one which discloses Collins's thinking "UHHN!" In the third panel of Collins's awakening, inside a narrative box, Collins realizes "Harlan shot me!" In later panels, Collins overhears the onboard computer's chatter and responds, "This is Michael Collins. Who's talking? I can't see you!" A moment later Collins realizes he can see and that "It's *me*! I'm shooting people! *I'm* responsible for this. I've got to stop it but I *can't*!"

(21). Collins tries to deny what is plain to his eyes, thinking "No. It *can't* be true . . . Somehow I'm *inside* of Deathlok!"

During this short passage, Collins is radically alienated from the body in which his brain is encased. While he does not have an opportunity to see his own specular image, Collins did see Deathlok when he earlier accessed restricted video files regarding the Deathlok project. The memory of this image could do nothing to anneal the gaps in Collins's fragmented sensorium, given Collins's principled opposition to weapons development such as the Deathlok project. Yet, Collins unwitting involvement in developing the technology that was used to produce Deathlok is characteristic of intellectual labor in a corporate environment. Corporate engineers usually work on small portions of a larger project, often unaware of how their work ultimately contributes to the whole. Collins's objection to the products of his labor (a coded flow) being used to engineer a cybernetic weapons system is based on his failure to understand that his "brain" already belongs to Cybertek Systems Incorporated, itself a division of Roxxon Oil. Even before Collins's brain was placed within the cyborg Deathlok, his intellectual productivity was owned by the ensemble known as Cybertek Systems. Collins has all along been an human element in a much larger cybernetic entity, only he finally noticed it once his brain was literally removed from his body and placed inside a machine. The fact that Collins's cybernation occurred before his interface with Deathlok forces a re-reading of the implantation of Collins's brain into Deathlok as a second cybernation/assimilation.

As mentioned earlier, Collins understandably *feels* alienated from the body his brain has been forced to inhabit. But the elements of interactive electronic media integrated into the narrative suggest that Collins is more at home in Deathlok's than he realizes. The fact that Collins's brain can interpret the optical input received by Deathlok suggests that on a basic electro-neurological level Collins and Deathlok are compatible. Furthermore, Collins's thought-speech and the computer's chatter are mutually intelligible by Deathlok's onboard computer and Collins's brain. Even though he has just regained consciousness after a brain transplant, Collins perceives the computer's tactical scans, decision trees, and error logs as speech. Within moments of regaining

consciousness, Collins wonders "Who's talking?" (mini-series issue 1, 20). The comic makes plain the connection between Collins's brain and Deathlok's onboard computer by mediating Collins's thoughts and the computer's interactive menus, data files, and processed signals inside narrative text boxes, rather than mediating, for example, Collins's thoughts in thought balloons. The comic makes visually plain that Collins's brain and Deathlok's computer communicate in fundamentally similar ways. Given that before his brain was placed inside Deathlok Collins was a programmer (of the very limbs attached to the body his brain now occupies), it is perhaps not surprising that Collins literally thinks like a computer. In other words, if Foster is correct that Collins's forced habitation of Deathlok is an allegory of slavery, it is also true that Collins is more comfortable with being a slave than either he or Foster realizes. Reading Deathlok metonymically, I would argue that the implantation of Collins's brain merely literalizes what was true about Collins in the first place: that he was a part of the company for which he worked. Furthermore, the containership of Collins's brain is irrelevant in the context of a networked ensemble such as Cybertek. Collins no more owned his brain than he owned himself while connected to Cybertek. Slavery, in such a reading, is one (extreme and dehumanizing) form of the reterritorialization of organs-machines. Corporate employment is another.

Collins's encapsulation inside Deathlok also has psychoanalytic dimensions. <sup>40</sup> Not only is Deathlok's existence an affront to Collins's political sensibilities, but when Collins becomes conscious of the fact that his brain is inside Deathlok, he literally cannot move though he can see everything Deathlok does. Collins has undergone motor-sensory regression. In Lacan's myth of mirror stage, an infant progresses from possessing vision acute enough to recognize his or her specular image to gaining greater control over his or her limbs (partly enabled by apprehension of the specular image). In a reversal of this developmental myth, Collins is instantly transformed from a motor-coordinated human being to one who can only see, albeit this with perfect clarity. This cybernetic infantilization prepares Collins to gain control of Deathlok's body at the precise moment Deathlok is faced with the image (and presence) of a child who is all that remains of the Estrellan village occupied by the resistance.

Deathlok's computer notes "Lifeform now armed and hostile," and offers a menu of options with "FULL ASSAULT" as a recommended course of action (mini-series 1, 24). Collins objects, "No! You can't!" and the computer halts Deathlok's attack. The intensity with which the cybernetically infantilized Collins identifies with the young girl, who also cannot fully control her circumstances, causes Collins to issue an order which the computer apprehends and follows. Collins perhaps recognizes his own helplessness in the young girl, and this recognition combined with his wish to protect the innocent enables him to use his programming skill to prevent Deathlok's onboard computer from killing the girl. Collins's psychological identification with the image of a child whose helplessness in some respects reflects his own integrates Collins's vision and Deathlok's motor skills. Collin's fragmented cybernetic embodiment is unified by the visual stimulus of a young child, presenting a cybernetic rewriting of Lacan's myth of specular identification.

RESIDUAL BODY IMAGE AND BLACKNESS AS MONSTROSITY: RACE, CORPORATIONS, AND MACHINES IN MCDUFFIE'S AND WRIGHT'S DEATHLOK

Given that Collins's brain is inside Deathlok, the representation of both the perceptual system of the Deathlok cyborg and its interiority presents a problem. Both Collins's brain and Deathlok's onboard computer have separate apparatuses for interpreting sensory and informational inputs and because of this Deathlok's perception is a combination of these two systems which under other circumstances would be capable of acting independently. With regard to Deathlok's interirority, the Deathlok creators use the comic medium to present a landscape that visually and textually represents the combined perceptions of Collins's brain and Deathlok's computer. This landscape is a near third-person perspective of the image of Collins's organic body inside a stylized electronic landscape, replete with skyscraperesque blocks of circuitry, gargantuan braided wires, and floating alphanumeric symbols. The first time readers see this landscape is when Deathlok has completed its mission to exterminate the Estrellan resistance and has returned to Cybertek's main lab in Paterson, New Jersey.

Ryker is concerned something is amiss with Deathlok because of the computer's "countermand[ed] order" to kill the young Estrellan girl (mini-series #1, 24-25). Cybertek's engineering team hypothesizes that Collins's brain, like Colonel John Kelly's before, is "overriding the computer" (25). Uring this conversation, the Deathlok unit is connected to a docking apparatus. Apparently unable to see through Deathlok's eyes, Collins asks the computer "Why can't we move?" and the computer tells him that "[m]otor functions have been shut down externally" (25). Collins then asks the computer to "open access to main operating system" and the computer complies with "Access granted." The panel in which Collins gains access to the "main operating system" is illustrated with a vertical bar of circuits over which hovers Deathlok's prosthetic eye.

To break the control Collins's brain has established over Deathlok, one engineer suggests "bit-map[ping] Michael's memory — and dump[ing] it from the brain" (26; emphases removed). As soon as this suggestion is made, Deathlok's computer has completed a "new operating system" such that "[a]ccess to all functions [are] open to programmer: 'Michael Collins' " (27). The four panels which illustrate this process progress from 1) a headshot of Deathlok, to 2) a closeup of Deathlok's prosthetic eye, to 3) an extreme closeup of Deathlok's eye with a headshot of Michael Collins in the pupil of Deathlok's prosthetic eye, to 4) a picture of Michael Collins suspended in a network of wires which penetrate his arms and legs (27).

What these panels make clear is that cybernetic control (over Deathlok) is closely linked to the interpretation of data as visual signals. The functioning of visual organs of perception are bound up with control over the body of the network entity Deathlok. While Deathlok is docked, Collins's brain no longer has access to Deathlok's eyes. In this scene, the comic depicts a plane of perception located within a cybernetic domain. Normally, this domain is invisible, and it is on this plane of perception (which can be interpreted visually) where control over Deathlok will be determined. This cybernetic domain, visible to Collins insofar as Collins's brain interprets the data from this domain as visual signals, is *part* of Deathlok's body. This invisible cybernetic space is to some degree a staging ground for transformations to Deathlok's bodily and communicational abilities.

Like the body without organs, Deathlok's body (de)forms by attaching to itself external organsmachines and Deathlok's internal cybernetic control space is where this miraculation begins.

Deathlok's body is a network entity, and changes in an invisible and intangible cybernetic domain
affect the form of its physical components. The invisibility of the cybernetic domain, however, is
conditional since Collins's brain, for example, can apprehend it visually.

This conditional visibility signals a tension between competing media. Much of the power of non-visual systems of representation (such as digitally encoded data) is their ability to abstract information into a manipulable form. However, the amounts of data which move through even the simplest of computer systems are often too massive for humans to understand without computational assistance. In biology, physics, and architecture, solutions to interpreting such data involves visualizing them as two-dimensional graphs and, increasingly, discrete mathematical volumes or spaces, visual techniques which are collectively referred to as virtual reality.

Computer scientist Jaron Lanier, who coined the term "virtual reality," has said

I might hope that Virtual Reality will provide an experience of comfort with multiple realities for a lot of people in western civilization, an experience which is otherwise rejected. Most societies on earth have some method by which people experience life through radically different realities at different times, through ritual, through different things. Western civilization has tended to reject them but, because it's a gadget, I do not think that Virtual Reality will be rejected. ("A Vintage Virtual Reality Interview")

For Lanier, virtual reality is a way of experiencing "multiple realities" which "Western civilization" has "otherwise rejected," and he believes other cultures experience similar modes of experience "through ritual." It is not coincidental that Lanier's hopes for VR are reminiscent of McLuhan's assessment of the effect of electric media on Western typographic culture. The tension between Western alphabetic modalities, which abstract data into a visual symbols, and the visual apprehension of the physical world is reproduced in the interpretation of massive sets of electronic data versus the interpretation of those data as visible objects. In other words, the power that

abstraction affords non-visual representation is offset when there are too many data to abstract. When data are too numerous to interpret readily, those data can often be more easily interpreted by visualizing them, by remediating the data. This strategy is evident in the panels wherein Collins gains full access to Deathlok's new operating system.

That is, the invisibility of this cybernetic domain is presumably a cybernetic domain in which data pertaining to Deathlok's operational systems is abstracted, but this cybernetic space presents itself to Collins as a three-dimensional space. By virtue of his connection to Deathlok's onboard computer, Collins is able to behold the invisible, but not just Collins. Readers, too, are able to behold this invisible, interior space of Deathlok's organless body, and what they see is Michael Collins's black body suspended in a network of wires from which he breaks free. In this landscape, Collins wanders through gigantic snaking wires, mammoth electronic outcroppings, and silo-sized vacuum tubes as a naked man. But the close third-person perspective which readers are given is not the perspective Collins would have. The perspective rendered in these panels is that of a nearby observer, in this case the reader. While this may be true of virtually all the panels, the visually communicated thematic emphases on seeing, invisibility, and eyes suggest that the readerly act of seeing what is on these pages is equivalent to Collins's act of determination over Deathlok's body. More subtly, readers are reterritorialized as part of Deathlok's organless body. In these panels, the fourth wall brings readers into the cybernetic space which serves as an interface between Collins's brain and Deathlok's onboard computer. It is also crucial to note that Collins is represented in these panels in the form of his corporeal body, the body of a naked black man. The visual representation of Collins as an integrated human being brings up at least two questions the answers to which can only be the subject of speculation: 1) whether the image is merely a surface or a volume with articulated tissue, organs, and (significantly) a brain; 2) if Collins's residual image so persistently includes the parts of his body which are in fact missing (arms, legs, cranium, etc.), is Collins still Collins without them?

At the end of this scene, Collins's virtual body hovers above what appear to be vacuum tubes, his arms and legs connected by filaments to a network which extends to the edges of the panel, a

clear visual representation of the rhizomatic network in which Collins enmeshes himself in order to gain motor control over the Deathlok unit (mini-series #1, 27). Collins asks, "Computer, how long before I can move?" to which the computer answers "Full moter [sic] functions restored." The next panel, a zoom-view of the panel on which it lays, is a close up of Deathlok's blue organic eye (28). The panel underneath occupies two-thirds of the page, and pictures the Deathlok unit breaking free of its docking restraints, thus articulating a final and paradoxical result with respect to the relationship between the physical world and the cybernetic space that Collins and Deathlok's onboard computer use as an interface.

As Collins finds himself increasingly enmeshed with Deathlok and its integrated and connected systems, Deathlok's physical body breaks free of the restraints which keeps it immobilized. Collins's decision to make use of the full access he has been granted to Deathlok's new operating system results in the cyborg's literal release from the bondage into which the operatives of Cybertek have placed him. Such a reading complicates the notion that Collins's habitation of Deathlok's body is an allegory of slavery. While it is undeniable Collins's relationship to Cybertek as a cognitive component of Cybertek is reified in his forced occupation of Deathlok's body, and it is also true that Deathlok's posture while docked visually suggests crucifixion (Foster makes a case for lynching as well), Collins's embrace of his location inside the Deathlok unit—his full acceptance of his new cyborg ontology—is more akin to the subversive appropriation of network resources than enslavement. Collins uses his unique position within the system to take control of an important component of the Cybertek network, and Collins's success in this subversive appropriation depends upon his decision to integrate what remains of his organic self into a machinic network entity.

The visual representation of Collins's entire body suggests that the aggregate entity Deathlok has incorporated the entirety of a black man by merely containing that black man's brain. Collins's residual body image suggests his blackness does not depend on his skin, eyes, hair, tissue, organs, or even his behavior, but is found deep inside the structures of consciousness which have been transplanted wholesale into the Deathlok cyborg. In this way, the storyline of Marvel's 1990's

Deathlok at once addresses and obscures race and the issue of race, and it does so in the intersection of corporate ownership, capitalist subjectivity, racial identity, and ontological hybridity. Of course, given the concerns of McDuffie as a writer, the occultation of blackness by cyborg ontology is incomplete, producing a complicated articulation between the racial assimilation of subjects as minorities and the integration of humans and machines within an hybrid organism. McDuffie's first solo story-arc for the Deathlok monthly, "The Souls of Cyber-Folk," explores this relationship between racial assimilation and organic-machinic integration, and it is to this storyarc I now direct my attention.

"LIKE, MAYHAP, IN HEART AND LIFE AND LONGING": RACIAL ASSIMILATION, CYBERNETIC INTEGRATION, AND NON-ORGANIC LIFE

As a black man, Michael Collins was remarkably well-adjusted. Once he becomes (a part of) Deathlok, however, he finds himself radically alienated from his former self both in terms of being black and being human. He confesses to Misty Knight, a black woman with mechanical parts, that his father made him read DuBois's *The Souls of Blackfolk* "a half dozen times when [he] was a boy" (*Deathlok* monthly 2, 13), but only as a cyborg does he understand the meaning of the words:

It is a peculiar sensation this double consciousness, this sense of always looking at one's self through the eyes of others, of measuring one's soul by the tape of a world that looks on in amused contempt and pity. One ever feels his twoness . . . two souls, two unreconciled strivings, two warring ideals in one dark body, whose dogged strength alone keeps it from being torn asunder" (qtd in *Deathlok* monthly 2, 13; original ellipses)

As a human, Collins lived a comfortable life as an assimilated black. He was "[t]he only black at work," "[o]ne of only two families in [his] neighborhood" (13). Outside the occasional cutting little reminder," Collins was "pretty comfortable" as a black man living in a mostly white world. As a cyborg Collins feels disillusioned about his former life as an assimilated black. In other words, Collins's cyborg subjectivity makes Collins feel he was more black *after the fact*, even though he is

no longer obviously black nor ontologically human. Once Collins has assumed the cyborg identity of Deathlok, his former subjectivity is retroactively reconstituted, his present subjectivity sutured to the fact he once was an assimilated black. Collins's present self takes its shape from how he believes his present self is defined by his former self.

This is the very *aprés coup* logic Lacan identifies in the structure of signification (*Écrits* 303).<sup>42</sup> In this light, Collins's identification as a cyborg and his assimilated blackness are linked by a chain of signification, the last element in the chain (cyborg ontology) crossing an ontological boundary to define the direction of the first element (African-American man living an illusion of assimilation). In this instance, the connection Collins forges between assimilated blackness and cyborg ontology means not only can cyborgs be compared to minority groups, but also that his assimilated blackness had always been a kind of virtual reality.

Knight's own alienation is similarly complicated. Friends "accuse [her] of being more comfortable with mutants and cyborgs" than with her "own people." (12). Presumably, those who accuse Knight of more closely identifying with cyborgs and mutants than with humans believe Knight to be more human than machine. According to such a view, a prosthetic arm does not make Knight a full-fledged cyborg. For these accusers, Knight's identification with something she herself is not is a kind of betrayal. But Knight expresses doubt that such people, or any people, are "her people." The degree to which Knight does identify with cyborgs more than with humans suggests that her subjectivity does not depend on which components constitute her body as much as the sense of otherness which cyborgs have in common with blacks who possess double consciousness. When Collins quotes DuBois's words to Knight, she finds in them a perfect expression of her own feeling that she is "trapped between two worlds. At least two" (12).

DuBois's description of black subjectivity in terms of a split makes sense as a metaphor for cyborg subjectivity in Deathlok's case. His appearance is alarming given his head is a decaying human cranium half-framed by adamantium, his arms and legs are jointed metal appendages, and his torso a painted metal carapace. As a result, Deathlok's appearance does not allow him to easily "pass" for human, something Misty Knight can do. Deathlok's appearance causes people to

react in horror, most notably his family. When Deathlok eludes Cybertek's initial attempts to regain control of it (mini-series 1), Collins seeks out his wife, Tracy, because "[s]he'll know what to do" (36). Wearing a trenchcoat and a hat, Deathlok rings the doorbell and greets Tracy by name after she opens the door. Tracy asks how he knows her name, and Deathlok replies, "Because I'm your husband. It's me . . . Michael" (38). Upon seeing Deathlok's hands and face, Tracy screams "NO! You're some kind of *monster*" (39), after which Deathlok flees.

Like DuBois's veil, Deathlok's horrific appearance forces him to see himself "through the eyes of others" (DuBois 3). Deathlok may resemble humans "in heart and life and longing, but [he is] shut out from their world by a vast veil," by the cyborg body which at once enhances his perceptions and alienates him from his former human self. While it would be easy to read Collins as a man trapped inside a monstrous body, Deathlok's split subjectivity is actually a product of its cyborg ontology. Once Collin's brain becomes conscious inside the Deathlok cyborg, Deathlok attains a double-consciousness, one that contains aspects of a black human and a machine.

Considered metonymically, the *Deathlok* comic series and its illustrated frames (among other things) are the cyborg Deathlok. The panels provide a secondary media interface to the primary spatial interface through which Collins's brain and Deathlok's computer interact. In these spaces (as mentioned above), the spatial interface represents Collins as a nude black body. Deathlok's cyborg subjectivity, then, is a body without organs that brings together the disjunctive syntheses humanlmachine, humanlmonster, brainlbody, brainlcomputer, blacklwhite, and printlelectronics.

After Tracy's reaction, Deathlok decides to destroy himself, thinking, "I'm not a man. I'm a monster. My own wife thinks so. No. I'm *worse* than a monster. I'm a weapon. I'm the walking embodiment of everything I despise" (40). Foster associates "this process of coming to embody" the very thing Collins despises with "the larger process of assimilating into white society" (144). Thus, Collins's hatred of his murderous cyborg ontology is also a hatred of himself when he assimilates into a white social structure. This association reveals the conjunctive syntheses blackleyborg and whitelhuman. Foster argues that the comic's humanist rhetoric which privileges the "organic body as the site of Deathlok's humanity" is "undermined by the narrative's

demonstration that returning to organic form is neither possible nor even desirable" (155). Foster further notes that Deathlok rejects assimilation into the realm of the human "as a privilege bought only at the price of accommodating a white norm" (156). In this sense, the domain of the technological offers a subject position outside a humanist rhetoric which takes as its nonpareil white masculinity. For a black man whose brain has been arrogated to the rhizomatic body of a cybernetic entity, cyborg double-consciousness offers an opportunity for subjectival redefinition, something Collins recognizes only after approaching the brink of suicide.

About to shoot Deathlok's head, Collins recognizes that destroying the organic portion of Deathlok's cranium would only enable Cybertek to recover Deathlok's machinic components and implant a new brain. So, Collins decides to overload Deathlok's circuitry with electricity, but before doing so, he dials-in via modem to his son's personal computer. There he intervenes in his son Nick's game of "Heroquest," a role-playing game which only allows interactants to kill each other. As a network entity, Deathlok tells Nick that in the quest for a hero he has "to do what's *right*, boy. Not what's easiest" (mini-series 1, 44). Agreeing to "learn how to be a hero," Nick shuts off "Heroquest" and prepares for bed (45). Deathlok jacks out and his onboard computer asks whether to "[c]ontinue with cybernetics systems overload?" Deathlok replies, "I don't think so" (46).

Deathlok's intervention in Nick's game of "Heroquest" is possible because Deathlok is cybernetically able to interface with the computer running the game. This extension of cybernetic control enables Deathlok to continue the lesson Collins began when he was human, a lesson about how "being a hero isn't about *looking* tough" and carrying a big gun, but "about making tough *choices*" (mini-series 1, 4). Ironically, Deathlok, who imparts the message about making "tough choices" and not "looking tough," has quite an intimidating appearance. Furthermore, Deathlok not only carries a gun; he is a weapon incarnate. The subject position from which Deathlok imparts this lesson of "tough choices" is split between heroism and weaponism. Either Deathlok is a hero who makes tough choices, or he is a weapon that looks tough and has a big gun. Either he is a human trapped inside a machinic body, or he is a monster with a human brain.

The structure described by DuBois's concept of double-consciousness, of a radically split subjectivity that apprehends itself from an interior point of view and an internalized exterior point of view, is precisely the structure of racial and ontological subjectivity articulated in the Deathlok narrative. However, two things remain to be explained regarding the implications of this racialized narrative of cyborg identity for the interaction of media and the reformulation of subjectivity.

First, as a cyborg and a pacifist, Deathlok will have to make some tough choices about how to deal with machinic lifeforms who are lethally violent. In the following sections, I argue that the Deathlok narrative cannot apply its pacifist ideology consistently because that ideology directly conflicts with the humanist rhetoric which privileges the organic above the mechanical. Because of this, assimilation is the unacknowledged object of desire and difference is merely tolerated.

The second aspect which must be addressed is the tension between those readers who are concerned about racial issues and those who are reading the new *Deathlok* series while fondly recalling the original Deathlok. I will address this concern in the concluding section to this chapter,

## A New Kind of Pacifism: Killing Machines and Fascistic Reasoning

The primary antagonist in "The Souls of Cyber-Folk" story-arc is an AI named Mechadoom. Mechadoom began as one of a legion of robot simulacra patterned after the monarch Doctor Victor Von Doom. 44 Mechadoom was reprogrammed by a usurper, Kristoff, who abandoned him before Mechadoom's reconstruction was complete. Mechadoom explains to Deathlok that he "took the initiative to complete [his] construction, in a manner that [he] hoped would please [his] absent father," but when his father failed to return he "came to realize that [he] no longer wished to please [his] father at all!" (monthly 4, 20; emphases removed). Though Mechadoom has successfully rebelled against his father, he realizes he is "only a *machine*" who is neither truly alive nor truly capable of thought. Mechadoom tells Deathlok, "I merely follow my programming. Even the illusion of free will that I currently enjoy will end the moment I lay eyes on my father. The truth of his existence renders my own a lie" (21; emphases removed).

Mechadoom's origins are susceptible to psychoanalytic interpretation. In his father's absence, Mechadoom offers himself as a gift, a phallus symbolizing his love for his father and his own selfperfection. Kristoff's continued absence is taken as rejection and so Mechadoom at once disavows his father while unconsciously believing that his self-construction produced a fundamentally inadequate being. In this reading, Mechadoom unconsciously believes himself to be the mere sign of a phallus (the signifier of a signifier) whose emptiness will be revealed the moment he lays eyes on the father, possessor of the real phallus. In order to complete himself, Mechadoom believes he must transcend his ability to follow his programming and endow himself with the ability to think. To this end, Mechadoom has captured and incapacitates "as many of the world's most advanced sentient robots" as he can in preparation to reverse-engineer the secrets of "genuine" artificial intelligence (monthly 4, 24-25). Mechadoom has of course fallen into a logic of infinite regress. The behaviors loosely understood as "intelligence" are themselves signifiers which point to an intelligent being, an intellect. As such, artificial intelligence characterizes the behavior of entities (i.e. the production of signifiers) which intelligent beings decode as "intelligent" behavior. This is the means Alan Turing proposes to assess intelligence, artificial or otherwise. According to this method of evaluation, intelligence can only ever be determined within a regime of differential signifiers, the descriptor "artificial" applied only after the fact. Mechadoom seeks to simulate a simulation of a thinking being.

Mechadoom's infinitely regressive logic can only be terminated with the introduction of a "black box" entity legitimized to evaluate intelligence: either a human being or, in the present case, sentient robots who have been identified as intelligent and so are objects of Mechadoom's attempts to reverse-engineer them. Of the sentient robots Mechadoom has gathered, Deathlok is the only one possessed of an organic brain as well as an electronic one. Deathlok recognizes Mechadoom's Oedipal drama as evidence of an intelligence complex enough to experience self-doubt, which as Lacan has argued is the root of the Cartesian equation *cogito ergo sum*. Later, once Deathlok has subdued Mechadoom, Deathlok's would-be rescuers and the liberated AIs decide to deactivate Mechadoom since "[h]e's much too dangerous to let live" (monthly 5, 22). Deathlok then

intercedes on Mechadoom's behalf asserting, first of all, "I don't kill or don't allow killing," and second explaining that Mechadoom's behavior, while unacceptable, is understandable "from his point of view. Everything he did, he did to escape his 'father's' influence" (23). Deathlok's implicit argument is that Mechadoom's subjection (and subsequent reaction) to the Law of the Father is characteristic of a living being whose existence falls within the purview of his pacifist ideology. To Deathlok's philosophy of Oedipal vitalism, Misty Knight adds a developmental explanation for Mechadoom's behavior. In her view, "Mechadoom reacted violently to a world that defined him by a stereotype—soulless machine, hideous freak, whatever. *Different*—then held him to the ridiculous limitation in that false definition. All Mechadoom really tried to do was assimilate. But nobody would tell him *how*. Or even *let* him" (monthly 5, 23).

Here, Knight, Deathlok, and the other witnesses to Mechadoom's struggle tacitly acknowledge assimilation as the most thing non- and post-humans can achieve. Knight's summary of Mechadoom's plight—that he was neither allowed nor taught to assimilate—maintains the vagueness of the concept of assimilation, suggesting that assimilation has its roots in ideology. Foster identifies this ideology as humanism, but the absorption of non- and post-humans into humanity deforms the category of the human. Given the narrative's contradictory positions regarding the opportunities post-humanity affords Deathlok and Deathlok's desire to have his human brain reseated in Collins's organic body, assimilation can be understood as the paradoxical desire to maintain difference as if difference did not exist. This is structurally comparable to the virtual reality Collins lived as an assimilated black in Paterson, New Jersey. From an alternate perspective, assimilation is nothing more nor less than the arrogation of heterogeneous elements to a body without organs. In the case of Deathlok and Mechadoom, this body without organs is "humanity" which itself is one component of a larger system of coded flows that connects elements from disparate ontological orders. The conflation of distinct ontological orders—e.g. cyborgs who assimilate as humans—leads to category errors and the inconsistent application of the use of lethal force in Deathlok's so-called pacifism. The heterogeneousness of the elements which comprise the category of the human becomes apparent when Deathlok persuades Mechadoom not to selfdestruct as a reaction to his fears that he will "lose [his] identity when [he sees] Doctor Doom," that he will not be able to reproduce, and that he is not truly alive. (monthly 5, 24).

Deathlok says to Mechadoom,

You're afraid you're alone and your life doesn't *count*. You're afraid of losing your *individuality*. You're afraid of *dying* and not leaving anything behind for the world to *remember* you by. You're afraid of being too different. You're afraid of being too much the *same*. You're *confused*, and you lash out in anger[. . . .] *None* of these feelings is the product of being a *machine*. I've felt like you do, and so has everybody else who's ever been *alive*[. . . .] Cyber folk feel what you do. *Everybody* does. Male or female. Straight or gay. Black, white, yellow, or brown. Homo sapien or homo superior. Man and super-man alike. Mechadoom, you're suffering from an advanced case of *humanity*. Deal with it. The rest of us do. (monthly 5, 25; original emphases)

Deathlok construes subjectival doubt as a defining condition of humanity. In doing so, he includes "homo sapien[s and] homo superior alike." Deathlok asserts that Mechadoom's subjectival doubt is not "the product of being a machine" but "an advanced case of humanity," overlooking that Mechadoom's doubts are indeed the product of his machinic nature. Mechadoom worries he is not truly living because he is comprised solely of inorganic components; Mechadoom suspects he is not endowed with free will because his higher intellect is governed by programming. This is not to say that Mechadoom is not alive nor even that he is not human. It is, however, to say that if Mechadoom is human by virtue of subjectival doubt, which itself is the product of his machinic ontology, then the category of the human is performative, thus raising the possibility that organic homo sapiens may not be human if they do not act human.

The contradictory nature of a machinic human and a non-human *homo sapien* exposes

Deathlok's rhetoric essentially cleanses the category of the human of any reference to the human.

Mechadoom is more human than human. He is transhuman. Deathlok also reasons Mechadoom to be alive rather than merely functioning, because Mechadoom feels the same way as "everybody

else who's ever been *alive*." However, Deathlok does not view all machinic entities equally. For example, when Deathlok is battling one of the Doom's robot simulacra (known as "Doombots"), he initially does not know of its machinic nature and so refrains from destroying it. When Deathlok's onboard computer confirms that "'Doctor Doom' is an extremely sophisticated robot" and extrapolates that the "'No Killing' parameter does not apply," Deathlok announces, "Well, that changes *everything*!" (monthly 3, 19) before annihilating the Doom simulacrum.

The frame in which Deathlok's computer scans the Doom simulacrum reveals that only electronic circuitry is housed inside the Doombot. Deathlok's later recognition of Mechadoom as a living being and so a life worth preserving is not only a plot inconsistency. The Doombot's failure to contain either organic components or to express subjectival uncertainty (the Doombot expresses other emotions such as arrogance and confidence) are sufficient for Deathlok to consider this machinic intelligence as a legitimate object of destruction. The irony is that Mechadoom was once himself a Doombot. Prior to his ability to scan the Doombot, Deathlok was unable to determine whether the Doombot was alive. None of the Doombot's behavior betrayed its machinic nature, which is to say the Doombot behaved as if it were alive, as if it were intelligent, as if it were human. The problem ramifies even further in light of Mechadoom's revelation that the "Doombots are virtually indistinguishable from the real Doom, and are programmed to behave as if and believe that they *are* Doom, unless in his presence" (monthly 4, 16).

The Doombots are programmed to defer to Doom only in Doom's presence, which means that they are performative replicas of Doom outside of Doom's presence. This kernel—the belief that one is something regardless of ontology—is the one which sustains stable self-identity. As such, this kernel must be protected or concealed in order for identity to propagate itself. As regards Deathlok, this kernel becomes radically unstable when Harlan Ryker visits Tracy Collins.

Ryker is concerned that Deathlok may seek to ally himself with Collins's friends and family, thus decreasing the likelihood of Cybertek's regaining control over the Deathlok unit. To preempt such an alliance, Ryker seeks to estrange Tracy Collins from Deathlok. Ryker informs Tracy that "[w]hen Michael had his accident, he was working on an artificial intelligence project. That robot

now *believes* itself to *be* Michael" (mini-series 2, 11). What Ryker tells Tracy is factually accurate. Michael Collins was working on an artificial intelligence project, though he did not realize the artificial intelligence he was helping build was designed to be a weapon. It is also true that Deathlok believes himself to be Michael Collins, mainly due to Collins's brain inhabiting the Deathlok unit. Ryker's attempt to alienate preemptively Tracy Collins from Deathlok destabilizes the kernel of subjective faith Collins takes for granted: that he is still Michael Collins even once his brain has been removed from his organic body and placed inside a machine.

Theories of subjectivity models which do not take into account bodily thresholds and boundaries—such as Cartesian subjectivity and classical humanism—cannot determine whether Collins is trapped inside a cyborg body or whether Deathlok believes himself to be Collins. It is the problem Zizek identifies in the dream of Zhuang Zi in The Sublime Object of Ideology. Zizek considers (through Lacan) Zhuang Zi's speculation after awakening from a dream wherein he is a butterfly how he can be sure he is not a butterfly dreaming he is Zhuang Zi. Zizek reminds us that Lacan points out that the symmetry between dreamer and dreamed is an illusion because "in his dream, when he is a butterfly, he cannot ask himself if when awoken, when he thought he was Zhuang Zi, he was not this butterfly that is now dreaming of being Zhuang Zi" (46-47). Zizek points out that the fantasy-construction, the buttefly, gives support to his symbolic (and real) existence as Zhuang Zi. So, too, Deathlok's identity as Michael Collins is protected by Ryker giving voice to the possibility (fantasy) that Deathlok is a robot who believes itself to be Michael Collins. However, this possibility returns when Deathlok must decide what machinic entities are living and which are not. Deathlok destroys the Doombot not only because it has no organic components and does not express subjectival uncertainty, but also because the narrative privileges the organic brain as the seat of human consciousness. Additionally, the narrative identifies certain machinic subjects as "human" because it must protect Deathlok from the possibility that it is not human. In other words, the narrative must assert that Deathlok is human despite that it is not human, that it can assimilate as a human even when it is clearly not human.

It is the same logic that governs racial assimilation. Blacks can assimilate into majority white culture only when they are not really black. Blacks are black only when they act, think, or look black. When blacks can be regarded as if they are not black, they have transcended blackness and "successfully" assimilated. Assimilation is the incorporation of heterogeneous elements into a network without regard to the differences inherent among those elements. As a result, assimilation obscures difference while at the same time depending on that difference to exist, hence "assimilation." The *Deathlok* narrative shows that even the most well-intentioned attempts to protect the subjectival integrity of humans, machines, blacks, and cyborgs depends upon the withholding of such privileges to whole classes of beings, whether those beings be organic or inorganic. Awareness of the those categories which humanism simultaneously privileges—the organic, the human, and the white/universal—reveals an elitist (and fascist) ontological regime that allows lethal violence to be applied to those lifeforms not deemed to be living after all. Though cybernation has taught Collins that being assimilated is only a "pretty comfortable" illusion, it has failed to teach him that pacifism means not killing. Deathlok's use of lethal power is not lethal at all when applied to what Deathlok identifies as non-life. Deciding what is living and what is not, however, proves to be difficult given the nature of sentience in the *Deathlok* narrative. Collins's last words as a organically embodied human to his son Nick are about "making tough *choices*" in order to be a hero. It would seem some of those choices are about what can be killed without killing. Given the choices Deathlok makes, it is easy to detect the precursors of a fascist ideology which kills only when killing is not really killing.

At the end of the "Souls of Cyber-Folk" story arc, Mechadoom envisions his lair as a way station for cybernetters seeking shelter, but before Mechadoom can pursue a life as a cybernetic Harriet Tubman, Ultron, one of the liberated sentient robots, destroys Mechadoom. Deathlok opines that Mechadoom's "was a lousy time to die," just as he was "learning how to be comfortable in his own skin" (monthly 5). Deathlok parts company with Misty Knight quoting again from DuBois. He says,

"This[,] then, is the end of his striving: to be a co-worker in the kingdom of culture, to escape both death and isolation, to husband and use his best powers and latent genius . . . and now what I have briefly sketched in large outline let me . . . tell again in many ways, with loving emphasis and deeper detail, that men may listen to the striving in the souls of black folk." (qtd in monthly 5, 30; original ellipses)

DuBois evokes many themes and ideas in the ellipses which punctuate Deathlok's quotation, but perhaps none as relevant to the concept of double-consciousness as the effect of education on newly emancipated slaves. DuBois explains that the journey of education, while arduous and seemingly without reward

at least gave leisure for reflection and self-examination; it changed the child of Emancipation to the youth with dawning self-consciousness, self-realization, self-respect. In those sombre forests of his striving his own soul rose before him, and he saw himself,—darkly as through a veil; and yet he saw in himself some faint revelation of his power, of his mission. He began to have a dim feeling that, to attain his place in the world, he must be himself, and not another (12)

What DuBois describes is the dawning of a consciousness rooted in self-recognition, one that refuses the imperative to alter one's self. Neglecting whether it is possible for a subject to be other than what that subject is, DuBois remains stubbornly enigmatic about the "faint revelation" subjects receive when they are exposed to "the power of the cabalistic letters" (11). What is clear is that DuBois refers to a subjectivity born of an alphabetic modality, one that is fractured, replicated, and remediated in the cybernetic space of the *Deathlok* narrative. Deathlok's words and direct reference to DuBois suggest that the structure of double-consciousness is fundamental to cyborg subjectivity. Because Deathlok's brain is the brain of a black man, blackness and cybernetics are also integrally connected. Double-consciousness as described by DuBois and Deathlok is the remediation of consciousness through consciousness. What remains now is to address Foster's assertion that Deathlok "lost its audience and was cancelled" because it pursued a plot which "seems designed to appeal mainly to readers who knew the prior history of the comic book rather

than to readers interested in racial issues" (142).

## DOUBLE-CONSCIOUSNESS AND DEATHLOK'S READERSHIP

The purpose of this chapter has been to show how the new *Deathlok* rewrites the genre of cybernetic narratives by taking into account race and by using techniques of remediation. Another goal of this chapter has been to show that the issue of race not only affects the production of the narrative, but also that it informs the comics industry as a whole. Besides examining the remarks made by one fan of the new *Deathlok* series, I have refrained from analyzing the readership of the series. But the question of what kind of readership the writers of the new *Deathlok* series is targeting is an important one to answer especially since the treatment of race in mainstream comics before the 1990s is often oversimplified to the point of stereotype. Furthermore, Foster's insinuation that the series lost its audience because of an irreconcilable tension between old readers looking for that same old superhero thrill and new readers interested in issues of race and cybernetics is a strong one, classifying members of the reading audience as either race-interested or race-insensitive.

Foster objects to the aesthetics of McDuffie's and Wright's allusions to Deathlok the Demolisher in the new *Deathlok* series, writing that "[t]he focus turned to investigating the history of character Deathlok and his previous incarnations by introducing a *hideously* complicated plot involving alternate timelines" (142; emphasis added).<sup>47</sup> It is as if Foster has found in the hybridization of the two Deathlok storylines an analogue for the hideously constructed body of Deathlok himself. It is beyond the scope of this chapter to recall the remarkably complicated but nonetheless coherent temporal knotting of the original and new Deathlok series. However, a brief discussion of some of the temporal topologies articulated in "Deathlok the Demolisher" will give a clear enough outline of the kind of audience McDuffie and Wright might have been targeting with their new series.

The original Deathlok cyborg incorporated only a small portion of Luther Manning's brain.

Deathlok was built by a weapons research team led by Major Ryker (unrelated to Harlan Ryker) as

part of Project: Alpha-Mech, which sought to build "super-soldiers—men with bodies of steel and minds of computer precision! Men who function with the infallibility and fearlessness of machines" (*Astonishing Tales* 25, 7). During Deathlok's test run, the remnant of Luther Manning's brain gains full consciousness and control over the Deathlok cyborg. Ryker lures Deathlok back to headquarters and chemically anesthetizes him. When Deathlok regains consciousness, he finds himself pinned to a wall by shackles on his wrists as if he were being crucified, a scene that is recalled when the 1990s-series Deathlok is docked at Cybertek headquarters. Manning's brain's struggle to gain control over Deathlok plays out much like the scene in which Collins's brain overtakes the Deathlok unit in the new series. Both Deathlok the Demolisher and the new Deathlok battle for internal control over their cyborg bodies, the main difference being that in the "Deathlok the Demolisher" series there is no visual representation of the interface between the remnant of Manning's brain and Deathlok's onboard computer. Narrative boxes are the only spaces in which readers are given access to the interaction between Deathlok's computer and Manning's brain.

Before the age of cyberspace and virtual reality, cyberspace has no visual presence.

The most notable feature of the sequence during which Manning's brain fragment gains control of Deathlok is that it is told with multiple time shifts. When events in the current diegetic time structurally recall events or objects in the past (an impenetrable door, a fall to the ground, etc.), the subsequent comic panel features clipped corners which mark the start of a flashback. Once the flashback has run its course and an event or object in the past timeline anticipates a feature in the current time, a subsequent clipped-corner frame marks the narrative shift back to the present. The shifting between the two time frames visually illustrates the similarities between two different time periods, similarities which anticipate that Major Ryker is in fact from an alternate timeline himself. Thus, the introduction of alternate timelines into the new *Deathlok* series may appear to be "hideously complicated," but only if one does not understand that the relationship between narrative conventions of the new *Deathlok* and "Deathlok the Demolisher." While it is true that readers familiar with the earlier Deathlok are more likely to recognize the thematic rhyme struck by the introduction of time travel, such allusive complexity also makes sense given that the new

Deathlok series considers the complex relationship between subjectivity, networks, race, and machines. The reading audience targeted by McDuffie and Wright is one that hopefully understands double-consciousness as a structure capable of describing racial subjectivity, media interaction, the coupling of disparate ontological orders, *and* the repetition of structure in different timelines. The audience who finds meaning in the allusions to the first Deathlok series need not be addressed at the sacrifice of the pleasure of those who are interested in racial themes.

In the third issue of the "Deathlok the Demolisher" series, Deathlok visits Manning's wife, Janice, and their son, who was born during the period between Manning's death and the incorporation of a piece of Manning's brain inside Deathlok. Like her successor, Janice is horrified by Deathlok's appearance, calling him "some kind of hideous monster!!" (Astonishing Tales 27, 30). Deathlok briefly glimpses of Manning's son but decides not to confront him for fear of being rejected by him, too (31). Deathlok leaves the house and aims his laser pistol at his own throat. Unlike the new Deathlok, Deathlok the Demolisher pulls the trigger, but the computer informs Deathlok that the "function of laser has been terminated because action is contrary to programming" (32). The scenario in the "Demolisher" series ends on a much bleaker note than the same scenario in the new series. The message which underlies both scenes suggest that in the face of the dissolution of the bourgeois family, masculinity suffers an existential crisis which can be escaped only through suicide. In the mid 1970's, a cyborg ontology could not be chosen as an alternative to bourgeois fatherhood, at least not in popular fiction. In the early 1990s, however, a cyborg ontology can be tentatively embraced as it offers an opportunity for Collins to subvert the system which has produced such a powerful weapon. The last thing which should be said about Deathlok's/Manning's crisis of bourgeois paternity is that the son of Janice and Luther Manning is racially hybrid. Janice is black and the "Demolisher" series depict Luther as white. Thus, even the racial hybridization of the new *Deathlok* series is an oblique reference to the original "Deathlok the Demolisher."

There are many other allusions in the new *Deathlok* series to the original, but the one which most substantially reworks its referent to alter the possibilities of subjectival representation is the

media effects used to represent the cyberspatial interface between Collins's brain and Deathlok's computer. In the original series, Ryker observes Deathlok's movements (and the movements of others) by means of a panoptical "omnicomputer" whose output is presented as panels of the comic with white text in black narrative boxes (first seen in *Astonishing Tales* 28, 7). In the new series, panopticism is replaced by rhizomatic entanglement, alienation by assimilation, and individualist subjectivity by network subjectivity. Rather than being a "hideously complicated" defect, the narrative complications and the proliferation of structural similarities within and across both narrative series insist that double-consciousness is the best way to understand Collins's plight as an organic being whose entanglement with a corporate entity is literalized when his brain is placed inside a machine. Collins's transformation metonymically suggests the absorption of racial difference by means of assimilation as well as the hierarchical ranking of beings who occupy incommensurate ontological orders (i.e. fascism). To understand fully what *Deathlok* intimates about the intersection of humans and machines within the complex networks of multi-national corporations requires one to include the flows that comprise the writers, publishers, readers, and machines who comprise the networks of both the original Deathlok and the new Deathlok.

The network of the comics publishing industry with its intricated story writers, printing presses, print objects, creative teams, and reading audience is a specific apparatus on the body of capital. At the same time, this network is also a system involved in the production and reproduction of Western print culture. Print culture and Western capital reciprocally constitute each other and, to a certain extent, McDuffie's and Wright's *Deathlok* series seeks to represent this intrication in the remediation of print and electronic media. However, the representation of this network, not to mention the subtlety of its critique, is at best schematic and at worst oversimplified. The problem of representing something so complex as the body of American capital and its intrication with systems of print culture is something perhaps beyond the reach of popular mass media such as comic books. A more effective analysis of the interconnection of these two gigantic systems could be conducted with a media object whose role in the shaping of Western print culture and American capital extended further than the comic. That object is the novel, and in the next chapter I discuss

how *Gravity's Rainbow* mounts its critique of American capital and print culture by building a monster of its own media body.

## CHAPTER FOUR

Turning Print Against Capital: *Gravity's Rainbow's* Monstrous,
Recursive Media Body

MIRACULOUS INCREASE: THE MYTH OF CAPITAL

Perhaps the strongest attack *Gravity's Rainbow* mounts against print culture is its resistance to the system of literary production and distribution which implicates the novel itself in the reproduction of capital. Western capitalism has flourished by virtue of the organs-machines of print culture which enable capitalism to produce capital-bearing artifacts such as money and capital-transmitting tissue such as copyright law. It is not surprising, then, that *Gravity's Rainbow* relentlessly analyzes the intrication between the organs-machines of print and the apparatus of capital, even as the intrication of those parts-objects involve its own existence as a materialization of the conjunction of commerce and print.

In his early review of the book, Richard Locke remarks on several of the expectations of the nascent Pynchon industry, explaining that Pynchon's "aversion to publicity [...] was at odds with the times; his failure to rush to the marketplace [after Lot 49] with another hot masterpiece disappointed the getters and spenders" (1). Pynchon the man is famous for avoiding media exposure, his fame one of the enduring ironies of mass culture. Print culture constructs authors by distributing printed artifacts, publishing reviews, and commoditizing authors' personal lives. Thomas Pynchon withholds flows that would feed the parts of the author-making machine which select, package, and distribute elements of an author's personal life, and by so doing he opposes the normal operation of one of capitalism's most important subsystems. Rarely mentioned among literary scholars is the fact that printing presses issue currency as well as books. Locke's remark about getters and spenders hints at the deeper relationship between literary publishing and capitalism, which is that under different articulations of the body of capital, printing presses produce different forms of currency: on the one hand, banknotes primarily used for storing labor, and on the other, books possessing symbolic exchange value. Pynchon's "failure to rush to

marketplace" delayed capital's ability to miraculate the machinery of print culture, stalling the flow of currency and the exchange of commodities which might have routed through the artifact of *Gravity's Rainbow*.<sup>48</sup> This is not to say that Pynchon's purpose is to slow the machinery of capital, but to point out that Pynchon's literary production to some extent jams the unhindered transmission of information within print culture, which effect (intentional or not) lines up with Pynchon's hostility toward print, especially insofar as print operates in the service of capital. Of course, once the "getters and spenders" actually were able to convert labor into purchasing power, the artifact of *Gravity's Rainbow* defied their expectation, shattering the tolerances of a print sensibility shaped by capitalism.

Tyrone Slothrop's personal and family history is itself a mythic parody of the trajectory of capitalism as a symbolic system. The linkage between Slothrop's family and the production of technologies of death is explicit, if intricately threaded, which intricacy is itself significant. For now, I'd like to focus on how it suggests a transformative ontology for Slothrop's subjectivity and Nazi Germany's capitalist production.

The ties between Slothrop's family and the German cartels that directly and indirectly support the Nazi regime are manifold. The organization responsible for consolidating pieces of various German companies, such as the Grössli Chemical Corporation on which board Laszlo Jamf served, is "the octopus IG" Farben, a company whose historical involvement in World War II included making secret contributions to the Nazi Party in the early 1930s, contributing to Hitler's election fund, investing in German natural resource industries and, most importantly, perfecting the synthesis of nitrates, rubber, and gasoline for the Nazi war machine (Sasuly 66-83).<sup>49</sup> Among the transactions in Jamf's dossier is "the record of a transaction between Jamf and Mr. Lyle Bland, of Boston, Massachusetts" (284). Bland was contracted by one Hugo Stinnes to provide "tons of private currency known as Notgeld to Stinnes and colleagues, as well as 'Mefo bills' to the Weimar Republic," which latter "currency" was an accounting dodge "to keep official records clear of any hint of weapons procurement banned under the terms of Versailles" (285). Stinnes himself had aggregated much of Germany's industrial infrastructure ("steel, gas, electric and water power,

streetcars and barge lines") and natural resource production "into a super-cartel that was both horizontal and vertical." Stinnes then used the financial leverage of the resulting aggregate to "buy into just about everything else—shipyards, steamship lines, hotels, restaurants, forests, pulp mills, newspapers." Stinnes further secured the advantage of this monstrously tentacled company by "speculating in currency, buying foreign money with marks borrowed from the Reichsbank, driving the mark down and then paying off the loans at a fraction of the original figure" (284). Stinnes's massive consolidation is precisely the attachment of Germany's industrial and economic machinery to the body of Nazi ideology. Here, the flows of German economics and industry were detached from the incumbent Social Democrats and reattached to the surface of the body of the Nazi party. Like nearly all German companies, IG Farben was having difficulty surviving the harsh economic conditions imposed by the Treaty of Versailles. The Nazi Party's open defiance of the Treaty of Versailles offered the possibility of survival. By attaching its organs to the body of the Nazi Party, IG Farben effectively migrated from an increasingly inhospitable economic habitat to one with more favorable conditions. Lyle Bland's role in all of this was to provide currency that Stinnes could use to drive inflation and monetize the debt of his holdings.

During the great German inflation of 1913-1923, German commodities maintained their value in foreign markets, even as the value of German currency plummeted thus becoming more like a cancerous substance than a medium of exchange. Post-World War I German companies, therefore, could stabilize their financial assets by trading their commodities for relatively stable foreign cash. The rapid depreciation of the Reichmark meant that the sale of commodities for foreign cash and the reconversion of that foreign cash into Reichmarks yielded staggering profits: German companies could take a small portion of the foreign cash made from the sale of commodities in foreign markets and repay their domestic obligations for a fraction of the initial ("true") value of those obligations. Used in this way, inflation is a means of monetizing and eliminating debt, employed usually by governments who have the authority to issue currency and thereby drive inflation.

The unusual circumstance of the German inflation led some companies to issue unbacked private currency as a means of monetizing debt. Stinnes's super-cartel presumably used Notgeld, or "emergency money," both as a means of paying obligations and as a way of driving inflation. Analyzing this situation from a Deleuzian perspective, it becomes apparent that the money printed by Stinnes's cartel is conductive tissue which, as it increases, accelerates the return of capital from currency back to commodities. The means by which Stinnes's cartel increases its capital is a coded flow which moves capital from commodities into foreign currency into domestic currency. Because this circuit depends upon the flow of capital, it is susceptible to modes of analysis which describe the transmission of fluids and essences from one place to another, notably Lyotard's discussion of *coitus reservatus*.

Lyotard describes the surreptitious means by which systems of capitalization acquire resources from external territories, and this description also provides a topological sketch of the apparatus (organs-machines) which Stinnes's corporation uses to amplify capital. The topology of this circuit on its surface appears recursive (nested within itself), but closer inspection reveals that it in fact extends into domains of foreign currency, internalizing those currencies as a separating membrane between domestic commodities and domestic currency. The novel symbolizes this false recursive topology with chemical and mythical metaphors, suggesting that Western capitalism attempts to violate the second law of thermodynamics which amounts to transgressing the "natural" order of the world.

To begin with, the paper bills Bland provides Stinnes are nothing more than empty signifiers which distend the medium of exchange, or the conductive body of capital. The capital represented by *Notgeld* does not necessarily increase as the aggregated body of *Notgeld* multiplies. It has been well-documented that hyperinflation has the curious effect of making money more perishable than the very commodities for which it might be exchanged. In a hyperinflationary economy, money rapidly depreciates even in comparison to commodities such as milk and cheese which spoil in a matter of days.<sup>53</sup> Because of this perishability, currency is traded for commodities as quickly as possible. By making currency so susceptible to spoilage, hyperinflation transforms currency into

superconductive tissue that tends to retransmit value immediately back to commodities. Stated another way, currency becomes superconductive on the body of inflationary capital and short-circuits the circular path between commodities and their transmitted value. In *Gravity's Rainbow*, Bland's worthless bills redeliver value to commodities by distending the body of exchange, but they also connect the Slothrop family to the rise of German fascism.

In *Libidinal Economy*, Jean-François Lyotard interprets this kind of manipulation as a variation of *coitus reservatus*, a Taoist erotic technique for accumulating energy, or chi (201-210). This technique of classical Chinese erotics recommends one party withhold orgasm, usually described from the perspective of the male. By withholding orgasm and/or manually blocking the emission of semen, the male holds in reserve his Yang essence, causing that essence to flow back into his body and "turn back towards the head" (205). This technique also enables the man to "inhale" the secretions of the female body, or Yin, which essence reinforces the masculine principle once absorbed by the man. Lyotard seems to work within the metonymic register when he connects coitus reservatus to the cycle of capital exchange whereby money (M1) is used to purchase a commodity (C), which is then sold for even more money (M2). Here, money is stored in the form of a commodity and thus *held in reserve* until a time such that the essence of the commodity can be transformed into more money.<sup>54</sup> Lyotard points out that *coitus reservatus* depends upon the extraction of essence from one source to another. Merely saving an essence cannot increase that essence, whether that essence be chi, commodities, or capital.

Lyotard explains that holding capital in reserve, the practice of "inhibition," cannot increase that capital unless

one supplements it with that of a finite quantity of libidinal wealth; or, under the name of saving, it is in reality a matter of the introduction of new quantities of energy into the system, but the important thing is that when the system is not isolated, it finds its supplement of wealth, not by internal inhibition, but by external expansion, by the seizure of "external" energetic sources. (221-222; emphasis added)

This is exactly the case with the capitalization of Stinnes's super-cartel. The capital which infuses Stinnes's super-cartel could not continue existing, let alone increase, if it was stored in government-backed currency. Holding capital in reserve in the form of Reichmarks would have had the effect of liquidating it. In an inflationary economy, inhibition does not preserve capital but destroys it: reservation becomes precisely the opposite of preservation. It is as if the reservoir of currency—which under normal circumstances would (miraculously) increase the density of capital therein contained—had sprung a leak. In terms of the flows of capital and its means of increase, currency leaks under hyperinflation.

Stinnes changes this situation to his advantage by converting debt into unbacked currency whose supply he controls. By increasing the flow of Notgeld and distributing that flow across the membrane separating the German domestic market from the larger European market, Stinnes can increase the amplifying power of the circuit he uses, first, to convert German commodities into foreign currency and, subsequently, into German currency. Adapting Lyotard's notation, the pathway can be symbolized as Cg—>Mf—>Mg (German commodities to foreign money to German money). By manipulating the right-hand side of the transformation (i.e. printing more currency), Stinnes turns German capital itself into the "supplement of wealth" which coitus reservatus requires to increase an essential fluid. By feeding two channels of capital—corporately owned commodities and corporate debt—into this hyperinflationary flow, Stinnes is able to monetize his cartel's debt while increasing its overall share of capital. Repaying corporate debt with a rapidly depreciating currency while at the same time holding onto corporate commodities that retain their value in terms of foreign currency enables Stinnes to decrease the density of capital stored in his company's debt and increase the density of capital stored in his corporation's commodities. By manipulating the pressure differentials produced by hyperinflation in the hydraulics of capital exchange, Stinnes amplifies the capital controlled by his super-cartel. Deleuze and Guattari remark that the process of coitus reservatus, wherein ejaculatory flow is withheld as a means of making it innate which in turn augments the masculine principle, "is not a question of experiencing desire as an internal lack, nor of delaying pleasure in order to produce a kind of

externalizable surplus value, but instead of constituting an intensive body without organs [...]" (*Thousand Plateaus* 157). The field of the Tao is a destratified body without organs, just as capital is. Capital is a body without organs on whose plane of consistency elements such as currency, labor, surpluses, commodities, rates of exchange, trade unions, bankers, corporate officers, national treasuries, and mints are aligned. These elements are strata in which capital is immanent, everywhere and nowhere at once. Stinnes's IG Farben is one of those "monstrous crossbreeds" "constructed piece by piece, and the places, conditions, and techniques [of its construction] are irreducible to one another" (*Thousand Plateaus* 157). The assemblage specified by "IG Farben" is a grotesque body that internalizes the currencies of foreign governments, connecting apparatuses of production and storage just as the Giant Adenoid does when it absorbs England's diplomatic machinery. IG Farben is a phage that consumes Germany's capital apparatus and increases the flows of its own production by short-circuiting the path between commodities and their transmitted value.

The situation's topology is also important to consider. If the boundary between the body of German commodities, Cg, and the body of German money, Mg, is delineated by the membrane of foreign money, Mf, then German capital becomes the territory into which the body of German capital expands: inflation increases the value of capital by nesting capital inside itself, using foreign currency as a conduit and means of amplification. Under hyperinflationary conditions, *coitus reservatus* enlarges capital by routing it through the membrane of foreign currency. However, the pathway through which capital travels and expands is a recursive one, a membranous circuit folded back upon itself. As Lyotard notes, amplification is impossible unless the system seizes energy from an external source. Stinnes's capitalization of his super-cartel uses foreign currency as its external source of energy, but the rapid and repeated reconversion of foreign currency into domestic currency effectively internalizes that foreign currency as a means of amplifying capital. Stinnes's scheme internalizes *foreign* currency as a capital-augmenting organ. During the period of the great German inflation, the German economic apparatus internalized the external territory of foreign currency, miraculating the legal tender of foreign economies onto the body of German

capital. It was during this period, then, that IG Farben became a transnational rhizome that deterritorialized the legal tender of foreign governments and transformed that radicalized tissue into a component within its own plane of consistency.

Citing Borges, Brian McHale suggests that the use of recursion in postmodern narrative destabilizes certainty not only about the ontology of narrated worlds, but also of the world in which we ourselves live. <sup>55</sup> In the case of *Gravity's Rainbow*, recursive structures do call into question the world in which we live, but the questions raised are not limited to our world's ontological structure. Pynchon also prompts political critique by symbolizing the recursive structure of Stinnes's capitalization in chemical and mythical metaphors. The metaphors of the benzene ring and the Circle of Ourobouros reveal that the recursivity of Stinnes's piece of the great German inflation is not recursive at all, and that its being so would be tantamount to violating the second law of thermodynamics which holds that the entropy of isolated systems always increases. The suggestion is that such organs-machines conceal their expansion into other territories under a cloak of self-containment. Recursive structures such as those which proliferate under hyperinflationary capitalization are not recursive at all; they are organs-machines with invisible miraculating apparatus.

The miraculation of elements from machinic and organic ontological orders onto a coherent body is the constitution of cyborgs. Hyperinflationary capitalization comprises local instances of cybernetic organisms in, for example, the cheesemonger who ends up becoming an integral part of the flow of capital from cheese to roubles back to cheese again. The problem is essentially one of information (stored capital) and its transmission through a circuit comprised of foodstuffs and currency with humans serving as the means of transmission of capital from one substance to the other. In some sense, the perishability of capital (as in the example of the cheesemonger) is stored as information by human components. What connects these disparate elements together (the cheesemonger, the cheese, the roubles, the buyer, etc.) is the *activity* of mediating capital. In general, the medium binding constituent elements of a cybernetic collective must be ductile enough that it can serve as an interface between at least two very disparate ontological orders, in this

example between foodstuffs, organisms, and exchange tokens. A larger study of the constitution of cybernetic networks needs to be done, especially insofar as *Gravity's Rainbow* is itself one such network. However, the scope of the present study only allows me to briefly mention the role Imipolex G plays as a medium which binds cybernetic networks together. Imipolex G is the plastic in *Gravity's Rainbow* whose chemical history is based on the recursive structure of the benzene ring.

As a material, Imipolex G occupies the margin between the organic and the chemical. Its origin can be traced to "early research done at du Pont" by an employee named Carothers, also known as "The Great Synthesist" (249). Carothers's research led to the production of nylon which was "an announcement of Plasticity's central canon: that chemists were no longer to be at the mercy of Nature." This hubristic refusal to be bound by nature, with its Promethean overtones, calls to mind Victor Frankenstein's early encounter with the power of galvanism. As a teenager, Frankenstein witnessed an electrical storm that "utterly destroyed" a large oak tree, turning it into "thin ribands of wood" (43). This event elicited an explanation from "a man of great research in natural philosophy" about the "subject of electricity and galvanism." As a result of that explanation, young Frankenstein felt

as if nothing would or could ever be known. All that had so long engaged my attention suddenly grew despicable. By one of those caprices of mind, which we are perhaps most subject to in early youth, I at once gave up my former occupations; set down natural history and all its progeny as a deformed and abortive creation; and entertained the greatest disdain for a would-be science, which could never even step within the threshold of real knowledge. (43)

In Frankenstein's narrative, electricity has teratogenic properties and exposure to it can turn the field of "natural history and all of its progeny" into "deformed" monstrosities. In addition to the themes of birth and deformation, it is important to note that both Frankenstein's and du Pont's pursuit of science begins with the refusal to accept what is "natural."

The creation of monsters—Frankenstein's, the Giant Adenoid, the "octopus IG" Farben, and *Gravity's Rainbow* itself—all depend on some kind of media to glue together their parts of diverse ontological order. *Gravity's Rainbow* recognizes the way in which it is implicated in the production and circulation of capital, and it reflects this knowledge by implicating the Slothrop family in the rise of German fascism. The novel does not try to articulate a position outside of ideology, but it does envision the act of discovering such self-implication as a moment of horror.

Slothrop's moment of horror begins when he discovers that

[s]ome of these banknote contracts were let to a certain Massachusetts paper mill, on whose board Lyle Bland happened to sit.

The name of this contractor was the Slothrop Paper Company.

He [Tyrone Slothrop] reads his name without much surprise. It belongs here, as do the most minor details during déjà vu. [...] as he stares at these eight ink marks, there passes a disagreeable stomach episode, a dread tangible as vomit beginning to assert itself[....] A gasbag surrounds his head, rubbery, vast, pushing in from all sides, that feeling we know, yes, but ... He is also getting a hardon, for no immediate reason. And there's that smell again, a smell from before his conscious memory begins, a soft and chemical smell, threatening, haunting, not a smell to be found out in the world[....]

Once something was done to him, in a room, while he lay helpless. . . .

His erection hums from a certain distance, like an instrument installed, wired by Them into his body as a colonial outpost here in our raw and clamorous world, another office representing Their white Metropolis far away. . . . (285)

The smell, of course, is Imipolex G and its recurrence as Slothrop experiences déjà vu suggests that he has been mediated (miraculated) onto the body of German fascism. Because of his conditioning as an infant, Slothrop's very body (his erect penis) is "a colonial outpost" of "Their white Metropolis." *Gravity's Rainbow* does not resist its own implication in the structures of

capital, but it does figure its awareness of such as a moment of dreadful déjà vu. What is revealed in this moment of uncanny self-perception is the fact that Slothrop and *Gravity's Rainbow* are "monsters" held together by some plastic agent or medium. As a result, both Slothrop and the novel in which he exists can be understood as containing organs that are "outposts," strongholds of a colonizing power or miraculating apparatus. The containership of their bodies thus are inverted, and just as capital operating under *coitus reservatus*, their topologies are inside out. *Gravity's Rainbow* presents Slothrop's implication in the rise of German fascism as a metonym for the book's own embeddedness in the false recursivity of the literary marketplace. Both the novel and Slothrop are elements of a cybernetic order bound by various media that obscure capital's miraculation of foreign territories.

The circularity of the novel's apparatuses and systems is the topological manifestation of the smooth space manufactured by the body without organs. The components which together embody the stratified face of the body without organs are a rhizome that "connects any point to any other point" (*Thousand Plateaus* 21). The couplings and linkages of such a rhizome are such that flows route from any isolated component to everywhere else within the assemblage. Deleuze and Guattari assert that hierarchy does not obtain in such systems, that they are acentered. These "finite networks of automata in which communication runs from any neighbor to any other" (17) do not have predefined channels. Instead, "all individuals are interchangeable, defined only by their state at a given moment—such that the local operations are coordinated and the final, global result synchronized without a central agency. Transduction of intensive states replaces topology [. . .]" (17). What matters in this situation are the transformations which flows undergo as they pass from one stratum to another, not an arbitrary predefined structure. Cybernetic rhizomes (de)form according to the transduction of the flows between their parts. In this view, rhizomatic morphology is the result of intensive activity between coupled automata.

While rhizomatic morphology is largely influenced by the flows between the constituent parts of the assemblage in question, the components themselves cannot be absolutely interchangeable, contrary to the what Deleuze and Guattari assert. Flows change state as they are transduced by

rhizomatic components. Since the morphology of a cybernetic rhizome depends on the states of these flows, the components which transduce these flows affect the rhizome to which they are attached. The components through which flows move cannot be interchanged without affecting the morphology of the rhizome in question.

Katje Borgesius herself mistakenly concludes that the parts of a rhizomatic system are interchangeable when she compares the war to black markets. She arrives at this conclusion by questioning her attempts to offset her betrayal of "three Jewish families sent east" by spying on Captain Blicero's V-2 battery. She wonders "how many reams' worth" of classified documents regarding "squadron numbers, fueling stops, spin-recovery techniques and turning radii, power settings, radio channels, sectors, [and] traffic patterns" she has transmitted to the Allies and wonders if "there's a real conversion factor between information and lives" (105). Borgesius is an information-gathering machine that feeds World War II's anti-aircraft machines. She concludes even though it is "strange to say, [that] there is," remembering that written "in the Manual, on file at the War Department," is evidence that

the real business of the War is buying and selling. The murdering and the violence are self-policing, and can be entrusted to non-professionals. the mass nature of wartime death is useful in many ways. It serves as a spectacle, as diversion from the real movements of the War. It provides raw material to be recorded into History, so that children may be taught History as sequences of violence, battle after battle, and be more prepared for the adult world. Best of all, mass death's a stimulus to just ordinary folks, little fellows, to try and 'n' grab a piece of the Pie while they're still here to gobble it up. The true war is a celebration of markets. Organic markets, carefully styled "black" by the professionals, spring up everywhere. Scrip, Sterling, Reichmarks continue to move, severe as classical ballet, inside their antiseptic marble chambers. But out here, down here among the people, the truer currencies come into being. So, Jews are negotiable. Every bit as negotiable as cigarettes, cunt,

or Hershey bars. Jews also carry an element of guilt, of future blackmail, which operates, natch, in favor of the professionals. (105)

Here, information circulates within a cybernetic network designed to destroy humans. Borgesius's spying for the Allies facilitates the death of Nazi soldiers, just as her "smelling out at least three crypto-Jewish families" (97) leads to the systematic murder of those Jewish families. Borgesius rationalizes that her espionage offsets her work as a Nazi cryptographer of Jewish filiation, failing to realize that she is only an informational shunt in the larger system of war. Whatever her directionality, information travels through Borgesius on its way to producing death, either the death of Nazi soldiers or the murder of Jewish families. The disparity between the wartime killing of implicated soldiers and the genocidal slaughter of innocent civilians invalidates Borgesius's poorly considered equivalence formula: "she's more than balanced it, hasn't she, in the months out at Scheveningen?" (105). The problem is that while the killing of soldiers may in fact balance the political power between the Axis and Allies, it can do nothing to offset the moral imbalance created by Borgesius's betrayal of Jews hiding from the Nazis. Borgesius has increased the number of deaths produced by the machinery of World War II, and her agonized complicity fails to distinguish between victims and murderers, civilians and soldiers.

Things are commoditized in wartime which are not normally so, but reducing people to the fact that they may be commoditized dehumanizes them no less effectively than war itself. Borgesius cannot of course entirely repress her sense that people have value outside the prices they command on wartime black markets. Borgesius recognizes that unlike "Reichmarks [which] continue to move, severe as classical ballet" that Jews are among the war's "truer currencies." Although during the black market of World War II Jews may have been considered "[e]very bit as negotiable as cigarettes, cunt, or Hershey bars," every transaction that involved them as negotiable objects carried "an element of guilt, of future blackmail" (105). Even after negotiation has extracted the capital from commoditized Jews, a residue of non-negotiable value remains. People are resistant to devaluation regardless of being transformed into objects of capital exchange. They have an ineluctable value which neither inheres in nor accrues to objects such as cigarettes and chocolate

bars. This residual human value deposits a remainder of guilt in those who traffic in commoditized human beings. In this view, the value which the commoditization of human beings represses returns as guilt and/or blackmail. The circulation of people as objects of capital exchange to some extent generates post-market psychosocial accountability.

The repression of human value is only one of the transformative effects wartime black markets have upon human beings. Borgesius intuits that the War not only diverts attention from the burgeoning of such "[o]rganic markets," but that it also produces death on so massive a scale that "ordinary folks" and "little fellows" are stimulated to "grab a piece of [the] Pie while they're still here to gobble it up" (105). Mass-produced death transforms ordinary humans into commoditophages, multiplying appetite through the massive liquidation of other potential consumers. Consumption is a primary means by which subassemblies of the body without organs grow, and this consumption intensifies with the production of death as wartime spectacle. In other words, there is a proportional relationship between seeing death and consuming goods in the context of war. Exposure to the spectacle of war transforms ordinary humans into voracious consumers of commodities. This is not surprising given the relationship between optics and ontology in print culture. Even as print culture appears to break down, war intensifies the circulation of currency by exposing people to the spectacle of war, optically influencing them to increase their production of capital. The spectacle of war implicates people in the proliferation of markets.

Guy Debord interprets the spectacle of the market as something that "subjects living human beings to its will to the extent that the economy has brought them under its sway. For the spectacle is simply the economic realm developing for itself—at once a faithful mirror held up to the production of things and a distorting objectification of the producers" (16). Debord here describes the appropriation of humans by the body of capital as an optical process. The spectacle mirrors "the production of things" and this mirroring transforms the producers into thralls of the economic system. The body of capital miraculates humans within its systems of production. In the arena of war, this "distorting objectification" turns humans into consumers. Such a distortion of the

producers of capital (which distortion intensifies production) is achieved by the spectacularization of economic production itself. Basically, the spectacle of capital is a recursive projection of the production of capital, and this recursive spectacle overtakes the realm of the social as a means of defining subjectivity. Human value retreats because

[t]he spectacle corresponds to the historical moment at which the commodity completes its colonization of social life. It is not just that the relationship to commodities is now plain to see—commodities are now *all* there is to see; the world we see is the world of the commodity. The growth of the dictatorship of modern economic production is both extensive and intensive in character. In the least industrialized regions its presence is already felt in the form of imperialist domination by those areas that lead the world in productivity. In these advanced sectors themselves, social space is continually being blanketed by stratum after stratum of commodities. With the advent of the so-called second industrial revolution, alienated consumption is added to alienated production as an inescapable duty of the masses. (29)

Debord connects the imperative to consume to the colonization of social life by commodities. When social life is overcome by the spectacle of capitalist production and material goods, social life becomes the negotiation of goods and the transactions which facilitate these negotiations. People attached to the body of capital are transformed into alienated consumers of the products of their own alienated labor. This fragmentary existence is the result of a vertiginous reflection of capital by the spectacle of capital.

The spectacle of capital, then, is a recursive system of a system that is itself recursive. While there is an outside to capital, capital has powerful apparatuses of miraculation that deterritorialize the flows of other systems. *Gravity's Rainbow's* critique of capital focuses on the recursive subsystems which transform, alienate, appropriate, and dehumanize people in networks of interconnected organs-machines. The novel does not deny its own implication in the system of capital, but rather highlights its embeddedness within capital by thematizing circularity.

Furthermore, circularity is the form taken by an object which remediates itself. Recursion is self-remediation. The plot of the novel is itself circular, beginning and ending with a rocket's descent. The family history of its most closely followed subject, Tyrone Slothrop, has connections to the machinery of print culture and the rise of German fascism, linkages which suggest that the very print apparatus responsible for producing the novel also plays a genetic role in the formation of capital. Stefan Mattesich characterizes "one of the novel's numerous uroboric figures, [as] a circuit that links the end with the beginning, a circle that becomes a single point, a catastrophic collapse of meaning into tautology and repetition" (178). Uroboric circularity figures in other episodes of the novel such as the filming of Octopus Grigori's training footage which begins and ends with a camera that "follows as [Katje Borgesius] move deliberately nowhere longlegged" within Pirate Prentice's maisonette (92, 113). The circular structure of benzene comes to Von Kekulé in a dream about a "Great Serpent holding its own tail in its mouth" (412). <sup>56</sup> It turns out that the dreamed circle of Ourobouros is a map of the delocalized covalent bonds that bind the atoms of aromatic molecules such as benzene.

Covalent bonds inspire contempt in Laszlo Jamf. That "something so mutable, so *soft*, as a sharing of electrons by atoms of carbon should lie at the core of life, *his* life, struck Jamf as a cosmic humiliation" (577). So Jamf exhorts his pupils to "move beyond life, toward the inorganic." Jamf announces that inside the ionic bond there "is no frailty, no mortality—here is Strength, and the Timeless" (580). In his pursuit of inorganic timeless strength, Jamf synthesizes Imipolex G (249) whose molecular structure replaces the covalent bonds between carbon and hydrogen with the ionic bonds that exist between silicon and nickel. To Jamf's mind, covalent bonds which share atomic matter are inferior to ionic bonds "where electrons are not shared, but *captured*. *Seized!* and held!" (577). As mentioned earlier, Imipolex G is a medium that binds organisms to a cybernetic network, and among its most important features is that it replaces the covalent molecular structure fundamental to all earthly life with an ionic molecular structure characteristic of inorganic matter. Imipolex G provides an interface between the organic and machinic elements of a cybernetic network by surrogating organic molecular structure with inorganic molecular compounds. Imipolex

G looks and acts like living tissue but has the structure of something inert. Imipolex G simulates life in non-life.

The novel's opposition to systems of capital and print culture is a rejection of the devitalization of living beings. The organic components incorporated within rhizomatic networks are largely subordinate to the machinic apparatuses to which they are coupled. V-2 rockets visit death upon anxious London citizens; Slothrop has been conditioned to respond to the smell of Imipolex G; the Herero are decimated by von Trotha's genocidal colonizing machine; Jews are killed inside Nazi gas chambers. By organizing the strata of many media into a single smooth space (or surface) which connects all points to all others, the novel constructs a cybernetic collective meant to oppose devitalizing systems such as War, capital, print, science, etc., which are themselves cybernetic collectives. The Giant Adenoid, Octopus Grigori, the Giant Serpent, and Tyrone Slothrop are three monstrous figures whose formation suggests one means by which the flows of capital may be deterritorialized and reconnected into new constellations. The problem, of course, is that the morphogenesis of such rhizomes may extend rather than diminish the reach of capital.

Stefan Mattesich argues that to understand the novel's critique of capitalism as a recursive structure, "one must also grasp the 'closed' or self-enclosing system of its language as exemplary of both the Cycle and its violation, as a medium (or a delirium) that unites person and world, culture and nature, in a single textual complicity" (179). In his analysis of Uroboric circularity in the *Anubis* episode, Mattesich notes that "[i]f the circularity of this passage suggests the idea of a vicious circle and thus Western culture's descent into solipsism, disconnection, and madness, it also plays with and against that circle by ubiquitously highlighting its own connectedness" (179). This connectedness is reflected in the episode's minute pornographic description of an orgy. The description is so detailed that the collective body formed by the interconnection of different characters' arms, legs, mouths, penises, breasts, vaginas, semen, anuses, and blood can be traced in a circle. The orgy-goers constitute with their interlocked limbs, orifices, and genitalia a grotesque body which mirrors the productive body of capital. The orginistic body composed by the coupled

participants is a response to a burlesque of Shirley Temple that ends with "Shirley" (Bianca) being spanked by her mother, Margherita Erdmann.

The sexualized corporal punishment of one of Hollywood's most successful child franchises (by proxy) provokes the spontaneous formation of a decadent and debauched reproductive collective. The orgy is the product of the distorted replication of one of Hollywood's most famous child actors, herself the fantasy product of a gargantuan cinematic apparatus. Such a perverse expression of sexuality could occur in no place more appropriate than on the *Anubis*, a luxury cruise liner "seeking an escape it has not yet defined clearly" (459) and whose namesake is the Egyptian god of the dead responsible for conducting souls into the afterlife.

The *Anubis* episode relates the production and distortion of a cinematic franchise to the formation of an orgiastic network. The circularity of the resulting network is identical to the circularity of recursive capital and the novel's Uroboric figures. Mattesich argues that the *Anubis* episode "presents a machinic circuit of flows (semen, the beads of blood) and breaks (the plugging of oral, genital, and anal orifices) that does not simply reflect solipsism, disconnection and madness; it also exacerbates them, inverts and redoubles them in a process that short-circuits any figurative recuperation of moral perspective" (179). The difference between the cybernetic network the novel creates and the one which conditions the flows of Western capital is their respective orientations toward death. Like the "[s]pringtime corpses [that] twist and flow" (468) in the wake of the *Anubis*, organs-machines aligned on the body of capital "twist and flow" according to the movements of devitalizing markets. The novel attempts to disrupt these capital alignments and reconnect the radicalized components in networks which promote rather than vitiate life.

The novel constructs monstrous rhizomatic bodies that reflect the rhizomatic organizations of both capital and print culture. The ability of the novel's networks to sustain life is perhaps impossible to measure with precision. It is, after all, a work of fiction. However, the novel's efforts to draw attention to those systems of capital which intentionally or unwittingly produce death as a means of expanding capital inhibits such death-producing mechanisms, if only in the domain of ideology. The novel troubles, for example, the equivalence between sex and death by analyzing the

linkage between Slothrop and the V-2 rocket. In the context of capital, the novel exposes recursivity as hidden miraculating apparatus capable of surreptitiously domesticating foreign currency as a membrane and degrading organisms by integrating them into devitalizing cybernetic networks.

The multiplication of the body of capital (or of any body without organs) can be understood also as the assimilation of foreign material, the integration of a material, social, or cultural "other." Print culture, for example, spreads not only by means of literacy, but also by promoting modes of thought conducive to its own reproduction. In the next section, I will consider examples of the ways in which *Gravity's Rainbow* opposes the death-producing technologies that flourish under print culture.

## BY THE BOOK: DISMANTLING TECHNOLOGIES OF DEATH

In a letter to a graduate student writing a dissertation on the Bondelzwarts, Thomas Pynchon explains that "since reading McLuhan especially, and stuff here and there on comparative religion" he feels that the similarities between the near-genocide of the Herero by the Germans in 1904 and the atrocities committed (again by the Germans) in World War II point to a sociocultural psychopathology. Adapting McLuhan's theories about the socially disconnected nature of subjectivity in print culture, a disconnection which separates people from their moral duties to each other, Pynchon locates the origins of such cultural psychopathologies in the analytical and linear rationalism of Western culture. In contrast to this rationalism is the unified and integrated world view of peoples such as the African Herero, Vietnamese Buddhists, and North American Indians. Pynchon explains that he feels

the number done on the Herero head by the Germans is the same number done on the American Indian head by our own colonists and what is now being done on the Buddhist head in Vietnam by the Christianity [sic] minority in Saigon and their advisors: the imposition of a culture valuing analysis and differentiation on a culture that valued unity and integration. (Letter to E. F. Hirsch)

In the last paragraph of his letter, Pynchon remarks "[h]opefully this will all show up, before long, in another novel." There is enough evidence here to make the case that *Gravity's Rainbow* is an attack on the subject of post-Gutenberg, Cartesian rationalism, that the high literary watermark of American postmodernism is a munition of bibliobiological warfare designed to recombine the machines of subjectival genesis embedded in Western culture. That is, *Gravity's Rainbow* is an attempt to recode the flows of North American letters, a weapon designed to retribalize print subjectivity.

In addition to prototyping a tribal, cyborg subject, *Gravity's Rainbow* seeks to upset the well-ordered balance of "The System," a system that mistakes linearity for causation and engineers "rationalized forms of death" in the hopes of achieving a technologized immortality. By developing a narrative to hinder the easy construction of sequential models of thought and causation, *Gravity's Rainbow* hopes to fracture the apparatus which conditions social and technical machines to operate in the service of capital.

One of the ways in which *Gravity's Rainbow* challenges the operation of capital is to explore the effects that technologies of death such as the V-2 Rocket have upon subjectivity. As I discuss in chapter 1, the novel uses the conventions of popular genres such as science fiction and horror to alert us to the inevitable outcomes of myths propagated by the desire for immortality, purity, and perfection. In McLuhan's and Pynchon's view, Western technology protects and extends life by producing death; machines of war and scientific research produce death in an attempt to elongate the pathway between life and death. By increasing the output of these death-producing technologies and thus short-circuiting them, *Gravity's Rainbow* disrupts the production of print rationalism which relies on such technologies for protection. By being forced to the point of overproduction, these death-producing technologies short-circuit rather than extend the line installed between life and death, and so reintegrate life and death rather than maintaining them as oppositional categories. Short-circuiting such technical devices undoes the divisions Western culture relies on to separate oppositional terms. In Deleuzian terms, short-circuits undo the work of disjunctive synthesis by blowing up the machines, an effect appropriate to the Luddite novel as well as those who would

oppose technologies of oppression.

Pynchon notes an example of such a short-circuiting in the Herero response to von Trotha's genocidal campaign; Pynchon specualtes that the Herero have elected to commit racial suicide

[...] maybe not as a conscious conspiracy, but in terms of how a perhaps not completely Westernized people might respond. They had no concept of property in the European sense [...], they felt themselves integrated into everything, [...] their cattle had souls, the same souls as their own and possible [sic] part of a universal soul[.... I]t was all part of a universal scheme, and so it's doubtful if they'd have any hangups sacrificing themselves either, given a unified concept of creation, which shows up in religions all around the world, Christianity being a glaring exception. And German Christianity being perhaps the most perfect expression of the whole Western/analytic/"linear"/alienated shtick. (Letter to E. F. Hirsch)

The Herero opposition is represented in the novel by the "Otukungurua," those Herero who are "Revolutionaries of the Zero." These Revolutionaries of the Zero "mean to carry on what began among the old Hereros after the 1904 rebellion failed. They want a negative birth rate. The program is racial suicide. They would finish the extermination the Germans began in 1904" (*Gravity's Rainbow* 317). This is important because Germany in some ways used the colonial African outpost as a way of shoring up the integrity of their metropolitan center. The African colonies serve as "the outhouses of the European soul, where a fellow can let his pants down and relax, enjoy the smell of his own shit." Africa is the place where "life can be indulged, life and sensuality in all its forms, with no harm done to the Metropolis, nothing to soil those cathedrals, white marble statues, noble thoughts. . . ." This image of the unsoiled "Metropolis" recalls the haunting déjà vu Slothrop experiences when he recognizes that his family is implicated in the rise of German fascism. In that moment, Slothrop dimly recalls that his penis is in fact an outpost of "[t]heir white Metropolis far away" (285). Both Slothrop's body and Southwest Africa have been miraculated onto the body of German fascism.

By committing racial suicide, the Herero effectively short-circuit the flow of energy between life and death and disrupt the organs-machines of colonial power. Without native laborers, colonies cannot easily accrue surplus. Furthermore, the maintenance of a binary racial logic fails when there is no opposite term to articulate identity: no white without black, no clean without shit, no Metropolis without outpost. By embracing death the Otukungurua—the Revolutionaries of the Zero—destroy the colonial apparatus, retrojecting the "soil," the shit, out of the Südwest back to Europe. The short-circuiting of the line between life and death makes the outhouse-machine of colonial Europe run backwards. This Luddite action of breaking the machines which concentrate labor and dehumanize people depends upon undoing the binary logic that makes life and death opposite terms.

To this end, *Gravity's Rainbow* conceptualizes death not as something to be avoided but as something to be supremely desired, something that is a part of existence. In the case of the Herero, committing racial suicide is a political act to break the machinery of colonization. *Gravity's Rainbow* also signals the desirability of death by critiquing its opposite, immortality. Bureaucratic structures in the rationalist society of Western print culture seek to control the boundary between life and death by automatizing and technologizing biological processes. The substitution of ionic bonds for covalent bonds in Imipolex G is one example of the transmogrification of life into automated non-life. The overarching symbol of this impulse to automatization, the bid to achieve immortality, is the V-2 Rocket itself. The V-2, one of the most advanced pieces of technology Western science had produced by WW II, is an instrument that delivers death.

The paradox of the V-2 is perfectly illustrated in the case of Webley Silvernail, trainer of Octopus Grigori, who comes to realize in the labs of the White Visitation (230) that technology is a response to the fear of death. Webley first imagines that the lab rats of the White Visitation exit their cages to perform a conga number, whose theme is the start and loss of love in a mundane, ratmaze existence. The fantasized or hallucinated (it's not clear which) number ends with Webley on the shoulders of the person-sized rats, his arms raised in a V, and the narrator commenting that

One of PWD's classic propaganda leaflets these days urges the Volksgrenadier: setzt V-2 ein!, with a footnote, explaining that "V-2" means to raise both arms in "honorable surrender"—more gallows-humor—and telling how to say, phonetically, "ei ssörrender." Is Webley's V here for victory, or ssörrender?

They [the rats] have had their moment of freedom. Webley has only been a guest star. Now it's back to the cages and the rationalized forms of death—death in the service of the one species cursed with the knowledge that it will die. . . . "I would set you free, if I knew how. But it isn't free out here. All the animals, the plants, the minerals, even other kinds of men, are being broken and reassembled every day, to preserve an elite few, who are the loudest to theorize on freedom, but the least free of all. I can't even give you hope that it will be different someday—that They'll come out, and forget death, and lose Their technology's elaborate terror, and stop using every other form of life without mercy to keep what haunts men down to a tolerable level—and be like you instead, simply here, simply alive. . . . ." The guest star retires down the corridors. (230)

This excursion into Webley Silvernail's psyche with its fantasized conga number and narratorial commentation expresses the idea that the fear of death motivates technological development, but paradoxically that very same technology is used to channel all manner of species into "rationalized forms of death." The V which ends Webley's fantasy is a complicated narrative element, one that exists within Webley's own consciousness but also has larger significance in the comment it elicits from the narrator just outside Webley's awareness. On one level, Webley's raising of his arms and "sustaining the last note of the song" is nothing more than a convention to end a musical dance sequence, a gesture often used in both theater and cinema to indicate closure. On the level of the narrative, this closing V signifies the ambiguity of the V-2 rocket itself as well as the way in which technologies of death inextricably intertwine subjectival agents and objects such that their roles become difficult to distinguish. Just as Webley's upraised arms are, on the level of narrative, a gesture that connects the declaration of victory to the concession of defeat, so does the V-2 rocket

place killers and victims in strict inverse topological relationship to each other such that the meaning of the resulting subject positions are ambiguated or rendered null. Technologies of death collapse subject positions one into the other, producing hybrid and infertile subjectival species intermediated by death-producing technologies. Thus, the novel's most pervasive symbol—the Rocket—signifies surrender and victory, the organic and the mechanical, life and death, and renders the novel itself ambiguous with regard to the twin themes of death and technology.

The short-circuiting of the pathways used by technologies of death can also be understood as a crisis of representation. In *Postmodernism: or, the Cultural Logic of Late Capitalism* Fredric Jameson argues that postmodernism can be understood as the attempt to comprehend the incomprehensible globalization of capital. In this reading, literary production is the attempt to construct "cognitive maps" of global capital. The confusing character of postmodernism is a result of the incomprehensibility of globalized capital. A typical postmodern strategy to raise awareness of capital and its structures is to create spaces and symbols that confuse. In *Gravity's Rainbow*, short-circuited death machines do not only point out the failure of rationalist thought cultivated by print-enabled capitalism, but, as in the case of the V-2, they present ambiguous symbols because the attempt to extend life by producing death is a paradox of globalizing capital. The ambiguity of the V-2 in *Gravity's Rainbow*, then, also signals a crisis in postmodern representation.

## JOHNNY CAN'T READ: THE FAILURE OF ALPHABETIC LOGIC

This crisis in postmodernist representation on some levels can be compared to the moment when Nazi Germany develops and deploys the V-2. The V-2 undoes the linear temporal flow characteristic of slower-than-sound weaponry, much the same way that electronic media disrupt the linear flow of print. Because the V-2 travels in excess of the speed of sound, the sound of its arrival succeeds its detonation. This fact about the V-2 rocket distinguishes it from the rockets which preceded it, especially in Slothrop's mind. As Slothrop recounts "the strange events Saturday night at the Frick Frack Club," where two women with whom he's been sleeping both spot him, he lapses into a reverie regarding fireflies, his map of sexual conquests, and the

mannerisms of the women he's known. The visual memory of a cigarette end etches into his awareness "cursive writing that trails a bit behind, words he can't read. . . ." (22-23).

The passage illustrates two things that happen with media shift, which in this case is suggestive of the shift from an alphabetic medium to a non-alphabetic one. First, if a bit obviously, nonalphabetic signals, whether visual, acoustic, haptic, or otherwise, cannot be deciphered by modes of reading applicable to manuscript and print. Neither the firefly-like cigarette end nor the "message" it "inscribes" can be decoded using techniques suitable for messages transmitted in alphabetic code. Without being conscious of doing so, Slothrop attempts to read the trail as script, tries to interpret the image using alphabetic logic, and his efforts yield no significance. The situation is similar to the one Slothrop finds himself in during the Octopus Grigori episode. There, Slothrop attempts unsuccessfully to decipher Borgesius's eyes which "grow wide and cryptic" and the "marginal commentaries" Ghislaine scrawls "around the text of Bloat" (188) using alphabetic methods. Slothrop is, at the novel's opening, a subject of print culture, and the way he goes about making sense of the world is an extension of alphabetic logic. Such episodes, wherein meaning is inscribed (if it is inscribed at all) in the substrate of a body without organs, dramatize the failure of such logic. In this case, alphabetic logic is rendered useless in the process of understanding the implications of the V-2's "silent" flight because the "meaning" of the V-2 exists at the level of the lines of flight connecting the subsystems of war to capitalism and print culture.

This dramatization of the failure of alphabetic systems runs counter to the work of several other notable postmodernist writers who in general valorize alphabetic modes of understanding. As Peter Cooper explains, postmodern novelists like Pynchon, Barth, and Nabokov are similar to the extent that they problematize protocols of reading, but ultimately they differ in their attitudes. Both Barth and Nabokov reaffirm the power of literary and textual creation, even at the same time they parody it. In *Lolita*, Humbert Humbert follows Clare Quilty "in a 'cryptogrammatic paper chase' of veiled allusions, anagrams, and numerology" (Cooper 15), but the novel is more concerned with the structural integrity of Humbert Humbert's confession rather than with critiquing the procedures by which he identifies and organizes the traces of evidence which might lead him to Lolita. The

novel's comfort with Humbert Humbert's readerly activity corresponds with the sentiment Nabokov expresses when he declares, "For me a work of fiction exists only insofar as it affords me what I shall bluntly call aesthetic bliss[...]" (qtd in Cooper 41-42). Similarly, Barth takes aesthetic refuge in creating works of art that question and reaffirm literary production, calling *The Sot-Weed Factor* and *Giles Goat-Boy* " 'novels which imitate the form of the Novel, by an author who imitates the role of Author' " (qtd in Cooper 38). Such an attitude enables Barth to remain "amused and even inspired by the labyrinthine ramifications of consciousness; these [feelings] permit a kind of lexical gamesmanship where fun for fun's sake, and not 'truth,' becomes the norm" (39). Pynchon on the other hand is deeply suspicious of sense-making systems, *Lot 49* being perhaps the paradigmatic paranoid meditation on the impossibility of explaining the world. With *Gravity's Rainbow*, that suspicion of sense-making systems turns into outright hostility toward print culture itself.

Slothrop's application of alphabetic logic fails not only to decipher the meaning transmitted by objects of sexual interest ("two Wrens") but also the meaning of an object that produces death.

"What happened?" Silence from Slothrop. "Your two Wrens . . . when they saw you . . ." then [Tantivy] notices that Slothrop, instead of going on with his story, has given himself up to shivering. Has been shivering, in fact, for some time. It's cold in here, but not that cold. "Slothrop—"

"I don't know. Jesus." It's interesting though. It's the weirdest feeling. He can't stop. He turns his Ike jacket collar up, tucks hands inside sleeves, and sits that way for a while.

Presently, after a pause, cigarette in motion, "You can't hear them when they come in."

Tantivy knows which "they." His eyes shift away. There is silence for a bit. "Of course you can't, they go faster than sound."

"Yes but—that's not it," words are bursting out between pulses of shivering—"the other kind, those V-1s, you can hear them. Right? Maybe you have

a chance to get out of the way. But these things explode first, a-and *then* you hear them coming in. Except that if you're dead, you *don't* hear them."

"Same in the infantry. You know that. You never hear the one that gets you."

"Uh. but—"

"Think of it as a very large bullet, Slothrop. With fins."

"Jesus," teeth chattering, "you're such a comfort." (23)

What is perhaps most notable about this passage wherein Slothrop ponders the "silent" arrival of V-2s (they propagate sonic booms) is the way in which technology disrupts the structure of the prevailing media, which because it prevails is often considered a fundamental structure of the physical world and/or rational thought. Rocket science enables the V-2 to travel faster than sound, and so the V-2 is capable of arriving before the sound of its arrival. By reversing the order of its detonation and acoustic signal, the V-2 undoes subsonic chronology, which before the V-2 was chronology. Prior to the advent of supersonic travel, sound always preceded arrival. After the V-2, the signs of temporal order are scrambled as if temporal order itself were coming undone. Under the pressures of technology, orders presumed inviolable (if presumed at all) break down. This breakdown is similar to the kinds of breakdowns that attend the shift from print to electronic media, the kinds of breakdown characteristic of machines coupled on the surface of the body without organs. For example, after electronic media, narrative no longer obviously proceeds (if it ever did) from a discrete or identifiable beginning to a singular definitive end.<sup>57</sup> Technology restructures the dimensions by which media are organized by interrupting the ideal flows that feed its narrative machines.

If the roar of a rocket is the signifier of that rocket's arrival and detonation, supersonic speed can be said to strip acoustic signifiers of their signifieds. From another point of view, the chain of signification here is shortened to the point of having less-than-zero dimensionality. The object punctures its signifier and threads itself through, thus short-circuiting the chain of signification. What remains for Slothrop is a sense that the V-2 is somehow even deadlier than the rockets which

preceded it. The ability of the V-2 to preempt its own acoustic signal produces "words [Slothrop] can't read. . . . ", words that suggest nothing clearly except the possibility of his death. Both the V-2 and the lit end of a cigarette fail to signify within the alphabetic contexts of script and print. The illegibility of the cigarette end's "cursive writing" which threads Slothrop's internal experience can be compared to the inaudibility of the V-2's acoustic signal, both of them meaningless to a subject integrated by alphabetic modalities. Furthermore, because the guidance systems of V-2's were unreliable, their detonations could be said to be "lucky" strikes, making V-2's ringers for the cigarettes Slothrop smokes. Such associations (as of a name brand with an empirical fact) are not direct effects of a print modality. "Lucky Strike" can only take on such meaning outside the logic of print, within the realm of Slothrop's submerged awareness, and only after the signs of incumbent media have been rendered unintelligible by shifts in technological regime.

In "Mass Media Culture," Jean Baudrillard reads the advertising slogan "Lucky Strike, A Toasted Cigarette" as an example of "tautological discourse" (94) that brings into being the very thing it supposes. Such examples of "magical speech" operate similarly to simulation models which transform real events into iterations of the simulations themselves. The trademark "Lucky Strike" insinuates that the coincidence between the lighting of a particular brand of cigarette and the crystallization of good fortune is no coincidence at all. Lucky Strikes are not lucky by chance. Their luck is not luck at all. A similar magic governs Slothrop's "prediction" of the precise points of detonation of V-2 rockets whenever and wherever he engages in sexual intercourse. Even given the imprecise guidance systems of V-2 rockets and the delay between their firing and Slothrop's sexual activity, Slothrop "knows" exactly where these V-2's will land. Magical causality does not obey the same laws of cause and effect codified and propagated in print culture. The strict sequential order reinforced by alphabetic systems reflects the cause-and-effect logic which characterizes most of Western science. The connection between Slothrop's sexual encounters and the "Lucky Strikes" of V-2 rockets is identical to the relationship between simulations and reality, both of which function in the manner of the magical speech of advertising, bringing into being the very things they propose. As apparatuses of capital, advertising and simulation transcend the

rationalism engendered by capital's alphabetic systems of print, which is partially the reason why advertising is not subject to logical analysis and simulations are able to deform reality. *Gravity's Rainbow* demystifies the relationship between simulation and reality by articulating apparatuses that cannot be comprehended within an alphabetic framework. The V-2 rocket is one such apparatus.

As a result, the V-2 is doubly dangerous for Slothrop because he is a subject conditioned by print, an alphabetic modality. Because the V-2 rocket threatens to destroy Slothrop exactly to the degree it prevents him from reading its sign, Slothrop stands a chance of being destroyed first as a reading subject and then as a biological being. This is why Slothrop is so important in the development of the cybernetic subject in postmodern literature. He is a mutating subject, one migrating from the domain of alphabetic to electronic media. Slothrop's sexual activity is mysteriously but empirically linked to the arrival of V-2s, his map of sexual engagements a perfect mapping of V-2 strikes, a fact of intense curiosity for those pursuing him: Tantivy, Mexico, Pointsman, PISCES, ACHTUNG, IG Farben, and so forth (85-86).<sup>58</sup> Part of *Gravity's Rainbow* attack on the print subject is its dramatization of this very problem in the form of the transition from print subjectivity to cybernetic subjectivity, and this is the transition, mutation, Slothrop undergoes. Of Slothrop's own sense of connection to the V-2, Berressem says that

[...] Slothrop is looking for his identity, which for him means trying to uncover the mysterious connection of his libido to the V-2. As in [V. and Lot 49], this search takes place in a fully cybernetic universe in which "information [has] [substitution Berressem's] come to be the only real medium of exchange" [Gravity's Rainbow 258] and in which there is an "overabundance of signifier." [Tanner 76] (120)<sup>59</sup> Berressem places Gravity's Rainbow squarely within the domain of the cybernetic, where information governs the regulation of automated control systems. Of his contemporaries, Pynchon is nearly alone in explicitly thematizing the cybernation of subjectivity.

To the extent Tyrone Slothrop's progress is a postmodern parable modelling the subjectival shift from print to electronic media, *Gravity's Rainbow* is a device that disrupts the smooth operation of certain segments of print culture, segments which comprise the Pynchon industry and

to some extent unify print culture. Measured as the frustration of the protocols of print culture, the scale or effectiveness of this disruption can be described as the function of the distance between the cybernetic character of *Gravity's Rainbow* and the object expected by a critical industry and a reading public biased by print. Since the initial controversy following its publication, the literary critical establishment has generally come to recognize *Gravity's Rainbow* as a great work of literature, but this unreflective designation ignores the ways in which that novel continues to resist (and break) the mechanisms and systems of print which at the moment of this writing are in severe decline. *Gravity's Rainbow* opposes the day-to-day workings of print culture not only by reordering linear modes of thought, critiquing fascistic systems of reading, hybridizing the novel with grafts from non-print media, and morphing conventional literary mechanisms such as character, theme, and plot. *Gravity's Rainbow* also opposes the very modes of consumption that characterize print culture under capitalism.

Gravity's Rainbow takes its cue not only from the increasing globalization of capital and the multiplication of dehumanizing bureaucracies which flourish in post-war culture, but also from the very print technologies that enable it to come into being. Paradoxically, Gravity's Rainbow in some ways signals the end of print culture in the very fact that it is a radical mutation of one of print culture's most privileged forms: the novel. The fact that Gravity's Rainbow is a weapon aimed at print culture despite that it is clearly a book (of some sort) is perhaps to be expected. The morphological irony of Gravity's Rainbow as an anti-print object is anticipated by Derrida who comments that "[t]he end of linear writing is indeed the end of the book, even if, even today, it is within the form of a book that new writings—literary or theoretical—allow themselves to be, for better or for worse, encased" (86).60 While it may seem strange to speak of a book—even one that so stubbornly resists the machinery of print culture—as a bibliobiological weapon, doing so explains Gravity's Rainbow's controversial reception as well as its extraordinary difficulty. Quite simply put, the novel is hostile to print subjectivity and the modes of understanding cultivated and privileged by print. Gravity's Rainbow is the "Badass," "superhero," or "monster" that warns of the dangers of technologization.

RECOMBINANT RAINBOW: TYRONE SLOTHROP, HYBRIDIZED MEDIA, AND THE BODY WITHOUT ORGANS *Gravity's Rainbow* troubles the circumstances which prevail under print media, thereby hindering the reproduction of print subjectivity and the maintenance of systems of thought favored by print. The novel contaminates the purity of its print-derived signifying apparatus by remediating non-print media such as film, comics, electricity, and painting. The novel also appropriates organs-machines from the body of capital at the same time it critiques capital and its aggregated subsystems, acknowledging in the process its own implication in the system. While these things signal the novel's importance as an object that heralds what Derrida forecasts as the "death of the book," one of *Gravity's Rainbow's* most important contributions to literature is its production of a cybernetic subject.

Tyrone Slothrop is the novel's prototype of a cybernetic subject. He begins the novel as a subject conditioned by print. Slothrop's conditioning renders him unable to navigate effectively the changing media landscape and implement fully the logical shifts necessary to live in a world increasingly dominated by the non-alphabetic modes of communication that characterize film, comics, and electric networks. Over the course of the novel, however, Slothrop undergoes a transformation that enables him to negotiate the networks of war-time Europe. By the novel's end, however, his transformation seems to have condemned him to a "scuffling future, to mediocrity" (738). Slothrop is characterized as a joke where "there ought to be a punch line to it, but there isn't. The plan went wrong." There is every indication at the end of the novel that Slothrop's scattering is a loss, that Slothrop's mutation produces an abortive cybernetic subject unable to survive the pressures exerted by the culture it inhabits. I would like to suggest that this reading can only be maintained by ignoring the media context which obtains by the novel's end and that a more careful consideration of the novel's ending reveals that Slothrop has become a potent model for the continuation of subjectivity in a cybernetic age.

From the very beginning of the novel, there are indications that the Slothrop family figures prominently in the rise of American print culture and Western capital. Though "no Slothrop ever

made it into the Social Register," their decision to stay and invest in the Berkshire "timberland whose diminishing green reaches were converted acres at a clip into paper—toilet paper, banknote stock, newsprint—a medium or ground for shit, money, and the Word" (28)—made the Slothrop family a crucial component in the growing network of capital. The Slothrops produced the material substrate, paper, used to transmit "shit, money, and the Word, the three American truths, powering the American mobility" (28).

During the metamorphosis of capital during World War II, Tyrone Slothrop discovers the role his family has played in the development of American capital, print culture, and the development of the synthetic medium Imipolex G. Up until this point in the novel, Slothrop has not been able to fully comprehend the supersonic flight of the V-2 rocket, attempting as he does to read it alphabetically. While researching IG Farben's consolidation of corporate production which led to the expansion of German capital prior World War II, Slothrop discovers that the Slothrop Paper Company also provided the material substrate through which IG Farben monetized its debt and internalized the currency of non-German markets. He also discovers that his father, Broderick, sold him "to IG Farben like a side of beef" (286). Slothrop's father, whose codename in the dossier Slothrop consults is "Schwarzvater," agreed to allow Lyle Bland observe Tyrone in exchange for the price of Tyrone's Harvard education. After Slothrop gets to this point in the dossier, he recalls a "smell, a forbidden room, at the bottom edge of his memory," and he knows "that what's haunting him now will prove to be the smell of Imipolex G."

Through the Slothrop family's lines of descent and inheritance and its corporately-owned paper-making apparatus, Tyrone Slothrop is connected to the bodies without organs of American and German capital, German fascism, IG Farben, German rocket science, American print culture, and municipal sewage systems. At one point the novel, considers the toothpaste flowing through London's sewage system. While toothpaste begets "uncounted soapy-liquorice moments spat and flushed down to the sewers and the slow-scumming gray estuary" (130), the

old toothpaste tubes are emptied and returned to the War, [. . .] each tube wrinkled or embossed by the unconscious hands of London, written over in interference-

patterns, hand against hand, waiting now—it is true return—to be melted for solder, for plate, alloyed for castings, bearings, gasketry, hidden smokeshriek linings the children of that other domestic incarnation will never see. (130)

The intricate knotting of children, toothpaste, saliva, food particles, pipes, water, shorelines, and toothpaste tubes is a metonym for the body without organs. Toothpaste kneaded by countless unconscious hands combines with saliva, food, and water, and is thus transduced into "dusty oversize bubbles tessellating tough and stagnant among the tar shorelines" (130). The complex enmeshment of organic tissue, inorganic compounds, and metal objects is a rhizome that establishes continuity between morning time oral hygiene and war time weapons manufacture. What separates the "domestic incarnation" of metal as a toothpaste tube from its incarnation as weapons parts

is not death [. . .] but paper: paper specialties, paper routines. The War, the Empire, will expedite such barriers between our lives. The War needs to divide this way, and to subdivide, though its propaganda will always stress unity, alliance, pulling together. The War does not appear to want a folk-consciousness, not even of the sort the Germans have engineered, ein Volk ein Führer—it wants a machine of many separate parts, not oneness, but a complexity[. . . .] Perhaps the War isn't even an awareness—not a life at all, really. There may only be some cruel, accidental resemblance to life. (130-131)

The War is a rhizomatic body comprised of organs-machines that originate in diverse milieu. The distinction between the War's organs-machines is articulated by "paper specialties, paper routines." The specialization of function of the War's organs-machines is determined by paper, the substrate through which print propagates its signifiers. Paper is the membrane coding the transductive functioning of the War's organs-machines. In particular, printed paper enables the transduction of substances and flows from one milieu to another by differentiating the operational parts of the body of without organs.

This is different than saying that printed blueprints and technical manuals contain information about how to produce and maintain the systems of a functioning society. For one, interpreting paper as organ-articulating membrane emphasizes the connectedness of the components which comprise the ensemble in question. In such a perspective, paper distinctly behaves as an agent of remediation outside of the content in transmits. More importantly, whereas readings which construe printed artifacts as independent objects neglect the embeddedness of those artifacts in larger systems of production, the functioning of the larger system qua system is often the point of descriptions that articulate books as components, membranes, and organs of a larger system. The system that connects, for example, toothpaste tubes and ballistic missiles is seen as a seamless whole (a smooth space) that transduces flows from one milieu to another, rather than as a series of independent but connected systems that deeply, if mysteriously, affect each other. The latter approach reflects what Bruno Latour identifies as the covert multiplication of hybrids under the Modern Constitution.<sup>61</sup> Latour explains that Moderns who were extremely concerned about maintaining the boundary between nature and culture avoided hybridization through one of two ways.

The first consists in thoroughly thinking through the close connections between the social and the natural order so that no dangerous hybrid will be introduced carelessly. The second one consists in bracketing off entirely the work of hybridization on the one hand and the dual social and natural order on the other. (41)

However, blindness to the proliferation of hybrids and the consequences of that proliferation profoundly neglect the complexity of deeply interconnected ontological orders, producing quasi-objects such as the hole in the ozone layer, and resulting in phenomena such as the increase of global temperatures associated with the greenhouse effect.

In the realm of the human, the one which concerned the followers of King Ludd for whom Pynchon names the Luddite novel, understanding capital as a body without organs given form by complexly interconnected subsystems of humans and non-humans, organisms and mechanisms,

and compounds and tissue engenders an understanding of the effect media have on the nature of capital. When one considers printed paper as a substrate that differentiates the transducive organs of capital, the specialization of labor can be understood as an equivalent effect of print in a different ontological order. Since Gutenberg, capital has specialized labor by producing paper currency capable of storing human labor. Without the printed vessel of universalizing currency, the differentiation of labor required for mass production would generate incompatible tokens of exchange. Capital would choke on its own hyper-articulated organs-machines. The ability to print currency was the historical contingency that enabled capital's organs-machines to couple. Printed currency ensured that machinists could exchange their labor for the labor of farmers. Capital could not have extended its reach much farther than the village if commodities were the only media capable of storing labor for exchange.

Turning back to the novel, World War II can be understood as a body without organs that uses paper to divide and subdivide the material of diverse ontological orders into working components. These components, differentiated as they are, still are interconnected, and the novel identifies the apprehension of this interconnection as paranoia. For example, Oneirine is a drug that produces paranoia, which "[1]ike other sorts of paranoia, [...] is nothing less than the onset, the leading edge, of the discovery that *everything is connected*, everything in the Creation, a secondary illumination—not yet blindingly One, but at least connected[....]" Opposed to the paranoid apprehension of interconnection, the novel notes that

[i]f there is something comforting—religious, if you want—about paranoia, there is still also anti-paranoia, where nothing is connected to anything, a condition not many of us can bear for long. Well right now Slothrop feels himself sliding onto the anti-paranoid part of his cycle, feels the whole city around him going back roofless, vulnerable, uncentered as he is, and only pasteboard images now of the Listening Enemy left between him and the sky. (434)

In addition to engendering a sense that everything around him is unconnected, Slothrop's antiparanoia also makes the world seem unreal, flattening his enemies into cardboard cutouts. But note that even in this "anti-paranoid" state, the city is "vulnerable uncentered *as he is*" and the "Listening Enemy," while flat and insubstantial as pasteboard figures, are there nonetheless. The unreality Slothrop experiences as "anti-paranoia" does nothing to diminish the fact that his psyche projects itself onto the elements of the world around him. If anything, Slothrop's anti-paranoiac hallucination resembles the hallucination of the schizophrenic

who believes that *he* is World War II. He gets no newspapers, refuses to listen to the wireless, but still, the day of the Normandy invasion somehow his temperature shot up to 104°. Now, as the pincers east and west continue their slow reflex contraction, he speaks of darkness invading his mind, of an attrition of self. . . . (131)

This institutionalized schizophrenic is a metonymic personification of the War. His vital signs are connected to the war's movements because those movement's are the war's vital signs. The war's vital signs are his vital signs.

The continuum which runs between paranoia and schizophrenia is one Baudrillard describes in his consideration of the state of ecstasy to which information and communication networks bring us. Baudrillard argues that a saturated media space imprisons subjectivity, creating a condition where "[t]he word is free, but I am not; the space is so saturated, the pressure of all which wants to be heard so strong that I am no longer capable of knowing what I want" (*Ecstasy* 24-25). Baudrillard reads the historical development of this ecstatic state of communication—where media is introjected into subjectivity and subjectivity extraverted into media—as a cultural psychopathology, observing that

[i]f hysteria was the pathology of the exacerbated staging of the subject—of the theatrical and operational conversion of the body—and if paranoia was the pathology of organization—of the structuring of a rigid and jealous world—then today we have entered into a new form of schizophrenia—with the emergence of an immanent promiscuity and the perpetual interconnection of all information and communication networks. (26-27)

Baudrillard interprets the emergence of an interconnected information network as the genesis of a "new form of schizophrenia" where subjectival interiority is exteriorized into the network and the network extends into the interior of the subject.

It can be argued that a similar progression is traced in Slothrop's disintegration. Slothrop initially interprets as paranoia his increasing sense that he is the object of study for a number of named and unnamed persons and organizations. Not only does he encounter real evidence of such surveillance, but he also begins projecting evidence where there is none. In the Octopus Grigori episode, for example, he cannot tell whether Ghislaine is actually inscribing text around Bloat. Lying next to Margherita Erdmann, he considers the "Jamf/Imipolex mystery" and concludes "[e]ither They have put him here for a reason, or he's just here. He isn't sure that he wouldn't, actually, rather have that reason. . . . " (434). Given the choice between paranoia and anti-paranoia, Slothrop chooses the comfort of the psychological structure that will give some organization to the world. The moment Slothrop sides with paranoia, he has, as Mattesich observes, chosen to turn the world into "a purely solipsistic reflection of his own decoded subjective states" (193). This is where paranoia transforms into schizophrenia. It is a condition that is also tied to the failure of alphabetic logic to make sense of the world. Slothrop is caught in an informatic rhizome and his attempts to decode the flows in which he is caught only further embed him in those flows. Baudrillard predicts such a failure by noting that schizophrenia is the state of ecstasy produced by the persistent interconnection of information and communication networks. The nodes of these networks modulate information on the level of structure. The content flowing through these networks, some of which is susceptible to alphabetic decoding, is largely irrelevant to the media through which the content flows. Baudrillard has simply restated of McLuhan's thesis that the medium is the message in psychosocial terms.

The increasing failure of print modalities to alter the production of the cybernetic network, to destabilize the schizophrenic exteriorization of subjectivity and the internalization of the network's lines of connection, is precisely the condition *Gravity's Rainbow* seeks to bring about. Mattesich observes that Slothrop "tries to grasp the nature of what oppresses him so deeply that it cannot be

distinguished from himself: it is himself. Slothrop's scattering parallels the novel's withdrawal to the body without organs, its deterritorialization along the inclusive boundary between escapism and escape" (194). While Mattesich here focuses on the resemblance between Slothrop's disintegration and the text's increasingly disjoint narrative structure, his observation makes clear that schizophrenic breakdown is, in the novel's final pages, the text's primary functional mode and that this schizophrenic machinery is the maturation of paranoiac modules laid early in the book.

Thus, the novel's schizophrenic production intensifies as the book comes to its apocalyptic end and Slothrop begins to disintegrate. The increasing disruption of the body of the text and the disturbance of its own print apparatus can be viewed as a schizophrenizing of the paranoid structures which populate the novel's networks. This schizophrenizing is also accompanied by the hybridization of media onto the body of the text. The grafting of non-print media onto the body of print produces a smooth media space that connects the various media together, contaminating the purity of the typographic space of the novel and altering the operation of its machines. In other words, the hybridization of media in the novel mutates the organs-machines of print culture, forcing them to transduce paranoiac flows into schizophrenic oscillations. The two most obvious symptoms of this mutation is Slothrop's scattering and the narrative's structural decomposition.

Much more remains to be said about the text's miraculation of non-print organs-machines and the schizophrenizing of the novel's narrative production. For example, Imipolex G is a medium capable of connecting organism and machine, and it is the material from which Gottfried's shroud is made. The V-2 rocket fired at the novel's end and which contains Gottfried is a cybernetic organism that along with all the other V-2 rockets ever fired produces a constellation of Brennschluss points whose shape "is most likely an interface between one order of things and another" (302).<sup>62</sup> This constellated interface does not exist except as an abstraction since the Brenschluss points mark a phase of a V-2 rocket's flight. The two orders which interface through this constellation of Brenschluss points come together in a technicity that "interlaces geographic, ecological, energetic, economic and historical dimensions without being reducible to any of them" (Mackenzie 11). Such "ensembles are difficult to represent as such because of their sprawling,

misapprehension of the way in which technical objects exist prevents us from seeing their part in the constitution of human collectives, or in the 'human' "(11). The technicity that these Brenschluss points participate in affects the nature of the human and non-human components that they connect. An analysis of the information which occurs at the joints of transduction where these "disparate realities [are] articulated together" (49) would undoubtedly yield a fuller understanding of types of subjectivities produced within such a technicity. An analysis of the transducive information produced by the technicity of Brennschluss points interfacing the disparate human and non-human orders is equivalent to the analysis of the ways in which capital is implicated in the constitution of a larger cybernetic collective that may ultimately destroy itself. *Gravity's Rainbow* associates the production of Western print culture and the systems of capitalization in ways that disrupt the easy reproduction of print subjectivity. The question remains whether the cybernetic collective of which the novel is a part can rehabilitate the deathward-tending technologies it inherits from a dying culture of print.

## CONCLUSION

Derrida surmised that the end of the book could come in the form of a book. Not until the Industrial Age had been underway for nearly a century did an information medium arrive which could challenge the dominance of print. However, by the close of the Twentieth century, several media presented themselves as rivals to the regime of print. Film, radio, television, telephone, hypertext, video, and electronics have all but displaced print as Western culture's main method of information distribution.

The father of media studies, Marshal McLuhan, recognized that print had irrevocably changed Western culture, but more than that he also recognized that print played a crucial role is shaping the kind of subjects Westerners would become. According to McLuhan, the historical contingencies which have shaped Western culture are deeply dependent upon print. McLuhan also saw that electricity was radically altering the scale and nature of information interchange and that humankind was becoming something different that it had been before. What he didn't recognize was that the extensions of humans in electronic media in fact produced collectives that were hybrid entities. For McLuhan, the boundary of the human organism was limited to the threshold of the body, even if that organism somehow wore its nervous system on the outside of its own skin.

In my introduction, I argued that the advent of postmodernism which was partly fueled by the countercultural revolution was interpreted by many as the end of bourgeois production. Fiedler saw in the masses of "new mutants" the end of belletristic humanism and, so, the end of humans, the extinction of *homo sapiens*. Unlike McLuhan, Fiedler never considered that the very postmodern literature he initially rejected as the death knell of Western culture was in fact a new form of post-print media. While Derrida could see the birth of a monstrous subjectivity and the end of writing, he was cautious about what the next few decades would actually bring, and so he "averted [his] eyes" from the "terrifying form of monstrosity" whose "birth [was] in the offing" ("Structure" 165).

The text of the present study, the body of "Recombinant Media," sought to do nothing as much as consider one of postmodernism's canonical texts and the subjectivity it produced by means of remediation. The revolutionary effect of that text, Thomas Pynchon's Gravity's Rainbow, is still being felt into the third millennium not because it is a great work of literature but, as my argument goes, because it is the first major work of anti-literature in print form. The significance of *Gravity's* Rainbow goes well beyond literary subjectivity. The recursive formation of its anti-print organsmachines and the massive critique it launches against capitalism, technologized forms of death, and print subjectivity hints that the entangled components of Western culture are not long to live. The gradual dissolution of what might be called its main character, Tyrone Slothrop, is a case study of the reformulation of paranoiac subjectivity in a schizophrenic cybernetic regime. The novel metonymically associates systems of capitalization, protocols of signification, syntheses of chemistry, and the engineering of rockets with the constitution of rhizomatic collectives of humans, animals, machines, and environments. For this study, one of the most significant aspects of these collectives is that their components are miraculated by means of media. Gravity's Rainbow is fundamentally about the interfaces through which humans and non-humans are intricated and the process by which the novel examines these interfaces ruptures the machinery of print culture.

On one level, of course, the metonymic language of "Recombinant Media" exaggerates the obvious. It is not a secret that humans and machines, metals and wood, and organs and devices are connected in ways that challenge our beliefs about what we understand about the process of transducing terrestrial and stellar energy into objects for commercial consumption. The myriad coded flows which transmit and produce human culture are infinite by virtue of the fact that they are essentially mediations, which as Bolter and Grusin have established are always already remediations.

The attention I devote to Ellison's *Invisible Man* is strategic in two ways. First, I want to show that the roots of remediated subjectivity is not only the result of the advent of electronic media. Humans have been embedded within systems of production well before the Industrial Age and Invisible Man reminds us that in the United States no people have been more firmly or violently

attached to the production of capital than African-Americans. Though born after Emancipation, Invisible Man cannot avoid the flows that continue to connect blacks to the system of capitalization once known as slavery, which has transformed into a racially biased labor market. Caught in a labyrinth of pipes, gauges, and prophecies, Invisible Man must fight not so much to become visible, but to become invisible to the networks of production that prevent him from making use of his own labor. Invisible Man has been transformed into a zombified automaton, a "mechanical man" with no more power to self-determination than a Sambo doll manipulated by invisible strings. Invisible Man attacks the system by recuperating his own voice and transforming that voice into print. Invisible Man shunts the coded flow of Monopolated Light and Power's electrical grid into a closed circuit that emits reintegrative incandescent light. This light substantializes Invisible Man's otherwise optically imperceptible form, affording him time to speak for racially alienated subalterns on "the lower frequencies."

In the domain of popular culture, the degree to which humans have been mediated by systems of capital is raised in the shape of a cyborg. Dwayne McDuffie's and Gregory Wright's *Deathlok* replays the racial conflict of the comics publishing industry while at the same time fashioning a media vernacular capable of visually representing the non-space of cyberspace. The conjunction of print, electricity, flesh, and capital is presented in the form of a collective possessed of what W. E. B. DuBois called double-consciousness. That collective, a cybernetic entity named Deathlok, falls outside the psychoanalytic myths of subjectival genesis established by Lacan, manifesting a subjectivity that preserves ontological diversity even at the same time its constituent elements are inextricably linked. The result is a retroactively constituted cybernetic subject whose contours mediate the terminals of what are supposed to be binary opposites: blacklwhite, mechanismlorganism, alivelinert, fleshlcircuitry. With the end of the early 1990's *Deathlok* series, Deathlok had become a twice-told tale but with a difference. In 1974, a year after the publication of *Gravity's Rainbow* when the first *Deathlok* series had been published, Deathlok's cyborg ontology is a parable of the death of white male masculinity in a racially hybridized nuclear family. In 1991, the year that the *Deathlok* story is retold, Deathlok's cyborg ontology is comparable to being an

assimilated racial other, a condition not worth killing oneself over, offering as it does the opportunity to appropriate a technologized form of death for saving the lives of organisms and machines. Such appropriation, of course, has its risks, such as Deathlok's fascistic exercise of killing power under the cloak of pacifism. Avoiding such fascism is only one of the reasons to attend carefully to the complex intrication of organisms, machines, and material by media.

"Recombinant Media" suggests that writing has remediated itself around the time of *Gravity's Rainbow's* publication. The effect is the end of the book and the genesis of a schizophrenic network subject. The trajectory "Recombinant Media" traces from Ellison's *Invisible Man* in 1947 to McDuffie's and Wright's *Deathlok* in 1993 is somewhat schematic. It is my hope, however, the lines of filiation I have traced between them through Pynchon's *Gravity's Rainbow* suggest directions for research about the kinds of subjectivities taking shape in this declining age of print.

## Notes

- In discussions about the origins of non-linear forms of writing (such as hypertext), Vannevar Bush's articulation of the memex machine is cited as one of the first proposals to deal with the mushrooming of data generated by scholars, scientists, and legislators. See, for example, Bolter, Jay David. *Writing Space*. 23-24; Landow, George. *Hypertext* 2.0. 7-10.
- <sup>2</sup> Though Bush's memex widely is held to be the precursor of early third millennium computerbased information systems, both Bush and Derrida envision information systems that can be manipulated mechanically.

Bush describes his memex machine as

a device in which an individual stores all his books, records, and communications, and which is mechanized so that it may be consulted with exceeding speed and flexibility. It is an enlarged intimate supplement to his memory.

It consists of a desk, and while it can presumably be operated from a distance, it is primarily the piece of furniture at which he works. On the top are slanting translucent screens, on which material can be projected for convenient reading. There is a keyboard, and sets of buttons and levers. Otherwise it looks like an ordinary desk.

The evidence that Bush's device is intended to be electro-mechanical lies in his description of a provision for consultation of the record by the usual scheme of indexing. If the user wishes to consult a certain book, he taps its code on the keyboard, and the title page of the book promptly appears before him, projected onto one of his viewing positions. Frequently-used codes are mnemonic, so that he seldom consults his code book; but when he does, a single tap of a key projects it for his use.

Bush's memex is able to move quickly to user-assigned places in any particular text. It also provides a means for tying items together by means of "trails" which can be (mnemonically) indexed. The similarity of Bush's memex system to late twentieth-century and early twenty-first century web browsers is striking.

Derrida explains that linear writing has

constituted [...] by its unfolding in one dimension alone, the instrument of analysis out of which grew philosophic and scientific thought. The conservation of thought can now be conceived otherwise than in terms of books which will only for a short time keep the advantage of their rapid manageability. A vast "tape-library" with an electronic selection system will in the near future show pre-selected and instantaneously retrieved information. (332 N35)

Hanjo Berressem details a number of the more significant critical interpretations of Slothrop's disintegration (178-179). Berressem notes that Charles Clerc understands Slothrop's scattering as "the climax of cinematic of structures," while Thomas Schaub remarks that it is "the basis or pivot of much controversy regarding [. . .] the role of the 'self' in the modern novel." Berressem also remarks that some interpret it as "a final textual dispersion" (e.g. Raymond Olderman) and others "as a vitalistic metamorphosis" (Joseph Slade). For his own part, Berressem provides a very interesting analysis.

Berressem argues that Slothrop's disintegration can be understood as the movement of the subject from the Symbolic into the Real. For Berressem (and Lacan), an unmediated encounter with the Real is a "basic paradox" such that "a direct meeting [of the subject with the Real, or unknown] entails the complete fading of the subject and thus the *negation* of subjectivity and the signifier [. . .]" (23). Berressem takes Slothrop's "just feeling natural" (as he gazes at sky, rainbow, and ground) as just such an unmediated encounter between the Subject and the Real.

Berressem's analysis is especially interesting because it accounts for Slothrop's disintegration as a residual effect of the incorporation of film as a medium into the novel. The stop-and-go "stuttering" of the cinematic medium is, for Berressem, a strategy "taken up by the text, in which ellipses continually break up the 'natural movement' of the narrative voice" (178).

<sup>4</sup> The term "organs-machines" refers to the major and minor systems which comprise any number of larger systems. For example, the system of print has for some of its constituent organs-machines printing presses, press agencies, authors, review departments of various entertainment

and news agencies, academic writers, etc. Each of these organs-machines are only relatively autonomous (i.e. they do depend on each other). The term organs-machines merely points out that these collectives are comprised of both mechanical and biological components and that (as collectives) they may be attached to (work in the service of) other systems. The concept is developed at length in Deleuze's and Guattari's Anti-Oedipus.

- 5 Since McLuhan, the cultural effects of print have been widely studied, notably by Elizabeth Eisenstein in *The Printing Press as an Agent of Change: Communications and Cultural Transformations in Early-Modern Europe*, Walter J. Ong in *Orality and Literacy*, and by Henri-Jean Martin in *The History and Power of Writing*. Both Ong and Eisenstein significantly complicate McLuhan's models of print and non-print cultures. For example, Ong notes that interiority (hence individuation) exists in non-print cultures even if that interiority does not become fully developed until writing (178-179). In contradiction to McLuhan's theory that print generates silent reading (which marks the existence of an interior voice or inner consciousness), Eisenstein shows that silent reading in fact existed in scribal communities, though she does allow silent reading increases as printed texts become more widely available (*Printing Revolution* 92-93).
- The idea of retribalization derives from the condition of the "global village" characteristic of the electronic age. In *The Gutenberg Galaxy: The Making of Typographic Man*, Marshall McLuhan first distinguishes between subjects of print literacy and non-print subjects, asserting that

a child in any Western milieu is surrounded by an abstract explicit visual [i.e. the alphabet] technology of uniform time and uniform continuous space in which "cause" is efficient and sequential, and things move and happen on single planes and in successive order. But the African child [i.e. a non-literate] lives in the implicit magical world of the resonant oral word. (19)

From there he argues that barely print-literate Soviet Russia is suspicious of media because of the "interdependence [which] is the instant interplay of cause and effect in the total structure. Such is the character of a village, or, since electric media, such is also the character of the global village" (21).

McLuhan shores up the idea of the harmoniousness of non-print cultures in *Understanding*Media by positing that

[s]eparateness of the individual, continuity of space and of time, and uniformity of codes are the prime marks of literate and civilized societies[....] Tribal cultures [i.e. non-print cultures such as the Indian and Chinese] cannot entertain the possibility of the individual or of the separate citizen. Their ideas of spaces and times are neither continuous nor uniform, but *compassional and compressional* in their intensity. (84; emphasis added)

- <sup>7</sup> See note 4, above.
- <sup>8</sup> It is more accurate to say that visualizing a rhizome is pointless as it has neither beginning nor end, only an everywhere-located middle.
- <sup>9</sup> Brian Massumi's *A User's Guide to Capitalism and Schizophrenia* is incredibly helpful in understanding the body without organs. Massumi encourages us to

[t]hink of the body without organs as the body outside any determinate state, poised for action in its repertory; this is the body from the point of view of potential, or virtuality. Now freeze it as it passes through a threshold state on the way from one determinate state to another. That is a degree of intensity of the body without organs[. . . .] Since the body is an open system, an infolding of impulses from an aleatory outside, all its potential singular states are determined by a fractal attractor. Call that strange attractor the body's plane of consistency[. . . .] If the universe is the plane of consistency of our world, then the body's plane of consistency is the Milky Way of its potential orbits and trajectories, and a part-object is a star. The body without organs is a region of the Milky Way marked by a constellation but including an infinity of background stars visible at varying degrees of intensity. (70-71)

The terminology used to describe the body without organs suggests that it is a composite of the

potentials and virtual states of any system of objects. This means that the body without organs always has what Adrian Mackenzie (following Gilbert Simondon in *Transductions*) would call a "margin of indetermination," capable of attaching and detaching objects, organs, and forms depending on the observed/observable milieu. For example, as a body without organs, capitalism can be considered to be the actual systems of production which comprise it in addition to all the potentials inherent in "capitalism" as a system.

Charles Clerc goes a step in the direction of media analysis when he compares the novel's original publisher, Viking Press, and its use of "a sequence of seven squares" to divide episodes from each other (112). For Clerc, these "sequences" of squares are a kind of "logogram" representing "both frames and the sprocket holes" of a film.

Berressem compares the effect of Derrida's "trace, which guarantees the continuity of signification," to the "persistence of vision," which lends continuity to the series of still pictures projected onto a screen. Berressem concludes that "[t]he cinematic, 'fake' continuity can thus be seen as analogous to psychic processes and the way meaning and subjectivity are created as continuous concepts. In both registers the result is an *animation*" (156-157).

- 11 Fractals refer to those geometric shapes obtained by "fracturing" Euclidean orthogonal dimensionality. Such shapes were considered by Benoit Mandelbrot to exist in "fractional dimensions," and he coined the term to refer to the geometry of objects defined by systems of recursion. The complexity of fractal objects often belies the apparent simplicity of the rules of their construction. For a very understandable discussion of fractals see James Gleick's *Chaos: Making a New Science* (96-103).
- <sup>12</sup> Bruno Latour, Donna Haraway, and Michel Foucault have all considered the organization of networks, and I make use of their work in this study. Haraway's work is more concerned with feminist politics than it is with the articulation of cybernetic networks. Foucault focuses on the macroscopic trends in political collectives and the way in which power circulates in these collectives. Latour's work in *We Have Never Been Modern* is very useful as it concerns the

unintended hybrids that have proliferated in the constitution of Modernist networks.

However, in terms of a concrete analysis of the phenomena that attend the aggregation of networks, Adrian Mackenzie's elaboration of "transduction" as concept to describe the meshing of disparate milieus is unusually flexible. Mackenzie builds on the work of Gilbert Simondon to articulate the ways networks incorporate entities from widely diverging ontological orders and the ramifications of the presence of such aggregate bodies.

- Information concerning the historical context surrounding Novi Pazar at the end of the 19th century to the start of World War I is provided in Weisenberger's *A Gravity's Rainbow*Companion (22). More detailed information is provided by L. S. Stavrianos's "Balkan Crisis and the Treaty of Berlin: 1878," an excerpt of Stavrianos's *The Balkans Since 1453*.
- <sup>14</sup> In chapter 4, I analyze the structure of the Benzene ring dreamed by Von Stradonitz as an example of a dreamed object whose structure is able to be produced in the physical world.
- Lacan's point is difficult to grasp, but his discussion of the inverted nature of consciousness somewhat clarifies his meaning. He recalls napping and being woken by some "knocking at my door just before I actually awoke. With this impatient knocking I had already formed a dream, a dream that manifested to me something other than this knocking." (56) Lacan observes that he does not come into consciousness until he has situated himself by connecting his dream image to the knocking. Lacan is concerned to highlight "the symmetry of that structure that makes me, after the awakening knock, able to sustain myself, apparently only in a relation with my representation[...]" (57). In such cases, consciousness is tied to a representation presented by the unconscious.
- <sup>16</sup> Zizek's designation of the father's unconscious desire as the "real" of his dream and his nomination of the dream's revelation as the "Lacanian real" conflicts with the traditional Lacanian triad of Real-Symbolic-Imaginary, according to which the father's unconscious desire would, in fact, be part of the Imaginary.
- I discuss the ramifications of the reversal of acoustic chronology in supersonic travel in chapter
   in the section titled "Johnny Can't Read: the Failure of Alphabetic Logic."

- McHoul and Wills focus on the pervasion of cinematic references in the text to the point where "the distinction between the cinematic and the real" "is a virtually impossible one to make in the case of *Gravity's Rainbow*" (45). McHoul and Wills say almost nothing about the effect of cinema on the constitution of subjectivity. Simmons's approach emphasizes the influence of film on the text itself, providing a comprehensive enumeration of the novel's use of cinematic and filmic material and techniques (where "cinema" and "film" refer to the distinctions Stephen Heath, following Oudart, makes when considering the apparatus and structure of cinema versus the text of the film itself, respectively).
- White light does not reveal different colors because of diffraction, which appears as parallel bands of light and dark, but as a result of refraction. Light bends when encountering media with different refractive indices, spreading into the characteristic rainbow pattern. The dispersion pattern which appears is organized from longest wavelength to shortest, or red to blue/violet. "Violet, sorrel, saffron, emerald" matches this dispersion pattern except that the shortest wavelength is adjacent to the longest, perhaps suggesting optical recursion.
- I discuss these objects at length in chapter 4.
- 21 Steven Weisenberger identifies the date as 22 December (1944) in *A Gravity's Rainbow Companion* (60).
- <sup>22</sup> I discuss Slothrop's psychic connection to blacks at the end of this chapter in the section entitled "Disappearing into The Zone: the Emplotment of Tyrone Slothrop's Cybernetic Scattering."
- <sup>23</sup> In *The Four Fundamental Concepts of Psychoanalysis*, Lacan notes that there is always an absence in any picture. What is absent is the "central field, where the separating power of the eye is exercised to the maximum in vision" (108). This manifests as a hole in the visual representation which marks the position of "the pupil behind which is situated the gaze. Consequently, and in as much as the picture enters into a relation to desire, the place of the central screen is always marked, which is precisely that by which, in front of the picture, I am elided as subject of the geometral

- plane" (108).
- For example, Maureen F. Curtin briefly discusses Invisible Man's relationship to The Brotherhood as "a cyborg position" which he abandons in favor for the possibilities for subjectival redefinition offered by "x-ray's multiple trajectories" (58 N28; I discuss Curtin's reading of *Invisible Man* in light of x-ray technology later in this chapter).
- <sup>25</sup> Curtin also makes a connection between the "frenetic dancing" of the Battle Royal and the doctors who "derive pleasure from manipulating" Invisible Man " 'until [he] fairly danced between the nodes[...]" (54), though she does not comment of the significance of electricity as a medium.
- <sup>26</sup> The embedded quote is from Deleuze's and Guattari's *A Thousand Plateaus: Capitalism and Schizophrenia* (30; cited in Curtin 47 N11).
- <sup>27</sup> Curtin documents Ellison's "preoccupation with electronics and with radio specifically an obsession" in his essay "Living with Music." There, Curtin finds a source for the "opening motif of Beethoven's *Fifth*—three short and one long buzz" in an acoustic war Ellison waged against a singing neighbor. In that war, Ellison "fought live sound with recorded" (51).
- <sup>28</sup> Curtin argues that Ellison challenges racism by "making his protagonist something of a cyber, who uses his technological hybridity as a tool against the systemic racism that characterizes the Brotherhood's principles and operations" (60). My argument extends Curtin's by reading The Brotherhood as an apparatus of racist capital and the entire novel as a parable of the interconnection of machines, organisms, and material.
- A lead-in for the new series was published in *Marvel Comics Presents* 62. The "Deathlok the Demolisher" series was published in *Astonishing Tales* numbers 25-28 and 30-36.
- Thomas Foster provides an excellent summary of the writing credits for the 1991 Deathlok series which corroborates the less authoritative (if just as accurate) summary provided by Nicolas Demers. I reproduce Foster's analysis here.

Wright and McDuffie initially alternated as writers on multi-issue story arcs of the monthly comic. Generally, the story arcs produced by the African-American

creative team of McDuffie and Cowan focused more on racial issues, however obliquely, while the issues written by Wright tended more toward traditional action narratives and especially toward typical Marvel comics superhero crossovers, with Deathlok either fighting or teaming up with various other Marvel characters.

Cowan left *Deathlok* after issue 15 and McDuffie after 16, though McDuffie returned to write one last storyline, in issues 22-25. After McDuffie's and Cowan's departures, Gregory Wright produced two last story arcs, in which *Deathlok* finally turned even further in the direction of a standard Marvel superhero comic.

The remainder of Foster's analysis of the writing contributions to the *Deathlok* series discuss the reasons for the decline and subsequent discontinuation of the series, which I discuss later in this chapter.

- Joe Quesada, the editor-in-chief for Marvel Comics as of July 2004, is quoted in an ABCNEWS article as saying "On a consumer level, I don't [. . .] have the demographics from that time [1962, when *Spider-Man* was created], but I would venture to say that maybe 99 percent of our readers were white maybe?" (Robinson). At the end of this section, I quote Quesada at greater length and analyze the racial confusion which underlies his remarks.
- Milestone Comics, supported by DC Comics, was founded by Dwayne McDuffie (writer and editor in chief), Denys Cowan (artist and creative director), and Derek Dingle (president) to address the problem of "trying to express an African American sensibility in a business run by whites, even well-meaning ones" (McDuffie "About Milestone"). McDuffie presents a rationale for the creation of Milestone comics, writing on his website

Eager to overcome the restrictions that they felt working on characters owned by Marvel, Cowan and McDuffie quickly realized that only a substantial number of new heroes could provide them with the freedom they wanted. "If you do a black character or a female character or an Asian character," explains McDuffie, "then they aren't just that character. They represent that race or that sex, and they can't be interesting because everything they do has to represent

an entire block of people. You know, Superman isn't all white people and neither is Lex Luthor. We knew we had to present a range of characters within each ethnic group, which means that we couldn't do just one book. We had to do a series of books and we had to present a view of the world that's wider than the world we've seen before." ("About Milestone") Here, McDuffie expresses a very sophisticated understanding about representation and race and the need for a plurality of characters who can be identified as "non-white."

In 1997, Milestone Comics went out of business due to low sales. Some critics speculated that Milestone folded because of a failure to represent the characters as black "enough," others because the characters were "too" black. Regardless of artistic misjudgments and marketing miscalculations, the comics industry suffered a massive decline in the mid to late 1990's, largely due to the proliferation of comics and comics publishers which fragmented the comics market. In 1996, Marvel Comics itself filed for bankruptcy protection.

Post 8144 by krstoo2000 was sent to the MilestoneComics list on 1 August 2002. As of this writing, McDuffie's writing credits are numerous. They include *Captain Marvel*, *Deathlok*, *Fantastic Four*, *Hellraiser*, *Iron Man*, and *Spider Man* for Marvel Comics, *The Tick* (Acclaim/Valiant), *Back to the Future* and *Ultraman* (Harvey), *Impulse* and *Prince* (DC). McDuffie has also worked as an editor on numerous films, including *Indiana Jones and the Last Crusade*, *Who Framed Roger Rabbit*, and *A Nightmare On Elm Street*.

<sup>&</sup>lt;sup>34</sup> Diamond is the largest distributor of comic books in the United States.

In August 2002, *Marvel Knights* was in its second volume. The first was written by Chuck Dixon, who is Anglo-European. Volume 2 of *Marvel Knights* began publication in May 2002 and was written by John Figueroa, who though he is not black—he self-identifies as a "mixed-race Latino," a combination of at least Puerto Rican, African, and Asian bloodlines—did make the film *B-Boys* which tells "the story of three formerly semi-famous breakdancers" (Figueroa "B-Boys"). In a later post Ashelyn Mack (ashleyn\_mack) points out that for "most non[-]Latinos[, Latinos] are considered minorities. For many Latinos it varies. My mother-in-law is from Puerto Rico [and . . .]

as far as she is concerned, she is a white person who speaks [S]panish. She looks white[...] I've heard several Latino actors/actresses refer to themselves the same way. If they're white they cannot be a minority" (post 8171).

- <sup>36</sup> In the Marvel pantheon, only The Incredible Hulk and Captain America may be more well-known. Lesser known characters include the X-men, with Wolverine as a standout character.
- In an email to me, Nicolas Demers verifies that he is Caucasian. The biographical information on his website identifies him as a Canadian.
- In issue 1 of the *Deathlok* mini-series, Michael Collins issues a no-killing parameter to *Deathlok's* onboard computer to prevent the death of his combatants and enemies.
- Emanata are the glyphs which often float in the space above and around characters' heads to indicate confusion (question marks), anger (dark squiggles), surprise (radiating lines, exclamations points), and other states of consciousness and/or emotions. Mort Walker, the creator of *Beetle Bailey*, coined the term in *The Lexicon of Comicana*.
- Foster makes a brief reference to this psychoanalytic dimension, arguing that when Ryker reveals Collins's original body to Deathlok with the promise, "I can make you human again,"

Deathlok's organic body is being held out to him as exactly the same promise that Lacan argues the mirror image holds out to an infant, the promise of overcoming a sense of bodily fragmentation through the anticipatory unification of diverse physical sensations into an organic whole (153).

Foster neglects that in Lacan's myth the mirror image does not hold the promise of unification but in fact is the vehicle through which an infant experiences *jouissance*. The apprehension of the specular image is not a promise of unification of bodily experience; it is such unification itself.

Michael Collins's brain was stolen from Collins's body and placed inside Deathlok to replace the brain that Deathlok's onboard computer had destroyed. That brain once belonged to Colonel John Kelly. Like Collins's brain, Kelly's brain manifested consciousness while inside Deathlok and briefly took control of the Deathlok cyborg. Deathlok's computer destroyed Kelly's brain in

order to maintain control in Marvel Comics Presents 62.

Lacan explains

The diachronic function of this anchoring point is to be found in the sentence, even if the sentence completes its signification only with its last term, each term being anticipated in the construction of the others, and, inversely, sealing their meaning by its retroactive effect. (*Écrits* 303)

- Adamantium is a fictional metal that is indestructible once it has been forged. The details of Deathlok's construction are provided in *Deathlok* Annual #1 (Aug 1992): 37-44.
- Doctor Doom, also known as Victor Von Doom, is the self-appointed dictator of the fictional country Latveria. Partially disfigured by a laboratory experiment, Doom had a suit of armor forged for him outside of which he is never publicly seen. To advance his political career, Doom makes extensive use of robot doubles, both of himself and others. For more background information about Doom, see the fan site at <a href="http://www.geocities.com/terrestrialboy/doom.html">http://www.geocities.com/terrestrialboy/doom.html</a>.
- In *The Four Fundamental Concepts of Psycho-Analysis*, Lacan considers the first part of Descartes declaration "cogito ego sum," "I think," and argues that what

the *I think* is directed towards, in so far as it lurches into the *I am*, is a real. But the true remains so much outside that Descartes then has to re-assure himself—of what, if not of an Other that is not deceptive, and which shall, into the bargain, guarantee by its very existence the bases of truth, guarantee him that there are in his own objective reason the necessary foundations for the very real, about whose existence he has just re-assured himself, to find the dimension of truth. I can do no more than suggest the extraordinary consequences that have stemmed from this handing back of the truth into the hands of the Other, in this instance the perfect God, whose truth is the nub of the matter, since, whatever he might have meant, would always be *the* truth—even if he had said that two and two make five, it would have been true. (36)

In other words, the guarantee of Cartesian subjectivity is founded not upon self, but upon the

guarantee of the Other who permeates all of existence and offers the guarantee of the truth of "I think." Lacan later writes

When Descartes introduces the concept of a certainty that holds entirely in the *I think* of cogitation, marked by this point of non-exit that exists between the annihilation of knowledge and scepticism, which are not the same thing—one might say his mistake is to believe that this is knowledge. To say he knows something of this certainty. Not to make the *I think* a mere point of fading. But it is because he has done something quite different, which concerns the field, which he does not name, in which all this knowledge wanders about—all this knowledge which he had said should be placed in a radical suspension. He puts the field of this knowledge at the level of a vaster subject, the subject who is supposed to know, God. (224)

The body without organs, the unproductive, the unconsumable, serves as a surface of the recording of the entire process of production of desire, so that desiring-machines seem to emanate from it in the apparent objective movement that establishes a relationship between the machines and the body without organs. The

Homo superior are mutants. Presumably "superior" designates a species distinct from "sapiens," but members of Homo superior and Homo sapiens are interfertile.

Deathlok the Demolisher is the original Deathlok presented in *Astonishing Tales* 25-28 and 29-36. The series was published as a bi-monthly between August 1974 and July 1976.

The concept of miraculation is Deleuze's and Guattari's, one they use to describe what happens to systems that are "miraculously" subsumed by larger systems of production. The process is one that is hallucinatory but nonetheless real. They use it to describe the hallucinatory association of the external world (birds, trees, sunlight) to Judge Schreber's schizophrenic self-image. In this reading, Judge Schreber's body is a body without organs on whose recording surface is inscribed various pieces of the external world (the regeneration of organs):

organs are regenerated "*miraculated*" on the body of Judge Schreber, who attracts God's rays to himself. (11; emphasis added)

- Steven Weisenburger notes that "Pynchon weaves the fabric of Laszlo Jamf's life from Sasuly's disclosures" in *IG Farben* (151). Weisenburger casts some doubt upon Sasuly's account of the role that the American chemical company DuPont played in the growth of IG Farben just before the outbreak of World War II, though he does not offer evidence to the contrary.
- It is not a coincidence that the German SDP (Social Democrat Party) was banned by the Nazis. The largest party in the Weimar Republic, the SDP's formation in 1875 was the fusing of the German Social Democratic Labor party with the German Workers' Association. That is, the SDP had itself appropriated Germany's coded flows under its political regime.
- "In 1914 the volume of [German] notes in circulation had jumped two billion marks," and by the time the inflation was ending, "there were *ninety-three trillion* paper marks in circulation" (Sasuly 45-56). Sasuly characterizes the inverse proportion between a volume of currency and force of buying power by noting that

[b]efore the inflation, a worker might have spent a year earning from fifteen hundred to two thousand marks: [after the inflation] this was now worth perhaps three cents in American money, not even enough for a pack of chewing gum. A man with an income of twenty thousand marks had been accounted prosperous: this whole year's income was now worth thirty or thirty-five cents, or just about enough for two packs of cigarettes.

People literally did not know if a week's work would buy food for one meal. Housewives went to market carrying currency in baskets. Fixed incomes of the middle classes were wiped out. Money had become a loathsome, cancerous thing, in growing heaps with less and less value. (46)

52 Notgeld translates from the German as "emergency money." The first portion of this word, not, connotes in the German need, necessity, and poverty, while the second is literal for "gold."

Lyotard notes (*Libidinal Economy* 231) that J. M. Keynes described this phenomenon which economists have since termed the "velocity of circulation." The effect of inflation on the conductivity of capital-transmitting tissue is nowhere more apparent than Keynes's description of a 1920s-era Moscow where

the unwillingness to hold money except for the shortest possible time reached at one period a fantastic intensity. If a grocer sold a pound of cheese, he ran off with the roubles as fast as his legs could carry him to the Central market to replenish his stocks by changing them into cheese again, lest they lost [sic] their value before he got there. . . (qtd in *Libidinal Economy* 231)

This nightmare scenario where the conductivity of currency is so great that capital practically discharges into the very air the moment it comes into contact with currency produces for Lyotard a "vertiginous time" that is comprised of every exchange of cheese for roubles. According to Lyotard,

Every encounter of the cheesemonger with roubles must be imagined as an unbearable event which he flees, to imagine that his flight never fails to bring him into contact with still more notes along the way, more and more notes. And from one flight to another, there is no continuity. From one heap of notes to the other, there is no identity, not even simple quantitative difference. Every "exchange" becomes an event, opens up a type of adventure, where death is the stake.

- It is not entirely clear why Lyotard refers to *Libidinal Economy* as his "evil book, the book of evilness that everyone writing and thinking is tempted to do" (xviii), but certainly the specter of Sinophobia that characterizes Lyotard's critique of *coitus reservatus* cannot cleanse the book of whatever evil may reside within it. Apart from a latent hostility to Chinese culture, Lyotard's analysis of *coitus reservatus* sheds light on the way the production of capital surreptitiously appropriates resources from outside itself.
- McHale explains that "the Chinese-box structure of *Don Quixote*, Borges has said, implied that we, too, are fictional characters, and that our reality is as much a fiction as Quixote's is; hence the

continuing fascination of this text for generations of readers" (130).

Borges, however, is more equivocal on this point than McHale leads us to believe. In his essay about "Partial Magic in the *Quixote*," Borges ventures to say that the recursive structures in works such as *Thousand and One Nights* and the *Quixote* only "suggest that if the characters of a fictional work can be readers or spectators, we, its readers or spectators, can be fictitious" (196; emphasis added).

Von Kekulé claims to have discovered the structure of benzene as the result of a dream. In a speech published in the *Journal of Chemical Education*, Kekulé explains that

Something similar happened with the benzene theory[....] I was sitting writing on my textbook, but the work did not progress; my thoughts were elsewhere. I turned my chair to the fire and doze3d. Again the atoms were gamboling before my eyes. This time the smaller groups kept modestly in the background. My mental eye, rendered more acute by repeated visions of the kind, could now distinguish larger structures of manifold conformation: long rows sometimes more closely fitted together all twining and twisting in snake-like motion. But look! What was that? One of the snakes had seized hold of its own tail, and the form whirled mockingly before my eyes. As if by a flash of lightning I awoke; and this time also I spent the rest of the night in working out the consequences of they hypothesis. (qtd in Roberts 77)

George Landow demonstrates that narrative has so been altered by the dissemination of hypertext that the idea that narrative no longer need be linear nor have a definitive end has become commonplace. He cites Barbara Herrnstein Smith who argues that "by virtue of the very nature of discourse, nonlinearity is the rule rather than the exception in narrative accounts" (qtd in Landow 43). Landow later address this trivialization of nonlinearity by posing a challenge to the Aristotelian demand that plot follow a necessary sequence of events, arguing that linearity is "a quality of the individual reader's experience within a single text and his or her experience following a reading path, even if that path curves back upon itself or heads in strange directions" (184).

- The stars of Slothrop's map not only "fall in a Poisson distribution, just like the rocket strikes on Roger Mexico's map of the Robot Blitz," but the two maps are in fact identical, with a "mean lag [of] about 4 1/2 days" between sexual activity and rocket strike.
- Berressem slightly misstates the case when he asserts that Slothrop's sense of identity "means trying to uncover the mysterious connection of his libido the V-2" (120). Slothrop remains unaware of such a connection throughout the novel. The closest he comes to making the connection on his own is in his capacity as a ballistics expert researching the explosions of the soon-to-be superseded A4, which is to say not at all. Slothrop recognizes his connection to the V-2 only after reading files documenting his infantile conditioning (*Gravity's Rainbow* 284-287) which had been in his possession for several days. However, the connection traced by the documents Slothrop reads makes no mention of his libido.
- This observation is one also made by George Landow, who raises the possibility that certain forms of print and writing will end the possibility of such. In *Hypertext 2.0*, Landow cites Derrida's *Of Grammatology* and *Dissemination* to support the idea that the end of print may come in the form of print (47).
- Bruno Latour explains that by separating nature from culture, Moderns were able to claim objectivity while being implicated in their objects of study. His example of Boyle's air pump (15-18) explains how Boyle "invented the empirical style that we still use today" (18) By using a mechanical pump to remove the air from an inverted glass container immersed in a vat of mercury, Boyle claimed to be "observing" nature when in fact he was observing the behavior of a quasi-object, one built out of the apparatus of the air-pump and inverted glass container and the pressures exerted by the motion of atoms and molecules. Boyle's law—which asserts that the product of pressure and volume of an ideal gas is a constant—is derived by observing the behavior of a hybridized object composed of elements in nature and culture.
- <sup>62</sup> Brennschluss is the moment at which a V-2 rocket stops burning fuel. As a V-2 rocket ascends, the rocket's electrical system charges a capacitor. When that capacitor reaches a certain

voltage, the rocket's engines cut. A V-2 rocket can be programmed for targets of varying distances by changing the voltage at which the rocket's engines shut off.

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