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by

DREW AYERS

Under the Direction of Dr. Alessandra Raengo

ABSTRACT

Vernacular Posthumanism: Visual Culture and Material Imagination uses a theory of image vernaculars in order to explore the ways in which contemporary visual culture both reflects on and constructs 21st century cultural attitudes toward the human and the nonhuman. This project argues that visual culture manifests a vernacular posthumanism that expresses a fundamental contradiction: the desire to transcend the human while at the same time reasserting the importance of the flesh and the materiality of lived experience. This contradiction is based in a biodeterminist desire, one that fantasizes about reducing all actants, both human and nonhuman, to functions of code.

Within this framework, actants become fundamentally exchangeable, able to be combined, manipulated, and understood as variations of digital code. Visual culture – and its expression of vernacular posthumanism – thus functions as a reflection on contemporary conceptualizations of the human, a rehearsal of the posthuman, and a staging ground for encounters between the human and the nonhuman. Each chapter of this project begins in the field of film studies and then moves out toward a broader analysis of visual culture and nonhumanist theory. This project relies on the theories and

methodologies of phenomenology, materialism, posthumanism, object-oriented ontology, actornetwork theory, film and media studies, and visual culture studies. Visual objects analyzed include: the films of Stanley Kubrick, David Cronenberg, and Krzysztof Kieślowski; *Fast, Cheap & Out of Control* (1997); the film *300* (2006); the TV series *Planet Earth* (2006); DNA portraits, the art of Damien Hirst; *Body Worlds*; human migration maps; and remote surgical machinery.

INDEX WORDS: Visual culture, Posthumanism, Nonhumanism, Film studies, Phenomenology, Digital culture, Materialism, Biomedia, Image vernacular, Digital code, Stanley Kubrick, David Cronenberg, Krzysztof Kieślowski, DNA portraits, Damien Hirst, Body Worlds, Planet Earth, 300, Fast, Cheap & Out of Control

by

DREW AYERS

A Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree of

Doctor of Philosophy

in the College of Arts and Sciences

Georgia State University

2012

VERNACULAR POSTHUMANISM: VISUAL CULTURE AND MATERIAL IMAGINATION

by

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August 2012

DEDICATION

For Karen, who sits behind my desk, and for Macie and Cora, who sit under my desk.

ACKNOWLEDGEMENTS

Support is vital for completing a project like this, and I have many people to thank. The completion of this project is as much a result of their support as it is my own time and effort. My time at Georgia State University has been infinitely enriched by my cohort of fellow PhDs. To Karen, Kris, and Steve: thank you for your thoughtful words, your critical eyes, and your willingness to celebrate my birthday at Medieval Times. May we share in each other's many future successes. To Mom, Dad, and Anna: Your support has been the most unwavering and selfless, and my completion of this project and degree is the culmination of your faith and support for the past 31 years. To Jennifer, Angelo, Ted, and Akira, my committee: Thank you for your insightful feedback, time, and friendship. This project has been made smarter and sharper by your mentorship and advice. To Karen, Macie, and Cora, my family: Thank you for putting up with my distractions from writing. I know you have better things to do than watch me play videogames. Karen, we have gone through this process together, and your grace and intelligence is reflected in every word on every page of this project. Hearing your constant writing and research in our little office has been a constant motivation. I am proud of both of our achievements, and I look forward to sharing many more with you. Macie and Cora, your furry presence at my feet has been a constant reminder to consider and respect the nonhuman, and I hope you have some sense as to how much you both have influenced the ideas expressed in this project. And, finally, I give my biggest thank you to Alessandra, my advisor, mentor, and friend. Your mentorship, friendship, and brilliance have had just as much of an impact on my professional life as my personal life. This project is as much yours as it is mine. I can only hope to repay you someday for all you have done, and I will start with a small and humble "thank you."

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PREFACE

The questions that this project asks have been knocking about my head since my first semester at Georgia State University in 2007, during which time I was enrolled in Alessandra Raengo's "Critical Visual Culture Theory" class and Angelo Restivo's course in "Style and Narrative Analysis: Modernism and its Vernaculars." Each class, in its own way, developed a theorization of the materiality of the visual sphere, and the serendipity of taking both classes in the first semester of my Ph.D. program created a unique framing of the relationship between visual culture, materiality, subjectivity, and image vernaculars. The lenses through which I viewed the objects in both of these classes would deeply influence the development of my own perspective on visual culture, and the theories and methodologies to which Alessandra and Angelo introduced me can be seen throughout this current project, *Vernacular Posthumanism: Visual Culture and Material Imagination*. More specifically, Alessandra and Angelo's classes gave me the language and analytical tools for understanding visual culture as a phenomenon based in the practices of material culture, as something rooted in the physicality of being. These classes also gave me a new perspective on "things" and "objects," and they invited a questioning as to the relationship between us humans and these nonhuman things.

Two books, in particular, have shifted my perspective on visual culture. W.J.T. Mitchell's book, *What Do Pictures Want?: The Lives and Loves of Images*, reframed the way in which I ask questions of my objects, eloquently repositioning desire, subjectivity, and agency from the sole province of humans to that of images. The idea that images themselves might possess those attributes traditionally associated with humans has profoundly impacted the ways in which this project interrogates contemporary visual culture. The second book, Bruno Latour's *We Have Never Been Modern*, shares a similar position in the foundations of this project. Latour's theorization of hybrids, quasi-objects, and material-semiotic networks opened a vista of new avenues of questioning, avenues that

view nonhumans as partners in processes of world-building. I would also be remiss if I neglected to mention the work of Donna Haraway, whose affection and respect for the nonhuman inflects all of the pages of this project.

These books provided the necessary starting point for my explorations of, what I would eventually discover was termed, theories of the nonhuman, and they have provided me with a framework for understanding the way in which the human, the nonhuman, and the world interact to create that experience we call "lived reality." My exposure to this mode of thinking in my first semester at Georgia State led me to discover and explore the areas of scholarship confronting the "nonhuman turn": object-oriented philosophy, animal studies, posthumanist theory, actor-network theory, speculative realism, Deleuzian theory, and new media theory, all of which provide a set of questions which guide my work.

Throughout this project, you will also see the influence of the scholarship of other members of the Georgia State community, scholars whose work I have incorporated into my own theorization of vernacular posthumanism. Jennifer Barker's visceral approach to phenomenology, Ted Friedman's unique perspective on contemporary cultural studies, and Angelo Restivo's innovative readings of Gilles Deleuze all feature prominently in this project. The work I completed in each of their seminars has ended up, in a modified form, in the chapters of this dissertation. In both Jennifer and Ted's classes I was exposed to the work of Akira Lippit, whose adventurous lines of inquiry have significantly broadened my perspective on how we might ask questions of our visual objects. Additionally, Alessandra Raengo's leveraging of materialist theory to explore the circulation and aesthetic form of images within visual culture has provided a signal influence on my own adaptation of this lineage of thought to the realm of nonhumanist theory.

My project is driven by an observation that has been reiterated throughout my encounters with the variegated ideas presented above, namely that the nonhuman objects with whom we share our world are curious things, things that speak and that demand to be listened to. In developing a

theory of vernacular posthumanism, this project examines the ways in which visual culture thinks through contemporary views of the human – and our relationship to the nonhuman – and speaks of a fantasy to render both human and nonhuman in terms of a general equivalent while at the same time reasserting the importance of materiality and the flesh. My own basis in the discipline of film and media studies has strongly influenced my selection of objects, and each chapter beings with a reading of the ways in which particular films speak in a language of vernacular posthumanism. The second half of each chapter, reflecting my own personal trajectory towards theories of the nonhuman, confronts less traditional objects of media studies, looking at the ways in which visual culture more generally makes sense of and reflects on its relationship to us humans. This project is motivated by a personal and professional desire to get to know the nonhuman, to forge a relationship with the nonhuman that respects it in all of its radical alterity. The project was also written with a spirit of fun, discovery, and exploration, and I hope this is reflected throughout my analysis of the adventuresome objects presented in the pages of this dissertation.

Drew Ayers

Atlanta, GA

May 2012

INTRODUCTION: A FAST, CHEAP & OUT OF CONTROL APPROACH TO VISUAL CULTURE'S VER-NACULAR POSTHUMANISM

Errol Morris's 1997 documentary, *Fast, Cheap & Out of Control*, establishes a model for how I will think through the issues raised in this dissertation. In its capacity as a *metapicture*,¹ the film provides a visualization of the ways in which I theorize and make sense of a particular trend in visual culture: the proliferation of *vernacular posthumanism* in contemporary image culture.² The film, which intertwines interviews from four idiosyncratic subjects – a lion tamer, a topiary gardener, a mole-rat expert, and a robotics professor – visualizes the complexity with which contemporary material-semiotic networks are constructed, and it provides an initiation into posthumanist modes of thinking.³ To the extent that it confronts issues of form and aesthetics, the phenomenology of consciousness, the ontology of experience, encounters with the nonhuman, and the relationship be-

¹ W.J.T. Mitchell, *Picture Theory: Essays on Verbal and Visual Representation* (Chicago: University of Chicago Press, 1994).

² Thomas Foster, in *The Souls of Cyberfolk*, provides an analysis of cyberpunk science fiction literature and the ways in which it establishes posthumanism as vernacular theory. Foster's work is a useful starting point for my own work, but I am interested in the widespread dissemination of posthumanism as a popular existential philosophy rather than the specific deployment of posthumanism in cyberpunk science fiction. While I share Foster's interest in non-academic theory and cultural vernaculars, my own analysis will be focused on a much broader, more mass object. Thomas Foster, *The Souls of Cyberfolk: Posthumanism as Vernacular Theory* (Minneapolis: University of Minnesota Press, 2005).

³ As developed by Bruno Latour and Donna Haraway, a material-semiotic method is one that acknowledges both the material reality, as well as semiotic (cultural) construction, of actants. As with Latour's theory of hybrids, a material-semiotic method assumes that all actants are hybrids of Nature and Culture. Latour's use of the word *actant* is an attempt to get away from language that differentiates between things that act and things that are acted upon. For Latour, all entities within a given network have an influence in how that network operates, and the concept of an actant moves away from traditional subject/object, culture/nature, human/nonhuman dichotomies. See: Donna J. Haraway, *Simians, Cyborgs, and Women: The Reinvention of Nature* (New York: Routledge, 1991); Donna J. Haraway, "The Promises of Monsters: A Regenerative Politics for Inappropriate/d Others," in *Cultural Studies*, ed. Lawrence Grossberg, Cary Nelson, and Paula A. Treichler (New York: Routledge, 1992); Bruno Latour and Steve Woolgar, *Laboratory Life: The Social Construction of Scientific Facts* (Beverly Hills, CA: Sage Publications, 1979); Bruno Latour, *Science in Action: How to Follow Scientists and Engineers through Society* (Cambridge, Mass.: Harvard University Press, 1987); Bruno Latour, *Reassembling the Social: An Introduction to Actor-Network-Theory* (New York: Oxford University Press, 2005).

tween the visible and the knowable, *Fast, Cheap & Out of Control* provides an ideal template for demonstrating the ways in which this project theorizes the expression of vernacular posthumanism in contemporary film and media.

This project diagnoses and theorizes the circulation of a posthuman image vernacular within contemporary culture, a vernacular that speaks of the growing dissolution of boundaries between humans and nonhumans and the increasingly pervasive ideological stance that collapses information and material, envisioning a networked world where everything is fundamentally reducible to binary units of exchange. A central concern of this project is developing methods with which to imagine and encounter the point of view of the nonhuman, and to that end, this project explores those hybrid visual objects – objects that freely and reflexively mix the positions of nature and culture, subject and object – with which our contemporary visual culture seems to be preoccupied.⁴ Errol Morris, in *Fast, Cheap & Out of Control*, examines precisely these kinds of objects, and he offers an example of how film and media might both imagine the point of view of the nonhuman as well as visualize these hybrid objects from a nonhumanist perspective.

Fast, Cheap & Out of Control confronts four objects: naked mole-rats, six-legged exploration robots, topiary animals, and circus lions. When placed into conversation with each other within the context of the film, these objects enact a chain reaction that visualizes Bruno Latour's idea of the "proliferation of hybrids." By straddling the line between self and other, they complicate any easy distinctions we might make between these actants. These objects – and the human subjects with whom they are associated – both enact a kind of Deleuzian process of becoming and function as what Latour terms mediators. The mole-rats are mammals but live like insects; the robots are ma-

⁴ According to Bruno Latour, Modernity proceeds by two competing interests: the desire to "purify" Nature and Culture, which leads to a proliferation of hybrids of Nature and Culture. In other words, the attempt to separate objectivity from interpretation results in monstrous hybrids that undercut and expose the artificiality of such a dichotomy. I discuss the concept of hybrids in more detail in Chapter Three. Bruno Latour, *We Have Never Been Modern* (Cambridge, Mass.: Harvard University Press, 1993).

⁵ Ibid.

chines that look like and behave as insects; the topiary plants look like animals; the lion is understood and trained through a lens of anthropocentrism; Ray Mendez, the mole-rat expert, himself looks a little like a mole-rat, and he wears a bow-tie that looks like a butterfly.

Additionally, each human encounter with the nonhuman object is presented within a framework of what Donna Haraway refers to as *significant otherness*, which provides a means for understanding the nonhuman other beyond of the scope of anthropocentrism. A thematic running through the film is the idea that we should attempt to let nature speak for itself. Rodney Brooks, the robot designer, rather than programming his robots to perform particular tasks, instead programs them to interact with the world. Similarly, George Mendonça, the topiary gardener, describes trimming hedges as a process of letting the plant grow into a design. Dave Hoover, the lion tamer, prefers to react to a lion's movements and behavior rather than control the lion. Finally, the mole-rats are described as "life that exists irrelevant of yourself," and Ray Mendez describes a moment of contact, which echoes Haraway's conceptualization of *contact zones*, where he looks into the eyes of a mole-rat and experiences a sense of "I know you are; you know I am."

These objects also offer a mirror in which the human sees itself as at least partially reflected, a reflection that, to the extent that it thinks through the implications of a nonhuman subjectivity, is becoming increasingly posthuman. They are the kinds of objects this project examines by moving from an analytical framework located within film and media studies into a body of theoretical literature drawing from visual culture more broadly. Each of the three main chapters in this project begins with an examination of the work of a particular film auteur – from Krzysztof Kieślowski's materialist depiction of space and subjectivity to the machine vision produced by Stanley Kubrick's camera work to David Cronenberg's posthumanist bodily concerns – and then opens up into a larger discussion of how we see a particular cultural process manifest itself in other objects of visual culture – for example, the shadows of embodiment that linger within DNA portraits, the virtuality of

⁶ Donna J. Haraway, When Species Meet (Minneapolis: University of Minnesota Press, 2008).

space in 300 (Snyder 2006), the limits of visualizing the nonhuman exposed by the art of Damien Hirst, the technological fetishism of *Planet Earth* (2006), the sedimentation of biological reductionism within human migration maps, and the imbrication of science, art, and culture in *Body Worlds*. I make sense of the proliferation of these hybrid objects of visual culture through the lens of vernacular posthumanism, which provides a framework for understanding how our encounters with the nonhuman, within the regime of the visual, might both reflect on and construct our perceptions of the relationship between subject and object.

In order to establish the basis of the circulation of posthuman imagery, our posthuman relationship to images, and the posthuman cultural logic in which we now find ourselves, this project takes a Marxist historical materialist approach to cultural formation, tracing a trajectory from Marx's own work, through that of Walter Benjamin, to the contemporary work of W.J.T. Mitchell. Broadly, this project draws connections between recent developments in digital media and digitality, object-oriented ontology (000) and actor-network-theory (ANT), posthumanist theory and ethics, and the genomic revolution. Rather than attempt to synthesize this variety of theoretical approaches into a speculative realist "theory of everything" or to chase after the "perfect theory," this project instead takes the tension among these approaches within the academy as indicative of the flexibility and sense of adventure with which we must approach the hybrid objects of visual culture. I accomplish this task by listening to the media objects themselves, whose voice is messier and less articulate than academic discourse might prefer. Objects speak in their own dialect – what this project theorizes as vernacular posthumanism – and it is only by acknowledging and accepting the messiness of the objects and the world they inhabit that we can begin to understand the ways in which these objects both speak to and reflect on our experience of the crisis in humanistic modes of thinking.

Fast, Cheap & Out of Control provides a signal example of how this vernacular is spoken in contemporary visual culture, and the interaction between nonhumans and humans within the film

offers a glimpse of how a nonhumanist perspective might be made visual. The film opens with a decontextualized collage of images of insect-like robots, grainy video footage of a man trimming hedges, hairless rat-like creatures, various images of circus animals and performers, and footage from Clyde Beatty's 1936 fifteen episode serial, *Darkest Africa*, all interspersed with the film's opening credits. During this opening sequence, the music transitions from a synthesized musical score to a more lighthearted, "circus-style" soundtrack. Without any voice-over narration or contextual clues, *Fast, Cheap & Out of Control* introduces the viewer to the primary concepts that will be explored by the film: networks of experience, the recursive circuits between past and present, and the illusion of control wielded by "subjects" within an informational and experiential system.



Figure 0.1: Dave Hoover



Figure 0.2: Clyde Beatty

The sequence that follows the title sequence elaborates on these concepts, and it introduces us to the four human subjects of the documentary: wild animal trainer Dave Hoover, topiary gardener George Mendonça, naked mole-rat specialist Ray Mendez, and robot scientist Rodney Brooks. The sequence begins with Hoover describing how, as a child, he "wanted to be a Clyde Beatty." As Hoover is talking, the film cuts between footage of a circus being set up, Hoover performing with a

lion, and various other circus performers. As is later unpacked by the film, this initial scene sets up a theme of the past intruding on the present and the melancholy and nostalgia that accompanies remembrances of the past. Hoover, in particular, longs for a dead era, an era of matinee idols and traveling circuses. Though this era might be dead, it exists as a virtuality within the present, informing and creating the present reality experienced by the figures within the film. Hoover's introduction concludes with an image of elephants circling a circus tent, which transitions with a match cut to an image of a man walking through a garden filled with topiary animals (including an elephant). This particular use of match cut editing is used throughout the film to create connections between the subjects, and it establishes a network of meaning that circulates within the film.



Figure 0.3: George Mendonca



Figure 0.4: Green Animals Garden

This next sequence introduces George Mendonça, who is responsible for maintaining Green Animals Topiary Garden in Portsmouth, Rhode Island. During Mendonça's voice-over, in which he describes how he came to Green Animals garden, Morris cuts to images of the topiary giraffe. These images are filmed at a canted angle, in black and white, and with a grainy quality that creates a similarity to the Beatty footage shown in the previous sequence. Again, we find that the film, rather than

make explicit connections between the human subjects, prefers instead to make a visual argument in order to create its network of meaning. Footage of the giraffe, strongly back-lit and in a rainstorm, grants the plant an uncanny quality, which carries throughout the film.



Figure 0.5: Ray Mendez



Figure 0.6: Naked Mole-Rats

Following the rain soaked giraffe is a cut to what looks like an esophageal endoscopy. As Ray Mendez's voice-over begins, we learn that the image is from a naked mole-rat tunnel. Again, as with Hoover and Mendonça, Mendez is introduced to us through his past, as he describes how, as a child, he was friends with a group of other children who were interested in entomology and insect societies. During Mendez's dialog, he describes how he was told that mammals could never live as insects. Then, twenty years later, a colleague informs him of the discovery of the naked mole-rat, which serves as Mendez's "eureka moment" and sets the trajectory for the rest of his career. The joy on Mendez's face as he describes this moment is palpable, as he recalls a dream of his childhood self being called into actuality. Again, Morris employs similar film techniques in order to render the mole-rat footage as uncanny, and the film form draws visual analogies to the Clyde Beatty footage.

This sequence ends with an image of a little mole-rat head peeking out of a tunnel, and it is followed by a crisp image of a human hand working on a computer circuit board.



Figure 0.7: Rodney Brooks



Figure 0.8: Rodney's Robot

This final introductory sequence presents us with MIT robotics researcher, Rodney Brooks. During Brooks's voice-over, Morris again intercuts crisp images of small robots with grainy video images of those same robots, which serves to render the images both foreign and familiar, past and present. Brooks, like the other three human participants, begins his story at childhood, and he describes how, as a child, he was always interested in tinkering with things and how he "liked to build electronic things in a little tin shed in the backyard." Like Mendez, Brooks describes an epiphany when, for the first time, he built something and the "lights flashed and the machine came to life." Brooks goes on to describe the "magic" he experiences whenever one of his robots begins to move. Brooks's sequence concludes with an image of a little insect-like robot, walking over rough terrain, followed by a cut to footage from *Darkest Africa*, footage from a circus tent, footage of naked molerats, and footage of Mendonça walking through his garden.

A hallmark of digital and posthuman modes of thinking is the dispersion of control over a network, and *Fast, Cheap & Out of Control* visualizes this framework by presenting a series of disconnected, but intertwined, interviews. Meaning cannot be located in any one story told by the interview subject; rather, meaning only emerges from the interaction between subjects. In this way, the film answers the question of how visual culture might materialize contemporary digital and posthuman processes of meaning-making, and in doing so, the film displays its fluency in vernacular posthumanism. In my usage, vernacular posthumanism describes how contemporary media and visual culture both speak of and reflect on a condition of cultural posthumanism. Vernacular posthumanism provides a lens through which to theorize the experience of a crisis in humanistic and anthropocentric models of subject-object interaction.

This project's theorization of media vernaculars draws primarily on the work of two thinkers: film scholar Miriam Hansen and visual rhetorician Cara Finnegan. In her seminal essay, "The Mass Production of the Senses: Classical Cinema as Vernacular Modernism," Hansen argues that classical cinema is the aesthetic form *par excellence* for reproducing the experiences and perceptions of the modern world, a world that is defined by a bombardment of sensations, rapid shifting of attention, highly noticeable differences in scale (between skyscrapers and people – analogous to close-ups and long shots), and confusion and shock. Hansen, following the work of Walter Benjamin, claims that film acts as a kind of instruction manual, a means of showing people how to see and experience the modern world. In other words, film not only reflects modern experience, it helps to construct that experience.

Vernaculars, in Hansen's usage are reflexive images that know themselves and are able to speak and theorize about a particular cultural experience. (It is important to note that vernaculars are always, and necessarily, culturally and historically embedded.) She is using the term vernacular

⁷ Miriam Hansen, "The Mass Production of the Senses: Classical Cinema as Vernacular Modernism," *Modernism/Modernity* 6, no. 2 (1999). See also: Miriam Hansen, "Vernacular Modernism: Tracking Cinema on a Global Scale," in *World Cinemas, Transnational Perspectives*, ed. Nataša Ďurovičová and Kathleen Newman (New York: Routledge, 2010).

to indicate a common language of experience, a way of perceiving the world. Vernacular also has another valence in Hansen's usage, namely that of a mass or popular language. Because classical cinema was a mass cultural form, it presumably "speaks" to the masses in a language they can all understand, having shared the same urban and industrial experience: that of vernacular modernism. In a more global sense, classical cinema translates the experience of modernity for those people in areas whose daily lives had yet to be affected by mass urbanization, finance capitalism, and industrialization. Therefore not only does cinema speak in the vernacular of modernism but it also teaches that vernacular to an uninitiated audience, summoning into existence and constituting a previously non-existent mass culture based around a virtual experience of modernity (virtual, at least for some areas).

Cara Finnegan takes a slightly different approach to the notion of "vernacular," and she conceives of vernacular more as a common reading strategy or interpretive community than as a language of experience. Using the case study of a photograph of a young Abraham Lincoln, and the letters written in response to that image, published in *McClure's* magazine, Finnegan argues that the image vernacular of late 19th century U.S. culture shared a widespread faith in the "truth" of photography. Photography, within this vernacular, had the power to reveal some "essence" of the person captured in the photograph, and viewers could identify personal and spiritual qualities of the person merely by examining his/her image. 9

Finnegan also conceives of vernaculars as the language of the image, and she shares this view with Hansen. In a sense, both authors do not merely posit vernaculars as a social language or common reading strategy; they go a step further and argue that vernaculars also refer to the lan-

⁸ Cara A. Finnegan, "Recognizing Lincoln: Image Vernaculars in Nineteenth-Century Visual Culture," *Rhetoric & Public Affairs* 18, no. 1 (2005). See also: Cara A. Finnegan, ""Liars May Photograph": Image Vernaculars and Progressive Era Child Labor Rhetoric," *POROI* 5, no. 2 (2008).

⁹ This kind of image vernacular also influenced the development of photographic surveillance and investigation techniques such as physiognomy, which attempted to identify criminal "types." It can also be connected to concurrent practices of craniology. They both share a faith in the connection between surface image and deep meaning. See Chapter Three for a more extensive discussion of this topic.

guage of the image itself. Here, I am not referring to a classical theorization of the "semiotics of the image." Rather, I mean that the images actually speak with their own language, that they have lives and desire in the sense outlined by W.J.T. Mitchell. The modernist vernacular of early cinema is *it-self* modernist, it speaks in a modernist language; the photographs of Lincoln *themselves* believe in their vernacular, in their ability to speak the truth of their connection to Lincoln's "soul." The images and cinema of Finnegan and Hansen speak, and it is the job of the viewer to listen carefully in order to understand what they are saying.

When a theory of image vernaculars is applied to *Fast, Cheap & Out of Control*, what emerges is an image of what a cultural posthumanism might look like. In a sense, vernacular posthumanism provides a rehearsal of the posthuman, and it teaches us how we might become posthuman. In our strongly networked world of advanced capitalism, where flesh and information, actuality and virtuality, and past, present, and future can be freely and easily exchanged, subjectivity requires that we account for the intentionality not only of other humans but also that of the nonhumans with whom we share our world. *Fast, Cheap & Out of Control* exhibits these cultural tendencies both through the form of the film as well as through the material-semiotic networks established among the subjects – both human and nonhuman – in the film.

Established here is the argument of both *Fast, Cheap & Out of Control* and this project, namely that images, "objects," and other nonhuman actants share their processes of meaning-making with the traditional humanistic subject and that the networks formed by the interactions among these actants are strongly inflected by the posthuman, digital cultural logic that is quickly coming to define our current era. *Fast, Cheap & Out of Control* constructs *a virtual space that serves as a staging ground for envisioning how a nonhuman perspective might appear*. Within the film, the frenetic chaos of the circus functions as a visual analogy for the destabilizing effect of thinking through the nonhuman, and short montages of circus imagery serve as bridges between the various segments of the film. *Fast, Cheap & Out of Control* speaks in a dialect of vernacular posthumanism, and through its

"out of control" decentering of human perspective, the film facilitates encounters between human and nonhuman actants.

The circus is perhaps the most prevalent theme throughout the film, and it used on numerous occasions as a transitional device between segments. On a literal level, the circus imagery serves to visualize the memories of Dave Hoover, as Hoover continually references the inspiration he took from Clyde Beatty in the crafting of his own career and persona. However, on a less literal level, the circus imagery speaks to a nostalgia for a lost past, a time of pre-technological innocence before the chaos and loss of control of that accompanies our contemporary era. There is something uncanny about circuses, from their anachronistic displacement from a previous time to their seeming naivety to social (animal rights) and technological (nomadic lifestyle) changes. Circuses appear free from the cultural and technological constrictions of the 21st century, and they are depicted in *Fast, Cheap & Out of Control* as if it were still the time of Clyde Beatty, Classical Hollywood, and the matinee idol. Circuses set up and dismantle, freely moving through a culture that has largely forgotten them.

Part of this sense of loss of control is reinforced through the aesthetics and production values of the circus imagery presented in the film. The circus footage appears to have come from a variety of film and video stocks, and Morris emphasizes grain, flicker, and video lines in his presentation. Additionally, Morris films the circus in a dizzying cinematographic display: sometimes the circus is presented in a standard manner, but more often than not, the footage is slowed down and presented in a variety of canted angles, reinforcing the uncanny nature of the circus. The circus footage is also often accompanied by a voice over from one of the four interviewees in a manner seemingly disconnected from the content of the speaker's words. The juxtaposition of the circus footage with other apparently unrelated footage of mole-rats, robots, and bushes furthers the associative chains of meaning established by the film.

 $^{^{\}rm 10}$ The credits to the film acknowledge the participation and cooperation of The Clyde Beatty Cole Brothers Circus and its various performers.

What this all adds up to, I contend, is a visualization of the dispersion and decentralization of agency and subjectivity as well as the "out of control" nature of contemporary existence mentioned in the film's title. By "out of control," I am referring not only to the aesthetics of the film and the unforeseen connections established between the seemingly disconnected professions of topiary gardener, robotics professor, mole-rat expert, and lion tamer, but also the unexpected ways in which the past intrudes on the present as well as the unexpected mixings of nature and culture that drive existential networks.¹¹

On a formal level, the aesthetic of the film is itself "fast, cheap & out of control." Deploying a range of imaging techniques – from 35mm to 16mm to video, from black & white to color, from live action to animation – and experimenting with camera angles, film speed, and the incorporation of historical and stock footage, *Fast, Cheap & Out of Control* exhibits the dispersion of control and point of view that is fundamental to a posthuman vernacular. In juxtaposing past and present, fantasy and reality, the film critiques the illusion of control ascribed to actors within a network, and the constant conflict between the voice-over and screen image reinforces an inability to draw clear cause-and-effect chains between actants and outcomes.

On a more thematic level, the content of the film allows us to trace various actants through their material-semiotic networks, examining how control and agency are spread throughout a network. An example of this is the temporal relationships established in the film and their connection to the theme of reproduction. Within studies of visual culture, the theme of reproduction has a rich tradition, ranging from Walter Benjamin's technological reproduction through W.J.T. Mitchell's biocybernetic reproduction, and a hallmark of this work is the idea that images frequently seem to re-

¹¹ Latour, *Science in Action*; Latour, *We Have Never Been Modern*; Donna J. Haraway, *Modest_Witness@Second_Millennium.FemaleMan©_Meets_OncoMouse™: Feminism and Technoscience* (New York: Routledge, 1997).

produce wildly out of the control of humans.¹² The past intrudes on the present, often in unexpected ways, throughout *Fast, Cheap & Out of Control*, and the most visible example of this is the incorporation of footage from the films of Clyde Beatty. This example has the most relevance to Dave Hoover, but this recursive circuit between past and present also bears on the other three major figures in the film. ¹³ Hoover consistently cites Beatty as his primary influence and the reason he became a wild animal trainer. And even though Hoover eventually ended up working with Beatty, it is clear that Hoover was influenced more by the *idea* of Beatty rather than Beatty the man. As a Hollwood star, Beatty represents the potential glamor of animal training, a glamor that is difficult to achieve in a traveling circus, especially a traveling circus in the 21st century.

This nostalgia for a lost era – in particular, the glamour of Classical Hollywood – infuses the film, and the incorporation of footage from Beatty's films throughout *Fast, Cheap & Out of Control* provides a connective tissue of loss among the interviewees. Toward the end of the film, when asked by Morris if he misses Beatty – the only time, significantly, where Morris physically inserts himself into the film¹⁴ – Hoover responds:

Yes. I miss him. I think I miss him just like I think we lost part of the industry. We lost part of the circus industry when we lost him. And, um, I don't know that there'll ever be anyone of that stature left in this business. I don't even know whether the situations would arise that we could even develop someone of that stature. He may have been at the right place at the

¹² Walter Benjamin, "The Work of Art in the Age of Mechanical Reproduction," in *Illuminations*, ed. Hannah Arendt (New York: Schocken Books, 1968); W.J.T. Mitchell, *What Do Pictures Want?: The Lives and Loves of Images* (Chicago: University of Chicago Press, 2005).

 ¹³ For a discussion of circuits of sensation, see: Gilles Deleuze, *Cinema 2: The Time-Image*, trans.
 Hugh Tomlinson and Robert Galeta (Minneapolis: University of Minnesota, 1989); Gilles Deleuze, *Francis Bacon: The Logic of Sensation*, trans. Daniel W. Smith (Minneapolis: University of Minnesota Press, 2003). I will discuss this concept in more detail in Chapter Three and the Conclusion.
 ¹⁴ Morris's intrusion into the film functions as a kind of reassertion of the human. Up to this point, Morris's perspective had been largely obscured in order to diffuse narrative and perspectival control across a variety of actants, both human and nonhuman. The reassertion of Morris's voice is indicative of much of vernacular posthumanism, which fantasizes about a posthuman utopia while simultaneously displaying a hesitancy to complexly let go of the human.

right time, but he was...he was a great performer and a great trainer. And, um, I don't think there'll ever be another one. Certainly not me.

Here Hoover is speaking to the inability to reclaim what has been lost, even if that loss is a mere virtuality of what actually occurred. And this past functions as an object that operates within the networks of the present.

This linking of past and present actants supports a reading of *Fast, Cheap & Out of Control* that emphasizes the film's reliance on a dispersion of control in its processes of visualizing the contemporary digital condition of networks and rhizomatic structures of meaning and subjectivity. Quite tellingly, the four subjects of Morris's film never directly interact with each other, nor do they ever acknowledge the presence of the other interviewees in the film. Each "story" is completely self-contained – self-contained, but incomplete. Yes, each subject's personal narrative makes sense on its own in a personal, autobiographical way, but without the montage interaction with the other three narratives, the single narrative loses many of the larger cultural claims it makes in concert with the other subjects. In other words, the true effects of the film are only felt when the centrality of control of the personal narrative is dispersed among the four subjects of the film. Meaning thus arises through rhizomatic processes, and it becomes impossible to locate a primary node of control. Meaning within a network arises through interactive feedback loops, and within *Fast, Cheap*, this is achieved through Morris's editing and aesthetic choices, as well as the thematic content of the film.

Fast, Cheap freely mixes styles, from 35mm to 16mm to video, black & white to color, and live action to animation, and Morris also employs a variety of cameras – the Interrotron[™] and Sewercam[™] are the most notable¹⁵ – as well as a diversity of film speeds, still and moving images, and stock footage. This multiplicity of style and aesthetic functions as a material embodiment of the film's attitude toward chaos and illusions of control. Nothing in the film is stable, and the interview

¹⁵ The Interrotron™, developed by Errol Morris, is essentially a modified Teleprompter that, instead of displaying text, instead displays the interviewer's face. This allows the interviewee to look directly into the camera while still focusing on the interviewer. The end credits acknowledge Roto-Rooter's Sewercam™ for the mole-rat POV photography.

subjects, film aesthetic, and thematic content of the film are all moving targets, their 'meaning' a constantly shifting and mercurial object that is in a perpetual state of becoming. And in this way, Fast, Cheap & Out of Control visualizes a digital cultural logic. Though the film, released in 1997, was made before the mainstream film industry adopted digital filmmaking in earnest, and though it was shot on analog film and does not contain any computer generated imagery, the film nevertheless inhabits a cultural logic of digitality, one that imagines the fundamental equivalence of all actants while at the same time reasserting the importance of the lived body.

These themes of digitality and posthumanity are made manifest in *Fast, Cheap & Out of Control*, particularly in its depiction of (loss of) control, (non)reproduction, individuality, and external forces and actants. Reproduction, in particular, is addressed in the film in a sustained manner, and though the theme is not an explicit theme of the film, reproduction undergirds much of what the interview subjects discuss. The theme of reproduction also has implications for my claims about the ways in which the film visualizes networks, especially in regards to temporality and the ways in which the past, present, and future intrude upon each other. Reproduction – both biological and nonbiological – thematizes many of these concerns. Each of the four interview subjects addresses reproduction during his individual segments within the film, and the inclusion of historical and stock footage creates a visual bridge that links past, present, and future.

Ray Mendez discusses the peculiar (for mammals) reproductive strategies of mole-rats. Mole-rat colonies are structured like insect colonies, and their reproductive practices follow those of many insects. Mole-rat society divides individuals into three groups: a queen, a few breeding males, and male and female workers. Like many insects, the mole-rat queen is responsible for bearing all of the colony's young. Part of the strangeness of naked mole-rats – aside from their hairlessness and blindness – is their social structure. While the mole-rat example is a very literal interpretation of biological reproduction, and therefore not particularly relevant to my discussion of networks, the other three interview subjects provide a more esoteric version of reproduction.

Rodney Brooks and his robots model this type of non-biological reproduction, and the film traces a kind of rhizome among the actants involved in the reproduction. The theme of reproduction can be seen in the Brooks segment from three perspectives: the relationship between the robots themselves, between Brooks and his students, and between Brooks and his robots. Brooks modeled the robots after insects, noting that insects moved with a degree of instability. Instead of designing a robot with a pre-programmed sequence of movements, Brooks created a six-legged robot named Genghis that operated through a series of feedback loops. The robot "walked" through a process of stumbles and other instable movements, but the overall result was movement toward a particular destination. As Brooks describes it, he "switch[es] it on and it does what is in its nature." Brooks also takes a rather phenomenological approach to robot design, accounting for the global system of which the robot is a part. His advice to robot designers: "Don't try and control the robot but feel how the world is going to control the robot." In other words, the robots don't operate according to a hierarchical process of instructions; rather, they operate according to a dynamic system of interaction with the world.¹⁶

The title of the film comes from a paper that Brooks wrote for the Journal of the British Interplanetary Society entitled, "Fast, Cheap, and Out of Control: A Robot Invasion of the Solar System." In this paper, Brooks advocated for space exploration to proceed via the deployment of thousands of little robots, rather than expending resources on a single unmanned mission that might be likely to fail. Turning again to the insect world (which resonates strongly with Mendez's mole-rats), Brooks relays an anecdote of witnessing some ants attempting to move a piece of cereal. Even though the individual actions of the ants didn't move the cereal forward, the global behavior of the ants accomplishes the task. Brooks models his robots after this concept. His little robots don't communicate with each other directly, but they sense the presence of other robots and react according to a predefined system of rules. The global behavior of the robots emerges out of the net-

¹⁶ Alva Noë, *Out of Our Heads: Why You Are Not Your Brain, and Other Lessons From The Biology of Consciousness* (New York: Hill and Wang, 2009).

work established among each actant, much like consciousness and a phenomenological sense of being emerges out of an interaction with the world. For Brooks, the task is discovering and directing how and in what ways this global behavior manifests itself.

In one non-interview segment of the film, we see Brooks, filmed in a grainy black and white, walk into what appears to be a "surprise" birthday party. Brooks is greeted by a dozen or so cheering students, who are all wearing t-shirts emblazoned with a screenprint of Brooks' face. The shots that follow show Brooks and his students, smiling, laughing, eating cake, drinking coffee, and generally partaking of the birthday merriment. At other points in the film, Brooks is shown working with his students to build and program his robots, and these sequences establish a theme of intellectual collaboration. The process of mentoring and student advisement is itself a form of reproduction, as Brooks' own ideas are passed on – with a few mutations, to be sure – to his students, who then continue to replicate these ideas in their own work. The film, in constructing these kinds of images, again reinforces its general thesis of the ways in which networks of actants constitute webs of experience. It isn't that Brooks merely passes on his knowledge and working style to his students; it's that Brooks and his students (and his robots, and his equipment, and the institution at which he conducted research [MIT], and his desk, and his pencils, etc.) create a system out of which a particular perspective of the world emerges.

Brooks' relationship to his robots shares a similar reproductive framework to that of his relationship to his students. In a more literal sense, Brooks has created his robots and set them forth in the world. However, as with his students, Brooks does not directly control what happens after he gives "life" to his robots. The robots are not directly programmed to accomplish a particular task; rather they are programmed to react in specific ways to their environment. Out of this attitude emerges a practical theory of phenomenology. Brooks sees many parallels between human consciousness and the activities of robots, though he repeatedly reiterates the fact that all intelligence is embodied, and therefore the consciousness that might emerge out of a robot would be fundamen-

tally different from that of a human. Reflected in his robots, Brooks sees his own consciousness as the process of "thousands and thousands of little agents, doing stuff almost independently." Drawing on an evolutionary model, Brooks views his network of robots as the potential first step in robot intelligence, as evolution proceeds by building on previous systems in a series of increasing complexity.

Brooks disavows his relationship to his robots as that of father to child. Opposing the idea that building robots "is something that men do because men can't have babies themselves," Brooks instead views his project as an attempt to understand life and the system out of which life emerges. His goal is to gain an "understanding [of] life by building something that is lifelike." What emerges out of Brooks' interviews are ideas of radical alterity, networked consciousness, and a phenomenological theory of life, all of which are significant theoretical interlopers in my conceptualization of vernacular posthumanism.

As previously discussed, animal trainer Dave Hoover's interviews establish a material-semiotic circuit between past and present, virtual and actual. The Hoover segments of the film, continuing this trajectory, also explore the themes of reproduction present in Brooks' portions of the film. As with Rodney Brooks, *Fast, Cheap & Out of Control* shows Dave Hoover training a student/replacement. Like any good teacher, Hoover is simultaneously excited and fearful for how his

¹⁷ For overviews of competing theories of consciousness, see: Maurice Merleau-Ponty, Phenomenology of Perception, trans. Colin Smith (New York: Routledge, 1962); Daniel Dennett, Consciousness Explained, 1st ed. (Boston: Little, Brown and Co., 1991); David Abram, The Spell of the Sensuous: Perception and Language in a More-Than-Human World (New York: Pantheon Books, 1996); Noë, Out of Our Heads. While all three authors provide a critique of Cartesian dualism and Cartesian materialism, they do so to different degrees. Merleau-Ponty rejects the mind/body split and instead offers an embodied theory of consciousnes, one that arises through an interaction with the material world. Dennett, a philosopher and cognitive scientist, critiques the idea of a "Cartesian theater," which posits a kind of perceiving homunculus that resides in the brain, and develops a "multiple draft" model of consciousness. In this model, the brain is viewed in terms of an information processing unit, and consicousness arises out of the interaction of these multiple streams of information. While Dennett critiques a Cartesian theater model of consciousness, he adheres to the idea that consciousnes resides in the physical space of the brain. Abram and Noë, conversely, claim that consciousness resides not in the brain but in the space between the observer and the outside world. For both authors, consciousness arises out of an interaction with the world, and it is impossible to separate observer from observed.

protégé, Kathleen Umstead, will carry on his legacy. This is especially true in the field of animal training, as inadequate preparation carries serious consequences. For Hoover, "It's a lot easier...to do it than to watch it." Relinquishing control, a major theme of the film, is difficult for Hoover, and the film includes a scene of Hoover nervously watching Umstead perform in order to reinforce this fact.

Hoover himself is a protégé of Clyde Beatty, which establishes a lineage from Beatty, through Hoover, to Umstead, with all of the Hollywood nostalgia that tags along with Beatty. In fact, John-John, one of Hoover's lion's, is the son of Beatty's lion, Pharaoh. John-John appears to be an old lion, blind in one cloudy eye, which gives him the uncanny, slightly creepy presence that accompanies many contemporary narratives of circuses and carnivals. John-John – and, by extension, Hoover – are relics of a bygone era, their presence in contemporary Western life an anachronism.

As a topiary gardener at Green Animals Topiary Garden in Portsmouth, Rhode Island,
George Mendonça has produced a living garden that reproduces, in a visual and visceral manner, his
approach to nature and his aesthetics of horticulture. However, unlike Brooks and Hoover, Mendonça has been unable to train his replacement, finding that any apprentices he takes on quickly
lose interest in the job. Fast, Cheap & Out of Control seems to be presenting Mendonça as a one-of-akind, a man whose work and approach can never be replicated. In fact, Mendonça relates in an anecdote that "several professors from the different schools" told him that "nobody can come in with
all of the book knowledge they've got – nobody can come in and do what you're doing." Furthermore, Mendonça doesn't expect anyone to be able to replicate his work, since they would not possess the same set of personal experiences. Here we see echoes of Brooks' statements on embodied
consciousness – consciousness arises out of a network of experiences, so it is impossible to replicate consciousness across different mediums. No one can completely replace Mendonça because
his/her network must necessarily be different. Quite tellingly, Mendonça's story of searching for an

 $^{^{18}}$ See, for example, HBO's 2003-2005 series, $\it Carniv\`ale$

apprentice unfolds right before Hoover's own sequence with his apprentice, Kathleen Umstead, towards the end of the film. Both are reluctant to hand over their responsibilities, and both seem rather unconfident that they will be able to find adequate replacements.

To conclude my discussion of reproduction and material-semiotic networks of experience, I turn to a small bit about Alice Brayton, the owner of Green Animals from 1939 to her death in 1972. Miss Brayton lived her life as an unwed woman, having once met a man that she wanted, and then abandoning the idea of marriage after the relationship didn't work out (according to Mendonça). At one point, Miss Brayton instructed Mendonça to build two "scarecrows," a man and a woman for whom she bought fancy clothes, including a \$44 hat for the woman. While these sterile, artificial people might seem to function as non-reproductive entities in the film – especially positioned, as they are, within the fertility of the garden – they nevertheless watch over their horticultural "offspring" as a quasi-object mother and father.



Figure 0.9: Mendonca's Scarecrows

The garden mannequins and their liminal subjectivities are precisely the kinds of hybrid objects and concepts with which this project is concerned. *Fast, Cheap & Out of Control*, and its visualization of quasi-objects, ²⁰ provides a template for how we might study film and media in the digital/posthuman age, and it serves as an example of how we, as humans, might encounter and visualize the nonhuman perspective of hybrid objects. The film poses some of the most pressing theoretical questions for the study of film and media in the 21st century, among them the interaction be-

¹⁹ http://www.newportmansions.org/explore/green-animals-topiary-garden

²⁰ Latour, We Have Never Been Modern.

tween humans and machines, the digitality of form and aesthetics, the materialization of a digital cultural logic, and the role of technology and networks in the constitution of the human.

Finally, Fast, Cheap & Out of Control also offers a commentary on the relationship between humans and nonhumans and the role that contact zones and radical alterity play in these relationships. ²¹ As previously discussed, Rodney Brooks makes a sustained argument for the need to account for differences in embodiment when confronting a mechanical other. His experiments with robotics and movement – in that movement is not preprogrammed but arises from feedback within a global system – rely on nonhuman actants (other robots, stones on the ground, "the world," etc.) in order to operate. This framework is essentially a template for the kind of theoretical work this project conducts. Ray Mendez, the mole-rat expert, also offers some thoughts regarding the interaction between human and nonhuman. Mendez defines "the Other" as being "in the presence of life that exists irrelevant to yourself," and he identifies a moment of contact between species as the mutual recognition that "I know you are, you know I am." This mutual respect of exchanging looks – Donna Haraway terms it respecere – describes how I conceptualize the encounters between human, nonhuman, and visual culture, and it frames my discussions of other visual texts in the chapters that follow. We encounter visual culture as actants within a shared material-semiotic network, and our subjectivities exist in the spaces and folds between these encounters.

0.1 Project Overview

Plastinated corpses. Maps of genetic drift. Remote robotic surgery. Technologies of vision, simulation, and remote sensing. Fantasies of the self enacted through visualizations of genetic material. Animal carcasses in museum spaces. These are the objects and techniques representative of a contemporary visual culture that has become increasingly concerned with staging encounters be-

²¹ Donna J. Haraway, *The Companion Species Manifesto: Dogs, People, and Significant Otherness* (Chicago: Prickly Paradigm Press, 2003); Haraway, *When Species Meet*.

tween the human and the nonhuman. These objects also manifest a primary contradiction in visual culture's attitude toward the relationship between the human and the nonhuman: they express a desire to transcend the human while at the same time reasserting the importance of the flesh and the materiality of lived experience. In this project, I turn to the images themselves in order to explore what they have to say about our relationship to the nonhuman members of our visual community. What do we see when we encounter the nonhuman? How does this encounter manifest itself in the visual realm? How do the material practices of vision think through our contemporary attitudes toward the human and the nonhuman? How does visual culture rehearse and make material our imag(in)ings of a posthuman potentiality?

To explore these questions, I turn to the familiar tools and objects of cinema and media studies in order to defamiliarize and adapt them to the rhizomatic messiness of contemporary visual culture, which demands a certain promiscuity of theoretical approaches as well as a flexible and adventurous attitude toward the language and desires of the images themselves. To this end, each chapter in this project begins with the cinema and then moves outward to other objects, topics, and concerns of contemporary visual culture. The cinema - and the methodologies of film studies I employ – set up the terms for the analysis of other objects that follow. The familiar questions of film studies – such as questions of ontology, the cinematic apparatus, the effects of montage, the construction of cinematic space, and embodied spectatorship - provide the lens through which I formulate the questions I ask of my non-filmic objects. Film studies has always relied on a highly adaptable set of critical tools, freely borrowing and mixing methodologies from other disciplines, and its strength has been in the ways in which it poses questions to its objects of study. My project continues this trend by beginning each chapter with conventional objects of film studies (the films of Krzysztof Kieślowski, Stanley Kubrick, and David Cronenberg), but I look at them slightly askew, bringing to bear contemporary questions and theories of the nonhuman. After examining a particular body of films, each chapter then moves out to more contemporary examples of visual culture

(300, Planet Earth, Da Vinci Surgical System, DNA portraits, human migration maps, the art of Damien Hirst, Body Worlds, and the videogame *Heavy Rain*) to examine how these questions are rearticulated within our current visual system.

What ties this variegated collection of approaches together is a theory of image vernaculars, one that views images as capable of expressing particular cultural logics and speaking in unique visual dialects. My project uses this conceptualization of image vernaculars to explore how images might themselves express an attitude towards the nonhuman. More specifically, my project develops a theory of vernacular posthumanism, and I understand visual culture as speaking in a language that both stages a productive encounter between the human and the nonhuman while at the same time rehearsing both the utopian and dystopian attitudes toward a contemporary desire to decenter the primacy of anthropocentric perspectives. My theorization of vernacular posthumanism always passes through, and is translated by, processes of embodiment, and as such, I lean heavily on phenomenological theory. My project is also strongly inflected by the work of Gilles Deleuze and Felix Guattari as well as the contemporary strands of literature that can loosely be grouped together as theories of the nonhuman: object-oriented ontology, actor-network theory, animal studies, and posthumanist theory. This project is also strongly invested in a specific tradition of materialism and the body. I conceive of visuality as a material phenomenon, and this project draws on the work of Karl Marx, Walter Benjamin, Miriam Hansen, and W.J.T. Mitchell in order to understand the interaction of flesh and information in contemporary visual culture.

This project, quite obviously, draws heavily from theories of the nonhuman and the posthuman, and as such, a brief overview of how I will be deploying these terms will be helpful. Within the literature, there is a certain slippage and inconsistency in the use of the terms "nonhuman" and "posthuman." In this project I will be using the term "posthuman" to indicate a perspective that is concerned with escaping the boundaries of the human and becoming something "more than human." My use of "nonhuman" is more broadly philosophical, and it refers to schools of

thought that display a commitment to ethical existence to nonhuman objects, animals, and machines. In other words, my use of "posthuman" functions diagnostically, as a way to describe and analyze a particular attitude and fantasy being expressed in visual culture. I also use "nonhuman" adjectivally, as a way to discuss that which is not-human. When referring to both human and nonhuman entities, I frequently use the term "actant," which describes all entities within a material-semiotic network and which avoids the problematic dichotomy of "that which acts" and "that which is acted upon."

The term "posthumanism" is itself a notoriously slippery concept to pin down, and it is used variously by different authors, and some authors, who do not explicitly identify themselves with posthumanism, can nevertheless be included within the group of posthuman theorists.²² A brief sampling of the varied positions taken towards posthumanism will provide a conceptual sketch of posthumanist theoretical approaches, and I identify two general, but overlapping intellectual trajectories. The first trajectory conceives of posthumanism in terms of the human organism and the human body, positing posthumanism as the technological extension and/or modification of the human, frequently in regards to theories of artificial/computer intelligence, and the second trajectory conceives of posthumanism as a response to humanism as an intellectual, philosophical, and moral endeavor.

The first trajectory, commonly referred to as "transhumanism," relies on a conceptual framework that fundamentally severs mind from body, information from its material basis. In the early to mid twentieth century, many thinkers were attempting to construct "thinking machines" that could replicate human consciousness.²³ Much of this work was based in cognitive psychology and behaviorism, which posited human consciousness as a series of stimuli and responses, almost

²² See, for example: Michel Serres, *The Parasite*, trans. Lawrence R. Schehr (Minneapolis: University of Minnesota Press, 2007).

²³ Much of this paragraph is based on Howard Gardner's history of the "cognitive revolution." Howard Gardner, *The Mind's New Science: A History of the Cognitive Revolution* (New York: Basic Books, 1985).

completely determined by training and evolutionary adaptations to the environment. Within this framework, consciousness acts as a kind of flow chart, and by examining cause and effect chains, an observer could determine the kinds of actions a person would take. This idea of human consciousness is symptomatic of approaches that conceive of the brain as an information-processing machine, as a computer (e.g., the transhumanist fantasy of uploading one's brain/subjectivity into a computer and thus achieving a kind of immortality). As Glen Mazis points out in *Humans, Animals, Machines*, we often think of biological processes in terms of mechanical processes and vice versa.²⁴ For example, we speak of a genetic "code," a biological "system," or a neural "network." Even though the mechanical metaphors are completely constructed by humans, we nevertheless take these constructions as natural expressions of the world and thus applicable to biological systems.²⁵ Cognitivism, in that it conceives of consciousness as a computer, is symptomatic of this tendency.

Much of the contemporary popular fantasizing about genomics and genetic manipulation also falls within this trajectory of post/transhumanism. As with the description of cognitivism provided above, much of the current discourse about genomics conceptualizes the human genome as being manipulable as computer code, which collapses biology and technology into a single concept. Eugene Thacker argues that much of popular culture's attitude towards genomics rests on a common assumption that "there exists some fundamental equivalency between genetic 'codes' and computer 'codes,' or between the biological and digital domains, such that they can be rendered interchangeable in terms of materials and functions." 26

Within the second trajectory, posthumanism is viewed as a corrective to a subject-centered Enlightenment epistemology of knowledge, expanding the notion of subjectivity to include both

²⁴ Glen A. Mazis, *Humans, Animals, Machines: Blurring Boundaries* (Albany: SUNY Press, 2008). 2-4.

²⁵ For an extended discussion of the power of biological metaphor, see: Judith Roof, *The Poetics of DNA* (Minneapolis: University of Minnesota Press, 2007).

²⁶ Eugene Thacker, *Biomedia* (Minneapolis: University of Minnesota Press, 2004). 5. For more about the molecularization of the body and its power to stand in for the lived body, see: Catherine Waldby, *The Visible Human Project: Informatic Bodies and Posthuman Medicine* (New York: Routledge, 2000); Jackie Stacey, *The Cinematic Life of the Gene* (Durham N.C.: Duke University Press, 2010).

humans and nonhumans. The work of Cary Wolfe is indicative of this approach, as is much of the work being done in the growing fields of animal studies, ecocriticism, object-oriented-ontology, and actor-network theory:

My sense of posthumanism is the *opposite* of transhumanism, and in this light, transhumanism should be seen as an *intensification* of humanism...Posthumanism in my sense isn't posthuman at all – in the sense of being "after" our embodiment has been transcended – but is only posthuman*ist*, in the sense that it opposes the fantasies of disembodiment and autonomy, inherited from humanism itself, that [N. Katherine] Hayles rightly criticizes.²⁷ Theories of consciousness, subjectivity, and the self are the primary concern of this strand of posthumanism, and it is responding to a notion of subjectivity closely associated with that theorized by René Descartes. The key to Descartes' theory of subjectivity is the insularity of the self, of the thinking mind – *cogito ergo sum*. Proceeding through a process of skepticism and doubt, Descartes systematically doubts everything he experiences in the world. Because Descartes cannot

This Cartesian theory of subjectivity is critiqued forcefully within the philosophical realm of phenomenology, which inspires much of the posthumanist theory of the second trajectory described above. Merleau-Ponty is arguably the most central figure in this lineage of phenomenology,

conclusively prove that objects exist in the world, he comes to the conclusion that those things

might not exist. All that he knows is that he can think himself thinking, therefore he (or his con-

consciousness or subjectivity.

sciousness) must exist somewhere. The rest of the world, within this framework, is unnecessary for

²⁷ Cary Wolfe, *What is Posthumanism?* (Minneapolis: University of Minnesota Press, 2010). xv. Emphasis original. See also: Judith Halberstam and Ira Livingston, eds., *Posthuman Bodies* (Bloomington: Indiana University Press, 1995). Additionally, see the *Posthumanities* series from the University of Minnesota press. I recognize that grouping together the bodies of scholarship known as animal studies, ecocriticism, object-oriented-ontology, and actor-network theory is a rather contentious claim. Placing these bodies of literature in dialog with posthumanist theory is perhaps even more contentious. However, much of the work mentioned above fundamentally questions the anthropocentrism of a humanist philosophical framework, preferring to speak in terms of networks of meaning and rhizomatic structures of culture. As such, encouraging these schools of thought to speak with each other can prove to be a productive exercise.

and his primary claim in *The Phenomenology of Perception* is that consciousness only exists within the world. ²⁸ Contra Descartes, Merleau-Ponty argues that subjectivity cannot exist apart from an environment. He states that consciousness is always consciousness of *something*; sensation is always sensation of *something*. Therefore, even though a person might not be able to experience the thing-in-itself, that person experiences *something*, and that something is produced by objects in the world. Descartes' process of systematically doubting the world thus concludes with a fallacy: instead of "I think therefore I am," it should more correctly state something along the lines of, "I think of something, therefore I exist in relation to that thing and because of that thing." According to Merleau-Ponty, a person cannot have a thought without thinking about something. There is most definitely an external world and it is that world that produces the raw material for consciousness and experience.

Phenomenology also influences more contemporary reactions to the transhumanist theories of the first trajectory. Katherine Hayles, who is one of the most influential figures in contemporary posthumanist theory, is very concerned with issues of embodiment, and she continues the critique of disembodiment that I have outlined above. The "informationalist" (or transhumanist) approach to the posthuman, as outlined by Hayles in *How we Became Posthuman*, consists of four defining qualities. First, the posthuman privileges informationalism over materialism. Second, it considers consciousness as an epiphenomenon. Third, the posthuman thinks of the body as a prosthesis, one that can be modified and improved through technology. Fourth, the posthuman disregards any essential differences between humans and intelligent machines.²⁹ According to Hayles, then, the primary attribute of an informationalist posthuman subjectivity is the disavowal of the necessity of the body.³⁰ The body, within this posthuman framework, is merely a house for the thinking mind,

²⁸ Merleau-Ponty, *Phenomenology of Perception*.

²⁹ N. Katherine Hayles, *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics* (Chicago: University of Chicago Press, 1999). 2-3.

³⁰ As Hayles later argues, the body is not merely an "accident of history." As most phenomenological theories assert, the body cannot be separated from the mind, and the phenomenon of embodiment

and the body, like any prosthesis, can be manipulated and improved. The body is thus nonessential to representations of the individual, and, within this posthuman epistemology, the "essence" of a human lies in the mind and its interaction with the informational patterns of the world. The body is merely one such informational pattern and can therefore not be the seat of a subject's interiority.

For Hayles, this view of consciousness is fundamentally flawed because it attempts to separate information from materiality without accounting for the effects of the interaction between the two and the effect of this interaction on consciousness. Information must be substantiated in a medium; it cannot exist in some transcendent space of non-materiality. Embodiment is crucial for Hayles, and she differentiates between the "body" and "embodiment." The body, for Hayles, is an abstraction that does not actually exist within the world, but acts as a signifier for an idealized mode of existence. Embodiment, on the other hand, is very real, and it is the creation of a nexus of forces: biological, technological, historical, cultural, ideological, and political. Hayles wants to do away with this abstract notion of the body and focus on embodiment, as lived existence is a site for political change. The body has historically been associated with white, male, Western subjectivity, and it serves as an abstract notion of "human." Within this view, all other bodies are raced and must deal with the material conditions of their embodiment. If we can recognize the social construction of all embodiment, according to Hayles, then we can really begin to understand the political ramifications of abstract notions of the body.

Broadly, my project uses these theories of posthumanism in order to diagnose and analyze how contemporary visual culture speaks in a language of vernacular posthumanism, one that is expressed in the relationship between visuality, subjectivity, and the body, and I have conceived the

is essential to an individual's experience of subjectivity. Any information or sensation that our minds gather must first be filtered through the apparatus of the body, which results in the inextricability of the body and mind. Attempts at creating "thinking machines" will thus inherently result in a machine that can never replicate the mind of humans. Without a human body, the machines cannot replicate a human mind. This is not to say that the machines could not possess some alternative method of thinking, but without the carnality of the human form, the machine's intelligence will be radically different from than of a human's.

³¹ Donna Haraway makes similar claims. Haraway, Simians, Cyborgs, and Women.

project in two parts. Chapters One and Two are concerned with the interconnections between vision, subjectivity, and space, and Chapter Three and the Conclusion take up a discussion of the interaction between phenomenological theories of the flesh, processes of vision, and fantasies of informational disembodiment.

Chapter One, "Prismatic Subjectivity and the Material Imagination of Visual Space," begins with an examination of the work of Krzysztof Kieślowski and how his films visualize the imbrication of subjectivity, commodities, and space. As with my discussions of the work of particular film directors and artists in the other chapters, my discussion of Kieślowski in Chapter One in not engaging in a classical auteur study. Rather, I view the author-function as a tool for providing solutions to the questions of posthumanism. Particular film directors and visual artists display consistent aesthetic idiosyncrasies, which provide a cohesive set of visual strategies and perspectives on the relationship between the human and the nonhuman. In other words, my project is not concerned with the connection between image and author, with the ways in which particular biographical attributes appear in the text. My choice to select a series of visual objects from specific creators was motivated by a desire for consistency and for cohesion. By definition, vernacular posthumanism is a widespread dialect being spoken by visual culture, and as such, the potential selection of objects is vast.³²

The second half of Chapter One uses Zack Snyder's film *300* (2006) to explore the relationship between physical bodies and simulated space in contemporary special effects cinema. As with the other objects discussed in this project, *300* embodies the central contradiction expressed in

³² A brief selection of visual objects and cultural trends that I discarded for this project include: The art of Lisa Black (http://www.behance.net/LisaBlack) and Eva Rorandelli (http://www.evarorandelli.com/), the NYU professor who installed a camera into the back of his head (http://www.mnn.com/green-tech/gadgets-electronics/stories/nyu-professor-to-have-camera-surgically-installed-in-back-of-), the Singularity Movement, genetic health testing, genetically modified food, developments in nanotechnology and artificial intelligence, IBM's Watson, the digital humanities, BioArt, synthetic biology, plastic surgery, and one artist's attempt to translate poetry into DNA (http://www.newscientist.com/blogs/culturelab/2011/05/christian-boks-dynamic-dna-poetry.html). As this list demonstrates, the potential number of relevant objects speaking in the language vernacular posthumanism can quickly become unwieldy.

vernacular posthumanism: a simultaneous desire to imagine virtual modalities of existence and an insistence on the fleshiness of lived experience.

Chapter Two, "The Machinic Vision of Vernacular Posthumanism: Fantasies of Aesthetic Disembodiment" begins with a discussion of the expression of machine vision in the films of Stanley Kubrick before moving out into a discussion of the phenomenology of high definition video and the fetishism of technologies of vision in the TV series *Planet Earth* (2006). In each case, the visual objects establish the nonhuman presence of the camera, and they offer a machine perspective that imagines the potential transcendence of human modes of vision.

Chapter Three, "The Informationalization of the Self: Digitality as Posthumanity," explores the role of the body in posthumanist imaginaries, and it examines the interplay of flesh and information. This chapter begins with a discussion of the films of David Cronenberg, and it uses these films as an example of the ways in which vernacular posthumanism imagines both the utopian and destructive tendencies of human-nonhuman interaction. After diagnosing the fantasies of biological determinism within contemporary culture – the desire to reduce all actants to exchangeable units of code – this chapter then moves to a discussion of the role of embodiment in DNA portraits. DNA portraits, which are artistic representations of gel electrophoresis, display a complex interaction between surface and depth, eschewing portraiture's traditional reliance on bodies as representations of the individual in favor the representational power of DNA, the 21st century's indication of individualism *par excellence*. Drawing on literature discussing the history of portraiture and the ontology of the photographic image, this chapter regards DNA portraits, despite significant technological and cultural shifts, as inhabiting a similar image vernacular to that of the 19th century.

The Conclusion to this project, "The Limits of the Nonhuman: Dead Flesh and Taxidermist Humanism," uses the art of Damien Hirst and the science-art exhibit, *Body Worlds*, to explore the limits of a nonhumanist imagination. In setting up a dialogue between Deleuze and Guattari and Donna Haraway, the conclusion examines the competing ethical claims of vernacular posthuman-

ism, which imagines a kind of virtual transcendence of the body while at the same time reasserting the importance of a fleshy existence.

This project, *Vernacular Posthumanism: Visual Culture and Material Imagination*, takes seriously the proposition that images within our visual culture have something to tell us about how we imagine both our human condition as well as our relationship to our nonhuman compatriots. Images, however, are not merely passive receptacles of meaning that is thrust upon them by omnipotent human agency. Images, too, are nonhumans with whom we share our world, and through their expression of a vernacular posthumanism, they both reflect on our desires and teach us how to desire. Contemporary visual culture teaches us what it means to be human in the 21st century, and its modes of vision frame our perspectives on the interplay between human and nonhuman actants. In this project I do my best to listen to these images in order to hear what they have to say about how we might see our own image distorted through the lens that visual culture offers.

1 PRISMATIC SUBJECTIVITY AND THE MATERIAL IMAGINATION OF VISUAL SPACE

The second half of the title of this project – "Visual Culture and Material Imagination" – makes reference to the importance of theorizing vernacular posthumanism from within a framework that acknowledges the materiality of the visual sphere. The visual is a material phenomenon, and the material relationships established between entities both construct and reflect on our experiences of visuality. (I am deliberately avoiding language that makes reference to "viewer and viewed" or "seer and seen," because a major thrust of my argument is to undermine such distinctions and think of actants in terms of their networked interconnectivity and mutual constitution, rather than in terms of discrete binary oppositions.) In this chapter, I use the work of Polish filmmaker Krzysztof Kieślowski (in particular *The Decalogue* [1988-89]) and Zack Snyder's film 300 (2006) - with some additional discussion of David Cage's videogame Heavy Rain (2010), the da Vinci Surgical System, and processes of motion capture special effects – in order to examine how visual space (and the relationships established both within that space as well as between the human viewer and that space) reflects on the fractured and dispersed posthuman subjectivities of contemporary advanced capitalism. Following the traditions and methodologies of the field of Visual Culture Studies, I theorize the visual sphere as a strongly material entity, emerging out of specific social and historical contexts and relationships. Additionally, I rely heavily on theories of phenomenology, and I emphasize the material aspects of embodiment, i.e. the idea that subjectivity emerges out of an interaction with the world. As such, I chart a very particular trajectory through this tradition, a trajectory I will shortly outline.

¹ For an introduction to visual culture studies, see: James Elkins, *The Object Stares Back: On the Nature of Seeing* (New York: Simon & Schuster, 1996); Hal Foster, *Vision and Visuality* (Seattle: Bay Press, 1988); Nicholas Mirzoeff, *An Introduction to Visual Culture* (New York: Routledge, 1999); Nicholas Mirzoeff, ed. *The Visual Culture Reader*, 2nd ed. (London: Routledge, 2002); Mitchell, *Picture Theory*; Mitchell, *What Do Pictures Want?*; Marita Sturken and Lisa Cartwright, *Practices of Looking: An Introduction to Visual Culture* (New York: Oxford University Press, 2001).

The media objects of this chapter reveal that contemporary experiences of subjectivity and consciousness are understood and visualized as prismatic, and our encounters with these visual objects reflect on and refract our posthuman experience. Subjectivity and consciousness, within these examples, is not produced by some inner homunculus of an individual's mind; rather, subjectivity and consciousness are refractions of all of the various inputs from the material-semiotic network of experience into which an individual is plugged. A particular actant functions as a prism, absorbing the inputs from the actants around him/her/itself and then outputting a modified reaction to those inputs back into the network. What is established here is a strongly phenomenological model of consciousness, one that models itself after a kind of recursive feedback loop of experience.²

In the case of *The Decalogue*, the visualization of the material abstraction of commodities under increasing Westernization (and, by extension, finance capitalism) not only leads to the breakdown of the distinction between subject and object but also produces an imagined space that is out of sync with the emergent subjectivities of the characters and objects depicted in the series. In other words, the nascent cultural logic of finance capital is temporally displaced from the monumental History of the waning logic of state socialism, which fractures and refracts the subjectivities of both the subjects and objects within the series. This out-of-sync temporality translates into specific spatial relations, which are connected to the emergence of a new material imagination. *The Decalogue* is a particularly lucid example of this shift in spatial relations in that it is registering the transition as it occurs, but it is not quite assimilated into the emerging logic of finance capital. Although the films were completed before the events of 1989, there exists within the films a strong sub-text of cultural and political transformation and the drastic societal change about to befall Poland.

² See my discussion of Rodney Brooks and his robots in the Introduction.

Rieślowski's other work frequently features characters who are doubled in some way (*The Double Life of Veronique, Blue, Red*) or who have the opportunity to "re-live" their lives (*Blind Chance, Red*). The subjectivities of these characters are not confined to their physical bodies; rather, their consciousnesses are dispersed both spatially and temporally, and they inhabit multiple bodies and chronologies. This view of consciousness fits within a framework of posthumanism, and it acknowledges the extent to which consciousness is something that exists outside of the body, a result of the encounter between self and the world. As I will discuss later in this chapter, this view of consciousness also shares much with how contemporary videogames conceive of subjectivity, specifically in games' replayability and branching narrative pathways. *Heavy Rain* is unique within the context of gaming in that each of the four major characters that are available to play can irreversibly die, radically changing the outcome of the game.³ There is no "winning" narrative in the game, and the characters function as modules of pure potentiality within the game.

It is also through an examination of space that we can see a paradox that is constitutive of vernacular posthumanism: namely that the vernacular fantasizes about the transcendence of mind over body (information over medium) while at the same time reasserting the materiality of the human and the importance of the flesh. Of particular interest here is the idea that subjectivity can exist in multiple bodies at once, spread out across both space and time (this is something that I examine from a slightly different angle in my discussion of *Dead Ringers* in Chapter Three). This extension of the body over space and time is actualized in the emergence of both remote surgery and motion capture special effects. In the former, a surgeon, interfacing physically with a machine, is able to conduct surgery on a patient in a remote location. By manipulating the input of one machine, the surgeon can transmit his/her movements to another machine in another location. In a sense, the surgeon has two bodies, separated by space and time, but united by one consciousness.

³ Anna Munster, "From a Biopolitical 'Will to Life' to a Noopolitical Ethos of Death in the Aesthetics of Digital Code," *Theory Culture Society* 28, no. 6 (2011): 68.

In the latter example, motion capture technologies allow the physical body of an actor to be transcoded into a digital avatar. Recent examples of the use of this technology include *Avatar* (James Cameron, 2009), *Rise of the Planet of the Apes* (Rupert Wyatt, 2011), *John Carter* (Andrew Stanton, 2012), and the videogame *L.A. Noire* (Brendan McNamara, 2011).⁴ Motion capture (also referred to as performance capture) technology uses a combination of cameras and computer processing to record the movements and expressions of an actor, which can then be animated into a digital recreation. Thus, the actor's consciousness exists within two bodies – the "real" physical body and the "virtual" avatar. In most cases, it is the presence of the actor's voice that remains, and it provides a phenomenological connection between the lived, physical body and the digital body through what Michel Chion calls "added value." ⁵

Lastly, this chapter understands the film 300 as a metapicture of the contemporary cultural struggle between flesh and information, a materialization of a cultural imagination that fantasizes about an easy exchangeability between mediums, which relies on a pervasive faith in informational reductionism. Through its deployment of special effects – most notably the almost exclusive use of simulated space – 300 visualizes the tensions of the shift from analog to digital modes of filmmaking, and it provides a "Version 2.0" of the relationship between humans, objects, and space established in Kieślowski's work. On the one hand, 300 professes an insistence on maintaining its ties to analogical forms of representation. The hyperphysical hardbodies of the Spartans are visualizations that rely on a direct link between physical labor and its material manifestation. On the other hand, 300 espouses a technological fantasy of the easy merging of flesh and informational patterns. The

⁴ The plots of both *Avatar* and *John Carter* also imagine a scenario in which an individual is able to transmit his body across space and time to inhabit another body.

⁵ Added value refers to the emotional, narrative, and contextual information that sound adds to the image. It also refers to the (faulty) interpretation that sound comes "naturally" from the image, that it only duplicates and confirms that which is seen on screen. Chion discusses added value and animation in: Michel Chion, *Audio-Vision: Sound on Screen*, trans. Claudia Gorbman (New York: Columbia University Press, 1994). 118.

physicality of the bodies in *300* synchronizes seamlessly with the virtual environments that those bodies inhabit.

All of these examples function as a reflection on our increasingly posthuman condition, and our encounters with these nonhuman objects serve to refract and construct the material of our posthuman imaginations, which fantasize about the ability to transcend the body while at the same time fetishizing the flesh. Additionally, each example demonstrates the importance of space – whether physical or virtual – in constructing an experience of subjectivity.

1.1 The Visual Materiality of Kieślowski's Decalogue

Within Krzysztof Kieślowski's *The Decalogue* – which is an extended meditation on the daily struggles of living through the ethical dimensions of the Ten Commandments – subjectivities take on a prismatic form, and they are refracted in such a way that the perspectives of subject and object are intertwined to the point where drawing any clear distinction between them becomes impossible. Produced during a time of great cultural, political, and economic transition, *The Decalogue* is particularly well-suited to exploring the relationship between materiality, space, and subjectivity. *The Decalogue* functions as a terrain on which various subjectivities – both human and nonhuman – encounter each other.

The abstraction of material culture produced within a cultural logic of finance capital complicates traditional humanistic conceptions of subjectivity, which favor clear boundaries between subject and object, human and nonhuman. Central to my understanding of the relationship between prismatic subjectivity and finance capital are theories of material and visual culture. Following the work of Alessandra Raengo,⁶ I trace a lineage from the work of Karl Marx to Walter Benjamin to that of Fredric Jameson and W.J.T. Mitchell, and I argue that the material abstraction of commodi-

⁶ See, in particular: Alessandra Raengo, "Chapter Three: 'Money(s) of the Real'," in *On the Sleeve of the Visual: Race as Face Value* (Dartmouth College Press (UPNE), Forthcoming).

ties under finance capitalism not only leads to the breakdown between subject and object but also produces an imagined space that is out of sync with the emergent subjectivities of the characters and objects depicted in the series. In discussing the ways in which Benjamin productively "misinterprets [Marx's] fetish as a scene of seeing," Raengo writes that this particular leveraging of the literature, which connects the sensible form of the commodity to the perceiver's psychological imbrication into material and visual culture, can "offer a way to think about the form of the commodity as a point of view: not only the manner of an appearance but also the locus of a gaze." It is this point of view of the commodity, the attribution of vital signs to things, that motivates my readings of the interactions between humans, nonhumans, and space in this chapter.

Images within our contemporary, technologically-reproducible visual culture are not merely the ephemera of a mass culture obsessed with representing and reproducing itself, the quickly fading byproducts of a global media gone wild. Images within visual culture are material objects, objects that are both the materialization of a cultural imagination as well as unique material objects in their own right. The materiality of these images grants them an existential weight, which bestows on images both a physical embodiment and a quasi-subjectivity. Like all actants – humans and nonhumans alike – images gain their quasi-subjectivity through a material interaction with the world. That is, subjectivity is not a phenomenon isolated within the subject; it is produced through the complexity of existence within a network. The body and mind of images, however, is not a sim-

⁷ Ibid.

⁸ Robin Bernstein argues that material culture "scripts" human actions, in that our physical interactions with the things of the material world help to shape our experiences of everyday life. Bernstein also theorizes a connection between material culture and visual culture. Her analysis posits that visual culture, through its processes of visualization and imag(in)ing, captures historical moments that have been shaped by the interactions between humans and nonhumans within material culture. These images then themselves become a part of material culture. Robin Bernstein, "Dances with Things: Material Culture and the Performance of Race," *Social Text* 27, no. 4 (2009).

⁹ For a discussion of this phenomenon, see, for example, Merleau-Ponty, *Phenomenology of Perception*; Noë, *Out of Our Heads*. Both authors argue that consciouness is not something that resides solely in the physical brain of the subject. Rather, subejctivity and consciousness are produced through an interaction between subject and world, in the space between subject and world. Consciousness must always be consciousness of *something*.

ple translation of the body and mind of us humans – though images' body and mind falls prey to many of the philosophical questions surrounding the supposed bifurcation of humans' body and mind. Rather, the body and mind of images must be understood in their own terms and within their own theoretical and conceptual framework.¹⁰

A theorization of the materiality of the visual sphere establishes the ways in which subjectivity might be refracted and dispersed throughout a particular space, and the work of Walter Benjamin provides a framework for understanding how processes of commodification and reproduction contribute to visual culture's material foundations. In his "Work of Art in the Age of Mechanical Production," "Some Motifs on Baudelaire," and "Paris: Capital of the 19th Century," Benjamin lays out his *modernity thesis*, arguing that the cultural and technological changes within modernity – mass production of commodities, industrialization, the growth of the crowd – have created a fundamental change in the ways in which we perceive and experience the world. This claim has im-

¹⁰ For a discussion of the phenomenology of images, see: Vivian Sobchack, *The Address of the Eye: A Phenomenology of Film Experience* (Princeton, N.J.: Princeton University Press, 1992); Laura U. Marks, *The Skin of the Film: Intercultural Cinema, Embodiment, and the Senses* (Durham, NC: Duke University Press, 2000); Laura U. Marks, *Touch: Sensuous Theory and Multisensory Media* (Minneapolis: University of Minnesota Press, 2002); Jennifer M. Barker, *The Tactile Eye* (Berkeley: University of California Press, 2009).

¹¹ Benjamin, "Work of Art."; Benjamin, "On Some Motifs in Baudelaire."; Walter Benjamin, "Paris: Capital of the Nineteenth Century," Perspecta 12(1969). For more on the relationship between material culture and modes of seeing, see: Susan Buck-Morss, The Dialectics of Seeing: Walter Benjamin and the Arcades Project (Cambridge, Mass: MIT Press, 1989). The "modernity thesis" also draws on the work of Siegfried Kracauer, The Mass Ornament: Weimer Essays, trans. Thomas Y. Levin (Cambridge, Mass.: Harvard University Press, 1995); Georg Simmel, "The Metropolis and Mental Life," in The Blackwell City Reader, ed. Gary Bridge and Sophie Watson (Malden, MA: Wiley-Blackwell, 2010 [1903]). For support of the modernity thesis, see: Tom Gunning, "The Cinema of Attractions: Early Film, Its Spectator, and the Avant-Garde," Wide Angle 8, no. 3-4 (1986); Ben Singer, Melodrama and Modernity: Early Sensational Cinema and Its Contexts (New York: Columbia University Press, 2001). For a critique of the modernity thesis, see: David Bordwell, On the History of Film Style (Cambridge, Mass.: Harvard University Press, 1997); David Bordwell, Figures Traced in Light: On Cinematic Staging (Berkeley: University of California Press, 2005); Charlie Keil, "'Visualized Narratives,' Transitional Cinema and the Modernity Thesis," in Le cinéma au tournant du siècle/Cinema at the Turn of the Century, ed. Claire Dupré La Tour, André Gaudreault, and Roberta E. Pearson (Québec: Nota Bene, 1999); Charlie Keil, "From Here to Modernity: Style, Historiography, and Transitional Cinema," in American Cinema's Transitional Era: Audiences, Institutions, Practices, ed. Charlie Keil and Shelley Stamp (Berkeley: University of California Press, 2004).

plications not only for the ways in which theorists conceive of visual culture as an object but also how they engage in their inquiries of visual culture.

Benjamin draws heavily on Karl Marx's theory of the commodity and commodity fetishism, which he establishes in Volume One of *Capital*, ¹² and commodity fetishism has subsequently formed the basis of many of the contemporary theories of visuality, especially those concerned with the autonomy and "lives" of images. ¹³ The commodity, for Marx, takes on a special existence once it becomes abstracted from its basis in human labor and comes to appear as a self-generating object of consumption. Through his example of the dancing table, Marx illustrates how a commodity can almost literally come to life, standing on its head and dancing for the consumer. ¹⁴ This life-of-thecommodity is created largely from the process of commodity fetishism, which grants an autonomy to the commodity and obscures/represses its relation to human labor. The commodity is valued for its unique existence as a product of consumption, and it stands alone and circulates according to its own desires.

The seemingly autochthonous generation of commodities from the cultural and economic fabric of society and its system of exchange grants the commodities their own distinct category of nonhuman existence and supports a theoretical framework that views these commodities as equally-existing actants, with their own lives and desires, within the material-semiotic network that constitutes reality. A recognition of the fact that we treat commodities *as if* they were living things allows us to treat them as things rather than objects. Objects are projections of the nonhuman in

¹² Karl Marx, *Capital: Volume 1: A Critique of Political Economy*, trans. Ben Fowkes (New York: Penguin Classics, 1990).

¹³ Bill Brown, and his work with "thing theory," has done much to establish the link between commodity fetishism and the ability of objects to "speak." Bill Brown, "Thing Theory," *Critical Inquiry* 28, no. 1 (2001); Bill Brown, *A Sense of Things: The Object Matter of American Literature* (Chicago: University of Chicago Press, 2003).

¹⁴ Marx, *Capital: Volume 1*: 163-77.

¹⁵ Jussi Parikka discusses the ways in which contemporary global capitalism operates according to a networked, viral logic. He argues that consumer objects within this system function parasitically, like an infection, and they appear to circulate according to their own logics and desires. Jussi Parikka, "Contagion and Repetition: On the Viral Logic of Network Culture," *Ephemera: Theory & Politics in Organization* 7, no. 2 (2007).

relation to the human subject; in other words, objects do not possess their own quasi-subjectivity but are instead understood dialectically as not-the-subject. Things, conversely, are granted a certain existential *thereness*, and as Ian Bogost points out, things "equally exist, *yet they do not exist equally.*" That is, all things bear an equal existential presence, but they do not share equal modalities of power and agency. In addition, an understanding of thingness does not conceptualize the thing as the not-human; rather, the thing is, in many ways, indifferent to the human. Within the framework of my own project, this idea of things having an uncanny existence separate from that of humans is understood within a context of nonhumanism, which attempts to make sense of the complex relationship between humans and nonhumans, and in my project, the ways in which the visualization of the nonhuman reflects on contemporary posthuman attitudes.

The thingness of things has its basis in processes of commodification, and Thomas Keenan provides an analysis of commodity exchange, which is crucial for understanding the ways in which abstraction functions to equalize entities within finance capitalism. Keenan theorizes commodity abstraction from a rhetorical perspective, and he argues that the process by which commodities are abstracted from their basis in human labor functions like language: just as "words murder the thing," so too does commodity fetishism destroy human labor, leaving nothing but a ghost. Commodities, like words, are abstract and movable, and through processes of substitution and abstraction, both lose their basis in the "reality" of production. For Keenan, commodities must first be abstracted – equalized and made substitutable – before they can be exchanged, and nothing within finance capitalism is immune from this process, even humans. "Under the pressure of the abstrac-

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¹⁶ Ian Bogost, "Materialisms: The Stuff of Things is Many," http://www.bogost.com/blog/materialisms.shtml.

¹⁷ The field of Object-Oriented Ontology has done much work in theorizing the thingness of things. For an overview, see: Graham Harman, *Towards Speculative Realism: Essays and Lectures* (Ropley, UK: Zero Books, 2010); Levi Bryant, *The Democracy of Objects* (Open Humanities Press, An Imprint of MPublishing, University of Michigan Library, 2011); Levi Bryant, Nick Srnicek, and Graham Harman, eds., *The Speculative Turn: Continental Materialism and Realism* (Melbourne: re.press, 2011); Ian Bogost, *Alien Phenomenology, or What It's Like to be a Thing* (Minneapolis: University of Minnesota Press, 2012).

tion necessitated by exchange, people and their labor become commodities too." ¹⁸ Within this schema, what is being exchanged is the abstraction from the human, and *all* entities – human and nonhuman – are equalized by the abstraction required by exchange. Keenan asserts that abstraction is the condition sine qua non of exchange, which has posthuman implications in that the similar material conditions of existence of both humans and nonhumans grant a (quasi-)subjectivity to both. He states: "Exchange is possible because abstraction reveals the common humanity surviving in things exchanged," and he continues, "Humanity as such, empty and abstract, alike and equal, is indistinguishable from the commodity." ¹⁹ Within each commodity is a ghostly trace of the human, and through abstraction, the human occupies the same existential space as the commodity.

Marx's theory of commodity fetishism informs much of Benjamin's work, and Benjamin extends Marx's ideas through an incorporation of technology. Once images can be technologically reproduced on a mass scale, according to Benjamin, they begin to take on the status of commodities, circulating free from ties to their mode of production – images become commodities become images. Benjamin most forcefully theorizes this process in his "Paris" essay, which forms a part of his larger Arcades project. The Arcades, for Benjamin, are the example *par excellence* of Modernity and its modes of seeing. Within the Arcades, commodities and images whirl and circulate, creating a phantasmagoria of consumption and experience. Gyorgy Markus expands on this notion, arguing that with the mass production of disposable commodities and the loss of aura surrounding unique works of art, commodities become images, and these images take on the spectral quality of 19th cen-

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¹⁸ Thomas Keenan, "The Point Is to (Ex)Change It: Reading *Capital*, Rhetorically," in *Fetishism as Cultural Discourse*, ed. Emily Apter and William Pietz (Ithaca, NY: Cornell University Press, 1993), 166. Ian Baucom echoes Keenan's line of thinking, as he bases much of his discussion on the fact that colonialism and finance capitalism allows people to become abstracted and generalized like commodities. Ian Baucom, *Specters of the Atlantic: Finance Capital, Slavery, and the Philosophy of History* (Durham: Duke University Press, 2005).

¹⁹ Keenan, "The Point Is to (Ex)Change It," 171.

²⁰ Guy Debord continues this mode of thinking and theorizes, in specific, the ways in which the commodity becomes a spectacle. Guy Debord, *Society of the Spectacle*, trans. Ken Knabb (London: Rebel Press, 2006).

tury phantasmagoria shows.²¹ As in the phantasmagoria, the commodities circle and dance around the viewer, their visualization one of thinness and superficiality.²² The *flaneur/flaneuse* is the subject-position created by this phantasmagoria, and he/she experiences the world in fragments, as a collection of images dialectically combined into a synthetic image of the world. The *flaneur/flaneuse* is like a window shopper, sampling a bit of each product on display but never fully committing to one product or view of the world.²³

In the realm of visual culture studies, scholars have taken up Benjamin's notion of the autonomy of commodities and the idea of commodities-as-images and extended it to the lives of images themselves. W.J.T. Mitchell has arguably been the most forceful in making the claim of the autonomy of images, specifically in *What Do Pictures Want?*. Here, Mitchell posits that, like fetishized commodities, images take on their own lives and possess their own desires. Thus, this phantasmagoria of images circulates not only as a mass of objects, but as a mass of autonomous subjects. Mitchell also addresses this idea in his earlier work, *Picture Theory*, in which he coins the term *metapicture* in order to argue that pictures have the ability to theorize the process of representation itself.²⁴

However, we must also always remember that the quasi-subjectivity I am positing for these images should not be confused with the kind of subjectivity possessed by humans. Such an analogy

²¹ Gyorgy Markus, "Walter Benjamin or The Commodity as Phantasmagoria," *New German Critique*, no. 83 (2001).

²² For more on the phantasmagoria, see: Tom Gunning, "The Long and Short of It: Centuries of Projecting Shadows, From Natural Magic to the Avant Garde," in *Art of Projection*, ed. Stan Douglas and Christopher Eamon (Ostfildern: Hatje Cantz, 2009); Marina Warner, *Phantasmagoria: Spirit Visions, Metaphors, and Media into the Twenty-First Century* (New York: Oxford University Press, 2006).

²³ Anne Friedberg, *Window Shopping: Cinema and the Postmodern* (Berkeley: University of California Press, 1993). Miriam Hansen takes a similar view, and she conceives of classical cinema as speaking in modernist vernacular. I take up this thread in more detail in Chapter Two. Hansen, "The Mass Production of the Senses."

²⁴ Michel Foucault provides an example of an analysis of a metapicture in his examination of "Las Meninas" in *The Order of Things*. Here, Foucault argues that "Las Meninas" is a completely closed representation that does not require the presence of the viewer at all. The painting, according to Foucault, is a representation of classical representation. Michel Foucault, *The Order of Things: An Archaeology of the Human Sciences* (New York: Vintage Books, 1970).

is far too reductive and does not do justice to the complicated existence of images. While I agree with much of what Mitchell argues, I want to problematize his idea of metapictures, their desires, and their signs of life. Quasi-subjectivity exists *between* entities, not within the entities themselves. Thus, both the subjectivity of humans and the quasi-subjectivity of images are contingent on the presence of the other and the environmental context of this exchange. In this sense, neither humans nor nonhumans are completely autonomous beings; each relies on the other for its (quasi-) subjectivity, and this must always be remembered in any theorization of radical alterity.

Though philosopher of science Bruno Latour is neither particularly Marxist in his thinking nor explicitly tied to studies of visual culture, I read his work as providing a corollary to Mitchell's conceptualization of the autonomy of images. In *We Have Never Been Modern*, Latour examines the processes of visuality that allow designated representatives to speak for objects and "witness" the activities of nature. At issue for Latour is the modern conceptualization of the separation between subject and object. According to Latour, modernity is founded on this separation, but because this separation is an artificially enforced construct of modernity, hybrids are produced that break down the barrier between subject and object. Modernity, for Latour, both relies on and disavows hybrids. In a sense, these hybrids occupy the same position as Marx's dancing table and Benjamin's phantasmagoria of images. They are quasi-objects/quasi-subjects, monstrous entities that are not quite human but not quite objects. They occupy a middle ground, and they act autonomously and frighteningly out of human control, disrupting the easy construction of a world picture that posits a strict separation between subject and object, human and nonhuman.

This concern with breaking down boundaries between humans and nonhumans forms one of the foundations of visual culture studies as a methodology and discipline, and it is a primary concern of my overall project. Within contemporary advanced capitalism, in which almost nothing can resist commodification, things becomes images and take on many of the vital signs of human life.

²⁵ Latour, *We Have Never Been Modern*. Donna Haraway makes a similar argument. Haraway, *Modest_Witness*.

Following Benjamin's materialist conceptualization of visuality, the ways in which we see are connected to the material circumstances of our existence.



Figure 1.1: Degalogue's Apartment Complex



Figure 1.2: *Decalogue's* Apartment Complex

The material history explicated by the literature mentioned above accounts for our relationship to images and material culture in light of the cultural logic of finance capital, and as such, is helpful for understanding how this transition registers in *The Decalogue*. Most of the action of *The Decalogue* takes place within an apartment complex in Warsaw. The apartment complex is typical of much of Soviet-era Eastern Bloc architecture in that it emphasizes efficiency and uniformity. The characters of *The Decalogue* move throughout this space, but they are dwarfed by the monumental figure of the apartment complex. Although apartment complexes of this type were not always constructed for durability and posterity, the architecture nevertheless imposes itself on its environment. What interests me about the space of *The Decalogue* is that it seems to lag behind the characters and objects of the series in the transition to finance capitalism. Produced during the time of the

fall of Communist control of Poland, namely by means of the Solidarity Movement's triumph in the Polish parliamentary elections of 1989, *The Decalogue* is symptomatic of a transitional attitude.

As Fredric Jameson has famously argued, a change in the means of economic production accompanies both an alteration of cultural artifacts produced within that economic system and the subjects that apprehend those cultural artifacts.²⁶ Specifically, Jameson asserts that our contemporary (Western) economic system of speculative capital investment, in which venture capitalists grow their assets through monetary investment rather than through trade in physical commodities, produces a cultural logic based on speculation. As such, the cultural products generated by such a system become historically hollow and purely self-referential, and "aesthetic production...become[s] integrated into commodity production generally."²⁷ This collapse of commodity production and aesthetic production into a single category results in a fundamental shift in a culture's symbolic order of representation, and we can see this collapse in an image from *Decalogue IV*.



Figure 1.3: Commodities

In this image, we see a bedroom adorned with that most American of commodities: a cigarette ad. This image also displays a rather Hitchcockian use of foreground space, which highlights the importance of objects to the milieux of the series. The positioning of the woman within the

²⁶ Fredric Jameson, *Postmodernism, Or, the Cultural Logic of Late Capitalism* (Durham: Duke University Press, 1991); Fredric Jameson, "Culture and Finance Capital," *Critical Inquiry* 24, no. 1 (1997).

²⁷ Jameson, *Postmodernism*: 4.

frame makes it appear as if she is almost disappearing into the image on her wall. In the private space of her bedroom, she becomes a part of the Westernized commodity culture that she is tacitly celebrating. The use of a mirror in the frame – another typical Kieślowskian touch – doubles the character, abstracting the reflection from its material base. This flattening of subject and object, human and commodity, is symptomatic of the transition into finance capital, and the human within this cultural logic becomes intertwined within a network of other entities, both human and nonhuman. Instead of being defined against a monumental history (as with the relationship between the characters and the apartment complex), humans and the things that surround them are coconstitutive, and this is imagined in *The Decalogue* through images that refract and displace the subjectivities of the characters.

A sequence from the end of *Decalogue II* displays the temporal out-of-syncness between the characters and the space they inhabit. This episode of *The Decalogue* focuses on the ethical dilemma faced by a woman, Dorota (Krystyna Janda), and her doctor (Aleksander Bardini). Dorota's husband, Andrzej (Olgierd Łukaszewicz), is dying, and she is pregnant with a child from her lover. If Andrzej is going to live, Dorota will terminate her pregnancy; if Andrzej will die, Dorota will keep the baby. The doctor must choose whether or not to tell Dorota the truth about her husband's chance of survival, as he views himself as implicated in the life of the unborn child. The sequence begins at the end of *Decalogue II*, and what is important for the purposes of my argument is the depiction of space and the transitions between the characters. The camera doesn't crosscut between characters; instead, it travels across the surface of the apartment complex. The transitional tracking shot focuses on the haptic qualities of the image and the texture of the building, and it refuses the kind of monumental shots of the apartment complex typical in other sections of the film.²⁸

The sequence beings with a low angle shot of Dorota, seen through the venetian blinds of her apartment window. The camera then tracks down from Dorota's face to the exterior wall of the

²⁸ Jessie Labov, "Kieślowski's *Dekalog*, Everyday Life, and the Art of Solidarity," in *Screening the City*, ed. Mark Shiel and Tony Fitzmaurice (New York: Verso, 2003), 118-20.

apartment complex. The image here is purely textural, as the dark, rough surface of the apartment wall consumes the entirety of the frame. On its journey downward, the camera passes by two apartment windows, continues downward, and eventually stops on the doctor's window. The doctor is bathed in dark red light, and only his face is shown as he peers contemplatively out of the window. After pausing on the doctor's face for several seconds, the camera begins to track right across the exterior wall of the apartment. Again, this image is haptic, rather than representational, and all the image shows is the rough texture of the wall. The camera's tracking shot speeds up (functionally masking a cut in the film), and finally lands on Andrzej's sweaty face as lies in a hospital bed. The camera lingers on Andrzej's face for a few seconds before Andrzej opens his eyes and glances toward the right edge of the frame. The camera then pans upward and to the right, quickly passing over various other objects in the room in a blur, before settling on a glass of fruit compote. The camera stays on the glass of compote for around 30 seconds as a bee, stuck in the sticky syrup, struggles to climb up a spoon and out of the glass. The bee eventually succeeds, and once the bee reaches the rim of the glass, the scene ends.

As the camera movement in this sequence emphasizes, the characters are tied to each other through their relationship to space and the materiality of the architecture that inhabits that space. This scene also highlights the quasi-subjectivity that is gained by nonhumans within the diegesis of the series – here, the bee crawling out of the fruit compote and the water dripping from the ceiling. It is not just that the bee and the water are granted some kind of agency in this scene; the important thing is that the subjectivities of the bee, the water, and the man are intertwined and dependent upon each other. One lacks meaning without the others. As such, each subjectivity is contingent upon both the space that it inhabits as well as the network of interaction – mapped by the walls of the apartment – established with the other subjectivities in its environment.

The denial of a rooted historicity of objects – illustrated, for example, by the intrusion of American cigarettes and American advertising into the lives and architecture of the formerly-

Communist subjects of the film – also repositions both the humans and nonhumans within the scene. History, as Jameson intimates, becomes hollowed out and lost within the cultural logic of late capitalism. "The past as 'referent' finds itself gradually bracketed, and then effaced altogether, leaving us with nothing but texts."29 He continues: "We are condemned to seek History by way of our own pop images and simulacra of that history, which itself remains forever out of reach."30 With the move towards multinational capitalism (and the concurrent move towards speculative investment), the spectacle of the commodity becomes a cultural priority, and it is through this lens that late capitalist cultures view the world. That is, history becomes yet another commodity, and it can be understood only in relation to other commodities.

The subject in state socialism, however, is a subject positioned within history, and, following the cultural progression outlined by Marx, socialism is viewed as the natural end to the struggles and contradictions of capitalism. As Susan Buck-Morss indicates: "It is history that legitimates political revolution, at least since Hegel and Marx. The suturing of history's narrative discourse transforms the violent rupture of the present into a continuity of meaning."31 At least as regards the Soviet style of communism, subjects within that system were encouraged to see themselves in relation to the past and future – in short, to see themselves as historical subjects.³² Within late capitalism, however, a subject's relation to history is lost, and it is this tension that is made visual in *The Deca*logue. As the subjects of The Decalogue experience a growing intrusion of Westernization, they ex-

²⁹ Jameson, *Postmodernism*: 18.

³⁰ Ibid., 25. This idea is echoed in: Vivian Sobchack, "The Insistent Fringe: Moving Images and Historical Consciousness," History and Theory 36, no. 4 (1997).

³¹ Susan Buck-Morss, Dreamworld and Catastrophe: The Passing of Mass Utopia in East and West (Cambridge, Mass: MIT Press, 2000). 43.

³² While there are historical problems involved with collapsing the Soviet style of communism with the socialism/communism adopted by the individual countries within the Eastern Bloc, some common philosophical trends in state socialism (such as a subject's relation to history) can be noted. I do not wish to imply that Poland's approach to government was the same as the USSR's, and I am using this discussion of Soviet visual culture to place *The Decalogue* within the larger (and admittedly problematic) discussion of the Cold War binary of "East and West" and economic and cultural processes of Westernization. As such, I am only tenuously applying this discussion to the matter of subjectivity as depicted in *The Decalogue*.

perience a certain disjunction with history and the historical space surrounding them. It is through this process that the space which the characters of *The Decalogue* inhabit and the objects with which they interact come to seem outmoded – that space and those objects are relics of a history and historical subjectivity that is quickly being lost or forgotten by the subjects that once apprehended them. Surrounded by a space saturated with history, the characters of *The Decalogue* cannot help but understand that space as uncanny, strange, and anachronistic.

To complicate the issue of subjectivity even further, the subject inhabiting the transitional period of Westernization also experiences a change in the system of perception and visual culture as well as a change in the construction of "the masses." In *Dreamworld and Catastrophe*, Buck-Morss examines the ways in which the different cultural and economic systems of the United States and the USSR created competing visions of modernity, embodied in the visual cultures that each nation produced. Analyzing the images produced by each culture, she argues that the visual cultures of each nation situated the masses in differing ways, functionally enabling different modes of perception. Speaking of cinema, she states that: "If the Soviet screen provided a prosthetic experience of collective power, the Hollywood screen provided a prosthetic experience of collective desire." 33 She continues:

If the collective imaginaries of both capitalism and socialism are virtual worlds, making them real becomes the social project...Movie stars had Hollywood homes, but Mr. and Mrs. America too were promised a dream house which, despite its mass production, was studded with superficial luxuries and signs of distinction meant to confer specialness onto its fungible inhabitants. Under Stalin the fantasy of the mass body influenced social projects to the point that enormity of size became the overarching criterion of construction, whether of a factory of a collective farm, a university or a subway system, a hydroelectric project or a ca-

³³ Buck-Morss, *Dreamworld and Catastrophe*: 148.

nal system. This awesome hugeness was reincorporated within the sublime body of the leader, the gigantically proportioned image of Stalin himself.³⁴

In other words, the U.S./capitalist audience was a mass empowered by its members' individual ability to consume while the Soviet/communist audience was a mass empowered by the strength of its collective size and its relation to history. And it is the moment of slippage between the subject and his/her relation to history that is captured in *The Decalogue*.

As Buck-Morss hints at, different cultural logics also differently construct their masses in relation to space. Speaking of the way in which Soviet socialism positioned itself in relation in the Modernist project, David Harvey asserts that:

If modernism meant, among other things, the subjugation of space to human purposes, then the rational ordering and control of space as part and parcel of a modern culture founded on rationality and technique, the suppression of spatial barriers and difference, had to be merged with some kind of historical project.³⁵

As Harvey illustrates, Soviet socialism explicitly positioned its subjects in relation to history while U.S. (late) capitalism effaces its subjects' relation to history, and this contrast can be seen in the ways in which each cultural system defines its space – compare the sedimented, monumental communist architecture to the (Jamesonian) "hyperspace" of postmodern architecture. This relationship between subject, object, and space (and their position within history) is what became problematized with the transformation of Poland's economic and political structure in 1989. *The Decalogue*, as a cultural product of this time, reflects this problematic.

The transitional nature of the space highlights the changing relationship between the humans and nonhumans within *The Decalogue*. The process of Westernization serves to fracture the subjectivities of not only the humans but also the nonhumans depicted in the series – the man, the

³⁴ Ibid., 149.

³⁵ David Harvey, *The Condition of Postmodernity: An Enquiry into the Origins of Cultural Change* (Oxford, UK: Blackwell, 1989). 280.

bee, and the water – and these subjectivities become intertwined and prismatic, refusing to be pinned down to one particular location.

1.2 The Decalogue in Context: Boundaries of (Quasi-)Subjectivity in Transitional Space

A brief overview of the production history of *The Decalogue* will help position the film both within the larger context of Kieślowski's work as well as within the cultural context of Poland circa 1989. *The Decalogue*, directed by Krzysztof Kieślowski and written by Kieślowski and Krzysztof Piesiewicz, is a ten-part film series produced for Polish Television in 1988-1989.³⁶ Kieślowski originally intended for *The Decalogue* to function as a launching pad for young Polish directors, giving them a chance to obtain a foothold within the Polish film industry, but he became so enamored with the project that opted to direct the entire series himself. Kieślowski did, however, (except for two films that used the same cinematographer) employ different cinematographers for each film.³⁷

Loosely based on the Ten Commandments, *The Decalogue* addresses the moral and ethical concerns raised by the Ten Commandments without being pedantic about their presentation. Each film of *The Decalogue* series addresses more than one Commandment, and as such, the order of the films should not be taken to represent a one-to-one correspondence between the film and a particular Commandment. As Kieślowski himself said, "The films should be influenced by the individual Commandments to the same degree that the Commandments influence our daily lives." Each of

³⁶ For a discussion of the omnibus film and its place within European art cinema, see: Mark Betz, "Film History, Film Genres, and Their Discontents: The Case of the Omnibus Film," *The Moving Image: The Journal of the Association of Moving Image Archivists*, no. 2 (2001). Though *The Decalogue* is not technically an omnibus film according to Betz's definition – he defines an omnibus film as a series of films by different directors – his discussion is relevant to the critical reception of the films. According to Betz, omnibus films were generally objects of critical scorn, viewed as "uneven" and "episodic." *The Decalogue*, conversely, was very well received by the European critical community and has, in recent years, been hailed as a masterpiece of cinema. See: Annette Insdorf, *Double Lives, Second Chances: The Cinema of Krzysztof Kieślowski* (New York: Miramax Books, 1999). 69.

³⁸ Quoted in: Michael Wilmington, "Long Decade's Journey into Light," *Film Comment* 36, no. 2 (2000): 10.

the ten films in *The Decalogue* focuses on the moral crisis experienced by one or more characters living in the same apartment complex in Warsaw. Since all of the characters reside in the same place, it is very common for characters from one film to make cameo appearances in another film (e.g., meeting in the elevator, passing each other on the street, waiting for a taxi), and this interaction between the films coheres the ten films into a single unit.

Throughout the ten-film series, Kieślowski focuses primarily on the existential and moral crises experienced by the characters, and he addresses such themes as isolation, fate, chance, and the ambiguity of moral behavior. Kieślowski, however, maintains a distance from overt proselytizing, and "in spite of its religious connotations, *Decalogue* is not an exploration of supernatural phenomena but an acute analysis of pre-1989 Poland...[*Decalogue*] portrays a pessimistic picture of a harsh world in which moral choices have to be made against the pressure of politics and economics." Though Kieślowski frames *The Decalogue* against the political and economic backdrop of pre-1989 Poland, the films are not explicitly political, and Kieślowski uses the socioeconomic problems of Poland more as a "realistic" milieu in which the characters must confront their moral and existential crises than as a subject in itself. This refusal to address directly the politics and social conditions of Poland separates Kieślowski from his Polish filmmaking peers. By focusing more on existential crises rather than political or economic issues, Kieślowski breaks with Polish cinematic tradition as "he does not fit the traditional image of a 'great Central European auteur' obsessed with politics and history." 40

As a final note, it is also worth mentioning the documentary aesthetics of *The Decalogue* as well as its concern with moral and existential crisis place it within a larger tradition of Polish cinema known as the *Cinema of Moral Concern*, which began after the events of 1968. Kieślowski began his career as a documentarian, and his early fiction filmmaking draws heavily on this experience, both in form and content. Kieślowski's early fiction films, more political in nature than *The Deca-*

³⁹ Marek Haltof, *Polish National Cinema* (New York: Berghahn Books, 2002). 197.

⁴⁰ Ibid., 196.

logue, falls within the tradition of Moral Concern, and *The Decalogue*, though it jettisons most of the political content typical of the films of the Cinema of Moral Concern, maintains a preoccupation with the role of morality in everyday life. As Marek Haltof describes it:

The corrupted side of communism was explored in the late 1970s by a group of films called the "Cinema of Moral Concern (*Kino moralnego niepokoju*)." The term refers to realistic films that examine contemporary issues and were made primarily between 1976 and 1981...This series of contemporary realistic films centers around the conflict between the state and the individual, and examines the massive gap between the "progressive" postulates and the implementation. Due to state censorship, the system is not attacked directly; the films target its institutions and functionaries, and focus on corruption and social maladies. The mechanisms of manipulation and indoctrination are examined on a metaphorical level. 41

In directly addressing human existence within a corrupted culture, the Cinema of Moral Concern shares much with the dominant strains of Modern art. With *The Decalogue*, Kieślowski questions the objectivity of the camera, which also functions as a critique of the modernist schism between subject and object.

Shifting means of economic and cultural production not only change the creation, reception, and ontological nature of cultural products, they also bring about a fundamental change in the subjectivity of those inhabiting the site of economic and cultural change, and much of this is dependent on a shift in visual culture and modes of perception. *The Decalogue*, as a cultural product of the protean economic and political milieu of 1989 Poland, reflects this change in subjectivity in both its representation of objects and the ways in which those objects are situated within the changing urban space of Warsaw. The economic and political process of Westernization brings about a fundamental shift in the symbolic order of representation, and *The Decalogue*, as but one example of a

⁴¹ Ibid., 148-149.

cultural object produced during this transition, makes sense of this new world through its transcendent objects and the ways in which those objects inhabit the transitional space of a shifting cultural logic. In *The Decalogue*, the effects of the cultural change are registered in the relations between humans, objects, and the space in which they exist. Objects in *The Decalogue*, becoming newly commodified, fetishized, and reconceptualized under the emergent capitalist cultural and economic system, begin to adopt an emotional quasi-subjectivity, and they become spectacles within the older communist space. In a sense, these everyday, pedestrian objects are examples of Walter Benjamin's notion of "profane illumination" in that their "outmoded" nature bestows on them an uncanny, affective aura. We kieślowski formally depicts this process through sustained close-up framing and long takes of objects throughout *The Decalogue*. The characters in *The Decalogue*, confronted with feelings of an emerging crisis in the anthropocentric understanding of the relationship between subject and object, begin to see in the objects with whom they share an outmoded, transitional space a burgeoning quasi-subjectivity, a mode of perception freed from the structures of humanistic understanding. These objects become saturated with expressive powers, transformed into meaningful actants within the material-semiotic network established within the film.

As any major shift in cultural logic leaves behind outmoded relics of the past, subjects living through the change are apt to experience some slippage between their previous understanding of these objects and the understanding granted by a modified mode of perception and subjectivity. The incongruence between the older communist space and the new actants created by the shift in Poland's cultural logic contributes to the quasi-subjectivity of objects in *The Decalogue*. A certain conflict exists between the sedimented communist architecture and the slippery, messy nature of the objects represented in the films, and as all of the main characters of *The Decalogue* inhabit a single apartment complex, the ways in which they negotiate this space become crucial for my read-

⁴² Walter Benjamin, "Surrealism: The Last Snapshot of the Eurpoean Intelligentsia," in *Walter Benjamin: Selected Writings: Volume 2, Part 1 (1927-1930)*, ed. Marcus Paul Bullock and Michael William Jennings (Cambridge, Mass: Belknap Press of Harvard University Press, 1996).

ing of the films. While both the communist space and the objects within that space are, in a sense, examples of the outmoded, the objects and commodities in *The Decalogue* seem somehow suppler, more prone to change. The architecture and space, as depicted in the films, are so rooted within the city that even a cultural shift as monumental as that experienced by Poland in 1989 cannot loose these buildings from their moors. Objects, on the other hand, while their physical form may not change, are more pliable – and subject to easier commodification – and can be more easily removed from their previous uses and reappropriated (in a De Certeau-ian sense) in order to satisfy new cultural imperatives.⁴³ It is in this sense that I am claiming that the objects are examples of profane illumination – they are relics of a former cultural logic being reappropriated as a means of expressing the existential crisis that accompanies a major economic and political shift.

If the objects depicted in *The Decalogue* are suppler than the space in which they exist, the characters of *The Decalogue* are equally so. The subjectivities of the characters, experiencing a rapid change within the shifting cultural logic, are at odds with the sedimented architecture of Warsaw, and the objects with whom they share that space serve as mediators between new and old.⁴⁴ That is, the physical form of the objects inhabits the space of pre-1989 Warsaw while the subjectivity of the objects complements the changing subjectivity of the post-1989 characters. The objects thus colonize the allegorical space between old and the new, themselves a part of both worlds – hence their uncanny and outmoded nature. In placing the characters within this outmoded and sedimented space, *The Decalogue* creates a feeling of temporal displacement between the characters and the space they inhabit, transforming this interaction between person and space into a living anachronism. This temporal displacement creates in the characters a fractured subjectivity, and Kieślowski depicts this through his proclivity for isolating close-ups of the character's faces. In *The Decalogue*,

⁴³ Michel de Certeau, *The Practice of Everyday Life* (Berkeley: University of California Press, 1984).

 $^{^{44}}$ The concept of mediators is borrowed from Bruno Latour. See Chapter Three for a more detailed unpacking of this concept.

the city of Warsaw becomes a character, and its spaces, loaded with the history of a communist past, become increasingly difficult for Poland's new subjects to navigate.

1.3 The Quasi-Object⁴⁵

As Marx illustrates with his oft-cited example of the "dancing table" in *Capital, Volume 1*, as soon as an object "emerges as a commodity, it changes into a thing which transcends sensuousness." ⁴⁶ In other words – and following the tradition of reading this passage within the lineage of literature I outlined at the beginning of this chapter, which focuses on the commodity's speech – through the process of fetishizing a commodity-object, that object gains the ability to "speak" and comes to possess a quasi-subjectivity. These objects are, in a sense, attributed a personhood, complete with desires and "social lives." ⁴⁷ Once these objects enter into the system of exchange, they come to embody the entirety of the social relations from which they were created, a germ cell of the aggregate of a cultural logic. In a sense, then, these objects not only represent the social transaction of which they are a part – they also speak to others (both humans and nonhumans) of their importance within the social fabric. "This is a social relation neither between men nor between things, but something like a social relation between human subject and inanimate object, wherein modernity's ontological distinction between human beings and nonhumans makes no sense." ⁴⁸

Speaking of images within a commodity culture, W.J.T. Mitchell asserts that: "Pictures are things that have been marked with all the stigmata of personhood and animation: they exhibit both physical and virtual bodies; they speak to us, sometimes literally, sometimes figuratively..." While Mitchell is speaking of pictures rather than objects, he is doing so within a discussion of Marx's

⁴⁵ Latour theorizes the quasi-object in Latour, We Have Never Been Modern.

⁴⁶ Marx, *Capital: Volume 1*: 163.

⁴⁷ Arjun Appadurai, ed. *The Social Life of Things: Commodities in Cultural Perspective* (New York: Cambridge University Press, 1986), 3.

⁴⁸ Bill Brown, "The Tyranny of Things (Trivia in Karl Marx and Mark Twain)," *Critical Inquiry* (2002): 451.

⁴⁹ Mitchell, *What Do Pictures Want?*: 30.

commodity fetishism, and pictures and other images are, after all, other commodities within late capitalism and thus subject to the same fetishization. Because we as a culture attribute such power and personhood to images (and objects), Mitchell is arguing for more than just an allegorical or metaphorical reading of an image. He is unconcerned with what pictures *mean* or what they do: he wants to know, quite literally, what pictures want, and within the diegesis of The Decalogue, images - and images of objects - are beginning to gain this ability to speak and desire. For example, the sequence from the end *Decalogue II* described previously includes a long take of a bee crawling out of a glass of fruit compote. On one level, the bee escaping the liquid could serve as an allegory for the recovery of the cancer stricken man (around whom the story of the film revolves) from illness. However, on another level, this prolonged shot invites a reconsideration of the object. The bee seems overcome by the object (the glass). On a deeper allegorical level, the (worker) bee stands in for the worker under communism, newly overcome by uncanny nature of the commodified objects of Western capitalism. The role of objects within Poland's cultural logic has begun to shift, creating a disjuncture between subject, object, space, and time. It is almost as if, within the changing cultural logic of Poland, objects have become mystical, uncanny, and even dangerous, and as a result, Kieślowski cannot help but stare at wonder at these images that have begun to express desire and affect. Imbued with new meanings, these images start to penetrate the Modernist binary between subject and object.



Figure 1.4: Bee in Compote



Figure 1.5: Crying Painting

In sum, the objects in *The Decalogue* gain much of their power through Kieślowski's presentation of them as inhabiting the worlds of both human and nonhuman. These objects have something to say and they want us to listen, and they are granted importance within the diegesis of the film through long takes and their isolation in the frame. Though Kieślowski might not know exactly what these objects want to say, he allows us to listen to them. In Decalogue I for example, we find a visual correlative to Mitchell's notion of the living picture and to Bill Brown's idea that "the boundary between person and thing may be more permeable than we're inclined to believe."50 In Decalogue I, a father, Krzysztof (Henryk Baranowski), and his genius son, Paweł (Wojciech Klata), spend hours on a computer calculating the thickness of the ice on a local pond. Krzysztof has just given Paweł a pair of ice skates, and Paweł is understandably eager to try the skates out. After writing multiple computer programs to calculate the thickness of the ice and physically visiting the pond to check its safety, Krzysztof decides that the ice is thick enough to skate on. Krzysztof, however, wants Paweł to wait until they can go together. Paweł, impatient, cannot wait and decides to go skating by himself. In a subtle yet harrowing scene, the boy falls through the ice, drowns, and is pulled from the pond by a rescue team. Throughout the film, the boy, his father, and the boy's aunt have been discussing religion – the father is an atheist and the aunt is fervently Catholic – and at the film's conclusion, the father enters an empty church and overturns the altar, causing some candles

⁵⁰ Bill Brown, "Reification, Reanimation, and the American Uncanny," *Critical Inquiry* 32(2006): 178.

to fall and drip wax on a painting of Mary, making the image appear to be crying. While there are many allegorical readings of this scene, the most obvious of which is that the image of Mary is weeping at the death of a child, I want to focus more on the ways in which this image breaks down the barriers between subject and object.

The image in Figure 1.5 demands that both the character *within* the film and the non-diegetic viewer *of* the film recognize the subjectivity of the painting. It is not that the character/viewer *provides meaning* to the image but rather that the character/viewer *listens* to what the image has to say. The image of Mary is speaking with its own voice, and the way in which Kieślowski shoots this scene allows the character/viewer the time for contemplation and the space to hear the voice of the image. Vivian Sobchack, discussing Kieślowski's gaze, is helpful here, and she comments on the ability of Kieślowski's objects to return our gaze:

Kieślowski's cinematic vision – and, in key moments of reflexive awareness, the gaze of his characters – *expands* to admit something *within* existence that is always potentially both awful and awesome in its obdurate materiality, its nonanthropocentric presence, and its assertion of the *existential equality* of all things, human and animate or otherwise. This vision of existential equality nullifies the primacy and privilege of human existence, meaning, and order yet simultaneously affirms human existence as always also transcendent and meaningful.⁵¹

Within *The Decalogue*, the binary between subject and object becomes permeable, and neither subjects nor objects are awarded a monopoly on subjectivity. In isolating objects within the film frame, Kieślowski not only positions those objects as the target of our gaze; he also positions us as the target of the object's gaze. In a Lacanian sense, these objects serve as stains on the symbolic world of

⁵¹ Vivian Sobchack, "The Expanded Gaze in Contracted Space: Happenstance, Hazard, and the Flesh of the World," in *Carnal Thoughts: Embodiment and Moving Image Culture* (Berkeley: University of California Press, 2004), 91.

both the viewer and the characters within the film, and they force a confrontation with the real.⁵² And that "real," for the characters within *The Decalogue*, is the breakdown of their sutured symbolic order of representation, fractured by Poland's shift in cultural logic.

This "existential equality of all things" within *The Decalogue* provides a means to tie together the various strands of theory with which I have been working. Using the frameworks of Marx, Jameson, Mitchell, and Latour, I have thus far been asserting that *The Decalogue*, as a product of the transitional cultural logic of 1989 Poland, manifests some of the cultural anxieties that accompany such a transition. Specifically, the boundary between object and subject, reimagined with the fall of communism and the coming of Westernization and capitalism, creates a transcendent object, possessing a pseudo-subjectivity and capable of manifesting vital signs, and since Kieślowski deprivileges the existential experience of the characters within the films, objects are free to become uniquely expressive. In order to explore further the ability of the object to express emotion, I return to Benjamin's concept of profane illumination.

Within *The Decalogue* the existential experience of the human characters is not given priority, which creates objects that become emotional spectacles, saturated with meaning and affect. These quotidian things, produced by a soon-to-be-extinct cultural logic, are reappropriated by *The Decalogue*, which extracts new meanings from the outmoded objects. These objects are also representatives of a quickly fading Modernist existential and representational crisis, a crisis that the nascent Westernized characters of *The Decalogue* will soon abandon for a different sort of nonhumanist alienation. As such, the objects in the films begin to express (and speak) the muted desires of the characters. Whether it is a glass of sour milk, spilled ink, a dead plant, or spilled milk, these objects express the unspeakable crisis in anthropocentric and humanistic models of subject-object relations, concurrent with a the transitional period between a fading Modernism, an already-

⁵² For more on how the object returns our gaze, see: Elkins, *The Object Stares Back*; Peter Schwenger, *The Tears of Things: Melancholy and Physical Objects* (Minneapolis: University of Minnesota Press, 2006).

abandoned Postmodernism, and a nascent nonhumanism. Kieślowski allows objects to speak within *The Decalogue*, and we (and the characters) have no choice but to listen.



Figure 1.6: Sour Milk



Figure 1.7: Spilled Ink



Figure 1.8: Dead Plant



Figure 1.9: Spilled Milk

1.4 The Spatial Relations of Prismatic Subjectivities

While the subjectivities of the objects and characters in *The Decalogue* are somewhat unstable, experiencing the ontological shift that accompanies a change in cultural logic, the space in which those objects and characters exist is far more sedimented and resistant to change. The space that the objects and characters in the films inhabit is crucial to understanding *The Decalogue*, since Kieślowski presents that space as confining and isolating. The emergence of *The Decalogue's* objects, in particular, appears to be in direct conflict with the monumental and imposing architecture of Warsaw, and these objects, again representing the revolutionary potential of the everyday,⁵³ seem to flaunt the principles on which the architecture was founded. The humans and nonhumans inhabiting this weighty space are outpacing the architecture's transition into a rhizomatic, nonhumanist network. The subjectivities of the humans and nonhumans have become prismatic, refracting and remaking the intentionality of each actant within the network as if existing in a house of mirrors. The sedimented architecture of *The Decalogue's* apartment complex confines this house of mirrors, but it finds itself not quite able to participate fully in the material-semiotic network established between the humans and commodities within the film. The apartment complex functions as a staging ground for the emerging subjectivities of *The Decalogue* to ricochet off the walls, creating the chaos and instability of a prismatic subjectivity understood outside of humanist modes of understanding.

This space, however, is also a transitional space, and though the trappings of Western capitalism have not yet been made apparent in this space, one can imagine that it is only a matter of time before Western department stores and fast food restaurants begin to infiltrate Warsaw's city center and high street. The space is on the precipice of capitalist reinvention, and the objects, possessing a more permeable subjectivity, have already begun this reinvention. *The Decalogue* creates

⁵³ de Certeau, *The Practice of Everyday Life*.

a palpable incongruence between the sedimented communist architecture and the prismatic subjectivities of human and nonhuman objects, and this conflict between object and space causes the objects to be literally upended, spilled, or otherwise destroyed. Again displaying their ability express the existential crisis that accompanies momentous change, the objects in *The Decalogue* speak of their discomfort and loss of existential grounding within the changing space of Warsaw. In Figure 1.6, the milk has gone sour; in Figure 1.7, ink has spilled and destroyed some documents; in Figure 1.5, wax has been spilled on a painting causing that painting to "cry;" in Figure 1.8, a plant's leaves have been torn off; in Figure 1.4, a bee has almost been drown in liquid; and in Figure 1.9, milk has been spilled. Objects within *The Decalogue* are able to express their own existential crises and ontological confusion without the "assistance" of human voices. Just as the human subjects of the film experience moral and existential confusion, so too do the objects. As Sobchack states, the humans and the objects are existentially equal; it is just their means of expression that differ.

Though the human characters of *The Decalogue* have audible voices with which to express their moral and existential confusion, Kieślowski presents them in much the same way as the objects; namely through isolating close-ups and long takes. These close-ups not only isolate the characters from their space, depicting the ways in which the characters are inhabiting a space that is in many ways anachronistic with their own subjectivities. These close-ups also serve to fragment the characters, filling the frame with their faces and allowing those disembodied faces to speak, like the objects, without words. This fragmentation of the characters also functions as a counterpoint to the monumental architecture that surrounds them. Rather than a colossal mass of well-ordered brick and stone, the characters of *The Decalogue* are vulnerable and disjointed, which again displays the incongruence with their surrounding space. As with the isolating close-ups and long takes of the objects, the shots of human faces function to isolate the humans and objects from both the space that they inhabit and the other objects and people surrounding them. In approaching both objects

and humans in the same formal manner, Kieślowski again demonstrates the way in which he views humans and objects to be of an existential equality. 54

As De Certeau contends, "the long poem of walking manipulates spatial organizations, no matter how panoptic they may be."55 The characters – both human and nonhuman – inhabiting the monumental and panoptic space of *The Decalogue* must reappropriate this space so that it might mesh more closely with their changing subjectivities. The Decalogue captures this shift in subjectivity, however, in the midst of its happening, and as such, the characters (and objects) have not quite completed their reappropriation of space - hence the uncanniness of the depictions of objects and the fragmentation of characters. (Or, to put it in a slightly different way, the humans, nonhumans, and space are not quite equipped to give respect to and acknowledge the radical alterity of the other; they are still in the midst of transitioning out of a humanist mode of representation.) And just as the everyday object can offer profane illumination, the everyday space is the site where, as De Certeau argues in *The Practice of Everyday Life*, the seeds of revolutionary activity are sown. The realm of the quotidian (in *The Decalogue* this would be the apartment complex in which all of the characters live) is also "where people actually experienced the differences between socialism and capitalism in daily life, both as dream and reality."56 It makes sense, then, that since the space of daily life is the place where the contradictions of capitalism and socialism are made most apparent, this space would also be the place where subjects would experience the most radical forms of existential angst and alienation. It is also the space where the ontological nature of subjects and objects becomes most hybridized, permeable, and prismatic, and it is in this transitional space that we can view the porous boundaries of subjectivity and the equality of existential experience among all things in *The Decalogue*.

⁵⁴ For a discussion of the liminality of Kieślowski 's treatment of humans and objects, see: Joseph G. Kickasola, *The Films of Krzysztof Kieślowski: The Liminal Image* (New York: Continuum, 2004).

⁵⁵ de Certeau, *The Practice of Everyday Life*: 101.

⁵⁶ Buck-Morss, *Dreamworld and Catastrophe*: 190.

Created during one of the twentieth century's most globally influential events (the fall of communism and Soviet control of the Eastern Bloc), *The Decalogue* confronts this cultural problematic by breaking down "the wall" between subject and object, allowing both to speak of their respective existential and nonhumanist crises for themselves. Kieślowski also visually represents the power of profane illumination, depicting everyday objects and spaces that are in the process of being reconceptualized and removed from their points of origin. Untethered from their original functions and ontologies, these objects and spaces enter into a site of transition, reappropriated by an emergent cultural logic. With *The Decalogue*, Kieślowski is asking us to consider the nature of all things – ourselves, the spaces we inhabit, and the objects with which we interact – and to decenter our anthropocentric gaze, widening our field of vision and viewing ourselves as part of a greater whole.

To conclude my discussion of *The Decalogue*, I turn to the connections between posthumanism and the shift in material culture as documented by *The Decalogue*. The picture of unstable and abstract materiality produced by *The Decalogue* undermines conventional hierarchies of subject and object, and it is this transition into finance capitalism that registers in the series as the possibility of a posthumanist imagination. The prismatic subjectivities of the newly malleable characters – and the ways in which they interface with the nonhuman quasi-subjectivities in their environment – show us what a material posthumanism might look like. The claims made by Marx, Benjamin, Jameson, and Mitchell can also be read through a lens of posthumanism, in that they all make assertions about the changing relationship between humans and nonhumans.

The shift to Western finance capital, which is a commodity-driven cultural logic, provides the conditions for exchangeability and general equivalence between entities, both human and non-human. In that a cultural logic of finance capital grants agency and quasi-subjectivity to nonhumans, while at the same time objectifying humans, materialist theories of culture can be productively coupled with theories of the posthuman. *The Decalogue* provides a vision of this exchangeability,

and the ways in which the characters interact with the objects and images that surround them encapsulates the posthuman imaginary that accompanies the abstract materiality of finance capitalism.

With *The Decalogue*, Kieślowski provides a visualization of the way in which space – as inflected by and permeated with a shift in cultural logic toward commodity culture – serves as a staging ground for depicting the prismatic subjectivities of both humans and nonhumans as they encounter the newness of a nascent Western capitalism. In his other work, Kieślowski pushes this idea further, and speaking in a language of vernacular posthumanism, many of his other films imagine how subjectivity and consciousness might appear if they were to be severed from time, history, and the individual molar body and spread out across a network of material and temporal strata. In this later work, Kieślowski begins to imagine how a subjectivity spread across multiple bodies might be visualized, and in doing so, he moves closer to the central paradox with which the remainder of this project will be concerned: that of vernacular posthumanism's tendency to fantasize about an amaterial subjectivity while simultaneously reasserting the importance of the body (be it biological, mechanical, or a hybrid of both).

Kieślowski's work, and its visualization of the imbrication of space, commodity culture, and subjectivity (both human and nonhuman), sets the stage for what follows in this project, namely an extension of the materialist analytical framework thus far employed to issues of subjectivity, the body, informationalism, digitality, and nonhumanism. The second half of this chapter explores the strategies of visualization employed by those objects attempting to imagine the interaction between flesh, information, and space in light of technologies that make possible the extension of an individual's subjectivity across multiple bodies. After first examining the ways in which Kieślowski's later work takes up this thread, this chapter then moves toward a discussion of *Heavy Rain*, remote surgery, and motion capture technologies before concluding with a discussion of the interaction between flesh and digital space in *300*.

1.5 Recursive Consciousness and Doubled Bodies

Kieślowski began his career as a documentary filmmaker, and his early experiences of thinking through the issues of objectivity and perception appear to have strongly influenced his later filmmaking. Kieślowski's later films take a strongly oppositional stance to the idea of pure objectivity, and moving away from the social realism of his early fiction films, his later French-Polish coproductions take a more abstract approach to their subject matter. Beginning with *The Double* Life of Véronique (1991), Kieślowski begins to make thematic the issues of subjectivity and the potential for an individual consciousness to be shared across both bodies and time. Kieślowski's final four films visualize the impossibility of establishing "truth," and they accomplish this on both aesthetic and thematic levels. Aesthetically, these films make heavy use of mirrors, filters, musical leitmotifs, and a variety of lenses, all of which serve to destabilize the monopoly of perspective established by both the characters within the film as well as by Kieślowski's camera. Point of view is often difficult to establish in these films, and the images frequently become textural and haptic, rather than purely visual.⁵⁷ These films are drawing us out of our conventional sensory shells and asking us to perceive them in a more synaesthetic fashion; in fact, Julie, the primary character in Blue (1993), perceives music in terms of color, which is a fundamentally synaesthetic experience.⁵⁸ Thematically, these films address issues of the doubling of self (Véronique), the experience of self across a temporal divide (*Red*), and the crystalline structure of past, present, and future (*Blue*). In each case, subjectivity becomes something that is not merely the product of a thinking mind housed in bodily wrapping, but rather the product of a convergence of human, nonhuman, and temporal forces. In this way, Kieślowski's films are speaking in the same kind of vernacular as Fast, Cheap & Out of Control, one that creates a mode of perception and sensation that apprehends the world as

⁵⁷ Laura Marks develops a theory of haptic visuality in: Marks, *The Skin of the Film*; Marks, *Touch*. ⁵⁸ Georgina Evans, "Synaesthesia in Kieslowski's *Trois couleurs: Bleu*," *Studies in French Cinema* 5, no. 2 (2005).

one formed out of the constellation of the myriad forces of the various actants making up a particular material-semiotic perception of reality.

Kieślowski's interest in this kind of perception – one that fundamentally rethinks the humanistic way in which objectivity and truth generally operate – was already on full display in 1981's *Blind Chance*. ⁵⁹ *Blind Chance* follows what Charles Ramirez Berg calls a "repeated action plot," ⁶⁰ in which the main character, Witek (Bogusław Linda), "relives" his life three times over the course of the film, depending on how he reacts to a chance encounter on a train station. ⁶¹ In the first version, Witek catches the train and becomes a loyal Communist Party member; in the second version, Witek runs into a guard, misses the train, is sentenced to community service for his dust-up with the guard, and he becomes a part of a group that publishes anti-communist literature; in the third version, Witek misses the train, goes to medical school, gets married and has children, and he maintains neutrality in regards to politics. This third story is also the one that completes the film's branching narrative, and the film ends with Witek boarding a plane and dying when the plan crashes (in the first two scenarios, Witek was unable to board the plane due to his political affiliations).

⁵⁹ David Bordwell discusses the narrative structure of *Blind Chance*'s many "film futures" in: David Bordwell, "Film Futures," *SubStance: A Review of Theory & Literary Criticism* 31, no. 1 (2002). ⁶⁰ Charles Ramirez Berg, "A Taxonomy of Alternative Plots in Recent Films: Classifying the 'Taratino Effect'," *Film Criticism* 31, no. 1 & 2 (2006): 30-32.

⁶¹ A descendent of this kind of narrative structure is Tom Tykwer's Run Lola Run (1998), in which the main character, Lola (Franka Potente), restarts her life three times until she "gets it right." A similar narrative structure, which Berg terms "the multiple personality (branched) plot," can be found in The Double Life of Véronique, which imagines a world in which the French Véronique and the Polish Weronika exist simultaneously, though they are ostensibly the same person. *Sliding* Doors (Howitt, 1998) follows a similar structure, and its narrative focuses on the different lives the main character, Helen (Gwyneth Paltrow), might lead if she were either to catch her train or miss it. As with *Véronique*, Helen's character is doubled, and both versions share a temporality, as opposed to Blind Chance, where Witek's character restarts each temporal line. Ibid., 19-24. For more on "puzzle films," and Kieślowski's influence on "complex narratives," see: David Bordwell, "Subjective Stories and Network Narratives," in The Way Hollywood Tells It: Story and Style in Modern Movies (Berkeley: University of California Press, 2006); Warren Buckland, ed. Puzzle Films: Complex Storytelling in Contemporary Cinema (Malden, MA: Wiley-Blackwell, 2009); Allan Cameron, "Contingency, Order, and the Modular Narrative: 21 Grams and Irreversible," The Velvet Light Trap 58(2006); Jan Simons, "Complex Narratives," New Review of Film and Television Studies 6, no. 2 (2008).

While Blind Chance, does not share the same abstraction of temporality that exists in The Double Life of Véronique – Véronique's doubled character shares the same temporality as her twin, while the triplicate Witeks exist in alternate timelines – the film nevertheless shows Kieślowski's early interest in exploring the contingency of life and the impossibility of objectively knowing the full truth of a particular situation. In Blind Chance, Kieślowski imagines life as fundamentally contingent, subject to the vagaries of chance, and the only constant in such a world is the persistence of morality and personal character. Though Witek's choices and situation change in each of the three timelines, his personality remains the same – a committed idealist who sticks by his friends and remains true to a cause (even if that cause is political neutrality). As with The Decalogue, in which space is a conspirator in constructing subjectivity, in Blind Chance, Kieślowski is creating a visual argument that posits an individual as, in part, constructed by his/her environment. Yes, Witek's agency plays a role in constructing the human we call Witek, but this agency is also inflected by the input of all of the other actants in Witek's network, and depending on how that network in constructed, Witek's life radically changes.

Kieślowski pushes this idea of the contingency of character even further with *The Double Life of Véronique*, and it is here that he begins to question the nature of perception and sensation in a sustained visual and aesthetic manner. *The Double Life of Véronique* tells the story of two women – the Polish Weronika and the French Véronique (both played by Irène Jacob) – who seem to be the same person but existing in two different bodies, as if they were doppelgangers.⁶² They never meet within the film – except for a passing glance shared from a bus – but the narrative creates a strong association between the two characters: they are each free-spirited and passionate about music, though Weronika chooses to pursue her career in music, despite her poor health, which ultimately leads to her death, while Véronique chooses to abandon music and thus live. Aesthetically,

⁶² As I will discuss in Chapter 3, this particular aspect of *The Double Life of Véronique* shares much in common with David Cronenberg's *Dead Ringers* (1988), which explores the desire of the Mantle Twins to share a consciousness across their separated physical bodies.

Kieślowski explores this doubling through the use of mirrors in the mise-en-scène, the deployment of colored filters, and the refraction of the film image through the use of various lenses (both attached to the camera and within the mise-en-scène [e.g. a fish tank]). This mode of visuality, which fractures the image and sends it through a hall of mirrors-like prism, calls into question the stability of perception and highlights the ways in which sensation, rather than being housed in a Cartesian monadic unit, is the result of an interaction with the world.

The Double Life of Véronique, to the extent that it imagines subjectivity as a prismatic form, refracted and reflected throughout an interaction in the world, visualizes what Deleuze calls a *crystal image*. The crystal image falls under the category of the *time-image*, which Deleuze outlines in *Cinema 2*. The time-image is opposed to the movement-image, and rather than rely on a schema that emphasizes action and reaction, cause and effect (a la the narrative structure of most of Classical Hollywood Cinema⁶⁴), the time-image instead focuses on duration, and it opens up a new space of temporal perception for the viewer (Deleuze cites Italian Neorealism and the French New Wave as examples of this kind of cinema). The time-image for Deleuze draws on the memories of the viewer, and its deployment of duration both provides for the experience of the new as well as the coexistence of multiple levels of time and reality – exactly the mode of perception established by *The Double Life of Véronique*.

The crystal image, as a subset of the time-image, shares much in common with how I have been discussing prismatic subjectivity, and it confuses the actual and the virtual as a means of exploring a realm of pure potentiality. The actual, for Deleuze, is the realm of physical, material, lived reality, the world of the lived present. The virtual is the realm of potentiality, the realm of multiple futures and memories of the past. The actual and the virtual are always intertwined, and in the crys-

⁶³ Deleuze, *Cinema 2*. See also: "Chapter 1: Images in Crystal: *La Double Vie de Véronique*" from Emma Wilson, *Memory and survival: the French cinema of Krzysztof Kieślowski* (Oxford: Legenda, 2000).

⁶⁴ David Bordwell, *Narration in the Fiction Film* (Madison, Wis: University of Wisconsin Press, 1985); David Bordwell, Janet Staiger, and Kristin Thompson, *The Classical Hollywood Cinema: Film Style & Mode of Production to 1960* (New York: Columbia University Press, 1985).

tal image, we find a visualization of how the two interact as a prismatic formation. In *The Double Life of Véronique*, Weronika's/Véronique's life is lived through this crystalline structure, with the actual and the virtual whirling about each other without reaching a point of stasis. The film creates a multilayered montage of realities and potentialities, which highlights the instability of subjectivity. In terms of vernacular posthumanism, the film is visualizing the interaction between the "self," the outside world, and temporality, and this complex formation undermines the extent to which subjectivity is conceived of as arising solely within the individual.

Blue and Red (1994), two films from Kieślowski's Three Colors Trilogy (the trilogy with which he would end his career), continue the trend of rethinking perception and sensation established in The Double Life of Véronique, and they offer two alternate visions of how subjectivity might extend itself over space and time. Blue is constructed as a kind of sublime hallucination, a phantasmagoria of Julie's (Juliette Binoche) sensations, and Kieślowski, through his visual style, provides a means for us to access Julie's synaesthesia. The film's narrative follows Julie after she loses her husband and daughter in a car crash that she herself survived. Julie's husband is a famous composer, commissioned to write a song to celebrate the "Unity of Europe," and as the film progresses, it becomes clear that it was Julie, not her husband, who had done most of the work of composition. The film is also a meditation on memory, perception, and self, and Julie is on a quest to rediscover just who, exactly, she really is. Through this process of self-realization, she discovers that her husband had a mistress, who is now pregnant with his child, which leads Julie to fundamentally rethink her memories of her husband.

Much like the Deleuzian crystal image of *The Double Life of Véronique*, *Blue* demonstrates the recursivity of time, the retroactive formation of memories and meaning, and the prismatic ways in which the self is constructed from potentialities both past and future. In *Blue*, this is achieved largely through Kieślowski's use of style to offer the viewer a glimpse of Julie's synaesthetic perception. Much of the film in tinged with the color blue, and throughout the film, Julie's memories are

instigated by the intrusion of music into the filmic space. On numerous occasions, the film cuts to black, music begins playing, and we are offered a shot of Julie experiencing the intrusion of a memory. Julie "sees" music as color, and she experiences the world in a highly tactile manner, holding onto a blue chandelier and, most memorably, grating her knuckles against a stone wall. Perception in *Blue* is always modified, whether through point of view shots, lens filters, or mirrors, and Julie's subjectivity is visualized as bleeding out of her body and into both the environment that surrounds her as well as her past memories and future potentiality.



Figure 1.10: Julie's Knuckles



Figure 1.11: *Red's* Network

Red, which was Kieślowski's final film before his untimely death due to heart attack in 1996 at age 54, tells the story of Valentine (Irène Jacob), a French model, who begins a friendship with a character only known as "The Judge" (Jean-Louis Trintignant) after accidentally running over the Judge's German Shepard dog. The Judge is a sad old man, a former judge, who passes his time eavesdropping on the phone calls of his neighbors. When he was younger, he was betrayed by a

woman with whom he was in love, and he never loved again.65 While this "A" story dominates most of the film, Kieślowski pairs it with a "B" story that focuses on Auguste (Jean-Pierre Lorit), a young judge, and his lover, Karin (Frédérique Feder). Auguste's story is intercut with Valentine's story, and though they never physically interact until the very end of the film, they often occupy the same space in particular shots. Auguste's life echoes many of the events of the Judge's life: Auguste is a young judge, he was betrayed by his lover and witnessed her making love to another man, he was given a pen by his lover upon completion of his judicial exam, and through a chance accident, he dropped one of his law books, and it opened to the exact page from which a major question on his judicial exam would be drawn. While the film never explicitly makes the connection, it becomes clear that Auguste and the Judge are the same person, existing in different temporal modalities. In fact, at one point in the film, the Judge says to Valentine, "Maybe you're the woman I never met," in reference to the fact that the Judge never found another woman to love. As with *The Double Life of* Véronique, the connection between the doubled characters is not established directly in the narrative. Rather, the connection is hinted at through a metaphysical vagueness and a strangeness about the ways in which the characters interact with each other. Auguste and the Judge are echoes of each other, reverberating across the temporal landscape of the film. At the end of the film, following a ferry accident in which they are two of the only seven people who survived, Valentine and Auguste finally meet, and the Judge watches his younger doppelganger meeting the "women he never met" through a TV screen displaying footage of the event.

Red also makes thematic the importance of connectivity as well as the contingency of missed connections. The film opens with Valentine's boyfriend, Michel, a character whose face we never see and who is only heard through phone calls, placing a call to Valentine. After watching Michel punch in the numbers on his telephone, the camera begins following the phone line out of

⁶⁵ The Judge also relates a story about how he eventually lost faith in his powers to judge other people, a commentary on the potential for pure objectivity and theme that Kieślowski explores in his other work, most notably *The Decalogue*.

the apartment, into the sea (Michel is in England, Valentine in France), and into a telephone switching station. The camera traces the lines and networks that connect individuals, but ultimately, the film shows us that sometimes connections fail, and this failure can lead to productive chance encounters. Michel's first attempt to contact Valentine is met with a busy signal, the second attempt results in an answering machine, and it is only on the third attempt that Michel is able to reach Valentine. Throughout the film, Michel is annoyed at his inability to reliably reach Valentine, and he becomes verbally abusive at her perceived indifference, even though she has demonstrated nothing but devotion to Michel. Chance occurrences prevent Valentine from getting to the phone in time, and it is this existence of chance and contingency that interests Kieślowski. Due to chance circumstances, the Judge and Valentine never aligned temporally. However, through the chance occurrence of the ferry accident, Valentine and Auguste manage to meet, and the film indicates that they will strike up a relationship.⁶⁶ In fact, this ferry accident serves to unite the three films of the trilogy, as of the seven survivors, six are the main characters from the three films: Julie and Olivier from Blue, Karol and Dominique from White (1994), and Valentine and Auguste from Red (the other survivor is a bartender that, to my knowledge, has no connection to the trilogy). Retroactively, the trilogy can thus be read as a kind of ironic commentary on chance and fate that Kieślowski provided throughout his career. The trilogy is ultimately the stories of the survivors of a ferry accident, a chance occurrence that provided a starting point for three separate stories. The selection of characters to focus on is therefore not completely contingent but rather the product of an accident, which is itself contingent. This kind of messy, paradoxical approach is, at its heart, the same approach visualized in works of vernacular posthumanism, an approach that forces a reconsideration of traditional humanistic modes of meaning making. When viewed through a lens of vernacular posthumanism, the *Three Colors Trilogy* makes perfect sense. Or, it makes perfect sense when viewed from the nonhuman perspective of objects and the networks they so fruitfully impact.

⁶⁶ Ironically, Valentine was taking the ferry across the English Channel to see Michel. We can assume that she ended up never completing that trip.

Though it inhabits a different medium from that of the filmic objects discussed thus far, the videogame *Heavy Rain* shares many of the concerns of Kieślowski's films, namely the recursivity of time, the prismatic subjectivities of characters, and the chance occurrences that impact the characters within a particular narrative. *Heavy Rain* is an interactive drama/murder mystery that follows four characters as they try to solve the mystery of the kidnapping of a young boy, Jason Mars.

Throughout the course of the game's narrative, the player controls the actions of each of the four characters, mostly through a series of "quick time events" (QTEs).⁶⁷ Each character – Ethan Mars (Jason's father), Madison Paige (journalist), Scott Shelby (private investigator), and Norman Jayden (FBI profiler) – has his/her own discreet narrative, and the narratives are interwoven with each other in a montage format.

Like all videogames, *Heavy Rain* allows you the opportunity to restart and replay the game an infinite number of times (though subsequent playthroughs would inevitably become boring and tedious). However, unlike most games, *Heavy Rain* provides a number of different endings, depending on the choices the player makes during the game. Echoing the narratives of films like *Blind Chance, Run Lola Run, Sliding Doors, Frequency* (Hoblit, 2000), *The Butterfly Effect* (Bress and Gruber, 2004), *Primer* (Carruth, 2004), and *Inception* (Nolan, 2010), *Heavy Rain* allows the player to view the alternate futures of each of the characters within the game. Additionally, depending on the choices of the player, each of the characters can permanently die within the narrative, leading to endings where the death of the character impacts the narrative. While *Heavy Rain* isn't unique in offering alternate endings (with the advent of home video, films have begun offering alternate ver-

⁶⁷ A QTE is an element of gameplay that requires players to perform a series of actions of the controller. The sequence of buttons is context-sensitive, and it usually matches the actions of some onscreen event. QTEs, as opposed to more traditional control schemes, do not directly control the character. Instead, they allow for the participation in an interactive cut scene or canned animation. *Dragon's Lair* was one of the first major games to utilize QTEs as a primary mode of gameplay.
68 According to the user-generated *Heavy Rain* wiki page, Ethan has seven different endings, Madison has three, Norman has four, and Scott has three. I have personally played through the game only twice, so I cannot independently confirm these results. http://heavyrain.wikia.com/wiki/Endings

sions of the ending, and many other videogames offer similar branching narratives), it is unique for the sheer number of potential endings as well as the ability for playable characters to be irreversibly removed from the narrative.

The branching futures and recursive narrative replayability of *Heavy Rain* materialize a form of vernacular posthumanism that emphasizes the unpredictability of networks and the potentiality that is embedded in digital modes of thinking. *Heavy Rain* relies on this kind of futurity, and even though all of the individual endings are preprogrammed into the software and thus not completely open to potentiality, the various permutations of the endings are unknown to the player until he/she has experimented and discovered them all. As with the branching narratives of film, the branching narrative of *Heavy Rain* begins with a sense of adventure and the potentiality of the unknown future, but as the narrative progresses and the future becomes the present, the potentiality narrows to a very specific actuality. In this way, the perceived potentiality of *Heavy Rain* mimics the illusion of freedom with in networks – and, more broadly, within fantasies of the posthuman. While digital technologies might seem to possesses unlimited potential, we must always remind ourselves that this potential is grounded within very specific forms of materiality (and in the case of digital technology, very specific forms of programming and coding). In the case of fantasies of the posthuman, which imagine the future transcendence of the body into the language of code (e.g. "DNA code"), we must remember that the human is always circumscribed within the materiality both of the body and of the world in which the body resides. Potentiality might seem to take the form of infinite futures, but this potentiality must always follow the paths established by the materialsemiotic networks in which it exists. Heavy Rain, in imagining the utopia of pure chance and futurity, speaks in a vernacular that fantasizes about the infinite potentiality of networked existence. The examples from Kieślowski and *Heavy Rain* all imagine the dispersion of consciousness across multiple bodies as a virtual process, something that takes place primarily through processes of vision

and imagination. Phenomenologically, the next two examples – remote surgery and motion capture – allow an individual to inhabit two bodies simultaneously in the realm of the actual.

The website for Intuitive Surgical, the corporation that manufactures the da Vinci Surgical System, describes its product as such:

Using the most advanced technology available today, the *da Vinci* Surgical System enables surgeons to perform delicate and complex operations through a few tiny incisions with increased vision, precision, dexterity and control. The *da Vinci* Surgical System consists of several key components, including: an ergonomically designed console where the surgeon sits while operating, a patient-side cart where the patient lays during surgery, four interactive robotic arms, a high-definition 3D vision system, and proprietary *EndoWrist*® instruments.

da Vinci is powered by state-of-the-art robotic technology that allows the surgeon's hand movements to be scaled, filtered and translated into precise movements of the *EndoWrist* instruments working inside the patient's body.⁶⁹

The da Vinci Surgical System functions as a robotic prosthetic for the surgeon, allowing him/her to translate and refine surgical movements and translate them over space. Most frequently, this space is very small, with the surgeon seated a few feet from the patient. However, given the appropriate infrastructure and equipment, the distance between the patient and the surgeon can be increased so that the two could be thousands of miles apart.⁷⁰ Using haptic feedback interfaces, high definition

⁶⁹ "The da Vinci Surgical System," http://intuitivesurgical.com/products/davinci_surgical_system/. The "Lindbergh Operation" in September 2001 was the first example of a transatlantic telesurgery. A team of surgeons at New York's Mount Sinai Medical Center successfully removed the gall bladder of a 68-year old woman in Strasbourg, France. The team was not using the da Vinci System – they employed the ZEUS System – but the da Vinci System does have the capability to be used in such a surgery, though that is not its primary function. Vicki Brower, "The Cutting Edge in Surgery," EMBO Reports, http://www.nature.com/embor/journal/v3/n4/full/embor175.html.

video, and 3D imaging technology, the da Vinci System allows the surgeon to be two places at once, extending his/her body into two (or more) locations.

Producers of contemporary media products engage in a similar phenomenological process of extending the body into multiple locations, but they do so through the special effects technologies of motion capture and digital animation. In motion capture, actors don a combination of body markers and facial cameras, which are then translated into a digital environment to be animated. The movements of the actor's body are captured and uploaded into a computer where an animator adds various textures and "skins" to bring the digital character to life. Frequently, this digital creation is coupled with voice of the actor, adding a phenomenological persistence of the human voice to an otherwise digital character.

In the cases of both remote surgery and motion capture, a human's bodily movements are captured, transmitted, translated, and finally recoded into the presence of another body, be it physical (the surgical robot) or digital (the animated character). The analog movements of the body are translated into digital information by a computer and then retranslated into analog movements or, in the case of motion capture, an image that must be analogically perceived. What this translation of body into code accomplishes is the phenomenological presence of one individual across two "bodies," allowing, in a very real way, the actualization of the kind of presence imagined in Kieślowski's work. These processes also speak to an actualization of the central fantasy of vernacular posthumanism, namely the faith in the fundamental translatability of flesh and information.

In the final section of this chapter, I turn more explicitly to this posthuman fantasy of the exchangeability between flesh and information, the reduction of biology to matters of code. Zack Synder's film 300 images the potentiality of a future in which flesh and information can seamlessly merge while at the same time reasserting the materiality of the body. A major facet of vernacular posthumanism is its seemingly paradoxical relationship to the human and the body: on the one

 $^{^{71}}$ I address the relationship between the analog, digital, and sensation in my discussion of 300 at the end of this chapter.

hand, it imagines a utopia where consciousness might transcend the human body and exist elsewhere; on the other hand, it ends up reasserting the human and the physicality of the self. 300 provides a material instantiation of a central contradiction visualized within vernacular posthumanism. It visualizes the tension between analog and digital technologies, refusing to relinquish the physicality of the body while simultaneously imagining an environment in which flesh becomes merely one additional informational pattern. As such, 300's use of special effects is symptomatic of not only contemporary approaches to image production, but also indicative of our increasingly digital view of the world.

1.6 Inhabiting the Virtual: 300 Bodies in Simulated Space

Upon its release in 2006, Zach Snyder's *300* attracted much commentary in the entertainment press regarding both its use of digital special effects as well as the physical conditioning of the film's actors. Accounts of the film celebrated the extent to which *300*, utilizing bluescreen and CGI technology, replicated the style of Frank Miller and Lynn Varley's book, on which the film was based.⁷² In fact, the special effects of *300* were so convincing to some commentators that, according to cinematographer Larry Fong:

A few people said they thought it was all CG, and that hurt...But then I realized that since it had really been our goal to sort of blur this line between CG and live action as a part of being true to the style of the graphic novel, these people had actually given us a big compliment.⁷³ This blurring between live action and CGI, the analog and the digital, provides one of the key theoretical leverage points that I will later use to examine the interplay between materiality and digitality within the film.

⁷² Frank Miller and Lynn Varley, 300 (Milwaukie, OR: Dark Horse Books, 1999).

⁷³ Karen Idelson, "Larry Fong," Daily Variety 297, no. 24 (2007): A6.

Popular press accounts of the film also fetishized the muscular physiques of the actors in 300 as well as the brutal training regimen they endured to achieve those bodies. These accounts stress the labor of the actors – in particular, the labor of lead actor, Gerard Butler (King Leonidas) – and they take pains to emphasize that the sculpting of the actors' bodies was the product of hard work and weeks in the gym, rather than CGI magic. As Mark Twight, proprietor of Gym Jones⁷⁴ and lead trainer of the 300 cast, puts it: "The typical interviewer wants to know about the 'magic' workout the cast did to make them look so good. Some were disappointed to learn that hard work is magic, while others marveled – as did we some days – that the actors would work so hard."⁷⁵

To achieve physiques that could match the comic book bodies of Miller and Varley's book, actors trained 90 minutes to two hours a day, five days a week – plus an additional 90 minutes to two hours of fight training – for eight weeks. (The stunt crew trained the same way, with an additional two to four hours of fight training per day.)⁷⁶ Additionally, everyone was put on a calorierestricted diet, consisting of "30 percent protein, 40 percent complex carbohydrates, [and] 30 percent fat."⁷⁷ The centerpiece of the training regime was the "300 Workout," which was a one-time, invitation-only challenge for those actors and stunt crew who felt up to the task.⁷⁸ The challenge proceeded as follows: 25 pullups, 50 deadlifts at 135 pounds, 50 pushups, 50 24-inch box jumps, 50 floor wipers, 50 single-arm clean-and-presses with a 36-pound kettlebell, and 25 more pullups – all completed without resting between exercises.⁷⁹

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⁷⁴ The reference to cult leader Jim Jones is intentional. According to Gym Jones co-owner Lisa Twight, they "knew some people would call [them] a cult so [they] decided to own the joke." Brooks Barnes, "The Cult of Physicality," *The New York Times*, 11 September 2011.

⁷⁵ Mark Twight, ""300": The So-Called Program,"

http://www.gymjones.com/knowledge.php?id=35.

⁷⁶ Kathleen Doheny, "The 300 Workout: Can You Handle It?," WebMD, LLC,

http://www.webmd.com/fitness-exercise/features/the-300-workout-can-you-handle-it.

⁷⁷ Gerri Miller, "Inside '300'," HowStuffWorks, Inc.,

http://entertainment.howstuffworks.com/inside-3004.htm.

⁷⁸ According to Twight, around half of the cast and crew successfully completed the 300 Workout.

⁷⁹ Jeff O'Connell, "The Gerard Butler Workout: The 300 Fitness Plan," Rodale Inc.,

http://www.menshealth.com/celebrity-fitness/gerard-butler-300-workout.

I have recounted the workout and diet regimes of the actors and stunt crew in detail in order to illustrate the extent to which these discussions perform much in the way of rhetorical work as a means of sedimenting and reinforcing the separation between CGI and gym magic, virtuality and actuality, digitality and materiality. Though we are quickly entering a period of media history in which digital special effects and live action photography are becoming interchangeable and indistinguishable from each other, the physicality of actors and actresses remains a desirable commodity. As I will argue, using 300 as a case study, contemporary visual culture is not quite ready to let go of the flesh wholesale.

300 is a metapicture of the contemporary cultural struggle between flesh and information. Through its deployment of special effects – most notably the almost exclusive use of simulated space – 300 visualizes the tensions of the shift from analog to digital modes of filmmaking. On the one hand, 300 professes an insistence on maintaining its ties to analogical forms of representation. The hyperphysical hardbodies of the Spartans are visualizations that rely on a direct link between physical labor and its material manifestation. On the other hand, 300 espouses a technological fantasy of the easy merging of flesh and informational patterns. The physicality of the bodies in 300 synchronizes seamlessly with the virtual environments that those bodies inhabit.

Continuing the thread established in the previous discussion of Kieślowski's work, my discussion of the interaction between flesh and information in 300 proceeds from two vantage points. The first follows the lineage of materialism in visual culture studies provided at the opening of this chapter. Industrial organization of capital and cultural division of labor, as Paul Willemen argues, register in the material form of a film – in things like the choice of film stock, digital processing and filming, editing techniques, special effects, etc. – as an indexical sign of its conditions of production. As such, a particular film's (or other media object's) visualization of bodies and special ef-

⁸⁰ Paul Willemen, "Fantasy in Action," in *World Cinemas, Transnational Perspectives*, ed. Nataša Ďurovičová and Kathleen Newman (New York: Routledge, 2010), 261.

fects can account for "the way that labor power is present in the very texture of films."⁸¹ A central problematic of contemporary special effects is the compositing of digital and analog image technology. In *300*, physical bodies and simulated space become exchangeable, and the actual and virtual are treated as general equivalents.⁸² In part, this equivalency is due to the different forms of labor deployed in the film: the physical labor of constructing the hardbodies and the intellectual labor of constructing the digital effects. Both forms of labor, however, become abstract and equivalent, allowing the physical and informational to become interchangeable.

The second theoretical framework relies on Gilles Deleuze's formulation of the concepts of the virtual, the actual, and the ways in which they become enfolded into each other.⁸³ The interaction of virtual special effects and actual bodies in *300* provides an example of the ways in which the flesh can be enfolded into the virtual. A preoccupation of our digital cultural logic is the desire to reduce all entities – human, animal, machine – to a function of "code" or information.⁸⁴ Digital spe-

81 Ibid., 252.

⁸² Marx describes money as a "general equivalent" that allows exchange between human labor and cultural commodities as well as between commodities and other commodities. 83 Deleuze discusses the functioning of the virtual and actual in film, specifically, in Gilles Deleuze, Cinema 1: The Movement-Image, trans. Hugh Tomlinson and Barbara Habberjam (Minneapolis: University of Minnesota, 1986); Deleuze, Cinema 2. See also Gilles Deleuze, Difference and Repetition, trans. Paul Patton (New York: Columbia University Press, 1994); Deleuze, Francis Bacon. 84 This functioning of "code" as a general equivalent has been variously described in terms of a tension between flesh and information, actuality and virtuality, materiality and immateriality, and embodiment and disembodiment. For discussions of the reduction of the physical and the informational to the common denominator of code, see: Drew Ayers, "Humans without Bodies: DNA Portraiture and Biocybernetic Reproduction," Configurations (Forthcoming); Lisa Cartwright, Screening the Body: Tracing Medicine's Visual Culture (Minneapolis: University of Minnesota Press, 1995); Joseph Dumit, Picturing Personhood: Brain Scans and Biomedical Identity (Princeton, NJ: Princeton University Press, 2004); Duana Fullwiley, "The Molecularization of Race: Institutionalizing Human Difference in Pharmacogenetics Practice," Science as Culture 16, no. 1 (March 2007); Haraway, Simians, Cyborgs, and Women; Haraway, Modest_Witness; Jr. Hartigan, John, "Is Race Still Socially Constructed? The Recent Controversy over Race and Medical Genetics," Science as Culture 17, no. 2 (June 2008); Hayles, How We Became Posthuman; Lily E. Kay, Who Wrote the Book of Life?: A History of the Genetic Code (Stanford, CA: Stanford University Press, 2000); Evelyn Fox Keller, *The Century of the Gene* (Cambridge, MA: Harvard University Press, 2000); Richard C. Lewontin, Biology as Ideology: The Doctrine of DNA (New York: HarperPerennial, 1992); Mazis, Humans, Animals, Machines: Blurring Boundaries; Sharrona Pearl, About Faces: Physiognomy in Nineteenth-Century Britain (Cambridge, MA: Harvard University Press, 2010); Roof, The Poetics of

cial effects function as one method by which we imagine the possibility of this utopic informationalism. The physical bodies of *300* are folded into the virtual spaces of the film, providing a visualization of the materiality of information. The special effects of *300* also reveal the extent to which digitality itself is a virtuality existing within the film.

300 provides a material instantiation of a central contradiction of our digital cultural logic. It visualizes the tension between analog and digital technologies, refusing to relinquish the physicality of the body while simultaneously imagining an environment in which flesh becomes merely one additional informational pattern. As such, 300's use of special effects is symptomatic of not only contemporary approaches to image production, but also indicative of our increasingly digital view of the world.

1.7 300: An Industrial Context

Before proceeding further, however, it will be helpful to provide an industrial context for 300 as well as outline the general techniques by which the images of 300 were created. 300 recounts the events of The Battle of Thermopylae, which took place in 480 BC when the Persian forces, led by Xerxes I, battled 300 Spartan warriors, led by King Leonidas. Originally recorded by the Greek historian Herodotus in his *Histories*, 85 the story of the 300 Spartans has been retold in several contemporary incarnations, the most recent of which is the film 300. 300 is based on a graphic novel of the same name by Frank Miller and Lynn Varley, which in turn is based on the 1962 film *The 300 Spartans* (directed by Rudolph Maté). The basic narrative of the graphic novel and film versions of 300 is as follows. In 480 BC the Persians (following their unsuccessful invasion of Marathon, led by Xerxes' father Darius, ten years earlier) made a second attempt to invade the Greek mainland, this time diverting the bulk of their forces to the Peloponnese. In response to this impending inva-

DNA; Allan Sekula, "The Body and the Archive," *October* 39(1986); Stacey, *The Cinematic Life of the Gene*; Thacker, *Biomedia*; Waldby, *The Visible Human Project*.

⁸⁵ Herodotus, *The Histories*, trans. Robin Waterfield (New York: Oxford University Press, 1998).

sion, Leonidas, the king of Sparta, asked permission of the Ephors, the Spartan council of elders, to declare war against the Persians. As Sparta was in the middle of a religious festival, the Ephors denied Leonidas his request and refused to provide him with access to the Spartan army. In response, Leonidas mustered 300 of his finest troops and led them against the invading Persian hordes. Vastly outnumbered, the 300 Spartans chose to make their stand at Thermopylae, a narrow pass near the sea. Using this strategic location the Spartans were able to hold off the Persians until they were betrayed by an outcast (and wildly deformed) Spartan, Ephialtes. Ephialtes informed Xerxes of the location of a hidden goat trail, which would allow the Persians to flank the Spartans. Facing certain defeat, Leonidas and his 300 troops made a last stand against the Persian forces, and they were all killed in the final battle. Their sacrifice, however, rallied the city-states of Greece to join together and ultimately drive the Persian army out of Greece.

Snyder's 2006 retelling of *300* strived to maintain much of the visual style of Miller and Varley's book, and according to one interview, Snyder set out to make the book into a movie rather than make a movie of the book.⁸⁶ As a consequence of Snyder's commitment to staying faithful to the book's style, much of the *300* film had to be digitally created. Except for a single shot of a rider on horseback, the film was shot exclusively against bluescreen sets in a Montreal studio,⁸⁷ and the guiding directive of shooting, according to Snyder, was that "whatever actors touched, or walked on, we should build. Everything else was going to be CG."⁸⁸ In other words, aside from the actors and props, almost everything seen on screen is a digital simulation of space and materiality.

With such an effects-heavy production, it is easy to lose the tether to the materiality of liveaction filmmaking, the sense that things are happening on a scale of human size and vision. A simple

⁸⁶ I interpret Snyder's statement as indicating that he wanted to translate the poetics of the graphic novel to film, rather than try to impose the poetics of film onto the story of the graphic novel. A similar approach was taken in Robert Rodriguez and Frank Miller's *Sin City* (2005). According to Snyder, "300 – like *Sin City* – was story-based, presenting the point of view of a graphic novelist. I felt it was my job as a director to present that on screen." Joe Fordham, "A Beautiful Death," *Cinefex*, no. 109 (2007): 66.

⁸⁷ Barbara Robertson, "The Art of War," Computer Graphics World 30(2007): 20.

⁸⁸ See also: David E. Williams, "Few Against Many," American Cinematographer 88, no. 4 (2007): 55.

statistic will put things in perspective: out of 1,500 shots in the film, 1,306 of them involve digital effects, 89 and four different studios were tapped to handle each of the four battles that comprise the central action pieces of the film: Animal Logic, Hybride Technologies, Hydraulx, and Pixel Magic.⁹⁰ To prevent the film from sliding into the realm of pure animation, the hyperphysicality of the Spartan bodies provides a strong link to the materiality of live-action film. Willemen, in his essay on the transnational circulation of labor, capital, and the action film, argues that the body of the action star functions as a condensation of an era's economic cultural logic, and the production conditions of the film share an indexical relationship to the physicality of the filmed body.⁹¹ For Willemen, the post-1970s action film body is defined by its relationship to three successive developments of capitalism: 1) The 1980s hardbody (Arnold Schwarzenegger, Sylvester Stallone), which fantasizes about a disappearing industrial sector. These bodies are defined by their ability to expend massive amounts of labor power with no concern for efficiency; 92 2) The early 1990s body (Jean Claude Van Damme), which indexes the rise of corporate capitalism and its leaner, more efficient deployment of labor and capital; 3) The contemporary (1990s-2000s) bodies of finance capital (Jason Bourne, technologically-enhanced bodies), which register the combination of labor, technology, and information processing that defines contemporary labor. 93 300's return to the depiction of hyperphysical bodies is an attempt to regain some semblance of control and grounding in a decade defined by speculative capitalism, futures trading, bank bailouts, and home foreclosures. However, the depiction of the hardbodies takes place within a digitally simulated environment, which again visualizes the complexity of the relationship between the digital and the analog as well as the contradictory desires to simultaneously transcend and reinscribe the physical body in the digital realm.

⁸⁹ Ron Magid, "A Spartan Effort," Animation 21, no. 4 (2007): 28.

⁹⁰ Robertson, "The Art of War," 21.

⁹¹ Willemen, "Fantasy in Action."

⁹² Susan Jeffords also makes this argument in Susan Jeffords, *Hard Bodies: Hollywood Masculinity in the Reagan Era* (New Brunswick, N.J.: Rutgers University Press, 1994).

⁹³ Willemen, "Fantasy in Action," 280.

The fact that 300 was shot on traditional film stock provides an additional linkage between the worlds of digital special effects and analog filmmaking. According to visual effects supervisor, Chris Watts, 300 was filmed:

the old-fashioned way – most of the footage was shot either handheld or on a dolly, then we did a lot of element shooting where we tracked in Persians, Spartans and other people. We shot entirely on Kodak 5229 film because we wanted to shoot high-speed with at least two cameras, generally three cameras. Digital video wasn't an option – the fastest you can get out of any digital camera is 60 frames per second at half-res, but we shot considerable portions of this movie at 120-150 fps, and almost everything else we shot at 50 fps, except dialogue, which we shot at 24 fps. We discussed shooting DV for the 24-frame stuff, but we agreed that it was already going to be a movie full of challenges in terms of keeping a consistent look, so we didn't want to introduce one more by having different acquisition mediums.

The use of such high-speed cinematography was necessitated by Snyder's penchant for extreme slow motion and nested zooms. An example of the use of both can be found in the first major battle scene, during which Leonidas, in a 70-second tracking shot, charges the field first with a spear and then with a sword. During this sequence, the film alternates between extreme slow motion, standard speed, and fast motion photography. Additionally, the camera seemingly zooms between three levels of the action: long, medium, and close-up shots. These effects were created through a combination of high-speed photography, technological ingenuity, and digital trickery: "The telescoping effect was achieved with a multi-camera rig that simultaneously photographed the action with three different focal length lenses; in post, the specific 'zoom' points were chosen, and the filmmakers could digitally shift between the perspectives."95

⁹⁴ Magid, "A Spartan Effort," 29.

⁹⁵ Williams, "Few Against Many," 63.

Despite the reliance on "old-fashioned" filmmaking techniques, the special effects and almost completely simulated space of 300 create an image that upsets easy distinctions between virtuality and actuality. The hyperphysicality of the actors serves to offset this tension and provide a material grounding for the images created by the film. As Lev Grossman, writing in *Time Magazine*, claims:

With so much computer-generated make-believe going on, the actors' physicality is the movie's only link to the real world. To turn Hollywood pretty boys into Spartans took eight weeks of intense dieting, exercise and martial-arts training. Onscreen their ripped abs look as if they're trying to bulge their way out of their stomachs.⁹⁶

However, because of the placement of material bodies into a virtual space, the physicality of the actors' bodies is called into question. Michael Williams claims that:

Although the taut musculature of Gerard Butler and the rest of the male cast were the product of an uncompromising exercise regime, the torso-sculpting overhead studio lighting as well as the judicious application of make-up to enhance tone, their awareness of the potential for digital trickery created further doubt among audiences.⁹⁷

Creating additional confusion is the fact that in the battle scenes requiring multitudes of soldiers, the filmmakers used MASSIVE software to fill out the ranks with computer-generated crowds, further blurring the line between "real" and "simulated" bodies.98

To combat this confusion, press coverage and promotional materials made much of the physical transformation and muscularity of the actors in the film, specifically highlighting the fact that the bodies were indeed real and not the product of digital special effects. Because so much of

⁹⁶ Lev Grossman, "The Art of War," Time Inc.,

http://www.time.com/time/magazine/article/0,9171,1595241,00.html.

⁹⁷ Michael Williams, "The Idol Body: Stars, Statuary and the Classical Epic," *Film & History* 39, no. 2 (2009): 46.

⁹⁸ Robertson, "The Art of War," 26. MASSIVE software (short for "Multiple Agent Simulation System in Virtual Environment") is used to generate virtual crowds. MASSIVE was originally developed to generate the crowds used in the battle scenes of Peter Jackson's *Lord of The Rings* trilogy.

the film was created through the labor of computer coding and animation, doubt was cast onto the labor required to sculpt the bodies of the actors. In response to allegations that the actors' physiques were the product of computer trickery, trainer Mark Twight responded on his blog:

It appears everyone has an opinion about *300* and how the actors and stunt crew achieved the level of fitness – and consequentially, appearance – for the movie. I have read that it was all CGI, make-up, steroids, etc. However, no one has come right out and said, "those guys worked really hard and had the self-discipline to control what they put into their mouths." Which is what I suggest: have the self-discipline to control what comes out of your mouth, especially if you are ignorant about the topic being discussed.⁹⁹

Twight, of course, has a personal stake in maintaining the perception of authenticity of his trainees' bodies, but other accounts of the actors' training confirm Twight's claims, though they admit that the use of those traditional aspects of Hollywood magic – makeup and lighting – highlighted the appearance of the actors' bodies.

More specifically, lighting, shadows, and makeup – achieved both through digital, as well as traditional, means – emphasized what the actors "already had," rather than adding any muscle mass to the actors' bodies. 100 Prosthetic attachments were only used for scars and injuries, not to enhance the Spartans' physiques, and resin-based paints were applied directly to the actors' bodies to create shadowing effects and make the muscles "pop." 101 Gerard Butler denies taking any steroids, but admits that his body was enhanced with makeup: "I had spray-on abs as well...but I could also stick my finger up to almost the second knuckle – that's how deep in my hands could go. You use make-up on your face. That doesn't mean you're an ugly fucker." 102

http://www.gymjones.com/knowledge.php?id=36.

⁹⁹ Mark Twight, "300 Opinions: Everyone Has One,"

¹⁰⁰ Daniel Foggo, "Those Spartan guys sure knew how to work up a six-pack," *The Sunday Times (London)*, 25 March 2007, 12.

¹⁰¹ Fordham, "A Beautiful Death," 68.

 $^{^{102}}$ Mickey Rapkin to GQ: The Q, 6 January, 2010, http://www.gq.com/blogs/the-q/2010/01/gerard-butlers-just-desserts.html.

What all of these production stories, anecdotes, and interviews add up to is a sense that the boundaries between the actual and the virtual, as established within the context of *300*, are perceived as being quite porous, and each side – both analog and digital – requires advocates in order to establish its ontology. I contend that the contradiction between physical bodies and virtual space – flesh and information – as pictured in *300*, rather than illustrating the failure of the film's visual regime to adequately visualize the relationship between digitality and materiality, instead provides a metapicture of the tension in contemporary visual culture's transition into digitality.

1.8 300: A Metapicture of Fleshy Information

In order to guide my discussion of the theoretical importance of a film like 300, I will be using two key images from the film and book versions of 300 (Figures 1.14 and 1.15). These images will serve as metapictures – visual illustrations of a concept – and they picture the theory of the relationship between flesh and information posited by the film version of 300. According to W.J.T. Mitchell, metapictures are "pictures about pictures," pictures that theorize their own existence. They are material objects that claim to "show themselves in order to know themselves." Mitchell, elaborating further, claims that:

Metapictures are notoriously migratory, moving from popular culture to science, philosophy or art history, shifting from marginal positions as illustrations or ornaments to centrality and canonicity. They don't just illustrate theories of picturing and vision: they show us what vision is and picture theory.¹⁰⁵

In that 300 pictures a kind of informationalist utopia, where flesh and information can freely intermingle regardless of medium, the film serves as a metapicture of the cultural technofantasies of easy exchangeability between the physical body and informational networks. All that is required is

¹⁰³ Mitchell, *Picture Theory*: 35.

¹⁰⁴ Ibid., 48.

¹⁰⁵ Ibid., 57.

a general equivalent – in this case "code" – and this cultural attitude finds its foundation in theories of labor and materialism.



Figure 1.12: Flesh and Simulated Space



Figure 1.13: Flesh and Simulated Space

Figure 1.14 provides a thesis for the operating logic of visuality presented in 300. In this image, we see Leonidas, accompanied by his wife and son, inspecting his 300 troops before heading out to the Hot Gates. This image is particularly striking for the way in which it creates a dialog between the hyperphysicality of the bodies with the hypersimulation of the space in which those bodies reside. If we follow the rule of thumb established by Snyder, that everything except what the actors touch is CGI, then only the ground, the actors, and perhaps the stalks of wheat closest to the actors are non-simulated within this image. Despite the different ontologies of the pieces of the image, the resulting composite image is notable for picturing the easy exchange of information between the analog and digital pieces of the image. The image appears satisfyingly "real," regardless of its hybrid mode of production.

Figure 1.15 continues the visual logic of the previous image, and it adds the element of simulated architecture. The close-up of Leonidas's upper torso and face, directly juxtaposed with the

simulation of Sparta in the background, highlights the way in which the visual regime of the film conceives of the virtual and the actual as exchangeable and conversant with each other. Along with their exchangeability within the visual scheme of the film itself, Leonidas and Sparta share a similar foundation in their expression of labor. Both digital and analog images in 300 occupy the position of abstract human labor, though they differ in the ways in which they foreground their embodiment of abstract labor. As Marx argues, "The body of the commodity, which serves as the equivalent, always figures as the embodiment of abstract human labour, and is always the product of some specific useful and concrete labour." While they are visual equivalents within the diegesis of the film, the abstract labor congealed in the "bodies" of the digital and analog images are founded on very different forms of concrete labor.

The bodies of the Spartan warriors depicted in film can be conceptualized as a form of abstract human labor rooted in the concrete labor of physical/bodily exertion. Each Spartan body represents not only the work, suffering, sacrifice, and dedication needed to create it, but also, by proxy, the work, suffering, sacrifice, and dedication of the entire Spartan army. The Spartan army is a single unit, fighting together in a phalanx and relying on each other to survive a battle. As such, the strength of the individual becomes the strength of the group, obscuring the singular labor required to form each physical body. The Spartan bodies thus come to represent labor in the abstract. Within the film, the men are not seen training (except as children), nor are they seen engaging in any sort of physical activity except waging war. Like the commodity in capitalism, these bodies arise in fully formed perfection, denying the labor needed for their creation and serving as a sign of abstract human labor.

These bodies serve as complex sign systems and indexes to the "reality" of the analog image. The actors playing the Spartans *really* had to submit themselves to the pain, toil, and dedication of sculpting their physiques. They *really* had to train themselves to perform the stunts and other phys-

¹⁰⁶ Marx, Capital: Volume 1: 150.

ical feats of the film. They *really* had to engage in mock fighting. The hyperphysicality of the actors' bodies creates their hyperpresence in the film, and in comparison to the simulated environments that surround these bodies, the bodies of the Spartans are truly, emphatically *there*. The fictional filmic images of the Spartan warriors serve as indexes to the real bodies of the actors playing the Spartans, "proving" that the representation of those bodies reflects a real body behind that representation.

The simulated images in 300, on the other hand, are grounded in a very different form of concrete labor; namely that of mental and technological labor rather than physical/bodily labor. Just as the physical images in 300 serve as forms of abstract labor, hiding the concrete labor behind their existence, so too do the simulated images in the film obscure their foundations in the concrete labor of mental exertion. Unlike the overinscribed indexicality of the bodies in 300, the simulated environments exist within a virtuality. That is, they have no concrete referent in reality and exist only as the result of the mental exertions of their human creators – there is no "reality" behind the representation. However, like their analog counterparts, the simulated images of 300 strive to embody a kind of visual perfection. Both types of image are presented in a highly stylized manner, and both are presented as "perfections" of their respective ontological positions. As such, both images are subject to the same kind of commodity fetishism that occludes the concrete labor that goes into their production, resulting in their seamless integration into the cinematic whole of 300.

The general equivalency between the digital and analog modes of representation in 300 – the equivalency between information and flesh – results from an abstraction of their forms of materiality into the equivalent of *code*, and this abstraction also expresses itself as an *aesthetic* equivalency of form. While the fantasies of reduction, abstraction, and equivalence I have thus far been discussing happen beneath the surface, as a kind of cultural imaginary, this fantasy is also visible on the surface of the images. Between the flesh and simulated space of 300 there exists a sensorial equivalence, a sameness of form and expression. The digital and the analog infect each other, and

their ontological reciprocity within the image results in a certain affective stickiness that bleeds between the analog and digital components of the image. As a result, the simulated images of space attract some of the phenomenological weightiness of the fleshy bodies, and the fleshy bodies attract some of the smoothness, glossiness, and "perfection" of the simulated environments. The sensorial circuit established between flesh and information creates an aesthetic and sensorial equivalency of digital and analog forms. In other words, the digital and analog pieces of the film look like each other, which reinforces the fantasy that flesh and information can be easily exchanged.

The materiality of the digital is one of the more pressing concerns of contemporary media studies, and I follow Deleuzian scholars in thinking through the "digital turn" in terms of the ways in which the digital visualizes a particular attitude toward the relationship between the actual and the virtual. In his *Cinema* books (specifically in *Cinema* 2), Gilles Deleuze theorizes the relationship between the virtual and the actual and how a particular mode of cinema – the time-image – visualizes this relationship. What is most relevant to my own discussion concerning the ways in which the relationship between the actual and the virtual can be applied to the relationship between the analog and the digital is Deleuze's formulation of how the actual and the virtual interact. Rather than acting dialectically, as opposing sides of the same coin, the actual and the virtual appear as reflections of each other, one inhabiting the image of the other.

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¹⁰⁷ I discuss this "digital culture logic" in detail in Chapter Three. For contemporary discussions of the digital turn, see: Sean Cubitt, *The Cinema Effect* (Cambridge, MA: MIT Press, 2004); Alexander R. Galloway, *Gaming: Essays on Algorithmic Culture* (Minneapolis: University of Minnesota Press, 2006); Lev Manovich, *The Language of New Media* (Cambridge, MA: MIT Press, 2001); Anna Munster, *Materializing New Media: Embodiment in Information Aesthetics* (Hanover, N.H.: Dartmouth College Press: Published by University Press of New England, 2006); Timothy Murray, *Digital Baroque: New Media Art and Cinematic Folds* (Minneapolis: University of Minnesota Press, 2008); D.N. Rodowick, *The Virtual Life of Film* (Cambridge, Mass.: Harvard University Press, 2007). 108 In short, the time-image is the logic that governs Post-WWII art cinema, and as opposed to the movement-image, which follows a logic of action and reaction (as in Classical Hollywood Cinema), the time-image confuses past, present, and future, and through its presentation of duration, it opens up a space of perception whose concern is perception itself. Deleuze, *Cinema 1*; Deleuze, *Cinema 2*.

We can say that the actual image itself has a virtual image which corresponds to it like a double or reflection. In Bergsonian terms, the real object is reflected in a mirror-image as in the virtual object which, from its side and simultaneously, envelops or reflects the real: there is "coalescence" between the two. There is a formation of an image with two sides, actual *and* virtual. It is as if an image in a mirror, a photo or postcard came to life, assumed independence and passed into the actual, even if this meant that the actual image returned into the mirror and resumed its place in the postcard or photo, following a double movement of liberation and capture. 109

Deleuze mobilizes another set of metaphors – the crystal and the baroque fold – to make more vivid the confusion of inside and outside occurring within images that open up into the space between the actual and the virtual. 110

Distinct, but indiscernible, such are the actual and the virtual which are in continual exchange. When the virtual image becomes actual, it is then visible and limpid, as in the mirror or the solidity of finished crystal. But the actual image becomes virtual in its turn, referred elsewhere, invisible, opaque and shadowy, like a crystal barely dislodged from the earth. The actual-virtual couple thus immediately extends into the opaque-limpid, the expression of their exchange.¹¹¹

While Deleuze probably did not have special effects (or *300*) in mind, his discussion of the relationship between the actual and the virtual can fruitfully be applied to issues of CGI and the relationship between analog and digital modes of filmmaking.

For Deleuze, the actual and the virtual are co-constitutive of each other, and they form a circuit of sensation within the image. In the context of *300*, we can see the interaction between the actual and the virtual as well as the folding of flesh into the code of the digital environments. Howev-

¹⁰⁹ Deleuze, *Cinema 2*: 68.

¹¹⁰ I take up the relationship between inside and outside, depth and surface, in my discussion of DNA portraits in Chapter Three.

¹¹¹ Ibid., 70.

er, rather than opening up a new form of perception as time-image films are able to do, 300 strives to elide the crystalline structure of the actual and the virtual, presenting instead a flat movement image that imagines a utopia of informationalism. The bodies of the actors merge into the simulated environments that surround them, producing a seamless whole that emphasizes continuity rather than discontinuity, harmony rather than tension. Despite its insistence on presenting a seamless cinematic world that refuses to differentiate between the analog and the digital, 300 nevertheless acts as a metapicture of a particular kind of pervasive thinking about the relationship between flesh and information, one that reduces physical materiality to a kind of signifier of presence rather than something that is grounded in ontological difference.

Here we see the paradox that complicates theorizing of the digital: any fantasy of pure informationalism must eventually slam up against the phenomenological realities of materiality. It is here that virtual desires and the material conditions of life do not always coincide. 300 serves as a metapicture of the digital attitude in that it fantasizes about an informationalist paradise, celebrating code over the material instantiations of that code. 300 too, however, as I discussed in the previous section on special effects, forefronts the separation of the physicality of the hardbodied actors and the simulated space inhabited by the actors. The metapicture 300 forms is thus a contradictory picture of how flesh and information interact in our contemporary era: the physical both tests the limits of the simulated as well as reinforces its incorporation into the simulated.

Or, to put it in more materialist terms, 300 acts as what Walter Benjamin calls a *dialectical image*¹¹² and Mitchell calls a *multistable* image. Dialectical images, for Benjamin, are "both/and" images that materialize the present while carrying within themselves an image of the past. In the context of 300, the dialectical form of the film carries within itself the analog presence of film production history while at the same time looking forward into film's digital age. It is both analog and

¹¹² Walter Benjamin, *The Arcades Project*, trans. Howard Eiland and Kevin McLaughlin (Cambridge, Mass.: Belknap Press of Harvard University Press, 1999). 3-26.

¹¹³ See Chapter Two of Mitchell, *Picture Theory*.

digital, not quite a synthesis but rather a point on a trajectory. As Benjamin says in regards to dialectical images:

Ambiguity is the manifest imaging of the dialectic, the law of dialectics at a standstill. This standstill is utopia and the dialectical image, therefore, dream image. Such an image is afforded by the commodity per se: as fetish.¹¹⁴

Benjamin thus brings us back to the issue of commodity fetishism, which provides the conditions of abstraction that allow for an image to appear removed from its historical and material moorings.

The image presented by *300* is one of both a dream-like informationalist utopia as well as a snapshot of the contemporary attitude towards the interaction between the analog and the digital.

1.9 Toward an Analog Digitality

To conclude this chapter, I will offer a preview of what will come in Chapter Three in regards to the "digital turn," the relationship between digitality and virtuality, and the position of 300 within this framework. Figures 1.16-1.19, taken from both the film and book versions of 300, will help to think through these issues. One of director Zach Snyder's stated goals of the film was to try to recreate as closely as possible the tone, style, and narrative strategies of the 300 graphic novel, and as Figures 1.16-1.17 and Figures 1.18-1.19 show, Snyder was able to replicate the mise-enscène of the book quite faithfully. In the language I have employed in this chapter, Snyder was able to make actual the "virtual film" existing within the book. Translations of this kind, according to Brian Massumi, are by definition an analog process, and he defines the analog as "a continuously variable impulse or momentum that can cross from one qualitatively different medium into another." Sensation, for Massumi (as well as for Deleuze), is vital for understanding the ways in which

¹¹⁴ Benjamin, *Arcades*: 10.

¹¹⁵ Brian Massumi, *Parables for the Virtual: Movement, Affect, Sensation* (Durham, NC: Duke University Press, 2002). 135.

images might open up new forms of perception, and this sensation is able to travel across different mediums.



Figure 1.14: Book...



Figure 1.15: ...and Movie

This idea of translation can also be applied to the relationship between the analog and the digital, and by extension, to the relationship between the actual and the virtual, since both are expressions of similar sensational and representational desires. In terms of the adaptation of the book to film, we find the actualization of the virtual filmic forces within the book; in terms of the relationship between analog and digital *within* the film, we find the actualization of a virtual desire for a general equivalency between flesh and information. Massumi, however, explicitly outlines the dangers of conflating the digital and the virtual, warning that: "Nothing is more destructive for the thinking and imaging of the virtual than equating it with the digital...Digital technologies in fact have a remarkably weak connection to the virtual, by virtue of the enormous power of their systemization of the possible." For Massumi, the digital is a form of "inactuality" that "must be actualized," and "digital technologies have a connection to the potential and the virtual *only through the*

¹¹⁶ Ibid., 137.

analog."¹¹⁷ The act of sensation is fundamentally analog – the example Massumi uses is the transformation of one medium (e.g. words) into another (e.g. thought) – and thus the digital must always first pass through the analog at the moment of recording and back through the analog at the point of consumption. Thus, if we follow Massumi, every piece of digital media is also intrinsically analog, in that in order to produce and consume that media, the world must first be translated, coded, and then sensed by an observer.



Figure 1.16: Book...



Figure 1.17: ...and Movie

In the context of 300, Massumi's formulation allows us to reconcile some of the seeming contradictions in the film's approach to its analog and digital pieces (though I would maintain that the contradictory nature of the film's imagery is what makes it such a valuable specimen for studying the role of actors, CGI, and special effects in today's media industries). Following a Deleuzian framework, the actual and the virtual must be thought of as pieces of the same crystal, folded into each other in a perpetual recursive circuit. The flesh of the bodies in 300 is folded into the digital environments of which they are a part, while at the same time, the digitality of the environments is

¹¹⁷ Ibid., 138.

folded into the flesh of the bodies. Each is granted some of the qualities and sensations of the other: the bodies seem digital while the environments seem analog. Much of the confusion in separating "real" from "unreal" in the film can be attributed to this exchange between digital and analog. As Massumi advises: "The analog and the digital must be thought together, asymmetrically. Because the analog is always a fold ahead." It is impossible to separate the virtual and the actual, the digital and the analog, since they are pieces of the same whole.

With a foot placed firmly in both camps of analog and digital filmmaking, 300 stands on the precipice of a shift in mainstream forms of media production, and it is representative of the contemporary media in that it leans heavily on digital technologies while not quite willing to completely forgo its ties to physical reality. Even with the rise of films like James Cameron's Avatar (2009) and Rupert Wyatt's Rise of the Planet of the Apes (2011), the motion capture technology on which the animation of the characters is based still relies on the presence, during production, of living, breathing human actors. My goal in describing the dual (and often contradictory) nature of these hybrid, composite digital/analog images is not to argue that there will ever be a "pure" media of either completely analog or completely digital production. Rather, my intent has been to argue that the analog and the digital will always be present together, whether it be during production or consumption, and as such the digital and the analog will be travel companions through various states of actuality and virtuality for as long as bodies engage with media. In the next chapter, I take up the role of technology more specifically in relation to both the body of technology – its "machine vision" – and the ways in which bodies are framed by technology (in particular, technologies of high definition video).

¹¹⁸ Ibid., 143.

2 THE MACHINIC VISION OF VERNACULAR POSTHUMANISM: FANTASIES OF AESTHETIC DISEMBODIMENT

Roughly three-quarters of the way into his 1975 film, Barry Lyndon, Stanley Kubrick repeats a cinematographic move that subtly and deftly indicates the extent to which his cinema speaks in the language of vernacular posthumanism. The shot, which takes place immediately following the brawl between Barry Lyndon (Ryan O'Neal) and his stepson Lord Bullingdon (Leon Vitali), positions Barry in such a way as to highlight his insignificance in the face of nature, society, and history. Barry is the antiheroic rake around whom the narrative of *Barry Lyndon* centers. Having exploited a series of opportunistic social positions – as a soldier, diplomat, gambler, and lover – Barry has found himself married to Lady Lyndon (with all the social and economic advantages offered by this position), the stepfather of her petulant son, Lord Bullingdon, and a proud new father of his firstborn, Bryan. Bullingdon, fed up with his perceived mistreatment at the hands of his stepfather, the "insolent Irish upstart" Barry, rudely interrupts a small chamber concert in his family's drawing room. Here, Bullingdon publicly calls Barry out for the "lowness of his birth and the general brutality of his manners," and he chastises Barry for his distasteful and vulgar treatment of Lady Lyndon (Marisa Berenson) and her finances. What ensues only validates Bullingdon's claims, as Barry violently attacks and beats Bullingdon on the floor of the drawing room. Contrary to the aesthetic style of much of the film, which is generally controlled and methodical, this fight scene is filmed with a highly mobile handheld camera. The effect of this change in cinematographic style is one of visceral kineticism, especially when placed within the context of the static composition of much of the rest of the film.

¹ This technique of using a handheld camera is repeated in the other fight scenes in the film, most notably during the impromptu boxing match between Barry and another soldier.



Figure 2.1: Individual



Figure 2.2: Network

The stillness of the shot that follows this scene, then, is even more striking when juxtaposed with the frenzied activity of the drawing room brawl. While the brawl is still in full swing, Kubrick cuts to a middle close-up of Barry leaning against the stone railing of a bridge. This shot is typical of the film, in that it lingers a moment on the human figure within the frame before slowly zooming out. This reverse zoom, used repeatedly by Kubrick throughout *Barry Lyndon*, is a signal example of the ways in which Kubrick's cinematographic technique speaks in a language of vernacular posthumanism. By beginning the shot with a human figure as the focus – both literally and metaphorically – of the setting and then zooming out to the point where the human figure disappears within the landscape, Kubrick highlights the inadequacy of anthropocentric modes of thinking in accounting for the complexity of the relationships between humans and nonhumans embedded in rhizomatic socio-cultural networks.² The reverse zoom effectively decentralizes the human within the visual poetics of the film, and it positions the human as merely one more object to behold within

² Chris P. Pliatska, "The Shape of Man: The Absurd and *Barry Lyndon,*" in *The Philosophy of Stanley Kubrick*, ed. Jerold J. Abrams (Lexington: University Press of Kentucky, 2007).

a landscape portrait. When viewed this way, it becomes clear that the film conceives of Barry's "humanity" as something fundamentally nonhuman, as something projected onto Barry by the complex networks of history and society. Barry, in effect, has no subjectivity other than that provided by what surrounds him. He is an empty vessel waiting to be made human.

The representation of the human, within the posthumanist framework established by the reverse zoom, takes on a prismatic form. As the boundaries between human and nonhuman become increasingly porous, so too must our understandings of representation become increasingly multifaceted. Here, representation is understood not merely as a human-centered process but rather as a terrain on which various subjectivities – both human and nonhuman – encounter each other. Central to this framework of representation, at least as it is deployed in *Barry Lyndon*, is the idea of machine vision. The slow and controlled nature of the reverse zoom – some might call it a "cold" aesthetic – speaks to a virtual automation of vision.³ In her classic essay on *2001: A Space Odyssey*, Annette Michelson describes the bodily effects that Kubrick's camerawork produces and the ways in which her body interacts with the images on the screen. Discussing the mode of perception produced by *2001*'s unique framing of vision, Michelson writes, "Viewing becomes, as always but as never before, the discovery, through the acknowledgment of disorientation, of what it is to see, to learn, to know, and of what it is to be, seeing." In many ways, Michelson is reacting to her encounter with a distinctly nonhuman mode of vision, a kind of machine vision.

As both Manuel De Landa and Paul Virilio indicate, with the advent of mass visual technologies, vision has become more and more automated.⁵ Virilio argues that the rise of surveillance technologies has lead to an automation of perception, what he diagnoses as a cultural "vision machine." Virilio ties the vision machine to the development of technological means of reproducing and repre-

³ This "cold" machine aesthetic can also be seen, most notably, in the steadicam movements of *The Shining* as well as in the hyper-controlled camera movements of *Eyes Wide Shut*.

⁴ Annette Michelson, "Bodies in Space: Film as 'Carnal Knowledge'," Artforum 7, no. 6 (1969): 58.

⁵ Manuel De Landa, *War in the Age of Intelligent Machines* (New York: Zone Books, 1991); Paul Virilio, *The Vision Machine*, trans. Julie Rose (Bloomington, IN: Indiana University Press, 1994).

senting the world, technology that "removes" the artist from the mode of representation (i.e. the move from painting to photography). Technology, within this framework, is seen as automating representation, placing it the realm of machinic quasi-subjectivity. As Virilio argues about photography and the automation of perception:

Photography likewise, in fulfillment of Descartes' hopes, had been largely an art in which the "mind" dominating the machine interpreted the results in the fine tradition of instrumental reason...But, conversely, because the technical progress of photography brought daily proof of its advance, it became gradually more and more impossible to avoid the conclusion that, since every object is for us merely the sum of the qualities we attribute to it, the sum of information we derive from it at any given moment, the objective world could only exist as what we represent it to be and as a more or less enduring mental construct.

When placed into an historical context that traditionally privileges human-centered modes of vision,⁸ the automation of perception radically affects what it means to represent the human, and the machinic visuality of *Barry Lyndon*'s reverse zoom provides a posthuman account of the embedded and networked nature of (human) subjectivity.

As Virilio indicates, photography "fulfills" the Cartesian desire to functionally separate perceiver and perceived, subject and object. I would, however, push this concept a bit and decenter the human to an even larger extent than Virilio. Virilio discusses the photographic process as facilitating the sedimentation of the "objective world" as a something that can be dominated by the mind of the perceiving subject, largely through the mastery of the camera's machinery of representation. As the photographic technology becomes more culturally embedded the camera appears to remove the interpretive powers of the perceiver from the circuit of representation, resulting in an image ver-

⁶ Stanley Cavell echoes these thoughts with his concept of artistic "automatisms." Stanley Cavell, *The World Viewed: Reflections on the Ontology of Film* (Cambridge: Harvard University Press, 1979). ⁷ Virilio, *The Vision Machine*: 22.

⁸ See my discussion of DNA portraits in Chapter Three for a full account of the relationship between representation, interpretation, technology, and the human.

nacular that views the photographic camera as recording the "truth" of the world, a "truth" that is self-evident and mechanically objective. Within this schema, however, the world remains a mental construct of the perceiving human, a collection of qualities and perceptions, and this follows an Enlightenment line of thinking established by Descartes and illustrated by his encounter with a ball of wax.10

What Kubrick accomplishes is something different. His use of the reverse zoom, rather than producing a picture of the world from the perspective of the perceiving human, instead visualizes a view of the world in which the machine of representation has sloughed off the chains of human perspective and established its own regime of vision.¹¹ Through the reverse zoom, Kubrick denies an anthropocentric monopoly on vision and acknowledges the perspective of the camera machine. Here, the camera isn't merely a tool of world-creating employed by humans; instead, the camera creates its own world, and what it produces cannot be accounted for by theories of auteur control of filmmaking nor humanistic frameworks of intention. I want to be clear about my claims here. I am not claiming that, like the dancing camera in Vertov's Man With a Movie Camera, Kubrick's camera somehow filmed the scenes itself and "decided" to employ a reverse zoom. Kubrick's intentions obviously constitute a strong influence on the film's final form. However, to completely remove the technology and intentionality of the camera from the equation is quite limiting. The camera itself must be approached in all of its significant otherness, as an entity that possesses a unique experience of the world.¹² I also want to be clear that I conceive of power and agency as existing within

⁹ See Finnegan, "Recognizing Lincoln."; Finnegan, "Liars May Photograph."

¹⁰ René Descartes, "Meditation Two: Concerning the Nature of the Human Mind: That It Is Better Known Than the Body," in *Discourse on Method and Meditations on First Philosophy* (Indianapolis: Hackett Pub., 1998). In this (in)famous passage, Descartes details his process of methodological skepticism, whereby he doubts the existence of everything by his thinking mind. Using a piece of wax as an example, Descartes concludes that his perception of the wax produces the object, and the only thing that he can "prove" about the wax is that an impression of it exists in his mind.

¹¹ This loss of control of the machine is made thematic in Kubrick's 2001.

¹² David Gunkel discusses the ethical implications and responsibilities of our encounters with machine otherness, and he argues that we must think outside of our traditional anthropocentric frameworks – to think otherwise – in order to think through the nonhuman in all of its unique

the kinds of networks theorized by actor-network theory and object-oriented ontology. Neither Kubrick, nor the camera, nor the actors, nor the Blu-Ray player on which I watch *Barry Lyndon* act individually. The final form of the film must be theorized and understood from within the material-semiotic web of interactions in which the film exists.

In discussing the role of the camera in processes of visualization, De Landa echoes much of what Virilio argues, and he relates technologies of surveillance to an increasing reliance on machine vision and the consequent decentering of human perception and subjectivity within technonatural networks.

The central surveillance tower of the Panopticon had already placed the human eye at the center of the machine, while at the same time devaluing any specific set of eyes: any pair would do, as long as the Panopticon worked as designed. Machine vision promises to remove humans even from this secondary position, to get them completely out of the loop.¹³

move humans even from this secondary position, to get them completely out of the loop. 13 De Landa here reflects much of what I previously discussed, namely that the increasing mechanization of representation – which, in Chapter One, I connected to Benjamin's theorization of technological reproducibility and the materiality of the visual sphere – ultimately leads to getting humans "completely out of the loop" of certain systems of visuality. What is most important to my conceptualization of vernacular posthumanism and a posthuman accounting of the human is the idea that the quasi-subjectivity of the camera has become a coconspirator in production of visual culture and, in the particular case of *Barry Lyndon*, imaginings of the human. One of Kubrick's greatest achievements as a filmmaker was to produce films that allowed the camera more than a modicum of agency and self-expressivity. In doing so, Kubrick stepped outside of a framework of vision that emphasized a distance between perceiver and perceived and an image vernacular whose faith resided in the human control of the machines of vision. Stanley Cavell interprets this condition of viewing,

alterity. David J. Gunkel, *Thinking Otherwise: Philosophy, Communication, Technology* (West Lafayette, Ind.: Purdue University Press, 2007).

¹³ De Landa, *War in the Age of Intelligent Machines*: 204.

which privileges the romantic, authorial control of automatisms and artistic tropes as such: "We do not so much look at the world as look *out at* it, from behind the self." What Kubrick does with films like *Barry Lyndon* is to allow the camera to get out from behind the self and express its own intentionality on the screen. A few more examples of the use of the reverse zoom in *Barry Lyndon* will help illustrate the extent to which this camera movement functions as a microcosm of Kubrick's deployment of vernacular posthumanism.



Figure 2.3: Triptych (1), Individual



Figure 2.4: Triptych (1), Network



Figure 2.5: Triptych (2), Individual

¹⁴ Cavell, The World Viewed: 102.

¹⁵ For more about the intentionality of the camera and the phenomenology of film, see Sobchack, *The Address of the Eye*; Barker, *The Tactile Eye*.



Figure 2.6: Triptych (2), Network



Figure 2.7: Triptych (3), Individual



Figure 2.8: Triptych (3), Network

Soon after Barry and Lady Lyndon experience the birth of their first child, Bryan, Kubrick presents us with a montage of three separate reverse zooms. The first of the triptych focuses on the Lyndons with their new child, the second on Barry in brothel, and the last on Lady Lyndon and her two children. As opposed to the reverse zoom I discussed previously, which placed Barry within the frame of an overwhelming natural context, the repeated use of the reverse zoom here serves to situate the Lyndons within an overwhelming social context, and the montage indicates the parallels among each member of the Lyndon family and the extent to which they are products of their sociohistorical situation. The first reverse zoom begins with a close-up of baby Bryan on his father's lap,

his little hand gripping his father's finger. At the beginning of the zoom, the baby occupies the entirety of the scene, but as the zoom pushes out, the context of the scene is established: Lady Lyndon and Barry are lying next to each other on a bed, cradling Bryan on their merged laps. It is a classical scene of familial tenderness, harmony, and love. Without pausing the reverse zoom, Kubrick cuts to a radically different scene, already in reverse zoom motion, of Barry in a brothel, sitting on a chair, kissing one topless woman while another topless woman caresses his leg. The zoom out continues, slowly revealing a scene of aristocratic male revelry. A group of men behind Barry are singing a lively drinking song, while another man lounges in a chair beside Barry, sleeping off his drunkenness. As with the previous example, the reverse zoom begins on an image of Barry and then slowly reveals the social network of which he is a part. In the last example, Barry was fulfilling the role of a doting father and caring husband. In this example, Barry is acting out the role of a philandering, caddish gentleman. The next role revealed is that of Lady Lyndon, reclining on a chaise longue with her son, Lord Bullingdon (Dominic Savage). 16 This reverse zoom begins with a close-up on Lady Lyndon and Bullingdon's faces and pulls back to reveal baby Bryan in a crib next to the chaise longue. This final piece of the triptych is notable for its stillness, as the only movement in the scene comes from Bryan. Bullingdon and Lady Lyndon remain perfectly still, which creates a stronger association between the image and the paintings on which Kubrick reportedly based much of the film's imagery.¹⁷

Throughout the film, Barry, in particular, is presented as a tabula rasa subject, completely defined by the network in which he is embedded – be that network natural or cultural – and he displays very few signs of agency or emotion. Each tableau vivant, in employing a reverse zoom, effectively draws primacy away from the human subjects depicted within the scene. Beginning with a

¹⁶ Two actors portrayed Lord Bullingdon. Savage played the younger version, Vitali the older.

¹⁷ Homay King, "The Sadness of the Gaze: *Barry Lyndon*," in *Stanley Kubrick: Essays on His Films and Legacy*, ed. Gary Don Rhodes (Jefferson, N.C.: McFarland & Co., 2008).

 $^{^{18}}$ The few times Barry does display emotion are during scenes of death, most notably with the death of Captain Grogan and the death of his son, Bryan.

close-up, which foregrounds the human subject, the reverse zoom slowly pulls back, revealing the network of which each human is a part. The human subject becomes static and small within the frame, and it is the embeddedness of the subject that is emphasized rather than a monadic individuality. To the extent that this creates a material-semiotic network of both human and nonhuman actants, the reverse zoom can be read here as performing a fundamentally posthumanist function, and, like Miriam Hansen's vernacular modernism, *Barry Lyndon* is speaking the language of vernacular posthumanism.¹⁹

The reverse zoom displays an ability to emphasize interconnectedness and networks rather than hierarchy and linearity, and the cinematographic move is repeated throughout the film: in a pastoral scene of a young Redmond Barry chopping wood; a melancholy scene of a lonely Lady Lyndon lying in a bath tub, surrounded by her French tutor and maid; a scene of a teenage Lord Bullingdon in the audience at Bryan's birthday celebration; and a scene with Barry discussing his entrance into the peerage. The repeated motif of the reverse zoom serves to reinforce the idea that subjectivity and consciousness arise within a network, effectively removing subjectivity from the individual and conceiving of consciousness as something we *do within the world* rather than something that arises in the individual.²⁰

A final scene from the end of *Barry Lyndon* illustrates how Kubrick's camera envisions the role of an actant within a network. After having been shot and maimed during a duel with Lord Bullingdon, which resulted in his leg being amputated, Barry is offered a deal by Bullingdon and Lady Lyndon, which stipulates that, in exchange for an annuity, Barry must leave England and never return. The scene shows Barry leaving his place of convalescence with his mother and entering a carriage. As Barry enters the carriage, Kubrick, in a breathtaking move, freezes the image, and Barry along with it. Viewed within the posthuman context of the reverse zoom, this still frame effectively freezes Barry within his network, stifling further movement of his subjectivity. Barry's network is

¹⁹ Hansen, "The Mass Production of the Senses."; Hansen, "Vernacular Modernism."

²⁰ See, for example, Merleau-Ponty, *Phenomenology of Perception*; Noë, *Out of Our Heads*.

dead, and as the epilogue to the film states: "It was in the reign of George III that the aforesaid personages live and quarrelled; good or bad, handsome or ugly, rich or poor they are all equal now." As *Barry Lyndon* demonstrates, the human is something that lives on only within its network. History flattens the subject and reveals the interdependence and coconstitutive nature of all posthuman quasi-subjects, and this is echoed in the effects of the reverse zoom, which serves to flatten the apparent depth of the image.



Figure 2.9: Freeze Frame

At first glance, it may seem like my claims can be fully accounted for and understood by theories of culture and ideology, as well as psychoanalysis, in that I am arguing that Kubrick is commenting on the power of society to mold the individual. It is a textbook example of structure/agent dialectic from Marxist ideological criticism. However, as the remainder of this chapter will argue, theories of the posthuman can reformulate and extend our understandings of the complex relationship between individual and context, subject and object, human and nonhuman.

Also important to this chapter's conceptualization of Kubrick's cinematic language of vernacular posthumanism is the importance of visuality and of pictures *as* theory. In this context, I am envisioning this chapter itself as a reverse zoom: I begin with small, concrete examples of vernacular posthumanism within a particular film from a specific director, and I "zoom out" from this example to expose the complex cultural networks of which the image is a part. My goal in beginning

with a "close-up" and moving out into a "long shot" is to illustrate the ways in which the various nodes of visual culture rhizomatically connect to form the web of visual expression I am terming vernacular posthumanism.

Vernaculars can be understood as a means by which popular culture does the work of (academic) critical theory, and they are the common language through which popular culture comments upon and makes sense of itself. Cultural vernaculars also bring to light the tensions between elite and popular forms of knowledge and the role of academia and the organic intellectual²¹ in the production of knowledge. As an example of an image vernacular, vernacular posthumanism is not articulated explicitly within contemporary visual culture – at least in a traditional academic form – but as with all forms of vernacular knowledge, it assumes a widespread, "taken for granted" legibility.²² Vernaculars, writes Cara Finnegan, are "grounded in a given rhetorical culture's implicit social knowledge."²³ What interests me is exactly this taken for granted aspect of vernacular posthumanism – its easy assimilation into popular visual culture – and it is my goal with this project to unpack the ways in which visual culture creates a vernacular theory of posthumanism and provides a companion language to the language of academic critical theory.

Following my discussion of image vernaculars in the Introduction to this project, I draw on the work of visual culture scholars who focus on technologies and processes of vision and the ways in which we are culturally taught to "see" and experience the world.²⁴ For Finnegan, image vernacu-

²¹ Antonio Gramsci, *Selections from the Prison Notebooks of Antonio Gramsci* (New York: International Publishers, 1971). See also, Andrew Ross, *No Respect: Intellectuals & Popular Culture* (New York: Routledge, 1989).

²² Vernaculars serve a dual function: that of a set of reading protocols for understanding popular theory as well as that of a lens through which one can make sense of popular theory. In other words, vernaculars function both epistemologically and ontologically in making sense of and creating popular theory.

²³ Finnegan, "Liars May Photograph," 97.

²⁴ See, for example, Jonathan Crary, "Techniques of the Observer," *October* 45(1988); Lorraine Daston and Peter Galison, "The Image of Objectivity," *Representations* 40(1992). There is also a connection to Thomas Kuhn here in that he claims that paradigms are the lens through which we see the world, and without paradigms – a kind of academic vernacular – knowledge is impossible. That is, knowledge needs a framework before it can become knowledge. Thomas S. Kuhn, *The*

lars crystallize our social relationship with images, and they reflect our historical and cultural beliefs as to the power of images: "Image vernaculars account for the persuasive impact of images but also our social knowledge about images." In her discussion of global vernaculars, Hansen also discusses the ways in which cinema, as a modernist art form, engages with the rise of commodity culture:

Film's technical ability to animate and foreground inanimate objects enabled it to explore their fetishistic power, to counter the abstraction of commodity capitalism with physiognomic expressiveness, or to enhance their physical opacity and alterity.²⁶

She continues:

What interests me in viewing these films is the extent to which, at the level of filmic representation, they gesture toward a modernist, non-anthropocentric aesthetics of contingency, even as they mobilize material objects to create pathos and critical reflection, in other words, to construct a space and time for spectatorial subjectivity.²⁷

Like W.J.T. Mitchell, Hansen is claiming that the vernacular modernism of cinema (filtered through the rise of finance capitalism) grants a subjectivity to objects and allows them to speak. Within this

Structure of Scientific Revolutions, 3rd ed. (Chicago: University of Chicago Press, 1996). For more on the relationship between vision, knowledge, and representation, see: Michel Foucault, "Las Meninas," in The Order of Things: An Archaeology of the Human Sciences (New York: Vintage Books, 1970); Michel Foucault, This is Not a Pipe (Berkeley: University of California Press, 1983); John Berger, Ways of Seeing (New York: Viking Press, 1973); Frantz Fanon, Black Skin, White Masks (New York: Grove Weidenfeld, 1991); Friedberg, Window Shopping: Cinema and the Postmodern; Martin Jay, Downcast Eyes: The Denigration of Vision in Twentieth-century French Thought (Berkeley: University of California Press, 1993); Elkins, The Object Stares Back; Brian Winston, Technologies of Seeing: Photography, Cinematography and Television (London: British Film Institute, 1996); Mirzoeff, An Introduction to Visual Culture; Sturken and Cartwright, Practices of Looking; Martin Heidegger, "The Age of the World Picture," in Off the Beaten Track (New York: Cambridge University Press, 2002); Akira Mizuta Lippit, Atomic Light (Shadow Optics) (Minneapolis: University of Minnesota Press, 2005); Iwan Rhys Morus, "Seeing and Believing Science," in ISIS: Journal of the History of Science in Society (2006); M. Norton Wise, "Making Visible," ISIS: Journal of the History of Science in Society 97, no. 1 (2006).

²⁵ Finnegan, "Liars May Photograph," 98.

²⁶ Hansen, "Vernacular Modernism," 290.

²⁷ Ibid., 291.

schema, humanity's monopoly on subjectivity is questioned, and objects are given equal existential presence.

Understood within this framework, Kubrick's films function as *metapictures*, and they comment on their status as pictures. As developed by W.J.T. Mitchell, metapictures are "pictures about pictures": they are self-referential images that comment on the nature of image production.²⁸ In that a metapicture "encapsulates an entire episteme, a theory of knowledge," it shares much in common with Finnegan and Hansen's conceptualization of an image vernacular.²⁹ Metapictures, within the framework of vernaculars thus far established, provide a particularly salient example of the image vernacular of a particular time and place. Kubrick's films are metapictures, and, as I discuss in this chapter, they provide a self-referential commentary on the nature of vernacular posthumanism.

The other important parallel between image vernaculars and metapictures is their cultural promiscuity and movability. Image vernaculars and metapictures are not subject to traditional disciplinary boundaries; they manifest themselves in all the crevices and interstices in which a culture makes itself visible. Any study of image vernaculars and metapictures must account for their slippery nature and their ability to inhabit all the spaces of visual culture. Traditional approaches to images – approaches that delineate according to medium, discipline, or subject matter – simply will not do. Image vernaculars, which function as a conduit through which images might "speak for themselves," demand a flexible theory, and a theory of vernacular posthumanism, which takes as symptomatic the contemporary attention paid to nonhumanist theories, can provide this flexibility.

Using a selection of Kubrick films – 2001, Barry Lyndon, The Shining, and Eyes Wide Shut – the first half of this chapter will demonstrate the extent to which Kubrick's films establish a vernacular posthumanism, one which traffics in a kind of popular understanding of the breakdown between subject and object, human and nonhuman, within popular visual culture. Extending the con-

²⁸ Mitchell, *Picture Theory*: 36.

²⁹ Ibid., 49.

cept of machine vision beyond the films of Stanley Kubrick, the second half of this chapter applies the theory of vernacular posthumanism to the BBC/Discovery Channel television mini-series, *Planet Earth* (Fothergill, 2006). Upon its release, *Planet Earth* was widely praised for its technological innovation and creative application of visual technology to nature documentary. The form and aesthetics of the series itself also displays a technological fetishism, effacing the traditional position of the "camera-as-proxy-for-human-hunter" and developing a technological expression of vision for its own sake. The result is an image so dense as to be impenetrable, one that approximates machine vision more so than human vision.

The chapter concludes with an examination of the Kubrick-produced, Steven Spielberg-directed *A.I.* (2001). This film is of particular interest because it combines the posthumanist aesthetic tendencies of Kubrick with the humanist aesthetic tendencies of Spielberg. *A.I.* creates a dialectical image that contains both "Kubrick-as-ultimate-posthumanist" and "Spielberg-as-ultimate-humanist," and it is in the conflict between the two styles that we can see the machinery behind the vernacular.

2.1 The Machine Vision of Vernacular Posthumanism

Among other things, *The Shining* (1980) is remembered for its innovative use of the Steadicam, which was, at that time, a relatively new filmmaking technology. Kubrick deployed the camera in order to facilitate the filming of narrow, maze-like hallways and corridors, spaces that cannot be adequately mapped and filmed with traditional camera-and-dolly setups. Perhaps the most famous examples of the use of the Steadicam in the film are the scenes in which the camera follows Danny (Danny Lloyd) as he rides around the Overlook Hotel on his "Big Wheels" tricycle. Kubrick shoots these scenes with the Steadicam a few feet directly behind Danny, and the camera is positioned about two feet from the floor, around the height of Danny's head as he sits on the tricycle. *The Shining* presents a supernatural horror story, and the disembodied, otherworldly feel of the Steadicam

matches the content of the film.³⁰ The image produced by the Steadicam functions within the film as a ghostly watcher, silently observing and following the characters within the film without their notice or acknowledgement.³¹ The image form created by the camera is emphatically *not* invisible, which produces a phenomenological feel and tactility to Kubrick's cinematography within *The Shining*. The camera itself becomes the arbiter of vision within the film.



Figure 2.10: The Shining's Steadicam

Contrast this with the camerawork in *2001: A Space Odyssey* (1968). Within this film, the camera functions as a dispassionate and static viewer, one that observes the humans in the film from afar, biding its time until a situation arises that facilitates intervention. *2001* enacts machine vision on two levels. On a surface level, the POV of the HAL 9000 computer – which oversees and runs all of the operations of *Discovery One* spacecraft – pervades both the mise-en-scène and the cinematography of the film.³² HAL's red eyes are ubiquitous throughout the ship, and they serve as

³⁰ Juhani Pallasmaa argues that *The Shining* is organized around space and architecture, both physical and mental. The film presents space as fundamentally unmappable, which reflects both the complexity of the narrative as well as the devolving mental state of Jack Torrance (Jack Nicholson), the primary character of the film. Kubrick's filming of the Overlook Hotel presents a space that is physically impossible and can only exist within the context of the film world. Juhani Pallasmaa, "Monster in the Maze," in *The Architecture of Image: Existential Space in Cinema* (Helsinki: Rakennustieto, 2007).

³¹ This could be said about any traditional narrative film, in that the camera acts as a silent observer. However, the *form* of the image, which is hypersmooth and has the appearance of floating, contradicts the traditionally invisible camera of mainstream filmmaking and positions the camera as a character and interloper within the film.

³² Ellis Hanson "queers" this kind of machine vision and perspective, and he explores the connections between homosexual panic and the kinds of paranoia surrounding machine subjectivity. Ellis Hanson, "Technology, Paranoia and the Queer Voice," *Screen* 34, no. 2 (1993).

both an interface with which the humans onboard the vessel can communicate with HAL and as a mechanical embodiment of Bentham and Foucault's Panopticon.³³ Kubrick also frequently uses POV shots to facilitate a shared experience with HAL's mode of vision. Frequently, these shots are distorted in some way – usually through the use of an extreme wide angle or "fish eye" lens – which attempts to approximate the way in which HAL "sees" the world.

These types of cinematographic techniques, however, are standard practice in mainstream narrative filmmaking, and on this surface level, 2001 follows the trend of using POV and "subjective" shots in order to alienate and cause discomfort in the viewer through an alignment with a mechanical or monstrous other. Opposing the POV shots of film with the "first person" viewpoints of videogames, Alexander Galloway writes that: "In film, the subjective perspective is marginalized and used primarily to effect a sense of alienation, detachment, fear, or violence, while in games the subjective perspective is quite common and used to achieve an intuitive sense of motion and action in gameplay." Later, he continues:

Where film uses the subjective shot to represent a problem with identification, games use the subjective shot to *create* identification. While film has thus far used the subjective shot as a corrective to break through and destroy certain stabilizing elements in the film apparatus, games use the subjective shot to facilitate an active subject position that enables and facilitates the gamic apparatus.³⁵

While I do not wish to discuss 2001 in terms of videogame aesthetics and phenomenology at this juncture, Galloway's descriptions are instructive. 2001 surely uses many of the classical film techniques Galloway discusses. However, 2001, like *Barry Lyndon*, also employs the camera itself as a third, independent seeing body, and this mechanical body shares much in common with the videogame experience described by Galloway.

³³ Michel Foucault, *Discipline and Punish: The Birth of the Prison*, trans. Alan Sheridan (New York: Vintage Books, 1995).

³⁴ Galloway, *Gaming*: 40.

³⁵ Ibid., 69.



Figure 2.11: 2001's Machine Vision

2001 features many shots of HAL watching the crewmembers of *Discovery One*. In the final scene of the first act, where Drs. Bowman and Poole (Keir Dullea and Gary Lockwood) relocate to a soundproof space pod in order to discuss a malfunctioning HAL, Kubrick positions the camera so that Bowman and Poole occupy the left and right foreground of the frame while the red eye of HAL occupies the exact center of the background. The effect creates a scene of the camera watching HAL watching. This also creates the effect of a cold machine vision, apart from that of HAL occupying the space of the film. The aesthetic of 2001 as a whole, which consists of many static camera shots, evokes the "mechanical objectivity" prized by early theorists and practitioners of photography.³⁶ Within this schema, the camera acts almost independently of the human user, simply and objectively capturing the world without human intervention or interpretation. 2001 echoes this attitude toward photography, positioning the camera as a dispassionate observer, free from human meddling.³⁷

The mise-en-scène of the film, and well as its thematic concerns, also serve to decenter human agency and perception. The narrative of the film – which addresses large existential questions

³⁶ Daston and Galison, "The Image of Objectivity." See Chapter Three for a more robust discussion of mechanical objectivity.

³⁷ To be sure, the film also contains the bravura camerawork of all of Kubrick's films. *2001*, however, and perhaps due to its employment of a bulky *Cinerama* camera rig, is less kinetic and mobile than other Kubrick films, and the compositions and cinematography prize stillness over motion.

such as technological and species "progress," the existence of nonhuman intelligence, and the nature of the soul, among others – could broadly be termed posthuman, in that it envisions a world in which human subjectivity and intelligence is only one of many, and the film ends in a literally posthuman fashion with Dr. Bowman transcending his human form and becoming the "star child."

2001's mise-en-scène is also posthuman, in the sense that humans and our pre-human ancestors are presented as fragile in comparison to the vastness of nature and space. Near the beginning of the film, the pre-human hominids are positioned within the frame as small within the context of the natural world, and they are under constant threat from marauding predators. Even when these hominids evolve into space-faring humans, the humans remain small within the infinity that is outer space. In 2001, humans are merely one piece of the network of existence, and we are a small piece at that.

Kubrick continues speaking the language of vernacular posthumanism in his 1999 film, *Eyes Wide Shut*, which, though it deals with the conventional humanistic concerns of dreams, psychoanalysis, sex, and love, deploys a machine vision that subtly undercuts and contradicts the presentation of the narrative on screen, mostly through violations of the 180-degree rule. Because this particular example of vernacular posthumanism stretches the definition of vernacular as I have previously defined it, further clarification of the concept is necessary. Within Cara Finnegan's framework of image vernaculars, "image" refers both to the objects of visual culture – photographs, films, etc. – as well as to personal and cultural imagination and beliefs regarding images and how they function. Thus, images exist on both an actual and virtual level. "Vernacular," for Finnegan,

refers to a mode of common or localized expression used in particular places or during particular historical periods. Vernacular connotes not only the everyday, the common, or the colloquial (the word's typical adjectival synonyms) but also, when used as a noun, their ex-

³⁸ In classical narrative film production, the 180-degree rule is an informal practice whereby, in order to maintain a cohesiveness of diegetic time and space, the camera remains in front of the action and never crosses the 180-degree line separating front and back. Crossing this line would cause the images on screen to appear as the reverse of the previous shot.

pression...My use of *vernacular* is meant to signal such common, localized communication practices. Thus an image vernacular is a rhetoric that taps into the historically specific ways we imagine images; these ways emerge from the visual conventions and beliefs we absorb into our knowledge and experience. Image vernaculars can be about many topics...but what makes them image vernaculars is that they are also arguments about our experiences of images.³⁹

Vernaculars are therefore not merely common or popular way of speaking about images. They are complex negotiations of both cultural imagination and personal experience, and they speak both through and to us about our understanding of visual culture. As I contend regarding Kubrick and posthumanism, Kubrick's deployment of the language of vernacular posthumanism – in both his filmic style and thematic concerns – pictures our cultural imagining of the relationship between human and nonhuman, culture and nature. And in the particular case of the 180-degree rule in *Eyes Wide Shut*, even though viewers may not consciously register the violation, the violation "feels" wrong, and it registers on a visceral level.⁴⁰ Thus, the vernacular posthumanism deployed in *Eyes Wide Shut* speaks to a discomfort in decentering the human, a discomfort that accompanies much of the rhetoric following the genomic and informational revolutions.

Eyes Wide Shut, Kubrick's final film, confronts the difficulties of sustaining a marriage and the role that fantasy plays in constructing reality. The film's motivating premise begins when Alice (Nicole Kidman) tells her husband, Bill (Tom Cruise), about a moment where she contemplated cheating on – and ultimately leaving – Bill and their daughter, Helena (Madison Eginton). In Alice's story, she details a fantasy she constructed about a naval officer, whom she merely espied across a dining room, in which they have a passionate affair and run away together. As Alice states, she "was ready to give up everything" for one night with the officer.

³⁹ Finnegan, "Liars May Photograph," 97.

⁴⁰ For a discussion of our visceral connection with film, see: Barker, *The Tactile Eye*.

This interplay between fantasy and reality structures the entirety of the film, and Kubrick constructs the film in such a way as to make it difficult to ascertain whether what we are seeing on the screen is "actually" happening or only happening in the mind of a character (usually Bill).⁴¹ One way the film signals a shift between the registers of fantasy and reality is by means of a violation of the 180 degree rule. This deployment of cinematic form lends a materiality to the fantasies being portrayed on screen and calls to attention the apparatus of the film camera and its mode of machine vision.

Eyes Wide Shut begins with Alice and Bill preparing for a party at the home of their friend, Victor Zeigler (Sydney Pollack). Once they arrive at the party, Bill discovers that his old friend, Nick Nightingale (Todd Field), is playing piano in the party band. Alice and Bill then split up, leaving each to become entrenched in their own fantastic scenarios. Alice, who is by this point a little tipsy, heads to the bar where she begins a conversation with a wealthy Hungarian man, Sandor Szavost (Sky du Mont). Sandor oozes gentlemanly charm, and he promptly begins hitting on Alice. Kubrick frames the scene with a static camera placed directly behind Alice and Sandor. Their backs are to the camera – Alice on the left and Sandor on the right – and it is at this point that Sandor picks up Alice's champagne glass and proceeds to drink the entirety of its contents. After draining the glass, introducing himself, and kissing Alice's hand, Kubrick abruptly cuts to the opposite side of the characters. The camera is now a little tighter, but it is still static and at roughly the same level, framing the characters from the waist up. Alice and Sandor, however, now occupy different sides of the screen – Alice is on the right, Sandor on the left. The cut is quite abrupt and noticeable, if only at an unconscious level, for even those viewers unaware of the conventions of filmmaking and the 180

⁴¹ Kubrick uses a similar conflict between "reality" and "fantasy" in *Barry Lyndon*. The film features voiceover narration throughout, and this narration frequently features content that we, as viewers, already know or that directly contradicts what we are seeing on screen. See: Thomas Allen Nelson, "A Time Odyssey: *Barry Lyndon*," in *Kubrick: Inside a Film Artist's Maze* (Bloomington: Indiana University Press, 2000).

 $^{^{42}}$ I won't be discussing Bill's scenario here, but he ends up tending to a model, who has overdosed on drugs while having sex with Zeigler. This, after having been hit on by two other random models who were also at the party.

degree rule. The cut also signals the shift into a register of fantasy, a realm that we can only experience through the "magic" of the machine apparatus of filmmaking. In this sequence Alice and Sandor openly flirt, discussing the poet Ovid and then dancing together while Sandor questions Alice's choice to remain married, asking: "Don't you think that one of the charms of marriage is that it makes deception a necessity for both parties?" While Alice and Sandor are dancing, the scene is repeatedly intercut with images of Bill flirting with two models. These two sequences convey the respective fantasies of Alice and Bill, and they are all signaled with a violation of the 180 degree rule.



Figure 2.12: Alice and Sandor #1



Figure 2.13: Alice and Sandor #2

This violation happens again toward the middle of the film when Bill is in a costume shop, hunting for an outfit to wear to a secret, invitation-only masked orgy. In this scene, Kubrick positions the camera in a similar fashion to that of the previous scene: the camera is static, waist high, and in a medium close up, and Mr. Milich is on the right, while Bill is on the left. The owner of the shop, Mr. Milich (Rade Serbedzija) is discussing his hair loss with Bill when Kubrick abruptly cuts, violating the 180 degree rule – Bill is now on the right of the screen while Mr. Milich is on the left. This, again, signals a shift into Bill's fantasy, and the two characters are framed by a large neon sign

reading "Rainbow." Mr. Milich thinks he hears something in the "Rainbow Room," and Bill and Milich enter the room where they discover Milich's teenage daughter (Leelee Sobieski), in her bra and panties, fooling around sexually with two older men wearing women's wigs. Milich, screaming, drives the men out of the room, and his daughter runs to Bill for protection. They provocatively exchange some glances while the daughter whispers in Bill's ear and seductively walks away. Comically, Mr. Milich apologizes to Bill and continues trying to find a costume. The ridiculousness of this scene, combined with the shift in tones from comedy to a scene of pedophilia, indicate that we have entered into Bill's fantasy.



Figure 2.14: Bill and Mr. Milich #1



Figure 2.15: Bill and Mr. Milich #2

A final violation of the 180 degree rule occurs while Bill is at the orgiastic ritual party. He is being led through the mansion by a topless, masked woman, and during the course of the "tour," the model stops Bill to warn him about his intrusion into the secret ritual. As with the previous scenes I have describe, Kubrick frames this scene in a similar fashion: static camera, middle close-up, the model on the left and Bill on the right. After the model says to Bill, "you are in great danger," Ku-

brick cuts to the opposite side of the screen, framing Bill on the left and the model on the right. After this occurs, Bill begins to walk unaccompanied through the mansion, witnessing a plethora of sex acts taking place in different rooms. As indicated by the violation of the 180 degree rule, Bill has entered into a space of fantasy, and while the orgy might actually be taking place, Bill's perception of danger is a part of the fantasy.



Figure 2.16: Bill and Model #1



Figure 2.17: Bill and Model #2

Ultimately, the separation of fantasy and reality becomes impossible, as they become intertwined to the point where the effects of the fantasy begin to bleed out into the reality experienced by the characters. In this way, the film functions explicitly like a waking, lucid dream, and neither the characters nor the viewer of the film can really ascertain what is taking place in reality and what is taking place in the realm of fantasy. The agency of the camera, however, offers a clue as to the shift in registers, and its positioning as a dispassionate, "objective" viewer provides a different vantage through which to view the film. As I will discuss in the next section of this chapter, machine vision is frequently constructed culturally as a means to leave the confines of the human body, a

desire that images an amaterial utopia in which information can freely flow between widely disparate mediums.

2.2 Planet Earth's Technological Fetishism: High Definition Disembodiment

About thirty-five minutes into the "Shallow Seas" episode of The Discovery Channel's (TDC) groundbreaking nature documentary series *Planet Earth* (2006),⁴³ viewers are treated to the kind of visual spectacle that has become the primary selling point of the series. In this scene, captured with an ultra-slow motion High Definition (HD) camera, a great white shark is shown fully breaching the surface of the water, its entire body suspended in mid-air. The one-ton great white shark, the largest predatory fish on the planet, is hunting cape fur seals who are making their daily journey to the open sea on a quest for fertile hunting grounds. As the seal surfaces, the image slows, and the great white's mouth breaks the surface of the water. In a frenzy of splashing water – a frenzy, that is, in stillness – the shark's mouth engulfs the seal's body, and the shark's body, twisting and

⁴³ Planet Earth was released in 2006 in the UK and included narration by renowned British naturalist and documentarian David Attenborough. The series was released in the U.S. in 2007 and included re-dubbed narration by actress Sigourney Weaver. Planet Earth consists of 11 episodes, and each hour-long episode focuses on a specific habitat. The first episode, "Pole to Pole," ties all of the habitats together. The other episodes have the titles of: "Mountains," "Deep Ocean," "Deserts," "Ice Worlds," "Shallow Seas," "Great Plains," "Jungles," "Fresh Water," "Forests," and "Caves." The entire series took five years to film, and each episode cost an estimated \$1-2 million dollars, a substantial investment for the BBC and DCI [Glen Dickson, "Discovery's New View of Nature. (cover story)," Broadcasting & Cable 137, no. 12 (2007): 26.]. To capture the desired footage, 40 different film crews visited over 200 locations worldwide, often waiting months before they were able to film their elusive subjects [Mark R. Smith, "BBC/Discovery Channel's Planet Earth Series," in Mix (Penton Media, Inc., 2007), 54.]. Planet Earth was also a huge success with both critics and audiences. According to the entry form submitted to the Peabody Awards, Planet Earth was the highest rated natural history program of all time and, excluding sports and other "special events," the series was the most watched cable program of all time, netting a total of 65 million viewers over the run of the series and averaging 5.1 million viewers for each episode premiere. Additionally, Planet Earth won four Emmys, was nominated for another three, and was honored with a Peabody Award ["Peabody Awards Entry - Planet Earth," (Athens, GA: Peabody Awards Collection, 2007).]. And, perhaps most significant and important of all, *Planet Earth* earned the support and adoration of Oprah Winfrey, who dedicated an entire episode of her show to discussing the importance of the series. The production team behind *Planet Earth* has gone on to produce *Frozen Planet* (2011), which employs much of the same fetishism of technologies of vision as *Planet Earth*.

thrashing, eventually exits the sea entirely, its body hovering over the surface of the water. This spectacle, which is typical to the style of *Planet Earth*, unfolds in ultra-slow motion HD, allowing every drop of water, every twitching fin, to be recorded in stunning HD quality. To capture this image, the filmmakers used a modified studio camera that is normally used to analyze car crash safety tests, and according to *Planet Earth Diaries* (the ten-minute "making of" vignette at the end of each episode of *Planet Earth*), the action of the scene took only one second of real time, but was slowed down to forty seconds of film time. This emphasis on technology, visuality, and style forms the primary aesthetic organizing principle of *Planet Earth*. This technological fetishism also invokes the kinds of posthumanist thinking that imagine the replacement of the organic human body with that of a mechanically- and informationally-altered body. In the case of *Planet Earth*, what is imagined is a kind of all-seeing mechanical eye, a form of vision that augments and surpasses human vision in order to render new mechanical ways of seeing.



Figure 2.18: Great White

As with the films of Stanley Kubrick, *Planet Earth* employs machine vision as a dialect of vernacular posthumanism. According to Cara Finnegan, image vernaculars not only reflect on what we see but also instruct us in particular modes of vision:

We perform the social knowledge in image vernaculars implicitly through everyday experiences of life in our visual cultures. Such experiences not only give us things to look at, they also teach us how to see.⁴⁴

In the case of *Planet Earth*, what is being taught is an approach to seeing that decenters the human and emphasizes the role of technology and the machine. The apparatus of filmmaking – here, the camera technology and HD video recording – becomes fetishized, and through this process it surpasses its role as simple tool and becomes an almost equal actant in the material-semiotic network that coalesces around the object of *Planet Earth*.

As image vernaculars result from the imbrication of a cultural logic and a particular set of media objects, the promotional rhetoric surrounding *Planet Earth* can be instructive in teaching us the ways in which the image vernacular through which we can read the series became posthuman.⁴⁵ Filmed completely in HD, *Planet Earth* ambitiously set out to capture the natural world in way that was (implicitly) intended to transform the relationship between humans and mediated representations of the natural world. As Katherine Nelson, Vice President of Communications for Discovery Channel, stated in her letter of submission to the Peabody Awards:

PLANET EARTH is natural history for the 21st century. The goal of the epic HD series reached beyond the benchmark of great television to inspire viewers to appreciate and care for their world. Developed from founder John Hendricks' vision, the series presents our world as it has never been seen before, and considering current climate data, may never be seen again. It wasn't enough simply to construct a beautiful series; Discovery and the BBC knew they were capturing a moment in Earth's history that would be preserved forever.

Producers were careful to include endangered species and habitats that are on the verge of extinction.46

⁴⁴ Finnegan, "Liars May Photograph," 98.

⁴⁵ This sentence is a play on Hayles, *How We Became Posthuman*.

^{46 &}quot;Peabody Awards Entry - Planet Earth."

As this statement demonstrates, TDC views *Planet Earth* as groundbreaking not only in terms of the technologies of its production but also in terms of the ways in which it reconfigures the relationship between viewer and image, human and nature. Primary to both of these claims is the technology of HD, which, within the marketing and publicity rhetoric surrounding *Planet Earth*, serves to differentiate the documentary from its forebears, provide a new and improved means of capturing the world with imaging technology, and bring the viewer into a closer relationship with the image and with the animals, plants, and environments depicted within the image.

Image quality and film technology were *Planet Earth*'s selling points, and both the marketing rhetoric of TDC and the journalistic discourse surrounding the series supports this claim. As an adoring commentator from *Home Theater* states about the series:

The 1.78:1 anamorphic image reminds us of the often staggering beauty of our diverse world. It's mildly compromised by a bit of compression artifacting upon a patch of foliage in the distance or a rainbow in the mist. The colors and textures of beasts both strange and familiar are a revelation at such clarity, while the almost throbbing greens of grass and trees fairly scream to save them from the relentless ravages of man. The more intimate underwater segments, meanwhile, can sometimes play like you're looking through the glass of an aquarium and not the TV screen. And what could be purer than high definition from outer space? Some of the more demanding scenes were not recorded at true HD quality, and you can sometimes tell the difference between the high and standard def, but it's usually nothing too jarring.⁴⁷

HD technology, as conceived of in this quotation, almost literally brings the images to life – the quality of the image is almost good enough to stand in for the real thing, and the HD image attains an almost transcendental, cosmic purity. And though the representations of the natural world are sometimes not perfect replicas, whether through the menace of artifacting or the sin of standard

⁴⁷ Chris Chiarella, "Old Planet. New Cameras," *Home Theater* 14, no. 8 (2007): 102.

def, the overall picture of the planet that *Planet Earth* constructs is close enough to substitute for physically experiencing the habitats documented by the series. The statement above is emblematic of much of the discourse surrounding the series, and it implicitly points to a very specific conceptualization of the relationship between technology and the experience of the natural world. Visual technologies, like that of HD, have the ability to (re)construct the ways in which the world, through mediated representations, is experienced. The framework established by this kind of rhetoric relies on a Cartesian perspective of the world, one which separates perceiver from perceived, subject from object, human from nonhuman. What this ignores is the network of actants upon which any experience is predicated, and it relies on an idea of visual mastery – and the mastery of vision – in order to separate subject from object. The dialect of vernacular posthumanism spoken by *Planet Earth* is thus one closer to that of transhumanism that than of philosophical posthumanism, in that it happily relinquishes human vision to that of machine vision without accounting for the complexity of the cultural logic and network of which it is a part.

The technological discourse surrounding the production of *Planet Earth* also reveals the popular conception of HD as a technology that extends vision, and this discourse exhibits a fetishism regarding the ability of technology to reconfigure structures of vision. According to the Peabody submission materials, the producers of *Planet Earth* either invented or redesigned various forms of filmmaking technology in order to capture the mysterious and hidden wildlife featured in the series. Among the technological innovations are such filming devices as the Cineflex heligimbal (a stabilizing system with a powerful zoom lens mounted to a helicopter), low-light HD cameras, ultrahigh speed HD cameras, tracking systems, and deep-sea time-lapse photography.⁴⁹ These visual technologies, at least within the rhetoric of *Planet Earth's* marketers, were the selling point for the series, and *Planet Earth* became as much about the wildlife captured in the series as it was about

⁴⁸ Maurice Merleau-Ponty, "Eye and Mind," in *The Primacy of Perception, and Other Essays on Phenomenological Psychology, the Philosophy of Art, History, and Politics* (Evanston, Ill.: Northwestern University Press, 1964).

⁴⁹ "Peabody Awards Entry - Planet Earth."

the technologies used to film that wildlife. In fact, at the end of each episode, there is a ten-minute vignette called *Planet Earth Diaries*, which gives a behind-the-scenes look at the difficulties of filming that particular episode. The surface narrative of *Planet Earth* – the "story" of the wildlife – is thus accompanied by another sub-narrative – that of the technology and trials of filming the series. Katherine Nelson describes the series within a similar framework: "A technological marvel, the series employs new filmmaking techniques to put wildlife into context with the epic landscape where it lives, for the first time." ⁵⁰ In this way, HD and other visual technologies become the co-stars of the wildlife presented in the series, and the technology allows viewers to see wildlife in its "context," a context largely constructed by the technology itself.

It is important to note that technological fetishism, particularly in the realm of visual communications technologies, is nothing new, and, as Brian Winston points out in *Technologies of Seeing*, film and television producers, for various economic, industrial, and social reasons, have used visual technologies as a means of selling their product. John Caldwell, speaking of television aesthetics, calls this emphasis on technology and style "televisuality," and he claims that style itself has become one of the major organizing principles of both television networks and television programming. Thus, my argument concerning HD and *Planet Earth* does not claim to be revealing anything radically new about media technologies or the utopian discourses that tend to surround such technologies. Rather, my goal is to use one contemporary use of HD technology as a means of illuminating the ways in which that technology supports historical interpretations of film and television technology in fundamentally visual (and implicitly Cartesian) ways. *Planet Earth* serves as a signal example of contemporary usages of HD not only because of its innovative utilization of the technology but also because of its claims to be remapping (and therefore remaking) the relationship between human and nature.

⁵⁰ Ibid.

ibiu.

⁵¹ Winston, *Technologies of Seeing*.

⁵² John Caldwell, *Televisuality: Style, Crisis, and Authority in American Television* (New Brunswick, N.J.: Rutgers University Press, 1995). 4-5.

As Donna Haraway writes, "map-making is world-making...Cartographic practice inherently is learning to make projections that shape worlds in particular ways for various purposes. Each projection produces and implies specific sorts of perspective."53 The map of the world created by the filmmaking machinery of *Planet Earth* relies on a Euclidean model of subjectivity, which conceptualizes vision as a colonizing force, able to tame and domesticate that which it sees.⁵⁴ From this perspective, *Planet Earth* positions the human as the hunter, using HD technology to reveal that which was previously unseen. One of the most utilized cinematographic techniques in *Planet Earth* is the long tracking shot, and within the diegesis of the series, this is the colonizing shot par excellence. A particularly striking (and typical for the series) tracking shot is included in the "Forests" episode. Beginning at the base of a California giant sequoia, the camera slowly tracks up the length of the tree's trunk. Rather than providing a holistic view of the tree, however, the camera frames the tree in a medium close-up, granting just enough distance to see the width of the trunk. Through this tracking technique (which is, from a technical perspective, amazing, as the camera is performing a vertical tracking shot over hundreds of feet within a dense forest), the camera is mapping the trunk of the tree in a way that is most closely akin to the ways in which Hollywood cinema maps the legs of women. In other words, *Planet Earth* is relying on the same colonizing cinematic look to map nature as Hollywood cinema uses to map bodies.⁵⁵ Whether it is the trunk of a tree, the craggy face of a rocky outcrop, or an enormous mound of bat guano, the tracking shots of *Planet Earth* construct nature as something to be mapped and colonized through the mastery of vision.

The conceptualization of mastery-through-visual mapping also has close ties to epistemological frameworks of knowledge-through-surveillance. HD, by providing a cleaner, denser image of

⁵³ Haraway, *Modest_Witness*: 132.

⁵⁴ Massumi, *Parables for the Virtual*.

⁵⁵ I am resisting the use of "female bodies" here because the leering look of Hollywood cinema is reserved not only for women; as I have argued elsewhere, the camera colonizes male bodies using many of the same techniques as it uses to colonize female bodies, specifically when filming the hardbodies of 1980s male action stars. Drew Ayers, "Bodies, Bullets, and Bad Guys: Elements of the Hardbody Film," *Film Criticism* 32, no. 3 (2008).

higher resolution, allows the camera to look more closely at nature, creating a more detailed map of the surface of the world. Lisa Parks, discussing remote sensing (satellite) television technology, argues that:

Remote sensing is related to the televisual, then, for it involves practices of seeing and knowing across vast distances and can powerfully shape our worldviews and knowledges of global conflicts, histories, and environments.⁵⁶

Parks, like Haraway, is viewing visual technologies as fundamentally epistemological systems – they create the knowledge and objects they purport to be merely capturing. She continues:

The televisual is an epistemologic system that intersects with and permeates various forms of knowledge and power, especially those of scientific fields that pride themselves on masterful seeing and knowing the world from a distance.⁵⁷

Parks views the earth as a text, and visual technologies give the impression of operating as a Rosetta Stone, merely translating the language of the natural world rather than actively creating that language.⁵⁸

"Seeing and knowing the world from a distance" is the primary function of surveillance technologies, and in a sense, the filmmaking technology – and the rhetoric that frames this technology – of *Planet Earth* is functioning as an eavesdropper on the natural world. Aside from the many war stories recounted in *Planet Earth Diaries* about film crews hiding out for months waiting to capture the activity of a particular animal, the very technology utilized for many of the aerial tracking shots was explicitly designed for surveillance. The Cineflex heligimble stabilizing system, as described by the producers, is:

⁵⁶ Lisa Parks, *Cultures in Orbit: Satellites and The Televisual* (Durham: Duke University Press, 2005).

^{4.}

⁵⁷ Ibid., 117-18.

⁵⁸ Ibid., 114.

a revolutionary new aerial photography system that stabilizes a very powerful lens to film animal behavior from the air as never before seen...[It was] used by the police, the military and some news organizations but never before in a wildlife film.⁵⁹

Visual mastery is thus inscribed into the very technology used to film *Planet Earth*; however, this purely visual framework leaves much to be desired, and *Planet Earth*'s mapping schema operates on levels other than the human optic. I have discussed the visual mapping strategies of *Planet Earth* at length because this is the most conventional way in which filmed images have been understood; I now intend to complicate that reading by accounting for the intersensorial experience of *Planet Earth* as well as the nonhuman, machinic experience.

Visual maps are very logical. Based in rational, predictable Euclidean geometry, visual maps correspond quite nicely to human-based cognitive perceptions of the world. That is, they just plain make sense. However, as decades of psychoanalytic theory have shown, human beings are far from rational creatures who are in complete control of their cognitive activities. Also, as Brian Massumi has insightfully pointed out, our cognitive maps are always already imbricated with our synaesthetic experiences:

It is very uncommon, a limit-case rarely attained, that we carry within our heads a full and accurate map of our environment. We wouldn't have to carry maps on paper if we had them in our brains. No matter how consciously overcoding we like to be, our mappings are rid-dled with proprioceptive holes threatening at any moment to capsize the cognitive model...No matter how expert or encompassing our cognitive mapping gets, the monstrous sea of proprioceptive dead reckoning is more encompassing still.⁶⁰

Visual maps, such as those created in *Planet Earth*, serve as overcodings in that they attempt to replicate the experience of space on one sensual register. Maps, however, are never purely visual, and

⁵⁹ "Peabody Awards Entry - Planet Earth."

⁶⁰ Massumi, *Parables for the Virtual*: 181.

sensual experience must also supplement the maps – they must necessarily be understood phenomenologically.

Massumi serves as a guide through this phenomenological terrain, and he conceptualizes movement and mapping as existing on two registers: the virtual – a synaesthetic movement through non-Euclidean space; and the actual – a cognitive movement through Euclidean space. Cognitive movement is the type of movement that I discussed previously; it is based in a Cartesian framework of the subject's mastery over the world through vision. Synaesthetic movement is more difficult to discuss, particularly in regards to moving images, which are conventionally viewed through optic perspectives or, occasionally, sonic perspectives. In the next section, I will discuss the ways in which the HD images of *Planet Earth* initiate virtual synaesthetic movement, but a few words about Massumi's mapping strategies are first necessary.

Massumi, following Gilles Deleuze, views experience as the constant folding together of the actual and the virtual, the cognitive and the synaesthetic, the past, the present, and the future: "Where we go to find ourselves when we are lost is where the senses fold into and out of each. We always find ourselves in this fold in experience." The actual is the realm of molar bodies, of cognitive and Euclidean space. The virtual is a realm of pure potentiality, of sensual and non-Euclidean space. It is a place where affects and intensities create an indeterminate space, where the past, present, and future exist simultaneously. The virtual, while it is not "real" in the sense of something concrete and molar, nevertheless has implications for the actual. Potentialities are experienced molecularly in the virtual but made real within the actual. Experience is thus unstable, a hallucination, and our perspective of the world is perpetually shifting between and throughout the actual and the virtual. Thus, purely optic theorizations of HD cannot possibly fully account for its phenomenological ef-

⁶¹ I take up this thread of the actual and the virtual in more detail in Chapter One.

⁶² Massumi, *Parables for the Virtual*: 182.

fects; a more synaesthetic approach is needed, and in the following section, I will address how that might be achieved.⁶³

2.3 Machinic Synaesthesia and The Phenomenology of HD

High Definition television (HDTV) is commonly discussed not only in terms of its technology but also in an ad hoc phenomenological way. Most typically, the experience of viewing an HD image is understood as something that is "hyper-optic," something that increases immersion within the image through increased visual quality. The quality of the image is perceived as something that allows the viewer to completely lose him/herself within the image – something approaching Bazin's notion of "the myth of total cinema." ⁶⁴ However, some of the discourse expresses an interest in the ways in which the HD images of *Planet Earth* can also evoke bodily responses in the viewer. As one commentator notes:

Planet Earth certainly excites a wealth of visceral responses as well. Cute things romp. Monstrous things chomp. Inevitably, because nature is more bloody-minded than fair, the cute gets chomped by the monstrous. And as the backdrop to all the struggle, there's always the Northern Lights or the vast expanse of Antarctic ice to make the observer feel at once a part of the tableau and yet wholly alien to the scene and what takes place there.⁶⁵

⁶³ For more on synaesthesia, see: John Harrison, *Synaesthesia: The Strangest Thing* (New York: Oxford University Press, 2001); Massumi, *Parables for the Virtual*; Steve Connor, "Intersensoriality: A Talk Given at the Conference on The Senses, Thames Valley University, 6 February 2004," http://www.stevenconnor.com/intersensoriality/; Michel Serres, *The Five Senses: A Philosophy of Mingled Bodies*, trans. Margaret Sankey and Peter Cowley (New York: Continuum, 2008).
64 By invoking Bazin here, I do not mean to indicate that he adhered to a naïve sort of photographic and filmic realism. Rather, my aim is to utilize his critique of the "myth of total cinema" and bring it to bear on my own commentary regarding HD. As contemporary scholarship on Bazin has demonstrated, his theories of realism are far more nuanced than that established within the vernacular of classical film theory. See: Dudley Andrew and Herve Joubert-Laurencin, eds., *Opening Bazin: Postwar Film Theory & its Afterlife* (New York: Oxford University Press, 2011).
65 Anthony Crupi, "Spending over \$25 million PHD," *MediaWeek* 18, no. 24 (2008).

While this commentator does not engage with the phenomenological experience of viewing HDTV in a sustained theoretical way, he does note the bodily effects of HDTV on the viewer. Especially noteworthy is Crupi's recognition that the visceral responses evoked by *Planet Earth* have a dual, and contradictory, effect. On the one hand, the images make the viewer feel "a part of the tableau," and this is consistent with most popular commentary on HDTV – the images embrace the viewer and fold him/her into the image. On the other hand, the HD images make the viewer feel "wholly alien to the scene," which demonstrates the distancing effect of HDTV – the images are, quite literally, stunning. The ability of HDTV to simultaneously immerse and distance the viewer from the image is something I will take up shortly and in more detail.

Like most new technologies, HDTV also has its utopian proponents, those who speak to HDTV's radical potential to transform society. In the context of *Planet Earth*, much of the emphasis (and hyperbole) concerns the ability of the series to not only bring humans into a closer relationship with nature but also to bring humans closer to other humans. Two comments are exemplary of this. The first comes from Stephanie Meeks, President and CEO of the Nature Conservancy, who wrote a letter of recommendation to the Peabody Awards, encouraging them to honor *Planet Earth* with a Peabody. In her letter, she claims that *Planet Earth* exhibits "excellence" because: "The series brought nature closer to people around the world through its stunning and vivid cinematography of Earth's ecological diversity." ⁶⁶ For Meeks, it is not the ecological diversity of the planet per se that brings humans into closer contact with nature, it is the "stunning and vivid cinematography," that is, the HD filming technology. HDTV is also seen as uniting the various peoples of the world: "The promise of HDTV is not just in the clarity and resolution of the picture; rather, it's an opportunity to bring people together again in a fragmented entertainment universe." ⁶⁷ Here, the utopian potential of HDTV extends beyond the image itself, and the commonality of humankind's relationship to nature – filtered, of course, through HD – becomes the great leveling force of the world.

^{66 &}quot;Peabody Awards Entry - Planet Earth."

⁶⁷ Anthony Crupi, "Survival Of the Fittest," *MediaWeek* 17, no. 19 (2007).

Empirical research has also attempted to make sense of the phenomenological experience of HDTV. One study found that viewers of HDTV do, in fact, report that viewing HD images increases immersion into the image, and this is tied to the marketing potential of HDTV: "These results are important because the selling point used by television manufacturers for HDTV is that viewers will feel as if they are 'there' or part of the action." Another study reported that:

The goal of HDTV is to give viewers a visual experience with a strong sensation of reality and superb picture quality. Experiments to gauge the visual experience according to the viewing angle show that the 1080 format is significantly better than SDTV, whereas the 720p format only achieves a comparatively slight improvement.⁶⁹

What both of these studies indicate is the extent to which HDTV is conceptualized as a primarily visual technology, one that offers viewers a more "realistic" experience. This idea of HDTV frames the studies and, to a large extent, determines their results. As with most empirical research into phenomenological experience, the results seem rather commonsensical, and the translation of sensuousness into data sets leaves much to be desired.

While the comments above point to a concern with the effects of HDTV on the viewer's body, none of them directly indicate a concern with the body of HDTV itself. The "technological body" of HDTV is made up of the lines of resolution in the image and the method of scanning the

⁶⁸ Cheryl Campanella Bracken, "Presence and Image Quality: The Case of High-Definition Television," *Media Psychology* 7, no. 2 (2005): 202. This data, of course, raises the inevitable "chicken and egg" question: do viewers feel more immersion with HDTV, or have they been primed to *think* that they feel more immersion with HDTV because so much of the popular rhetoric conceives of the phenomenological experience of HDTV in these terms? An additional problem with this kind of research is that, perhaps, the term "immersion" is the only way respondents are able to verbalize the intersensorial experience of viewing HDTV. That is, "immersion" becomes shorthand for a whole host of sensual experiences.

⁶⁹ M. Sugawara et al., "Future Prospects of HDTV - Technical Trends Toward 1080p," *SMPTE Motion Imaging Journal* 115, no. 1 (2006): 14.

⁷⁰ Again, an issue with this type of research is the framing of the questions to the respondents. If someone is asked if an HD image, compared to an SD image, is more "realistic," that person will probably respond in the affirmative. HDTV picture quality is much clearer than that of SDTV. However, that does not mean it is more "real;" "realistic" merely comes to signify many other experiences.

image. In the United States, the most common format of Standard Definition television (SDTV) is 480i/p, meaning that there are 480 lines of vertical resolution on the TV screen. The "i" stands for "interlaced" – interlacing is a bandwidth saving technology that, similar to film, relies on the persistence of vision to nullify any flicker in the image. An interlaced image is created by breaking the image apart into odd and even lines; the "odd image" and the "even image" are then displayed rapidly, one after the other, giving the impression of a single, unified image. Interlacing technology was originally designed to save on bandwidth space, since only half of the image's information would need to be transmitted at any one time. However, as a result, the interlaced image experiences a loss of quality. Progressive scan images ("p") require more bandwidth, but are of a higher visual quality than interlaced images because they do not break the image into alternating sets. Instead, progressive scan images are drawn in their entire sequence every time the image is refreshed. SDTV can display both interlaced and progressive scan images, but within the U.S., 480 lines of resolution is generally considered the maximum. U.S. standards of HDTV increase the lines of resolution, and the most common formats of HDTV are 720p and 1080i/p, where 720 and 1080 indicate the number of vertical scan lines. The increased lines of resolution in HDTV give the image a greater density and clarity, substantially improving the quality of the image.

I have explained the technological body of HDTV in quite conventional terms – a focus on the increased lines of resolution, the greater density and clarity of the image, and the gain in visual quality that results from HD. The technological body of HD, however, lies largely within the cognitive, Euclidean realm of thought, privileging vision as the primary organizing principle of HDTV's body. HDTV's "phenomenological body" is something quite different, and it exists on a more sensual, non-cognitive plane. In order to understand the complete phenomenological body of HDTV more fully, I will now turn to Vivian Sobchack's conceptualization of the film's body.

Much has been made of Sobchack's phenomenology of the film's body since the publication of her seminal work on the topic, *The Address of the Eye*. Other scholars, such as Laura Marks and

Jennifer Barker, have followed Sobchack in exploring, respectively, the "skin" of the film's body and the living corporeality of the film's body (including the film's viscera and musculature).⁷¹ Elena del Rio has extended Sobchack's film phenomenology and applied it to a Deleuzian theory of sensation and performance.⁷² My own analysis of the body of HD will follow the lines of flight of these scholars, and I will follow del Rio in offering a reconciliation between Sobchack's phenomenology and Deleuze and Guattari's theory of becoming.

First, however, I must examine the ways in which the HD body overlaps with, and in some cases adds a prosthesis to, the film's body. In that they are both technologies of cinema and television, HDTV's body and the film's body share much in common.⁷³ Sobchack's fundamental argument posits that a film's body – including the screen, the image, the recording and projection equipment – is not merely something to be observed and experienced by the viewer; rather, the film's body itself possesses intentionality and sensuous existence. In other words: "The film is not...merely an object for perception and expression; it is also the subject of perceptions and expression."⁷⁴ Sobchack elaborates further:

If we allow that we *are* our bodies and their visibly intentional conduct in the world, if we reflect upon our existence and understand that we are the subjects of our visual experience as well as visual objects for other visual subjects, then we cannot but recognize that the film's body and its visibly intentional conduct enjoy the same existential privilege.⁷⁵

⁷¹ See Barker, *The Tactile Eye*; Marks, *The Skin of the Film*; Marks, *Touch*.

⁷² Elena del Río, *Deleuze and The Cinemas of Performance: Powers of Affection* (Edinburgh: Edinburgh University Press, 2008).

⁷³ For the purposes of this essay, I am focusing on HDTV, as opposed to cinematic HD projection systems. As such, my discussion concerns the televisual, not the cinematic, body of HD. While this is a subtle difference, the apparatus of recording and projection is a fundamental aspect of any mediated body, and I might very well find different results if I examined cinematic HD projection systems. However, as I am concentrating mainly on the *image* of HD, my argument would remain largely the same whatever mode of exhibition under examination.

⁷⁴ Sobchack, *The Address of the Eye*: 167.

⁷⁵ Ibid., 248.

The body of film, and by extension the body of HDTV, should be viewed as an experiencing body on the same existential plane as all other bodies. Though the film's body might not possess the same faculties of perception and cognition as the viewer's body, the body of film is nevertheless a body with intention, a body that can return the looks of the viewer.

Film phenomenologists also note the extent to which the body of the viewer and the body of the film interact and exchange experiences and perceptions. Through the process of viewing, the two bodies lose some of their individuation, merging into each other and blurring the boundaries between subjective sensation: it becomes difficult to discern the place from which sensations arise – the film's body or the viewer's body. As Marks claims: "Sobchack's phenomenology of cinematic experience stresses the interactive character of film viewing." Film viewing is not a one-sided affair; it is a *process* of exchanging affects. Subjective and objective experience cease to have meaning, and both bodies are affected by having been accounted for by the other. Much of this interaction takes place between the skin of the two bodies, and the skin, in that it touches both the inside and outside of a body, serves as the liminal point of interaction between two bodies. Skin is a point of contact between two bodies, and it is the place where a body can feel another body feeling. Barker describes the film's skin thusly:

The function of the film's skin as the perceptive and expressive boundary between self and other is thus achieved by different mechanical parts of the apparatus and cannot be equated with just one of those components...The film's skin is a complex amalgam of perceptive and expressive parts – including technical, stylistic, and thematic elements – coming together to present a specific and tactile mode of being in the world.⁷⁷

When my skin, through tactile vision, touches the skin of the film, our perceptions and modes of being merge, allowing both of our insides and outsides to intermingle and infect each other. Viewing a film thus becomes much more than a visual experience – or, in the case of HDTV, a hyper-visual ex-

⁷⁶ Marks, *The Skin of the Film*: 149.

⁷⁷ Barker, The Tactile Eye: 29.

perience. The interaction between the film and the viewer involves all of the senses, and it cannot be limited to operating merely on the level of optic sensation. The phenomenology of HDTV involves much more than a simple increase in visual quality; it also involves a change in the relationship between the skin of the HDTV body and the tactile vision of the viewer.

This idea of tactile, or haptic, visuality is key to understanding the ways in which HDTV's body both shares affinities with and differs from the film's body. Marks defines haptic visuality as a mode of seeing whereby the eyes come to act as tactile organs, as organs of touch.⁷⁸ As Barker puts it: "Marks defines haptic visuality as a kind of looking that lingers on the surface of the image rather than delving into depth and is more concerned with texture than with deep space."⁷⁹ Haptic visuality, therefore, moves across the surface of the image, focusing on the materiality of the image rather than what is represented in the image.⁸⁰ Within the film's body, Marks argues, haptic images are generally the products of extreme close-ups, blurred images, or non-representational figures (such as carpets or sheets). The nature of these images is not immediately apparent to the viewer, so he/she must focus on the surface materiality of the image instead of the illusion of depth that representational figures provide.



Figure 2.19: African Hunting Dogs

⁷⁸ Marks, *The Skin of the Film*: 162.

⁷⁹ Barker, *The Tactile Eye*: 35.

 $^{^{80}}$ Marks, *The Skin of the Film*: 162-63. I also address this kind of haptic visuality in my discussion of Kieślowski in Chapter One.

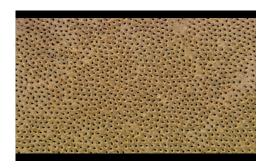


Figure 2.20: Seabird Colony

HDTV operates by a different means. Rather than achieve haptic images through 'film tricks' such as intentional blurring or scratching the film stock, the HD image itself is haptic. As my previous discussion has demonstrated, the quality of the HD images in a series like *Planet Earth* is, in many ways, the "star" of the series.⁸¹ The rhetoric surrounding the series is as much about the HD images as it is about the wildlife and environments represented in those images. Thus, when viewing Planet Earth, the viewer's look is constantly oscillating between the materiality of the image and the figures represented within the image. Planet Earth encourages this swirling instability of viewing through the constructions of its shots. Many of the scenes are not of wildlife but of environments that are not recognizable until the camera either zooms in or pulls back. As with the example of the giant sequoia tree described earlier, one strategy of *Planet Earth* is to begin with a close-up of some object - a tree, a rock face, a mound of bat guano, a coral reef - and then pull back until the object becomes recognizable. In these cases, the initial image is purely haptic; the focus is on the texture and surface quality of the HD image. As the camera zooms/tracks out, the focus shifts from surface/texture to depth/representation as the image becomes recognizable as an object, and the image becomes primarily optic. Or, conversely, the reverse happens: the camera will begin at a great distance from its object and then zoom in until the object is close enough to recognize. For example, in a scene from the "Pole to Pole" episode, the camera begins at a great distance from the

 $^{^{81}}$ HD sports broadcasts are another type of television that has attracted much attention in regards to the vastly improved quality of image.

land, and what appears on screen is virtually unrecognizable, except as surface texture.⁸² Then, as the camera slowly zooms in, the image becomes recognizable as a herd of African hunting dogs stalking prey. This strategy of moving from haptic to optic is used elsewhere, as in the "Shallow Seas" episode, where a mass of dots on the screen slowly reveals itself as a 100,000 strong seabird colony. Marks differentiates between optic and haptic visuality:

Haptic visuality is distinguished from optical visuality, which sees things from enough distance to perceive them as distinct forms in deep space: in other words, how we usually conceive of vision. Optical visuality depends on a separation between the viewing subject and the object. Haptic looking tends to move over the surface of its object rather than to plunge into illusionistic depth, not to distinguish form so much as to discern texture. It is more inclined to move than to focus, more inclined to graze than to gaze.⁸³

In the HD body of *Planet Earth*, BOTH optic and haptic, immersion and distanciation, are present. It is important to note that neither of these images in *Planet Earth* is ever out of focus (something that often happens when film shifts from optic to haptic). Every image is in crystal clear HD. This focus allows the camera to move from depicting the tiniest pores of a rock face to depicting the vastness of a mountain, all in one continuous shot. It is only with HD technology, and the special cameras and lenses utilized in *Planet Earth*, that the HD body of the series can achieve this type of oscillation between optic and haptic visuality, and this is what differentiates the film body from the HDTV body.

The HDTV body is also differentiated from the film body through the simultaneous ability of the image to immerse and distance the viewer. The HD images of *Planet Earth* are stunning in dual senses of the word: they are "stunning" in the sense of being aesthetically beautiful and engaging (immersive), and they are "stunning" in the sense of shocking the viewer with their quality (distancing). The images are distancing and immersive in dual ways as well. They are "distancing" not only through their stunning quality but also through their ability to maintain perfect clarity from

⁸² These shots were achieved with the aforementioned Cineflex heligimbal.

⁸³ Marks, The Skin of the Film: 162.

great distances (as in the African wild dog example). They are "immersive" not only through their detailed representations of creatures but also through their ability to achieve crystal clear close-ups of objects and animals. This oscillation between distance and closeness is a fundamental attribute of HDTV's body, and it must always be remembered that this oscillation is an *embodied* oscillation, one that affects the viewer's interaction with the HDTV body and HDTV's interaction with the viewer's body. As Lisa Parks explains in the context of satellite television, technologies of seeing do much more than merely increase the visual. And though she is speaking of temporal distance, her argument is useful for understanding the spatial distances of *Planet Earth*:

However, the further the televisual gaze peers back in time, the more forcefully it collapses into the realm of the senses. For distant vision needs to be embodied. That is why the term *remote sensing* is so apt for the televisual, because it implies that distant vision ultimately necessitates and is contingent on various visceral experiences, libidinal investments, and sensuous engagements that could never be reduced to the visual alone. Understanding the televisual as a practice of remote sensing thus complicates paradigms that attempt to isolate and privilege vision as the ultimate sense, as the one of greatest accuracy, knowledge, and truth, and insists on the significance of other senses, whether hearing, touch, or taste, in interpreting the world.⁸⁴

The embodiment and interaction of both the viewer and the image, and the distance between the two bodies, concerns the final piece of my discussion of *Planet Earth*, and I will use Deleuze and Guattari's concept of becoming-animal in order to understand the ways in which this phenomenological interaction might be understood within a theory of becoming.

84 Parks, Cultures in Orbit: 137.

2.4 Becoming-Animal through Planet Earth: HD and Beyond

In *A Thousand Plateaus*, Gilles Deleuze and Felix Guattari make the argument that becomings deterritorialize the subject, and becoming-animal is one step towards that deterritorialization. Belouze and Guattari's overall project in *A Thousand Plateaus* is to outline a philosophy of rhizomes, a philosophy whose concepts are all intertwined and follow non-linear connections. This rhizomatic philosophy is deterritorialized, meaning that it does not inhabit a stable, subjective point of view (in contrast to a humanistic, subject-based, arborescent philosophy). For Deleuze and Guattari, the goal of philosophy is to deterritorialize the subject, which allows him/her to escape the molarity of the physical body and perceive the world molecularly, as a flow and interaction of affects and energies. Becomings are the means to achieve this deterritorialization, and becomings create a situation wherein a subject might experience, through the sharing of affects, movements, speeds, and intensities, the energies of another being. This sharing of movements and affects within the process of becoming is not, however, mimetic, and becoming-animal does not involve acting like a particular animal:

For if becoming animal does not consist in playing animal or imitating an animal, it is clear that the human being does not "really" become an animal any more than the animal "really" becomes something else. Becoming produces nothing other than itself. We fall into a false alternative if we say that you either imitate or you are. What is real is the becoming itself, the block of becoming, not the supposedly fixed terms through which that which becomes passes. Becoming can and should be qualified as becoming-animal even in the absence of a term that would be the animal become. The becoming-animal of the human being is real, even if the animal the human being becomes is not; and the becoming-other of the animal is

⁸⁵ Gilles Deleuze and Félix Guattari, "1730: Becoming-Intense, Becoming-Animal, Becoming-Imperceptible..."," in *A Thousand Plateaus: Capitalism and Schizophrenia* (Minneapolis: University of Minnesota Press, 1987). I also explore the concept of becoming in the Conclusion to this project.

⁸⁶ It is important to note that becomings take place in the virtual, which is an area of pure potentiality and molecularity. Deleuze and Guattari oppose the virtual to the actual, which is the area of molarity and lived reality.

real, even if that something other it becomes is not. This is the point to clarify: that a becoming lacks a subject distinct from itself; but also that it has no term, since its term in turn exists only as taken up in another becoming of which it is the subject, and which coexists, forms a block, with the first.⁸⁷

Thus, for example, becoming-rat would not involve scurrying around the floor, looking for cheese. Instead, it would involve sharing the movements, intensities, affects, and speeds of a rat. Deleuze, in fact apparently desired to become-rat, as indicated in an anecdote recounted by Steve Baker: "Deleuze's own attempts to write like a rat, for example, are said to have sometimes included a refusal to cut his nails." 88

Though I am concerned primarily with becoming-animal, Deleuze and Guattari conceive of becoming as a process, passing through many stages (including becoming-woman and becoming-child) before reaching the ultimate goal of becoming-imperceptible.⁸⁹ The ultimate goal of all of these becomings is to allow the subject to deterritorialize him/herself and experience existence in terms other than those of an individuated, fleshy, molar body. This de-emphasis of the importance of the lived body puts Deleuzian/Guattarian becomings at odds with much phenomenological theory, which stresses the significance of embodied existence. In the case of becoming-animal, a complication that arises is the difficulty of navigating between the actual (human/animal bodies) and the virtual (becoming-animal) and the consequences that the virtual can have for the actual. While Deleuze and Guattari stress that it is the *process* of becoming that is real, not some imagined end result that would destroy the physicality of the body, becomings necessarily imply that centers of indetermination should strive for molecularity, sloughing off the fleshiness of embodied existence. However, a potential alliance between phenomenology and becoming might lie in this relationship between the actual and the virtual. While becomings might exist within the virtual, an arena of mo-

⁸⁷ Deleuze and Guattari, "A Thousand Plateaus," 238.

⁸⁸ Steve Baker, "What Does Becoming-Animal Look Like?," in *Representing Animals*, ed. Nigel Rothfels (Bloomington: Indiana University Press, 2002), 93.

⁸⁹ Deleuze and Guattari, "A Thousand Plateaus," 272.

lecularity and pure potential, there is also an element that exists within the actual, namely the physical modification of movement, speed, affect, and intensity. In a sense, becomings change the ways in which a body exists in the world, altering its physical relationship to other bodies, and this change in embodiment is quite real:

Becoming-animal has its own reality, which is not based on resemblance or affiliation but on alliance, symbiosis, affection, and infection...According to Deleuze and Guattari, there exists a reality of becoming-animal that consists of a proximity between man and animal on the level of affects, movements, and speeds...It is on the level of intensities that the assemblage animal-human is made. It is not evoked by blood ties or heritage but by contagion and infection.⁹⁰

Becoming-animal can thus evoke a change in the way in which a body inhabits space, and just as *Planet Earth* can initiate haptic and visceral responses within the viewer, so too can it initiate becomings.

In fact, much of the connection between becoming-animal and phenomenology can already be found (implicitly) in the literature discussed thus far in this chapter, and as I have already indicated, the deployment of HD as an aesthetic strategy of *Planet Earth* produces a *liminal phenomenology*. That is, the experience of viewing *Planet Earth* is one of oscillation – oscillation between immersion and distanciation, cognitive and synaesthetic mapping, humanistic and nonhumanistic perspectives. This oscillation fits quite nicely with the concept of Deleuzian/Guattarian becoming in that it is always in motion, always fluttering between the virtual and the actual.

A Deleuzian phenomenology can be found in Barker's discussion of the film body's viscera, and in many ways, Barker is making a fundamentally Deleuzian argument: the body of the film and the body of the viewer come to share much in terms of affect and intensity, and this leads to a Deluzian/Guattarian becoming. In her section on the film body's viscera, Barker makes the argument

⁹⁰ Patricia Pisters, *The Matrix of Visual Culture: Working with Deleuze in Film Theory* (Stanford, Calif.: Stanford University Press, 2003). 144.

that the experience of viewing a film has the potential to create an affinity of movement between the rhythms of the film's body and the rhythms of the viewer's body – in other words, the viewer becomes-film: "We find a film's rhythms riveting, perhaps even eerily human because they are, in fact, founded on and perpetually indebted to our own imperceptible human rhythms." She continues: "[0]ne of the reasons we respond so passionately to cinema as an art form is because of a deep, and not uncomplicated, affinity between our bodies and the film's body." Marks, who is more explicitly Deleuzian than Barker, shares a similar view of the phenomenology of becoming in relation to haptic visuality: "Haptic cinema does not invite identification with a figure – a sensory-motor reaction – so much as it encourages a bodily relationship between the viewer and the image." Barker and Marks are essentially making the argument that the process of viewing a film initiates a bodily interaction between the viewer and the film, and this fits the basic definition of becoming – a sharing of movements and affects. The haptic nature of *Planet Earth*'s HD images facilitates this process, as haptic visuality more easily deterritorializes the image since it is non-representational.

Planet Earth allows the viewer to become-animal, not only through cinematic techniques but also through the haptic visuality of HD and the haptic visuality of the multiplicity of swarms depicted in the series. The cinematic techniques of *Planet Earth* encourage a more Cartesian, Oedipal relationship with the animals in the series in that they cultivate an identification with the animals on a representational, molar level. This type of relationship, rather than initiating a mutual, molecular exchange of affects, encourages an anthropocentric/anthropomorphizing identification with the animal. As Marks describes it:

Cinematic conventions have a lot to do with our powers of putting ourselves into the other's paws. In nature documentaries, shot-reverse shot structure creates a sense of narrative; quick editing makes for excitement; cutting gives a sense of simultaneous action; eyeline

91 Barker, The Tactile Eye: 128.

⁹² Ibid., 129.

⁹³ Marks, The Skin of the Film: 164.

matches between animals and their prey establishes intentionality; and when the creatures gaze into the camera, their eyes seem to communicate with the depths of our souls."94

Here, Marks is criticizing conventional nature documentary techniques (which are also utilized by
Planet Earth) for attributing to animals the types of intentionalities and thought processes of humans. That is, she is criticizing nature documentaries for not following a framework of becominganimal.

However, just because *Planet Earth* utilizes representational, Cartesian modes of filmmaking does not necessarily indicate that it cannot initiate becoming-animal. *Planet Earth*, through its focus on swarms and packs of animals, encourages the viewer to become-animal. As Deleuze and Guattari write: "A becoming-animal always involves a pack, a band, a population, a peopling, in short, a multiplicity." Swarms, packs, and multiplicities are rhizomatic and deterritorialized, meaning that the loss of one individual, while it may restructure the pack, does not destroy the pack. Swarms and packs are also formed by infection and contagion – the actions of one member can "infect" the others and cause a massive shift in affect and intensity. The recognition of the multiplicity of these packs can initiate a becoming in that the human perceives the pack as a collection of forces, which molecularizes perception and provides an opening to becoming-animal. Elena del Rio echoes this thought: "Deleuze's understanding of the body as an assemblage of forces or affects that enter into composition with a multiplicity of other forces or affects restores to the body the dimension of intensity lost in the representational paradigm." When bodies begin to lose their individuation as molar representations, becomings can ensue.

One scene in particular from *Planet Earth*, in the "Shallow Seas" episode, illustrates this concept of swarms and their ability to infect others. In this episode, there is a sequence depicting a very large sunflower sea star hunting some much smaller brittle stars. As the sunflower sea star moves,

⁹⁴ Marks, Touch: 25.

⁹⁵ Deleuze and Guattari, "A Thousand Plateaus," 239.

⁹⁶ del Río, Deleuze and The Cinemas of Performance: Powers of Affection: 3.

the brittle stars constantly re-form themselves into new assemblages in an attempt to avoid being eaten. What is most striking about this sequence, however, is not the swarms of starfish but the cinematographic techniques utilized by the filmmakers. The starfish move much too slowly, at least in terms of human movement and perception, for their activities to be fully comprehended. To solve this problem, the speed of the film is increased, which gives the sequence the feel of stop-motion animation. This has the uncanny effect of making the speeds and movements of the starfish match those of humans, initiating a kind of becoming-human on the part of the starfish. The stop-motion look also encourages a becoming-starfish on the part of the viewer, as it creates an affinity between the discontinuous movements of both human and animal. Barker points out this affinity in relation to stop-motion animation:

Cinema's defining characteristic is the movement of discontinuous images in space and time at a prescribed rate of frames per second, and this intrinsic form is derived from the temporal structures of the human body, whose actions are also made up of discontinuous movements that seem smooth and uninterrupted.⁹⁷

Through this example from *Planet Earth*, a link between becoming-animal and phenomenology can be forged. Becoming-animal involves a very real change in affect and motion, and through the affinity between the internal motions of the viscera and musculature of the film's body, a corollary change in affect and motion is effected in the body of the viewer. In this way, *Planet Earth* encourages the viewer to deterritorialize him/herself and become-animal. This becoming is not, however, without danger.

As my discussion of *Planet Earth* has demonstrated, the process of Deleuzian/Guattarian becoming invokes competing ethical claims. On the one hand, the process of becoming initiates a fundamental questioning of the Cartesian subject, decentering human subjectivity and providing an alternative, deterritorialized and rhizomatic, perspective of existence. This type of radical critique

⁹⁷ Barker, The Tactile Eye: 134.

of the Cartesian cogito, which is connected to the seeing/thinking subject's ability to master the objects, people, and creatures within his/her environment, allows for an ethical intervention into the exploitative, colonizing destruction of the environment that such an anthropocentric cogito permits. When mastery is tied to the molarity of the human body, destructive human activities can be excused on the grounds of the natural superiority of *Homo sapiens'* cognitive ability.



Figure 2.21: Sunflower Sea Star and Brittle Stars

On the other hand, the de-emphasizing of individuated, fleshy bodies results in a loss of the importance of unique subjectivity (not only of humans, but of all creatures and objects) – through the process of becoming, subjects are encouraged to escape the boundaries of their molar, physical bodies. Priven by an all-consuming desire to become, human becomings-animal, as Akira Lippit claims in *Electric Animal*, transform the animal into pure metaphor, something conceived of as absolute other to human existence and outside the realm of human ethics. Pas a result, it is not the actual bodies of the animals that matter, it is what they stand for in relation to the human, which, as Katherine Young argues, makes becoming-animal an essentially anthropocentric event, problematizing a straightforward reading of becoming-animal as radically transgressive.

⁹⁸ See the Conclusion for a more sustained analysis of the ethics of becoming.

⁹⁹ Akira Mizuta Lippit, *Electric Animal: Toward a Rhetoric of Wildlife* (Minneapolis: University of Minnesota Press, 2000). 25; 181-82.

¹⁰⁰ Katherine E. Young, "Deleuze and Guattari: The Animal Question," in *An [Un]Likely Alliance: Thinking Environment[s] with Deleuze/Guattari*, ed. Bernd Herzogenrath (Newcastle: Cambridge Scholars, 2008), 258.

Planet Earth is a fundamentally unstable phenomenological work, and it encourages competing reactions in the viewer. Thus, any reading of the series must account for this instability, and much of the phenomenological liminality of the series is a result of the instability of the HD technology with which it was made. HD is both a haptic and optic technology, and the images it produces can either reinforce or radically question the anthropocentric Cartesian cogito. As with any emergent visual technology, it is difficult (if not impossible) to sediment HD's cultural and phenomenological impact. The oscillating and dialectical properties of HD, therefore, locate it comfortably within the competing claims made within objects of visual culture that speak in a language of vernacular posthumanism. Vernacular posthumanism – as the totality of this project demonstrates – is a messy dialect of visual culture, and it often speaks in paradoxes and contradictions, displaying a desire both to transcend the human body as well as to reassert the importance of the body. The deployment of HD in Planet Earth, in its insistence on having its phenomenology both ways, speaks in the familiar tones of vernacular posthumanism.

2.5 The Strange Case of A.I.: Steven Spielberg's Trenchant Humanism

In 2001, two years after Stanley Kubrick's death, Steven Spielberg released *A.I.: Artificial Intelligence*. *A.I.* was a project initially conceived by Kubrick, based on the Brian Aldiss short story, *Super-Toys Last All Summer Long*, but like other Kubrick projects, it was never realized by Kubrick himself.¹⁰¹ Kubrick and Spielberg had discussed the project beginning in the 1980s, but Kubrick never began production on the film in earnest, claiming that special effects technology had not yet reached a point where he could believably render a world of robots. However, after seeing Spielberg's deployment of special effects in *Jurassic Park* (1993), Kubrick felt confident that technology had finally caught up with his vision for *A.I.* It was at this time that Kubrick also decided to abandon

¹⁰¹ Two notable projects that Kubrick abandoned are *Napoleon* and *The Aryan Papers*. Thomas Allen Nelson, *Kubrick: Inside a Film Artist's Maze*, New and Expanded ed. (Bloomington: Indiana University Press, 2000). 136; 261-62.

the project, and in 1995, he handed the project over to Spielberg, claiming that the film was closer to Spielberg's sensibilities than his own. 102 Spielberg then took over the project, but it languished until Kubrick's death in 1999. After Kubrick's death, Spielberg began production on the film, and *A.I.* was released in 1999 as "An Amblin/Stanley Kubrick Production," with long-time Kubrick producer Jan Harlan serving as an Executive Producer and including a dedication at the end of the film reading, "For Stanley Kubrick."

While *A.I.* was written and directed by Spielberg, and thus bears all of his "auteur" marks, the form of the film also makes it clear that Spielberg was channeling Kubrick, attempting to form a Kubrick/Spielberg hybrid film. This bifurcated form displays itself within the film, mostly through Spielberg's attempts to channel Kubrick's vernacular posthumanism while at the same time maintaining his own humanistic tendencies. *A.I.* is a Frankenstein's monster, an attempt to reanimate the body of Kubrick's film corpus through a virtual reconstruction filtered through Spielberg. It is in the conflict of dialects – humanism and posthumanism – that Kubrick's vernacular posthumanism is revealed, and Spielberg's attempt to render Kubrick's posthumanism exposes the machinery behind the vernacular.

The narrative of *A.I.* incorporates many of the themes with which Kubrick concerned himself throughout his career: the relationship between human and nature; the dialectic between individual and society (agency and structure); the insignificance of the human in relation to society, nature, and history; the contingency of the universe; and the role of fate and chance in our experience of the world. The form of the film also indicates the extent to which Spielberg attempts to channel Kubrick's aesthetic sensibilities. *A.I.* is shot in the cold, mechanical hues of blue and white; the

¹⁰² Richard Corliss, "'A.I.' - Spielberg's Strange Love," *Time* (2001), http://www.time.com/time/arts/article/0,8599,130942,00.html.

¹⁰³ For a more sustained discussion of Kubrick's "aesthetics of contingency," see: Nelson, *Kubrick: Inside a Film Artist's Maze.*

film uses a variety of long tracking shots, often distorted through the use of a wide-angle lens; and the sets employ the kind of sexed-up garishness found in films like *A Clockwork Orange* (1971).¹⁰⁴

While the aesthetics and thematic overtones might be pure Kubrick, the plot of the film is pure Spielberg. *A.l.* is the story of a boy robot who, through an experience of love, seeks to become a real boy. ¹⁰⁵ David (Haley Joel Osment), the boy robot, was produced for families who have either lost children or who are unable to have children of their own. Programmed to love – via an imprinting process with his parents/owners – David provides an Oedipal replacement for parents who desire unconditional, unchoosing affection. While David's love might be unconditional, however, his parents' love is not. When his parents' original son, who was placed in a kind of stasis in order to halt the progression of his disease, recovers, David is abandoned and left to fend for himself. What ensues in the remainder of the film is classic Spielberg: having lost his parents, David embarks on a quest to find his "real" father, the man who created him. Motivated by love and a desire to become a "real boy," David overcomes impossible odds to finally meets his maker. This meeting, however, is less than fulfilling, as David discovers that he – and his love – is utterly unoriginal: David sees an assembly line of other Davids (and Darlenes, the female equivalent), each programmed with the potential to "love" his owner. Faced with this revelation, David throws himself from the top of a building into the roiling ocean below.

Contrary to much of the rhetoric surrounding Kubrick's films, they often conclude on optimistic notes: *Paths of Glory* ends with a song, which allows the French soldiers to recognize the humanity of the German singing girl; *2001* concludes with a shot of the star-child, the next phase of human evolution; at the end of *A Clockwork Orange*, Alex regains his free will (however destructive that might be); the final word of *Eyes Wide Shut* – "fuck" – indicates that Alice and Bill's relationship might still be saved through a return to the physical. These "happy" endings, however, are always

¹⁰⁴ Vivian Sobchack, "Decor as Theme: *A Clockwork Orange*," *Literature Film Quarterly* 9, no. 2 (1981).

 $^{^{105}}$ The connections to Pinocchio are obvious, and the film alludes to these connections throughout.

tempered with a bit of sadness, and it is easy to see where Kubrick might have taken the conclusion to *A.I.*: David realizes that his love is "real," but since he has lost the object of that love (his mother), he chooses to die with her memory rather than live with her absence.

In the hands of Spielberg, however, *A.I.* resolves itself in much more Oedipal terms. After throwing himself into the ocean, David is frozen for an unspecified period of time. At the beginning of Act 3 (which takes place directly after David's apparent suicide), the film presents us with an image of David being broken out of a block of ice by a group of advanced robotic creatures (which look a lot like aliens). These robots are curious about David, since he is one of the first examples of a robot who could "think" and "feel." After harvesting his memories, the robots offer to use a strand of hair from David's mother in order to clone her for David. The catch, however, is that she will only live for 24 hours, after which time David will lose her forever. The film concludes with David and his mother, snuggling in bed, and David finally achieves his goal of becoming a real boy through an expression of love. The film strongly suggests that David "dies" along with his mother at the end of the 24 hours, thus completing the Oedipal circle.

The ending to *A.I.* is very strange, and it almost seems as if it were tacked on as an after-thought. Rather than offer a transcendence of the human condition – which is the modus operandi of many of Kubrick's films, whether this transcendence is physical, sexual, or social – the film instead reinscribes a framework of humanism. The film, which is ostensibly a commentary on the nature of human emotion and free will, implodes precisely because we, the audience, love David. In much the same way as David is programmed to love, the film, through its structure, "programs" us to love David. We have no choice but to feel affection for this lost and abandoned boy, and Spielberg's ending speaks to this emotion. David's resurrected mother is a stand-in for the audience, being granted one final opportunity to embrace this lonely child onto which we have projected all of our humanist emotion.

In this way, *A.I.* demonstrates the contradictory and paradoxical dialect of vernacular posthumanism: it fantasizes about a posthuman existence but can only understand this existence through modes of humanism. The film does not allow the object/machine to love on its own terms; it only allows the object/machine to serve as the receptacle for love. In other words, David's emotional state can only be conceptualized from an anthropocentric perspective. His love is our love, and the film is trapped in an oroborus of its own design. Its attempt to present the radical alterity of machine emotion is first filtered through human love and then returned to the viewer as David's pre-programmed love. Thus, the film opens up an exploration of machine "subjectivity" only to close in on itself by returning to a fundamentally anthropocentric framework of knowledge.

This oscillation between the human and the nonhuman; embodiment and disembodiment; and flesh and information, rather than being an exception to vernacular posthumanism is instead one of its primary features. The crystalline structure of both the images in Kubrick's films as well as the HD images of *Planet Earth* are thus quite indicative of the instability of the hybrids objects and images that speak in a dialect of vernacular posthumanism. In the next chapter, I will continue exploring this contradictory nature of vernacular posthumanism through the films of David Cronenberg as well as DNA portraits, which visualize the contemporary conflict within visual culture primarily though their negotiation of surface and depth.

3 THE INFORMATIONALIZATION OF THE SELF: DIGITALITY AS POSTHUMANITY

An aftershock of the earthquake caused by the informational, genomic, and digital "revolutions" of the 20th and 21st centuries has been an increasing reliance on the idea of *biological determinism* (also referred to as *biological essentialism* or *biological reductionism*) in processes of cultural meaning-making. Harvard professor and biologist Richard Lewontin describes biological determinism in terms of three culturally held ideas: "These three ideas – that we differ in fundamental abilities because of innate differences, that those innate differences are biologically inherited, and that human nature guarantees the formation of a hierarchical society – when taken together, form what we can call the *ideology of biological determinism*." The ideological bias of modern biology, according to Lewontin, is "that everything we are, our sickness and health, our poverty and wealth, and the very structure of the society we live in are ultimately encoded in our DNA." The attribution of complex social and biological systems to a single causal agent is known as reductionism, and the idea that we are our DNA is the 21st century reductionism par excellence.

Within the products of visual culture, this attitude towards biological determinism can be seen in particular images' expression of vernacular posthumanism. What Lewontin identifies as the "ideological bias of modern biology" is in fact a valence of the vernacular being spoken in contemporary visual culture. In this chapter, I use two objects of visual culture – the films of David Cronenberg and DNA portraits – to unpack and diagnose the ways in which a vernacular posthumanism that emphasizes the collapse of surface and depth and the reduction of actants to expressions of a common code is being spoken within contemporary culture. What these visual artifacts share is an attitude towards materialism that envisions flesh and information as fundamentally exchangeable, reducible to common terms. And while the endpoint of this exchangeability is different – Cronenberg strongly critiques the collapse of flesh and information while DNA portraits tacitly support

¹ Lewontin, *Biology as Ideology*: 23.

² Ibid., 107.

such a collapse – the topic itself is indicative with contemporary culture's ambivalent attitude towards the relationship between the human, the nonhuman, and the digital.

In the case of David Cronenberg's films (in particular his films made before 2000), a particular mode of digitality - what I will later term a digital cultural logic - pervades their imagery, and I argue that theoretical gains can be made by examining this mode of digitality in tandem with theories of the posthuman. A traditional filmmaker like David Cronenberg has inhabited the digital long before the digital was a technical reality. Cronenberg's approach to embodiment and the flesh is reflective of a digital attitude, in that he conceives of subjectivity (both human and nonhuman) as something that is exchangeable, as something that exists within and between the interactions of agents.³ For Cronenberg, the digital exists as a virtuality between the fantasies of informationalism and the realities of materialism. Matter, in Cronenberg's world, is the flesh, and his films visualize the tension between the utopian ideals of digital information and the materiality of the body. Cronenberg's films display a fundamental contradiction that is symptomatic of the digital turn. On the one hand, digitality is commonly associated with a technological utopia, in which all things – human and nonhuman - are reduced to a common code and seen (like money) as a general equivalent.4 On the other hand, digitality must also recognize the importance of materiality, and Cronenberg's films struggle to reconcile these two poles. The folding of inside and outside, subject and object, allows Cronenberg to maintain the tension of the digital virtualities that he visualizes in his films.

It can be productive to think of the digital from within the theoretical framework of the posthuman. Like the digital, the posthuman is a virtuality existing within a complex network of so-

³ For more on the cultural logic of networks and digital technology, see: Manuel Castells, *The Rise of the Network Society*, 2nd ed. (Malden, MA: Blackwell Publishers, 2000); Steven Shaviro, *Connected, or, What it Means to Live in the Network Society* (Minneapolis: University of Minnesota Press, 2003); Ted Friedman, *Electric Dreams: Computers in American Culture* (New York: New York University Press, 2005).

⁴ Here I am invoking Marx's discussion of the commodity and its basis in the abstraction of human labor into the general equivalent of money. Marx, *Capital: Volume 1*. See Chapter One for a more sustained discussion of the relationship between the commodity and digitality.

cial and material relationships. They can be regarded as the recto and verso of the same cultural logic, and they find a common expression in their approach to visuality. The films of David Cronenberg – specifically *Shivers* (1975), *The Fly* (1986), and *Dead Ringers* (1988) – serve as a case study through which to explore the extent to which a virtual digitality is simultaneously a virtual posthumanity.

In that they both function, to an extent, as virtualities, digitality and posthumanity are closely linked. And here is a crucial point: both should be conceived of in the plural – digitalities and posthumanities – as each has expressed itself at different times throughout history (e.g. Munster's account of the Baroque). As such, digitality and posthumanity are not concrete, datable functions of history (though they are dependent on a historical context). They are particular attitudes toward the image, and they emphasize interchangability and exchangability within a complex, embodied network of interaction. In short, posthuman images and digital images are travel companions, and they are intimately connected.

Discussing Cronenberg in terms of a digital turn might, at first, seem an anachronism. However, if the digital is thought in terms of the posthuman, then the digital can more easily be conceptualized as existing as a virtuality within Cronenberg's films. Cronenberg expresses this digital virtuality in the language of posthumanism, and his concerns are similar to that of a digital attitude: both call into question the stability, production, and authenticity of images, and both demand that we radically rethink the traditional humanistic conceptions of the boundaries between subject and object, human and nonhuman.⁶

⁵ Munster, *Materializing New Media*. See also: Murray, *Digital Baroque: New Media Art and Cinematic Folds*.

⁶ For overviews of new media and the "digital turn," see: Sean Cubitt, *Digital Aesthetics* (London: SAGE, 1998); Jay David Bolter and Richard Grusin, *Remediation: Understanding New Media* (Cambridge, Mass: MIT Press, 2000); Manovich, *The Language of New Media*; Wendy Hui Kyong Chun and Thomas Keenan, eds., *New Media, Old Media: A History and Theory Reader* (New York: Routledge, 2006); Rodowick, *The Virtual Life of Film*.

The second half of this chapter will examine DNA portraits, which attempt to make visible the inner "depth" of subjectivity and human experience. The creation of DNA portraits has been enabled by the genomic revolution and the consequent commodification of the human genome. In DNA portraits, a visualization of a DNA sample – an "inner" structure – comes to stand in for the individual represented in the portrait. In other words, DNA functions both as metonym for blood as well as synecdoche for the materiality of the lived body. However, because DNA portraits are just that – images of DNA as visualized through gel electrophoresis rather than images of an identifiable (iconic) body – how is the connection between surface and depth established? What allows these intransitive images to be read as "portraits?"

To answer the question of what connects the surface of the images to the deep constructions of identity they purport to make visible, I place DNA portraits within an intellectual approach to photography that regards the photographic process as a technique by which the invisible inside might be made material in the photographic image. The negotiation between surface and depth is especially visible in the case of 19th century photographic portraiture – as well as its deployment in pseudoscientific practices such as physiognomy and craniology – and 20th century theorizing of the ontology of the photographic image (e.g., that of Roland Barthes and Andre Bazin). DNA portraits do not share the same mode of production as photographic portraiture, and yet, despite significant technological and cultural shifts, the 19th century image vernaculars survive within these 21st century visual objects. It is a sustained "photographic imagination," which functions as an "a(e)ffect of indexicality," as well as a faith in the power of blood and modern genetic technologies to exhaust the potentialities of the individual, that allows these objects to be read as truth-producing material manifestations of internal "essences."

⁷ André Bazin, *What is Cinema?*, trans. Hugh Gray, vol. 1 (Berkeley: University of California Press, 1967); Roland Barthes, *Camera Lucida: Reflections on Photography* (New York: Hill and Wang, 1981).

⁸ Alessandra Raengo offers an affective reading of Barthes's notion of the reality effect in: Alessandra Raengo, *On the Sleeve of the Visual: Race as Face Value* (Dartmouth College Press (UPNE), Forthcoming).

DNA portraits point toward a larger cultural concern enabled by the genomic revolution: that of the ability of blood (and, by extension, DNA) to function as a material expression of some internal essence. Along with other contemporary symptoms of this attitude, including the construction of human migration maps as well as the growing popularity of individualized medicine and ancestry tracing, DNA portraits provide us with insight into how historical models of surface, depth, visual imagining, and identity have survived into our present era, and they function as an example where blood acts as the means to materialize an image of the self. Additionally, the creation and conceptualization of DNA portraits relies to a considerable extent on computing and information processing technologies, exposing the extent to which they draw on a framework of understanding that regards biological material in terms of bits of computing data.

3.1 Cronenberg's Fleshy Imagination: Dead Ringers and Virtual Digitality

Dead Ringers (1988) provides a good entry point for examining the ways in which a film, speaking in the language of vernacular posthumanism, can enact the relationship between digitality, posthumanity, virtuality, and materiality. Dead Ringers is a film about twin brothers who try to overcome the physical split that separates their virtually united subjectivity, and this film speaks to the idea that subjectivity always arises in a particular space and within an embodied network of interaction. The human is something created and defined by what surrounds it, and it is in a constant state of contingency and flux. Following Donna Haraway¹⁰ and Bruno Latour, the relationship between the Mantle twins can be made sense of by looking through the lenses of "radical alterity" and "significant otherness." As opposed to models of interaction that emphasize the fundamental similarity of actants – e.g., frameworks of biological reductionism – a schema of significant otherness.

⁹ Merleau-Ponty, *Phenomenology of Perception*; Noë, *Out of Our Heads*. I discuss the relationship between space and subjectivity in a more sustained manner in Chapter One.

¹⁰ Haraway, Companion Species; Haraway, When Species Meet.

¹¹ Latour, We Have Never Been Modern.

erness uses a recognition of difference as itself the grounds for alliances. 12 Within Haraway's terms, significant otherness relies on mutual respect, and it is founded on a recognition of difference and an agreement to live together.¹³ The strength of this framework is that it recognizes the impossibility (and undesirability) of overcoming the materiality of the lived body while at the same time offering a means for theorizing the assemblages of physical entities.14 For Haraway, this kind of "becoming" is not something that takes place in the virtual; rather, the assemblages created through a recognition of significant otherness are very real, very physical alliances akin to the types of symbiosis achieved in the natural world. Two distinct actants can function as one "organism" while maintaining their separate bodies, and this can only be achieved through the sharing of mutual respect. In a sense, what happens in this kind of relationship is that consciousness extends outside of the boundaries of the physical body, and it comes to exist in the space between the bodies, each actant affecting the other in a process of continual de- and re-forming. Because this process is largely hidden from the realm of the visual, inhabiting instead the realm of the experiential and phenomenological, it becomes difficult to render visible this posthuman self – a self that is by its very nature transitional and transitory, whose conglomerate body is formed with porous boundaries. Dead Ringers offers us an example of how this process of visualization might be achieved, and it does this largely though speaking in the language of vernacular posthumanism.

Dead Ringers tells the story of the Mantle twins, Beverly and Elliot (both played by Jeremy Irons), who are a pair of brilliant gynecologists, both in terms of their research and clinical practice. From an early age, the film shows the Mantle brothers as different iterations of the same being, alternate expressions of the same genetic code. The brothers are virtually identical – though Elliot is

¹² As I discuss in the context of *Planet Earth* in Chapter Two, alliances between members of different "packs" are also important to the philosophy of Deleuze and Guattari. Gilles Deleuze and Félix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia*, trans. Brian Massumi (Minneapolis: University of Minnesota Press, 1987).

¹³ Haraway, *Companion Species*: 7.

¹⁴ In this, Haraway echoes some of what Deleuze and Guattari discuss in terms of "becoming." Haraway, however, has serious reservations about Deleuze and Guattari's theorization of virtuality and becoming. I take up this disagreement in more detail in the Conclusion to this project.

the slightly older (he refers to Beverly as "baby brother"), more outgoing, and dominant of the two – and they attempt to live their lives as one entity, going so far as to swap sexual partners without the women's knowledge. The Mantle twins want to share *every* experience, and they attempt to construct a kind of subjectivity that exists beyond the boundaries of the molar body. As the film progresses, the appearance of a new woman, Claire (Geneviève Bujold), upsets the careful balance established between the brothers. Beverly wants Claire to himself, which leads to a metaphorical "separation of the Siamese twins." Claire eventually has to travel out of town for work on a film (she's an actress), which sends Beverly into a state of severe depression and drug addition (his position as a doctor give him access to all the drugs necessary to form a nice, stable drug habit).



Figure 3.1: *Dead Ringers* Synchronization

When Elliot finally discovers Beverly's sorry state, he decides that the only way to save Beverly is to "get synchronized," to return to their previous state of sharing all experiences. From this point of the film on, the Mantle twins have returned to their journey of demonstrating that subjectivity is not confined to the body; rather, it is something that is enacted within the world. In Figure

¹⁵ Throughout the film, the Mantle twins compare themselves to Eng and Chang Bunker, the "original Siamese twins" (they were born in Siam, now Thailand, hence the name Siamese twins). In making the analogy between the Mantle and Bunker twins, the film uses physical conjoinment as a bridge to exploring the potential for two individuals to share an experience. While a physical link between two people certainly does not lead to those people sharing a subjectivity and consciousness, the visual element of conjoinment makes the link *seem* more plausible, or at the very least, easier to imagine. The Mantle twins are not physically conjoined, though they attempt to get their bodies "in sync" in order to facilitate the sharing of the experiences and consciousness. *Dead Ringers*, at its heart, is a reiteration of the classical philosophical problem of the relationship between "mind" and "body," though it rearticulates the problem as one of multiple minds and bodies as opposed to the mind and body of an individual.

3.1, we see Elliot and Beverly trying to "get synchronized." Beverly has become addicted to drugs, and in order to maintain their symbiotic relationship, Elliot has also decided to addict himself. In a sequence from the film before the scene from which this screencap was taken, we see that Elliot has put himself on a strict regimen of pills, taking them at appointed times according to a precise schedule. In order to understand his brother, Elliot must first become addicted to drugs. This, of course, leads to problems in Elliot's personal and professional lives, which leads to a fight with Cary (Heidi von Palleske), his girlfriend, over Elliot's plan to get synchronized with his brother. The dialogue from the scene proceeds thusly:

<u>Cary</u>: It's getting hard to tell the two of you apart. (Cary then describes how Elliot needs to extricate himself from Beverly, how his career and reputation can survive without Beverly.)

<u>Elliot</u>: The truth is, nobody can tell us apart. We are perceived as one person. If Bev goes down the tubes, I go down with him.

Cary: You've got to cut yourself loose.

Elliot: It wouldn't work.

Cary: Why?

<u>Elliot:</u> Now look. Don't you get it yet? Whatever's in his bloodstream goes directly into mine.

Cary: You can't be serious.

<u>Elliot:</u> That is an objective medical observation. (Elliot begins taking pills.)

<u>Cary:</u> No, no, no! It's not true. You're making it true, but it's not true. Look, you don't put these in your mouth, they don't end up in your bloodstream. (Cary knocks the pills from Elliot's hand, and Elliot begins picking up the pills.)

Elliot: Beverly and I just have to get synchronized. Once we're synchronized it'll be easy.

Following this exchange, Elliot moves in with Beverly, and both enter into a downward spiral of drug abuse and addiction, continually vowing that the next day will be the day they kick their habit.

By this point in the film, it is virtually impossible to tell the twins apart. Previously, each had his

own particular idiosyncrasies, but by now the twins are completely visually interchangeable within the film.

The Mantle twins are enacting a central tenet of both digitality and posthumanity: the actual arises in the world through its instrumentality, through the ways in which it is used and deployed in a particular environment. Consciousness and subjectivity are activities; they are something we do within the world. And the film visualizes this process in a particular dialect of vernacular posthumanism that deploys a physical connection to indicate a connection in consciousness. ¹⁶ The *surface* similarities between the twins – in appearance, in movement, in manner – indicate a similarity of *depth* – of character, of subjectivity, of personality ¹⁷ – (and this is something I will explore in more detail with my discussion of DNA portraits later in this chapter). Consciousness, within this vernacular, exceeds the boundaries of the body and spreads itself across multiple actants inhabiting the world – Beverly, Elliot, the pills, the apartment, the surgical tools, etc. Synchronization, as demonstrated in *Dead Ringers*, is not a passive process but rather an activity that takes place in a material world. What comes to mind here is another hallmark of the digital age: the widespread desire to have all devices "synced" so that information can mingle freely on all devices. However, as much as we might desire the simultaneous and synchronized existence of all information across multiple platforms, bodies and materiality – as the Mantle twins so vividly illustrate – matter.

To explore the relationship between the actual and the virtual, and the ways in which the virtual inhabits a material body, I turn to a strain of visual scholarship that conceives of the digital as a virtuality existing within objects of visual culture. Anna Munster conceives of the digital as a "baroque event," and she calls the digital a "machinic movement…a flow of information, technologies, cultural and social deployments, potentialities, delimitations and regulations." For Munster,

¹⁶ As with *300, Dead Ringers* utilizes an aesthetic form of equivalence to indicate a "deeper" form of equivalence. See Chapter One.

¹⁷ Marcie Frank, "The Camera and the Speculum: David Cronenberg's *Dead Ringers*," *PMLA* 106, no. 3 (1991).

¹⁸ Munster, *Materializing New Media*: 13.

digitality is a baroque event in that it is an open system that refuses closure, emphasizes spectacle and illusion, refuses to confine itself to the frame, and inhabits the folds, creases, and curves of the visual realm. The same could be said of the posthuman, which is a similarly open system that denies the simple framings of human and nonhuman, subject and object, self and other.

David Rodowick echoes much of what Munster argues, though he places more emphasis on the virtual dimension of the digital image. For Rodowick, a medium can only be defined through the cultural context of its use: "A medium is not simply a passive material or substance; it is equally form, concept, or idea. Or, more provocatively, a medium is a terrain where works of art establish their modes of existence, and pose questions of existence to us." A medium, therefore, is defined not by any intrinsic property it might possess; rather, a medium's "meaning" is achieved through interaction with the other agents in its material-semiotic network. This emphasis on use and phenomenological interactivity is also a hallmark of the way in which posthumanist theory makes sense of agents and environments.

Medium still maintains importance – for understanding consciousness, self, etc. – but the meaning of a medium also arises within the network. It is helpful to think of mediums as actual manifestations of virtual attitudes, forces, and processes of translation. From this perspective, mediums can be viewed as material manifestations of virtual forces. They are not abstract, self-generating technologies (though they might appear to be so), but are rather connected to the myriad virtual forces within a particular time and place.

The relationship between the Mantle twins in *Dead Ringers* provides an example of the digital and posthuman attitudes. Materially, their bodies are separate entities. However, through the ways in which they *enact* their subjectivities in the world, they create a virtual system in which their subjectivities can exist across material boundaries. As the film demonstrates at several points, the Mantle twins desire to become completely interchangeable, and their actions strive to make this

¹⁹ Rodowick, *The Virtual Life of Film*: 42.

virtuality an actuality. It is here, however, that we find the contradiction on which vernacular posthumanism draws: fantasies of disembodiment and informationalism must eventually reckon with the realities of the body. The Mantle twins share a virtual subjectivity, but they cannot overcome the materiality of their bodies, no matter how hard they try. In true Cronenbergian fashion, this desire to transcend the human is punished in the end through the evisceration of one Mantle twin and the suicide of the other. In this moment from the end of the film, one Mantle twin has killed the other in an attempt to "separate the Siamese twins," and the other has committed suicide – it is unclear which twin is which. In Figure 3.2 we see an enactment of the virtual folding of the twin's subjectivities. At their end, the twins enfold their bodies in an attempt to reflect the enfolding of their subjectivities. They enact this virtual folding but at the cost of their actual flesh.²⁰



Figure 3.2: Dead Ringers Folding

3.2 The Poetry of the Steak: The Fly as Metapicture

The process of synchronization in *Dead Ringers* is, essentially, the meeting of two different entities, which, though processes of translation and mediation, come to resemble and understand each other. The concept of *mediation* is foundational to the work of philosopher and sociologist of science, Bruno Latour, and he uses *mediators* to explore how social realities are materialized through his formulation of actor-network theory (ANT). Within Latour's framework, actants exist completely separated from each other, each actant a material entity that can only relate to other actants through third party mediators. However, while an actant might enjoy a unique and material

²⁰ I explore the "dead flesh" of nonhumanism in the Conclusion to this project.

existence, it comes to be defined purely through its relationships with other actants.²¹ In other words, an actant exists in its own strong realism, but it can only be perceived within a network through the sensations it creates by means of its interaction with other actants. What is most relevant to my reading of *The Fly* are the ways in which processes of *translation* function to create associations among actants, finding ways of establishing equivalency among completely individuated actants. As I have discussed previously, *code* operates as a 21st century universal equivalent that purports to be able to translate among humans, nonhumans, and machines, and it acts as a mediator among actants. In The Fly, scientist Seth Brundle (Jeff Goldblum), his teleportation pods, and the fly that accidentally fuses with Brundle's DNA are each discreet entities, unable to relate to each other without a mediator. As philosopher Graham Harman puts it, "Latour sees entities as basically cut off in their current relations, unable to enter into new ones without a third actor mediating on their behalf."22 Eventually, by developing an understanding of what connects human, animal, and machine, Brundle is able to fuse the three actants together. Brundle soon discovers, however, that translations always change that which is being translated, and the importance of medium and materiality is echoed by Latour: "For Latour, translation is ubiquitous: any relation is a mediation, never some pristine transmission of data across a noiseless vacuum."23 An actant is not durable, and it changes constantly depending on its relationships with the other actants in its network.

Latour is also careful to distinguish between an intermediary – something that is perceived as translating without changing – and a *mediator* – something that "is an original event and creates what it translates as well as the entities between which it plays the mediating role."24 For Latour, an intermediary "is what transports meaning or force without transformation: defining its inputs is

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²¹ Graham Harman, *Prince of Networks: Bruno Latour and Metaphysics* (Melbourne: re.press, 2009).

²² Harman, *Prince of Networks*: 228.

²³ Ibid., 77.

²⁴ Latour, We Have Never Been Modern: 78.

enough to define its outputs."²⁵ Mediators, conversely, "transform, translate, distort, and modify the meaning of the elements they are supposed to carry."²⁶ Cultural processes of translation – the concept of code, for example – are often perceived as seamlessly translating among diverse actants, allowing for a perfect exchange between humans and machines. However, the reality is much more complex, and as Latour argues, translation creates the things it translates, deforming and reforming the actants with which it is involved. This theorization of mediators is also the premise of *The Fly*, and as I will demonstrate, Cronenberg offers a vision of just how deforming the process of translation can be.

In one important sequence from the film, scientist Seth Brundle is trying to solve the "riddle of the flesh." His telepods have thus far only been able to teleport non-organic matter. Any attempt to teleport living or organic matter results in the organism being wildly deformed or destroyed. In order to test the ability of the telepods to transport dead organic matter, Brundle takes a piece of steak, cuts it in half, and teleports one half of the steak while leaving the other half in its "natural" state. After the teleported steak has been "decoded," transmitted to the sister pod, and then "reencoded," Brundle cooks each steak and gives them to his girlfriend, Veronica (Geena Davis), to taste. Veronica tastes the first steak – the untransported steak – and replies that "it could use some finesse, but it tastes like a steak." However, after tasting the transported steak, Veronica spits it out, claiming that "it tastes synthetic."



Figure 3.3: Human-Fly-Machine Assemblage

²⁵ Latour, *Reassembling the Social*: 39.

²⁶ Ibid.



Figure 3.4: Human-Fly-Machine Assemblage

The quandary for Brundle is making sense of why the computer can effectively translate inorganic matter but fail to successfully translate organic matter. The underlying premise of this dilemma is that inorganic matter, which is closer in form to the machine nature of the computer, is easier for the computer to understand. Organic matter, conversely, is foreign to the computer's sensibilities so it needs a more effective method of translation. Brundle, as a genius scientist, believes he can teach the computer about the flesh (himself only having become educated in the intricacies of the flesh as a result of his sexual relationship with Veronica). Brundle describes his assessment of the problem as such:

The computer is giving us its interpretation of a steak. It's translating it for us. It's rethinking it rather than reproducing it, and something's getting lost in the translation...The Flesh. It should make the computer crazy, like those old ladies pinching babies. But it doesn't, not yet. I haven't taught the computer to be made crazy by the flesh. The poetry of the steak. So I'm going to start teaching it now.

The telepod's inability to accurately translate the flesh has exposed the *black box* that is the construct of code. For Latour, "a black box is any actant so firmly established that we are able to take its interior for granted."²⁷ Black boxes are those entities whose operation, origin, and ontology are so taken for granted that they are no longer even recognized. Latour's project is to blast open these black boxes, exposing the forces and networks that constitute the particular actant. In the context of

²⁷ Harman, *Prince of Networks*: 33.

The Fly, the film opens the black box of translation and code, only to seemingly shut it again when Brundle successfully instructs the computer as to the craziness of the flesh. However, as Cronenberg's films so often do, the film ends with the black box being torn asunder again, when Brundle-Fly and the telepods are fused into a monstrous human-fly-machine assemblage.

A digital cultural logic is one that wishes to view information, as reduced to code, as an intermediary rather than a mediator. Vital to digital thinking is the idea that information should be able to pass through multiple mediums with no alteration in the content of the information. Translation only matters when glitches expose the machinery behind the flow of information. These momentary hang-ups are the signs of a black box being opened, and they indicate the kinds of work that goes into information processing and synchronization. *The Fly* offers a vision of digitality that fantasizes about the easy exchange of information. All entities – human, animal, and machine – are reduced to a common code that can be understood and translated by a computer (after, of course, some tutoring by Seth Brundle). The film serves as a metapicture of the digital attitude – while it may not have been produced within a digital mode of filmmaking, it was made within a cultural logic that fantasizes about an informationalist paradise. And this is another example of where posthumanity and digitality overlap: both contain strands of thinking that celebrate code over the material instantiations of that code. While *The Fly* is decidedly schizophrenic in its attitude towards posthumanity, espousing both transhumanist fantasy as well as a more subtle critique of that fantasy, it does have something to say about the interface between humans and other entities.

On the one hand, *The Fly* adheres to the idea that if we build a good enough translator – Brundle's computer – we will be able to reduce everything to its building blocks of code. Notably, it is not the computer that fails; it is Brundle. The computer accurately does its job, decoding the bodies and objects in one telepod, breaking them down into pieces of code, and transmitting them to another telepod where they are reconstructed. Brundle, however, makes the mistake of hubris, and

²⁸ I discuss the role of the scientist as "modest witness" in the second half of this chapter.

he fails to account for the foreign body of the housefly that accompanies him during his first journey in the telepod. The technology is flawless, but the scientist is flawed. Given sufficient precautionary measures, humans and other organic matter could be safely and efficiently teleported from one location to another. The primary thesis espoused by *The Fly* is that the theory of informationalism, one that adheres to strong belief in reductionism, is fundamentally sound.

On the other hand, *The Fly* warns of the dangers of informational reductionism. While technology might enable Brundle to teleport himself, the film criticizes Brundle for scientific overreach (as do many of Cronenberg's other early films).²⁹ So, while the film might support a theory of passive translation, in practice, translation is a very active process. *The Fly* calls attention to the difficulties of translation, positioning both Brundle and the computer as important mediators, actants who reshape and reform interpretations of the flesh. In particular, *The Fly* recognizes the necessity of a translator in order for entities to "speak" to each other. The film attempts to address this issue of translation in a sustained manner, but it tends to get caught up in its own technological fantasy. Brundle, the scientist, most certainly fails in his quest, but it is due to his own personal overreaching rather than a failure of technology. Even though the film acknowledges the craziness of flesh and "the poetry of steak," a machine is ultimately able to provide an accurate translation of the flesh, a "synchronization" of flesh and machine. What this fails to acknowledge is both entities – flesh and machine – are not, in fact, purely exchangeable, and as Latour asserts, mediators change that which they are translating. Matter matters. The scientist is elided here, and his role as translator takes a backseat to the technological power of the teleportation device.

²⁹ For a discussion of Cronenberg's oeuvre, see: William Beard, *The Artist as Monster: The Cinema of David Cronenberg*, Rev. and expanded. ed. (Toronto: University of Toronto Press, 2006); Ernest Mathijs, *The Cinema of David Cronenberg: From Baron of Blood to Cultural Hero* (New York: Wallflower Press, 2008).

3.3 Shivers and the Materiality of Space

Cronenberg's visions of posthumanity and digitality always return to the concerns of the material world. The tension between information and the flesh becomes enfolded in his films, and the possibility of reconciling the two exists as a virtual fantasy that resists actualization. My final example from Cronenberg returns us to his early efforts at filmmaking. *Shivers* (1975) offers a visualization of the relationship between the *space* of the material world and informationalist fantasy. In *Shivers*, the residents of an isolated apartment complex are besieged by a parasite that turns its victims into sex maniacs. While the narrative of *Shivers* is typical genre fare – the film is essentially a take on the zombie narrative – the larger concerns of the film speak both to Cronenberg's later concerns as well as to the relationship between space and subjectivity. In a sequence from the very beginning of the film, which is structured as a slideshow of the features and amenities of the apartment complex, a narrator describes the benefits of living in Starliner Towers. The space is depicted as completely rational and devoid of humans, and the apartment is presented as static and hierarchic, a far cry from the rhizomatic structure of the digital.

This opening sequence is constructed as a series of snapshots, almost like thumbing through the images of a brochure, and it does not contain any moving images. A male narrator speaks over the images, describing the various benefits of living in Starliner Towers, among them furnished rooms, an underground parking garage, views of the St. Lawrence river from apartment balconies, "modern name-brand electrical appliances," standard cable TV, an Olympic-size swimming pool, a golf course, tennis courts, a restaurant, variety store, delicatessen, boutique, drug store, dry cleaning service, and dental and medical clinics, basically everything a person needs to isolate him/herself from the rest of society. This isolation is advertised as one of Starliner's major selling points, according to the narrator: "Although downtown Montreal is only twelve-and-a-half minutes away, once you've crossed the carrier bridge to Starliner Island, the noise and the traffic of

 $^{^{30}}$ My discussion of space in *Shivers* echoes my discussion in Chapter One of the relationship between space and subjectivity in *The Decalogue*.

the city might as well be a million miles away." Later, the narrator invites applicants to: "Explore our island paradise, secure in the knowledge that it belongs to you and your fellow passengers alone. Cruise the seasons, the sun, and the stars without ever leaving the great ship Starliner. It's all here." This opening sequence ends with the tagline: "Sail through life in quiet and comfort. Cruise Starliner." The apartment complex is advertised as a calm, quiet, and isolated living environment, one that an inhabitant need never leave, and the formal qualities of the sequence mirror this sentiment. The complex is, above all, a safe and rational space, an attempt to isolate all of the qualities of the suburbs in a self-contained apartment complex on a self-contained island.



Figure 3.5: Starliner Towers



Figure 3.6: Starliner Towers

This rational space, however, cannot sustain itself, and it is soon infected by the virus of the sex parasites. The parasites contaminate the space, and they break down the clean and rigid hierarchies set up through the isolation of humans from all forms of contact (even each other). This theme

of viroid infection³¹ has much in common with the theories of digitality and posthumanity that I have thus far discussed. The vectors of infection that plague the apartment complex break down physical, social, economic, cultural, and class boundaries. The parasites, in a way, allow the residents to network with each other and reclaim the rational space of the apartment in the name of more rhizomatic desires. Like digital information, the parasites flow through various mediums. However, we still encounter the fundamental contradictions of information, flesh, and translation we found with *Dead Ringers* and *The Fly*. Rather than individual parasites or people, we now have parasite-human assemblages. The sex parasites of *Shivers* (as well as the "sac-babies" of Cronenberg's later film, *The Brood* [1979]) are radically other, but simultaneously fundamental to, our subjectivities.

As Walter Benjamin argues in his discussion of the Arcades, space functions to crystallize and produce a particular subjectivity at a particular historical moment.³² The space in *Shivers* speaks to a desire to separate completely the mind and the body, the rational and the irrational, and to deny the interconnection between the two. The apartment complex is a completely rational space, clean and self-contained, and this is reinforced by the style: still snapshots instead of moving images. The complex also speaks to a desire to separate the inside and the outside, the private and the public. Unlike digitality, which relies on a rhizomatic structure of information exchange, the apartment complex operates hierarchically, strictly separating the inside from the outside.

However, as nonhumanist thought recognizes, such divisions are artificial and do not with-stand scrutiny. The desire to create an isolated space functions, in the end, to provide the conditions necessary to *produce* the parasites that bring chaos to order. Only a culture that has completely separated body and mind could conceive of both the isolated apartment complex and the sex para-

³¹ Parikka, "Contagion and Repetition"; Keith Ansell-Pearson, *Viroid Life: Perspectives on Nietzsche and the Transhuman Condition* (New York: Routledge, 1997).

³² Benjamin, "Paris." See Chapter One for a fuller explication of this "Modernity Thesis."

sites. The apartment complex is a material manifestation of the mind/body dichotomy, and the sex parasites are a symptom of the split.

Space, therefore, provides a means to circle back to my original questions about the relationship between digitality, posthumanity, materiality, and virtuality. Space is also an actual manifestation of virtual forces, and as such, tells us something about the relationship between the actual and the virtual.³³ The way in which we inhabit space – as well as the space itself – is fundamental to the formation and enactment of our material and semiotic relationships. In theorizing the digital turn, we might also be mindful of the implications of the turn and what it says about the ways in which we imagine ourselves interacting with each other and with the world.

The next section of this chapter takes up the issue of surface and depth, the relationship between the inside and outside, in more detail, and it uses DNA portraits as a means to unpack the complications that arise when flesh and information are folded into each other and visualized on a single plane.

3.4 Drawing Blood: Surface and Depth in DNA Portraits

Since the writing of Walter Benjamin's "The Work of Art in the Age of Mechanical Reproduction," technologies of mechanical reproduction have continued to improve in both the speed and accuracy with which they produce copies of their "originals." What happens, then, when we apply Benjamin's conceptualizations of twentieth century mechanical reproduction to twenty-first century practices of biological reproduction? W.J.T. Mitchell, in his chapter "The Work of Art in the Age of Biocybernetic Reproduction," addresses exactly this question, and he revises Benjamin's theory in order to apply it to contemporary culture, in which DNA and genome maps are supplementing photographic negatives and binary code as viable material for mass reproduction. As Mitchell defines it:

³³ See my discussion of *300* in Chapter Two.

³⁴ Benjamin, "Work of Art." Or, as Baudrillard would have it, copies of copies. Jean Baudrillard, *Simulations*, trans. Paul Foss, Paul Patton, and Philip Beitchman (New York: Semiotext(e), 1983).

Biocybernetic reproduction is, in its narrowest sense, the combination of computer technology and biological science that makes cloning and genetic engineering possible. In a more extended sense it refers to the new technical media and structures of political economy that are transforming the conditions of all living organisms on this planet.³⁵

He concludes that "biocybernetic reproduction has replaced Walter Benjamin's mechanical reproduction as the fundamental technical determinant of our age." ³⁶

For Benjamin, the era of modernism was marked by an increasing reliance on technological reproducibility, from the distribution of mass media, to the mass dissemination of artistic commodities, to the reproduction and recording of live sound. The stakes for Benjamin are twofold. On the one hand, the ability to inexpensively reproduce, on a mass scale, works of art that were previously accessible only by pilgrimage to specific locations resulted in a loss of aura surrounding those works. That is, the original work of art, stripped of its singularity, becomes merely one among many other commodities, just another product on the shelves of the five-and-dime. On the other hand, technologies of mechanical reproduction can promote liberatory, democratic practices. By making available works of art that were previously accessible only to those with the time, means, education, and class stature to travel to the sacred space of the museum, mechanical reproduction opens up pathways of accessibility to new consumers of art. Additionally, technological reproducibility allows consumers to modify the artistic products they are consuming, becoming producers of cultural products rather than merely consumers. With the presence of the aura lessened, consumers become freer to tinker with the formerly sacred cultural products (Benjamin interprets the destruction of the aura as a form of secularization because it moves the art object from the sphere of the sacred to that of the secular, transforming its cult value into exhibition value). Aura, within Benjamin's framework, is a decidedly class-based phenomenon, and the dissipation of that aura by me-

³⁵ Mitchell, What Do Pictures Want?: 312.

³⁶ Ibid., 318.

chanical reproduction serves to even the entry-point for all cultural consumers. Mechanical reproduction is, thus, a double-edged sword – it has utopian, as well as destructive, potential.

If Mitchell is correct, and technologies of biocybernetic reproduction have indeed supplanted or replaced technologies of mechanical reproduction, then this creates significant implications for the ways in which culture represents itself. Mechanical reproduction tends to encompass only those things *external* to the human body, things that are nonhuman. Biocybernetic reproduction, conversely, encompasses things *internal* to the human body, the very stuff with which we are made. Instead of merely reproducing photographs and other products of media, biocybernetic reproduction provides us with the cultural fantasy that we can reproduce ourselves. Using DNA and the genome map, humanity can be represented and reproduced in entirely new ways, and I will examine this notion of biocybernetic reproduction and the ways in which it inflects our cultural representations of ourselves.³⁷ Specifically, I will use the recent development of DNA Portraits as a starting point for an analysis of contemporary conceptualizations and representations of "humanness." Of particular interest is the evolving notion of what it means to represent a human within a context of biocybernetic reproduction, which emphasizes that which is *common* among all humans (and non-humans).

This recent interest in imag(in)ing the self through visualizations of DNA is symptomatic of a larger cultural concern with the connection between "deep" genomic structures and individual identity. As I will later discuss in detail, these kinds of "nature vs. nurture" concerns are nothing new, and they can be traced back to Descartes' epistemology of skepticism, which privileges infor-

³⁷ Jackie Stacey, in a parallel movement, addresses the relationship between digital imaging technologies and "geneticized embodiment." Utilizing a Benjaminian framework of the loss of aura, Stacey relates the breakdown of the body into its genetic components to the body's loss of "bioaura." This loss of bio-aura leads to a loss of uniqueness of the individual, and this is a conceptual framework that my own analysis of DNA portraits follows: "Extending Benjamin's concept of the loss of aura to the domain of the geneticized body, we might think of the demise of bio-aura through the fading sense of the body's singularity, nonrepeatability, uniqueness, integrity, and authenticity." Stacey, *The Cinematic Life of the Gene*: 182.

mational processes at the expense of material existence.³⁸ In more contemporary discourses, the relationship between genetics and the individual is framed within discussions of, for example, intelligence, human ancestry, and individualized medicine. My intent in critiquing these approaches to the relationship between identity and genetics is not to claim that they are somehow "wrong" or "misguided." Rather, my critique is intended to complicate the one-sided, biologically deterministic discourse that these approaches frequently utilize and to expose the cultural assumptions on which such discourses are founded.

The history of the kind of biological essentialism described above has been well studied and documented, and I do not intend to rehearse the entirety of the arguments presented in the literature. A few examples, however, will provide an overview of the current critical consensus on the matter of biological essentialism and biological determinism. As I stated at the beginning of this chapter, Harvard professor and biologist Richard Lewontin offers a critique of biological determinism in order formulate a larger commentary on contemporary culture's attitude towards "biology as ideology." Lewontin's project is to demolish the kind of biological determinism that posits a direct link between heredity and intelligence, and in particular, his target is Richard Herrnstein and Charles Murray's *The Bell Curve* (1994), which argues for the genetic (and racial) basis of IQ.³⁹ The attribution of complex social and biological systems to a single causal agent is known as reductionism, and the idea that we are our DNA is the 21st century reductionism par excellence.

However, as Stephen Jay Gould observes, while *The Bell Curve's* argument might seem particularly provocative, salacious, and/or offensive, it is in fact the logical extension of popular attitudes towards the power of biological essentialism, and in more contemporary times, DNA. Gould takes pains to historicize what he considers the completely unoriginal, biodeterminist arguments presented in *The Bell Curve*, drawing a parallel between the popularization of biodeterminist dis-

³⁸ René Descartes, *A Discourse on the Method*, trans. Ian Maclean (New York: Oxford University Press, 2006). 23.

³⁹ Richard J. Herrnstein and Charles A. Murray, *The Bell Curve: Intelligence and Class Structure in American Life* (New York: Free Press, 1994).

course and trends of economic, social, and political upheaval, particularly in regards to calls for decreased government spending and unrest among disadvantaged groups. Gould identifies three influential episodes of biologically determinist thought. The first involves the push towards a hereditary interpretation of IQ in the 1920s United States; the second episode revolves around an article published by psychologist Arthur Jensen in 1969, which formulates an argument supporting the genetic basis and innateness of intelligence (this argument was used to criticize the Head Start program and dichotomize blacks and whites); the third example provided by Gould is Herrnstein and Murray's *The Bell Curve*, written in 1994 and based on an article published by Herrnstein in 1971.⁴⁰ To this list – and more directly relevant to my discussion of identity and embodiment in DNA portraits – I would add our contemporary cultural obsession with the genomic revolution and the utopian discourses of genetic manipulation spawned by this revolution.⁴¹

DNA portraits, in part, accrete much of their representational power through processes of synecdoche, whereby the part – DNA – comes to stand for the whole – the embodied individual. ⁴² The portraits, which do not employ iconic methods of representation, rely on an assumption that DNA can stand in for the individual. This assumption, in turn, relies on a conceptualization of DNA as a homuncular entity in the style of a Cartesian cogito, a ghost in the machine that directs the behaviors and activities of the individual. What this all adds up to is a link between DNA and biological determinism: within popular rhetoric DNA comes to stand for a whole host of behaviors and medical conditions, from alcoholism to high cholesterol to athletic ability. DNA also comes to stand in for (and tacitly justify, through appeals to Nature) larger cultural structures such as economic class, gender, and race. Lewontin summarizes this line of thinking as such: "Genes make individuals, individuals have particular preferences and behaviors, the collection of preferences and behaviors

⁴⁰ Stephen Jay Gould, *The Mismeasure of Man*, Rev. and expanded. ed. (New York: Norton, 1996). 29-31.

⁴¹ For discussions about the impact of genetic science on cultural thinking, the dangers of biological reductionism, and the connections between theories of subjectivity and theories of genetics, see: Kay, *Who Wrote the Book of Life?: A History of the Genetic Code*; Keller, *The Century of the Gene*.

⁴² Roof, *The Poetics of DNA*.

makes a culture, and so genes make culture."⁴³ Because DNA is viewed as affecting societal structures, biodeterminist discourses have the power to shape popular thinking in regards to things like social programs and racial essentialism.

This kind of deterministic discourse lends DNA a kind of agency, which is reflected in ideas such as Richard Dawkins' concept of the "selfish gene." 44 Dawkins, in sum, posits that it is not the ability of the organism to survive that is the primary force behind natural selection but the selfishness of the gene, which battles with other genes for reproductive supremacy. Organisms thus become merely mechanisms for the survival of the gene, tools of the forces of natural selection. This focus on DNA rather than the organism also has implications for the kinds of health policy that focus on biological, at the expense of social, causes of disease. "Understanding genes as agents (even agents with selfish motives) makes it easier to think of genes as a strategic site to focus palliative measures" such as gene therapy. 45 Again, the idea that we are our DNA has significant cultural and political ramifications, especially in regards to health research.

Two specific examples of the contemporary rhetoric of biological determinism will help illustrate the link between DNA and essentialism. The recent upsurge in genetic ancestry testing is symptomatic of the cultural fascination with genetic identity. Numerous companies offer genetic ancestry testing through their websites, the most prominent of which is arguably National Geographic's Genographic Project.⁴⁶ The Genographic Project seeks to answer the question of where "you *really* come from," and it hopes to accomplish this task by gathering DNA samples from population groups around the world.⁴⁷ Implicit to the goals of this project is the assumption that discovering one's ancestry will lead to a richer understanding of personal identity, to the acquisition of a

⁴³ Lewontin, *Biology as Ideology*: 14.

⁴⁴ Richard Dawkins, *The Selfish Gene* (New York: Oxford University Press, 1976).

⁴⁵ Roof, The Poetics of DNA: 23.

⁴⁶ Companies offering personal genetic ancestry testing include DNA Tribes (http://dnatribes.com/), GeneBase Systems (http://www.dnaancestryproject.com/), The National Geographic Society (https://genographic.nationalgeographic.com/).

⁴⁷ For an extended explanation of The Genographic Project, see: Spencer Wells, *Deep Ancestry: Inside the Genographic Project* (Washington, D.C.: National Geographic, 2006).

deeper truth about one's history. Within this schema, genetic history is prioritized over social, cultural, or anthropological history, emphasizing heredity over the sociocultural processes – war, economics, family structure, etc. – by which that heredity occurred.

The human migration maps created from this ancestry tracing beg similar questions as those raised by DNA portraits, though they rely on group, rather than individual, representation. Utilizing a broad database of DNA samples, these maps chart the historical migration of humans out of Africa and into the rest of the world. Here, the historical and geographical diachronic movement of blood is condensed into a synchronic image of the world. The maps materialize blood by simultaneously dematerializing the historical and cultural forces that have guided human migration.

In contrast to DNA portraits, which focus on the visualization of an individual, migration maps instead attempt to visualize (and reduce) large populations to statistically significant appearances of particular genetic traits. The genetic archive established by these projects is the result of both private and public corporations and organizations – most notably the National Geographic Society's Genographic Project, headed by Dr. Spencer Wells – and this archive is often visualized in the form of migration maps. After the complete human genome was sequenced in 2000, researchers had available to them all of the information needed to locate small mutations in human DNA. In order to track the history of human migration, genetic tests "examine the sequence of molecules, called nucleotides, in a person's DNA. They focus on what scientists consider 'junk' DNA – portions of the human genome for which no biological function has been identified." During the transfer of genetic material from generation to generation, small mistakes occur when the DNA is being copied, and these mistakes arise at a predictable rate, almost like a biological clock. As Wells describes it: "In genetics, the mistakes are called *mutations*. They occur at a low rate every generation – about 50

⁴⁸ Jennifer McAndrew, "Deep Roots?: New DNA Tests May Reveal Your Ancestry, but Researches Urge Caution when Interpreting Results"," *Feature Stories from The Office of Public Affairs* (2007), http://www.utexas.edu/features/2007/ancestry/.

changes out of the billions of nucleotides that make up the human genome."⁴⁹ Most of the time, these mutations happen on segments of the DNA referred to as "junk DNA" above – that is, the mutations do not affect the form, appearance, or biological functioning of the organism, at least not on a level that presents itself visually obvious. Because the rate of mutation is predictable, researchers can track the historical evolution of human DNA. Vital to this type of research is the idea of endogamy, the human practice of marrying and reproducing within isolated population groups. While these conclusions do not necessarily hold for a particular individual's DNA, by examining large swaths of a population, researchers can use statistical regression to make conclusions as to general migration patterns. Doing this kind of analysis on a global scale results in migration maps, and these maps place people into *haplogroups*, which are "a group of people who share a set of genetic markers and therefore share an ancestor."⁵⁰

The increasing focus on individualized medicine – treatments that address personal genetic and hereditary risks for disease – serves as another example of the increasing cultural attention paid to personal genetics and identity. While individualized medicine has great potential to improve the lives and wellbeing of those who have the economic means to access such technologies, it is not immune from cultural biases. As both Duana Fullwiley and John Hartigan have pointed out, individualized medicine is especially problematic in regards to race in that it relies on cultural constructions of race in order to gather "representative" samples of DNA and then reinscribes those constructions of race in the treatment of individuals.⁵¹ In other words, researchers rely on the self-identification of individuals in order to gather diverse samples of DNA for research purposes. Conclusions are then drawn from the results of the analysis of these samples and then reapplied to other individuals seeking individualized treatment according to their self-identified race. It is im-

⁴⁹ Wells, *Deep Ancestry*: 16.

⁵⁰ Ibid., 40.

⁵¹ Fullwiley, "The Molecularization of Race: Institutionalizing Human Difference in Pharmacogenetics Practice."; Hartigan, "Is Race Still Socially Constructed? The Recent Controversy over Race and Medical Genetics."

portant to note, however, that both Hartigan and Fullwiley are careful to maintain a balance between the claims of nature and the claims of culture, and they refuse any strict delineation between the social and the scientific, a nuance I work to retain in my own analysis of DNA portraits.

Within these example discourses, DNA (and its corollary genetic structures) is viewed as a truth-producing entity, capable of both predicting the future as well as revealing the past. According to this framework, individuals are biologically overdetermined from the moment of their conception, and all that the individuals will become is encoded in their DNA. Identity is thus naturalized through appeals to genetics, and locating the "truth" of the individual involves "decoding" the genome. My analysis of DNA portraits aims to shed light on one aspect of this growing cultural obsession with DNA, namely, its ability to represent and produce a visualization of the individual. Through analysis of this kind, I hope to better understand the imbrication of culture, technology, and visuality and the stakes – both political and personal – of the imag(in)ed link between nature and culture, technology, and representation.

Portraits have traditionally been viewed as revealing some insight into the figure represented in the portrait, presumably through some connection between the body and the "soul." Shawn Michelle Smith makes this point strongly in her analysis of early photographic portraiture, which, due to its mechanical mode of production, was not viewed as artistic production in the classical, painterly sense. Rather, as Smith claims, critics "deemed the photographic portraitist's art to be something else, namely, his or her ability to depict the inner soul of an individual in a representation of external countenance." In the case of DNA portraiture, however, there is no depiction of an external body to which the inner soul can adhere. In this case, what exactly is the portrait representing, and how does it change our definitions of humanness? In the next section of this chapter, I will address these questions through an examination of embodiment in traditional portraiture and the ways in which the figure represented in the portrait comes to reveal something about the es-

⁵² Shawn Michelle Smith, *American Archives: Gender, Race, and Class in Visual Culture* (Princeton, N.J: Princeton University Press, 1999). 60.

sence of that figure. I will then compare traditional portraiture to DNA portraits, arguing that DNA portraits are utilizing the same representational techniques and operating within the same representational frame as traditional photographic portraiture.

The final section of this chapter outlines the historical and cultural context of DNA portraits, and it contains information gathered from an interview with the co-founder of DNA 11, the leading producer of DNA portraits, Nazim Ahmed. This section will also examine the breakdown of the modernist division between subject and object, human and nonhuman, and it will place this breakdown within the context of theories of the posthuman. I will also use Bruno Latour's idea of the *hy-brid* to analyze the ways in which DNA portraiture serves as an example of the weakening binary between nature and culture in contemporary society. Additionally, I will interrogate the ways in which life becomes embodied through DNA portraits in an era of vernacular posthuman. Bridging the gap between aesthetics and science, DNA portraiture straddles the division between humanistic and scientific representations of humanness.

3.5 Portraits with Bodies, Portraits Without

The development of photography in the mid-nineteenth century created a new ontological framework within which to understand the relationship between an object and its representation. Widely viewed as bridging the gap between object and image, photography was heralded as "a truth-producing technology," which could capture the essence of the thing and re-present it in photographic form.⁵³ The image vernacular surrounding photographic portraiture assumed some connection between the subject as represented in the photograph and the essence of the embodied human that forms the object of representation.⁵⁴ Although photographs are not themselves (hu-

⁵³ P. Gabrielle. Foreman, "Who's Your Mama? 'White' Mulatta Genealogies, Early Photography, and Anti-Passing Narratives of Slavery and Freedom," *American Literary History* 14, no. 3 (2002): 509. ⁵⁴ I am focusing on photographic portraiture (instead of painting, sculpture, etc.) because it is a form of indexical, mechanical reproduction, and as such, bears more relevance to my discussion of

man) bodies, they do depict (human) embodiment. This embodiment can be attributed, in part, to both the indexical and iconic relationship the photograph shares with its subject, the shadowy umbilical cord that connects the image in the photograph with the body of the subject. And though the body depicted in the photograph might no longer be living, that body, as Barthes argues, still maintains a ghost of embodiment (i.e., "the referent adheres").⁵⁵

As Lorraine Daston and Peter Galison point out, the development and refinement of photographic technologies in the mid-nineteenth century lead to a reconceptualization of the role of the scientist-artist in transcribing nature, and the link between photography and mechanical objectivity formed the foundation of many theories concerning the truth claims of photography in the nineteenth century. For In particular, Daston and Galison note a shift in thinking in regards to the function of interpretation in depictions of Nature. Whereas, in the eighteenth century, the interpretive skills and trained eye of the expert formed the paradigmatic framework of scientific illustrations,

"Let nature speak for itself" became the watchword of a new brand of scientific objectivity that emerged in the latter half of the nineteenth century. At issue was not only accuracy but morality as well: the all-too-human scientists must, as a matter of duty, restrain themselves from imposing their hopes, expectations, generalizations, aesthetics, even ordinary language on the image of nature. Where human self-discipline flagged, the machine would take over. Wary of human intervention between nature and representation, [Étienne-Jules]

Marey and his contemporaries turned to mechanically produced images to eliminate suspect mediation.⁵⁷

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the connections and divergences between mechanical and biocybernetic technologies of reproduction. However, the idea that a portrait reveals something essential about its subject would hold for non-mechanical forms of portraiture as well.

⁵⁵ Barthes, Camera Lucida: 6.

⁵⁶ Daston and Galison, "The Image of Objectivity." For more on mechanical and scientific objectivity, see: Lorraine Daston and Peter Galison, *Objectivity* (New York: Zone Books, 2007).

⁵⁷ Daston and Galison, "The Image of Objectivity," 81. However, as the authors note, the transition from expert interpretation to mechanical objectivity was not a clearly delineated paradigm shift. The interpretive skills of the expert still maintained a position of prominence, especially in regards

Within this schema, the ability of a machine to record Nature objectively – and the perceived distancing of the scientist-artist's hand in the making of the image – allowed nature to "speak for itself."

The importance of what Bruno Latour calls "inscription devices" cannot be underestimated here. See Imaging technologies and mechanical objectivity are inextricably bound together, and the automated nature of photography granted it much of its perceived powers of objectivity. Étienne-Jules Marey, for example, in his treatise on chronophotography, *Movement*, carefully details the technology by which images are recorded and the artistic practices utilized to frame the subject of the photograph. The specificity with which Marey describes the inscription devices reveals that, at the time of his writing, the mechanical objectivity of photography had not yet become one of Latour's "black boxes." Marey, through his writing and photography, is in the process of cementing the role of photography as a dispassionate observer of Nature, and his obsession with detailing the accuracy of his inscription devices indicates the extent to which he believes that those devices have the ability to speak in the "language of the phenomena themselves."

This perceived ability of photography to record objectively the phenomena of Nature displaced the burden of interpretation from the expert creator to the non-professional viewer. With Nature having written itself upon the photograph, it was now the duty of viewers to interpret the image accurately. Truth-value was readily apparent on the surface of the image, and all one needed to interpret that image was the power of sight. This emphasis on sight played into the development of physiognomy, which took as its basis the idea of a connection between the physical surface, accurately recorded by the mechanical objectivity of the photography, and the interior psychology of the embodied subject. As Sharrona Pearl writes in *About Faces*, part of the power of physiognomy came

to medical photography, and there was an initial reluctance, by the courts, to accept photographic and x-ray images as evidence, due to a lack of knowledge as to how these images were created. ⁵⁸Latour and Woolgar, *Laboratory Life*; Latour, *Science in Action*.

⁵⁹ Etienne-Jules Marey, *Movement*, trans. Eric Pritchard (New York: D. Appleton and Company, 1895).

⁶⁰ Quoted in Daston and Galison, "The Image of Objectivity," 81.

from its accessibility: "Although physiognomic skill could be honed, some were born with natural skill, and everyone was born with (variably reliable) instinct. All one really needed was the ability to see and then judge." Consistent with Daston and Galison's outline of the shift from expert interpretation to objective assessment of the image, Pearl's framework acknowledges the importance of "amateur" interpretation of mechanically-produced images: Nature itself is written on the surface, and anyone can read its signs. Pearl also argues that physiognomy – and the photographic technology on which it relied – promoted a belief in the connection between surface and depth, exterior and interior:

The development and awareness of physiognomy during the nineteenth century had an interesting by-product, namely, the rising emphasis on interior space. And understanding of physiognomy entails a commitment to the idea that exterior signs signify a less visible interior correlate.⁶²

This perceived connection between exterior and interior space is something fundamental to understanding the representational power of DNA portraits, especially because in the case of DNA portraits, the depth of the subject – his/her DNA – is written on the surface of the image and made to stand as a representation of the embodied subject.⁶³

Race scholars, in particular, have done much valuable work in regards to identity and the visuality of embodiment, specifically in studies of *fin de siècle* positivist attempts at physiognomy and craniology and in studies of images of racial "passing." Allan Sekula examines the physiognomic and craniological work of Alphose Bertillon and eugenist Sir Francis Galton, arguing that their attempts at creating databases of criminal "types" constructs a "shadow archive" that "encompasses

⁶¹ Pearl, *About Faces*: 5.

⁶² Ibid., 9.

⁶³ For a discussion of related imaging practices that emphasize a connection between biomedical portraits and the essence of the subject, see: Cartwright, *Screening the Body: Tracing Medicine's Visual Culture*; Waldby, *The Visible Human Project*; Dumit, *Picturing Personhood: Brain Scans and Biomedical Identity*. Cartwright addresses medical films, Waldby discusses the Visible Human Project, and Dumit examines the connection between brain scans and personal identity.

an entire social terrain while positioning individuals within that terrain."⁶⁴ This shadow archive is a visual record of human "statistics," and it is based in "the belief that the surface of the body, and especially the face and head, bore the outward signs of inner character."⁶⁵ These early efforts at cataloging physical and psychological human traits through portraiture are symptomatic of an epistemology of photography that regards the indexicality of photographic images as a truth-producing mode of mechanical production. Central to this conceptualization of photographic images is the "automatic" nature of photography, one which positions the camera as "an apparatus fundamentally independent of the spectator, yet which masquerade[s] as a transparent and incorporeal intermediary between observer and world."⁶⁶ As a "pencil of nature," the camera has the ability to inscribe onto the photographic plate the interiority of the subject depicted within the image.⁶⁷

This faith in the truth-value of the image, and its ability to speak to the interiority of the person depicted, is also addressed by race and visual culture scholar, Shawn Michelle Smith. Regarding early photographic portraiture, Smith claims that: "Exterior 'expressions,' namely, the physical contortions of the face, were said to register in the body's surface the 'character,' 'emotion,' 'mind,' 'disposition,' or 'soul' imagined to reside within the body's depths." She further connects this to practices of craniology and physiognomy, arguing that "visual culture was fundamental not only to racist classification but also to racial reinscription and the reconstruction of racial

⁶⁴ Sekula, "The Body and the Archive," 10. (While Sekula is not himself a race scholar, his work has been influential for race scholarship.) As Sharrona Pearl puts it in *About Faces*: "In Galton's hands, photography and statistics combined to change the emphasis of identification from individuals to groups, or, specifically, to individuals as representatives of groups." Pearl, *About Faces*: 206.

⁶⁵ Sekula, "The Body and the Archive," 11.

⁶⁶ Crary, "Techniques of the Observer," 35.

⁶⁷ The Pencil of Nature was a collection of photographic images published by William Henry Fox Talbot between 1844-1846. Fox Talbot invented the calotype, which was one of the early photographic processes developed in the 19th century. Fox Talbot was an early proponent of the idea of "mechanical objectivity" and photography's value as a truth-producing form of art. See William Henry Fox Talbot, The pencil of nature (New York,: Da Capo Press, 1969); William Henry Fox Talbot, "A Brief Historical Sketch of the Invention of the Art," in Classic Essays on Photography, ed. Alan Trachtenberg (New Haven, Conn.: Leete's Island Books, 1980).

knowledge in the nineteenth and early twentieth centuries."⁶⁹ Marey and Eadward Muybridge, both early experimenters in chronophotography, exemplify Smith's claims about nineteenth century photography's obsession with capturing the details of the physicality of the body. Muybridge, of course, is remembered for his series of chronophotographs depicting nude bodies in movement, and Marey was similarly concerned with accurately capturing the details of the body hidden from the eye. For Marey, photography had the power to pause time, to reveal what is normally unseen by the human eye: "[Photographs] teach us...to observe Nature more carefully, and, perhaps, to seek in a moving animal for positions hitherto unnoticed."⁷⁰ This increased detail afforded by photography allows the viewer to reflect on the image presented, and photographic portraiture, through its depictions of embodiment, presumes some connection between interiority and exteriority, between the photographic image – which is both index and icon – and the person depicted within the image.

Images of racial passing, however, challenge the connection between body and soul, demonstrating the instability of the body within portraiture and the extent to which cultural attitudes toward embodiment overdetermine the photographic subject. Scholars examining racial passing frequently focus on the cultural processes that sediment racially "ambiguous" images within a specific racial discourse, attempting to ground the image within a single racial type. These kinds of images work against the projects of racial classification inspired by the work of Galton and Bertillon (and discussed by Sekula), and they reveal the tenuousness of the cultural framework that understands photographic portraiture as depicting a connection between body and soul. It is this idea of embod-

⁶⁹ Shawn Michelle Smith, *Photography on the Color Line: W.E.B. Du Bois, Race, and Visual Culture* (Durham: Duke University Press, 2004). 3. This ability of the photographic image to colonize and classify is also echoed in the work of Fatimah Tobing Rony, specifically in regards to cinema and the "ethnographic spectacle." Fatimah Tobing Rony, *The Third Eye: Race, Cinema, and Ethnographic Spectacle* (Durham, NC: Duke University Press, 1996).

⁷⁰ Marey, *Movement*: 304.

⁷¹ See, for example: Valerie Smith, "Reading the Intersection of Race and Gender in Narratives of Passing," *Diacritics* 24, no. 2/3 (1994); Elaine K. Ginsberg, *Passing and the Fictions of Identity* (Durham, NC: Duke University Press, 1996); Sally Stein, "Passing Likeness: Dorothea Lange's 'Migrant Mother' and the Paradox of Iconicity," in *Only Skin Deep: Changing Visions of the American Self*, ed. Coco Fusco and Brian Wallis (New York: International Center of Photography/Harry N. Abrams, 2003).

iment, achieved through representation, which will provide a framework for the subsequent discussion of portraiture and the body.

As previously indicated, much of the power of physiognomy as a framework with which to understand the connection between body and soul, surface and depth, came from its popularity as a conceptual device as well as its acceptance as an image vernacular. As Pearl succinctly puts it: "In the nineteenth century, physiognomy went paperback." According to Pearl, physiognomy, in the nineteenth century, had become a widely understood *visual language*, a means of procuring immediate character detail." Physiognomy – and the photographic technology on which it relied – had thus become an image vernacular, a shared conceptual scheme on which popular interpretations of photographic depictions of the body relied. "Like today's computer or the film and radio of Benjamin's time, physiognomy and its media changed the way in which people perceived the world around them." An image vernacular both provides a common set of interpretive tools as well as teaches people how to see.

Cara Finnegan, in her study of the image vernaculars surrounding a portrait of a young Abraham Lincoln published in *McClure's* magazine in 1895, explores the ways in which late nineteenth century American culture read portraits as glimpses into the souls of their subjects. Discussing the relationship between image and essence, Finnegan states:

In the nineteenth century, portraits were thought to be *ekphrastic* – that is, they were believed to reveal or bring before the eyes something vital and almost mysterious about their subjects. It was assumed that the photographic portrait, in particular, did not merely "illustrate" a person but also constituted an important locus of information about human character.⁷⁵

⁷² Pearl, *About Faces*: 12.

⁷³ Ibid., 7. Emphasis mine.

⁷⁴ Ibid., 220.

⁷⁵ Finnegan, "Recognizing Lincoln," 42.

In this example, the photograph of Lincoln was interpreted by the readers of *McClure's* as indicating the true "Americanness" of Lincoln, and in his youthful face one could see the seeds of eventual greatness. Here, the body of Lincoln is the site/sight of meaning, and coinciding with the concurrent belief in physical epistemologies such physiognomy and craniology, late nineteenth century popular and scientific opinion held that the body's "external, physical features are readable manifestations of inner, spiritual qualities." The ontology of the photographic image described here, however, relies on two important aspects of photographic portraiture. First, the photographs must re-present the physical body of the subject. Second, the image vernaculars surrounding the photographs must have faith in the truth-value of the photographic image. What happens, then, when portraiture loses its bodies and is relocated into a context in which skepticism as to the truth-value of photographic images is the norm?

As decades of work in cultural studies and media reception has shown, photographs and other media images no longer hold the same truth-value within contemporary twenty-first century culture as they did during the nineteenth and early twentieth centuries. Having lived in a thoroughly media saturated environment for most of their lives, contemporary audiences are well versed in practices of representation, and they are already quite familiar with the cultural practices of "reading" and interpreting mediated images. To a certain extent, contemporary audiences begin from a point of skepticism toward mediated images, and they expect that these images are meant to manipulate. This attitude extends to portraiture: "In today's saturated image culture, portraits – especially portraits of the well-known – are not taken to be windows to the soul nor keys to understanding mythic greatness."⁷⁷⁷ Audiences, in general, are savvy media consumers, and they expect that pictures have been doctored, that the pictures are somehow lying to them. In the age of Photoshop, when anything can be altered, the truth-value of images becomes questionable. DNA portraiture, in

⁷⁶ John B. Lyon, ""The Science of Sciences": Replication and Reproduction in Lavater's Physiognomics," *Eighteenth-Century Studies* 40, no. 2 (2007): 258.

⁷⁷ Finnegan, "Recognizing Lincoln," 33.

that it relies on a belief in the connection between subject and representation, mostly through appeals to the veracity of science, seems to bypass much of this skepticism of images.

3.6 DNA Portraits: History and Cultural Context

Currently there are approximately ten companies offering DNA portraits to customers, and they all offer the same basic services: customers submit a cheek swab, and the company analyses and prints a color portrait of the gel electrophoresis. The companies all offer various customization possibilities, ranging from color, shape, and size, to the insertion of images of the person whose DNA is depicted within the portrait. DNA 11, founded in July 2005, was the first company to innovate the concept of DNA portraits on a major scale, and it was quickly emulated by competitors and clones. The primary companies offering DNA portraits include: DNA 11, MyGeneImage, Gene-Portrait, Cell Portraits, DNA Art Online, DNA Art US, DNA Art, Genomixer, deScript, and DNA Imprints.

DNA 11 has by far the strongest media presence, and its DNA portraits have been featured in numerous print and Internet publications, along with several television spots, including *Wired*, *The Today Show*, CNBC's *The Big Idea*, *Gizmodo*, *USA Today*, and HGTV, among others, and DNA 11 has also partnered with The Museum of Modern Art to sell its products. ⁸⁰ According to an interview I conducted with DNA 11 co-founder Nazim Ahmed, the company takes a broad approach to marketing, and it sees itself as bridging the traditional boundaries between art and science; DNA 11 finds itself at home in tech blogs, design magazines, art publications, and science journals. ⁸¹ As such,

⁷⁸ Nazim Ahmed, 18 April 2011. Ahmed is the co-founder of DNA 11.

⁷⁹ The websites for these companies are: http://www.dna11.com/, http://mygeneimage.com/, http://geneportrait.com/, http://www.cellportraits.com/, http://dnaartonline.com/, https://www.dna-art-us.com/, http://genomixer.com/, http://descript.info/en/, and http://www.dnaimprints.com/. DNA 11's portraits have also been sold at the MoMA online store.

⁸⁰ See http://www.dna11.com/news_clippings.asp for a full list of press appearances.

⁸¹ Ahmed.

the target market of DNA 11 is consequently quite polymorphous, and when asked about his company's intended demographic, Ahmed replied, "We don't know." I take this response to be indicative of the diversity of appeal that DNA portraits hold within contemporary culture rather than a lack of business acumen on the part of DNA 11's marketing team. Indeed, Ahmed identifies four primary demographics for DNA portraits, and he claims that the diversity in the market for DNA 11 comes from the fact that "DNA is universal" and that "everyone can connect to it." Ahmed claims that DNA 11 has sold "thousands" of DNA portraits since 2005 in over 50 countries across the world. The first market identified by Ahmed is the young professional market, people looking for something with a modern aesthetic that can serve as a conversation piece; the second market is older people looking for creative portraits of their children and grandchildren, and this market desires the DNA portraits for emotional reasons; the third market is young people seeking out DNA portraits for the "coolness," and the portraits appeal to this market completely at the level of design; the fourth market is academics.

Dovetailing with the argument I have thus far forwarded in this chapter, Ahmed attributes the growing popularity of DNA portraits, in part, to the genomic revolution of the 21st century and the concomitant shift in cultural thinking and meaning-making. He claims that the DNA portrait "concept" represents "something a lot deeper than the piece of art you see in front of you" and that the portraits are in the process of capturing a particular moment in time. More specifically, Ahmed sees DNA portraits as representing a moment in the early cultural popularization of the genomic revolution, highlighting some of the major tenets of the posthuman cultural logic of the 21st century: networks and a recognition of the fundamental connectedness of all entities. According to Ahmed, some of the illegibility of DNA portraits qua portraits has to do with the fact that culture, on a broad scale, is still trying to make sense of the genomic revolution; DNA portraits will make more sense in 20 years time. While I cannot wholeheartedly agree with this assessment – mostly because, as I lat-

⁸² Ahmed never uses the term "posthuman," and the connection between his words and posthumanism is my own interpretation.

er argue, there is something fundamentally intransitive about DNA portraits – I do agree with Ahmed's theory about one reason for the popularity of DNA portraits: the desire to explore the growing popularization of genomics in popular culture. Ahmed sees the role of DNA 11 as providing the spark for conversations about genomics, and he sees the popularity of DNA portraits as growing out of a larger cultural desire to learn more about the role of genomics in contemporary science, medicine, and art. To this end, DNA 11 has made a point of not going the route of providing personal information about the genetic information contained within the portraits (a la the genetic ancestry companies mentioned previously in this essay).

The other major thematic concern of DNA portraits, according to Ahmed, is their focus on the "connectedness" of living beings, and Ahmed attributes to this another reason for the growing popularity of DNA portraits. "History has been based on divides," and part of the appeal of DNA portraits is that they overcome these divides by representing the fundamental sameness – a DNA base - of all living creatures. This, of course, represents a very utopian view of genomics, but I think Ahmed is accurately diagnosing the appeal of DNA portraits. On the one hand, the portraits fetishize uniqueness, and they are based on the consumer's singular DNA sample. On the other hand, the illegibility of the portraits - this could be his DNA or her DNA or its DNA or anything whatsoever's DNA – contributes to the sense that these portraits are representing the sameness of all individuals; we're unique like everyone else. Traditional photographic portraiture, through its depiction of physicality, emphasizes our differences in race, gender, size, ethnicity, etc. DNA portraits, according to Ahmed, erase these differences and focus more on our sameness, even while they celebrate our uniqueness. It is telling that their first paid commission was for an advertisement for Absolut Vodka in 2005. This particular DNA portrait was made using the DNA from the various fruits employed in making the flavored vodka produced by Absolut. However, without knowing the origin of the DNA used to create the portrait, there is no way to tell what is being represented in the image. This, Ahmed claims, "reminds us that we're all connected," and the fact that fruit DNA and human DNA appear to be the same within the representational structure of the DNA portraits emphasizes our link with nature. As I will later argue, I read this more in terms of the surface quality of the image, but Ahmed's assessment gives us a glimpse into how DNA 11 views its product and the audience consuming this product.

For Ahmed, DNA portraits function as a microcosm of how genomics is going to radically affect culture, and he draws an analogy between the genomic revolution and the Internet. Both emphasize networks and connectedness, and the popularity of each both reflects and informs the way in which we think of ourselves. Additionally, the mixture of art and science represented in the DNA portraits – as well as their mode of production, utilizing artists and scientists – is reflective of a broader cultural move to collapse traditional disciplinary boundaries. Ahmed emphasized the interdisciplinary nature of DNA portrait production, and he argues that this kind of interdisciplinarity is essential for understanding how the genomic revolution is affecting contemporary culture.

Before proceeding with the rest of my analysis, however, it will first be useful to describe the process by which DNA portraits are made.⁸³ According to DNA 11's website, customers first select the size, color, and style of their frame and portrait and then order a DNA sampling kit.⁸⁴ The kit consists of a cheek swab and FTA card – the user swabs his/her cheek and then rubs the swab against the FTA card, which "is coated with a special chemical that lyses (breaks open) the cheek cells, releasing the DNA from within each cell."⁸⁵ Having completed these steps, the customer then returns the DNA sample to DNA 11's lab. Once the sample arrives, technicians at the lab extract the DNA from the cellular sample, and they use a process called a polymerase chain reaction (PCR) to amplify a certain sequence of the DNA sample until there are enough DNA sequences to create a

⁸³ The bulk of my information in this section comes from the DNA 11 website and its descriptions of how the company constructs DNA portraits.

⁸⁴ DNA 11 offers services other than DNA Portraits[™]. They offer DNA Mini Portraits[™], Ancestry Portraits[™], FingerPrint Portraits[™], and KISS Portraits[™] (which are replications of a customer's "lip print").

⁸⁵ DNA11, "DNA Art by DNA 11: Your DNA as artwork on canvas," DNA 11, Inc., http://www.dna11.com/.

visualization. When this is completed, the sample is injected into an agarose gel, and an electrical current is then run through the gel in a process called electrophoresis. The electrical current sorts the strands of DNA according to size: the smaller pieces move faster toward the bottom of the gel while the larger pieces move more slowly and remain at the top of the gel. This process separates the DNA by size, which gives each sample a unique order. Once the electrophoresis process has been completed, "a high-power, biological-grade camera" is used to capture a digital image of the stained gel.⁸⁶ After the digital image is created, DNA 11's artists fulfill the order placed by the customer, giving the DNA image the desired size, color, and frame. The customer now has a finished DNA portrait.

Many of the truth-claims of DNA portraiture can be attributed to this complicated process of representation, whereby the interiority of the subject (his/her DNA) is transformed into an exterior representation (the DNA portrait). These truth-claims mimic those made by nineteenth and early twentieth century photographic portraiture, specifically in regards to the ability of portraiture to reveal the essence of the subject represented. DNA 11 claims that their portraits "frame your inner beauty." The home page of one of DNA 11's competitor websites, MyGeneImage, advertises its services as such:

TIMELESS GENE, DISTINCT LIFE, ELEGANT ART: MyGeneImage proudly presents DNA Art, beautiful art expressed from your gene. A unique gift combining the elegance of art and the splendor of science, it is not only timeless but also extremely personal. It is essentially an art created by you. It's your art, like no others.⁸⁷

Gene-Portrait advertises its product using similar language:

Our unique DNA fingerprinting method creates exclusive digital self-portrait photos by using a unique blend of molecular recipes and ingredients. These DNA digital images are

Gene-Portrait's artistic vision of the genetic world we all carry within. Our science-art por-

⁸⁶ Ibid.

⁸⁷ MyGeneImage, "My Gene Image," MyGeneImage, http://www.mygeneimage.com/.

traits allow you to contemplate and enjoy a sample of your own unique DNA world. This personalizes the experience and engages you in ways that wouldn't otherwise be possible. The rhetoric employed by each of these companies shares a striking affinity with the rhetoric surrounding photography in the nineteenth and early twentieth century. They are all claiming an indexical relationship between the portrait and its subject – the portrait is literally created by the subject's DNA – and they claim to illustrate the essence of the subject – his/her truly unique "inner beauty."

These DNA portraits thus channel much of the same rhetoric as that surrounding photographic portraiture. However, DNA portraits exhibit one extremely notable difference – there are no iconic bodies, no way to identify the subject of the portrait (at least without scientific equipment, training, and substantial contextual information as to how the DNA sample was processed). The power of photographic portraiture was the visibility of the bodies, the truth-value of the surface image. Viewers knew exactly what they were looking at. With DNA portraits, viewers are presented with an almost unreadable image – or, if not unreadable, than intransitive, in that the image appears to lack an object of representation (and even if the viewer was able to read the DNA, without comparing samples, there would be no way to connect the portrait to its subject). The ability of DNA portraits to depict embodiment (and embodiment's connection to the interiority of the subject), I suggest, comes largely from the representational structures they share with more traditional photographic portraiture.

The central tension in the functioning of DNA portraits as portraits – the representation of a person without an image of the person's body – is made clear in a series of DNA portraits taken from DNA Imprints (www.dnaimprints.com/). In these images, the problematic of representation without a body is completely elided – the portraits all feature an image of the subject superimposed over (or included within the frame of) the image of the DNA gel. As if to reassert the power of DNA

⁸⁸ GenePortrait, "GenePortrait: The Portrait of Your Genetic Essence," Geneportrait S.L., http://geneportrait.com/.

to represent a subject – i.e., the power of the inside to represent the outside – these images collapse surface and depth, flattening the subject and its representative DNA image. Interior and exterior become united in these images, and they reinforce the representative power of a recognizable, iconic body in depicting a subject.

"Pure" DNA portraits, however, do away completely with images of the body, and they rely on the traditional contextual structures of photographic portraiture – namely a frame, placement on a wall, and public exhibition – but they do not require such structures for their meaning. In fact, DNA portraits are probably more difficult to read in their portrait form; a written analysis of the DNA would say much more about what the lines in the gel mean than simply a picture of the gel. That is, the surface value of photographic portraiture is explicit, and it can be read with an untrained eye. The surface value of DNA portraiture is much more difficult to locate, and it requires a trained eye, along with contextual information as to how the sample was collected and the sequence of DNA that was amplified, in order to decrypt. However, the placement of the DNA analysis within the symbolic system of portraiture uses the older form of photographic portraiture in order to make the representation of the body through the medium of DNA gel more translatable to audiences. Without this frame of reference, DNA portraits are virtually unreadable as images of the body. In a sense, DNA portraits function as a kind of "transitional species" – they are utilizing older forms of representations of humans (i.e., photographic portraiture) in order to pave the way for future representations of humans that do not require a body at all.

3.7 Posthuman Embodiments of Life

The question of the "believability" of DNA portraits as representations of humans still remains. The simple, rather cliché, answer to this question is that in our highly skeptical culture, in which mediated images are profoundly untrustworthy, appeals to science provide more in the way of truth-value. DNA, as a "deeper" structure than the physical body, can more easily and more truth-

fully reveal the "essence" of a subject. More so than our bodies, our DNA speaks to something more fundamental to our being. It is the stuff from which we are made, the very core of our humanity, so it *must* more accurately represent us.

This simple answer, however, is quite unsatisfying. While it accurately diagnoses a dominant current of popular thought in the twenty-first century Western world – namely the widespread faith in the ability of genetics and the genome map to reveal the secrets of humankind – it does not speak to the conditions that allowed such subjectivities to arise in the first place. How has (Western/American) culture developed to the point that DNA portraits can fulfill the same functions as traditional portraiture, that they can be interpreted as images of embodiment without depicting bodies?

DNA portraits visualize the tensions between materialism and informationalism, flesh and data, that I have been exploring in this project. On the one hand, they deny the importance of the body to representations of individual humans. Bodies are unnecessary in depictions of individual uniqueness. On the other hand, DNA portraits require DNA, the very stuff with which the body and brain are made, for their creation. Like many contemporary cultural constructions, DNA portraits seem to be constituted by what the exclude. That is, they disavow the very bodies on which they rely for their constitution. Contrary to conceptualizations of photographic portraiture, which viewed the body as an external surface that registers traces of the internal self, DNA portraiture no longer depicts a surface beneath which a soul might reside. The interior and exterior of the body have been subsumed within each other in DNA portraits, creating a representation of the individual that posits the body as truth. DNA, within this schema, serves as a synecdoche both for the body and

⁸⁹ Or at least developed to the point where multiple companies offering the same DNA portraiture services can survive. I do not intend to make the argument that all of Western/American culture believes that the DNA portraits are satisfactory representations of humans. However, the existence of multiple DNA portrait companies indicates that this is a growing phenomenon.

⁹⁰ Here I am following Žižek's psychoanalytic theory, which argues that the Real both constitutes, and is excluded from, the Symbolic. Slavoj Žižek, *Welcome to the Desert of the Real!: Five Essays on September 11 and Related Dates* (New York: Verso, 2002).

for the soul/consciousness of the individual. That is, DNA functions as a homunculus within the self that directs and dictates the expression of an individual's potentiality. Body and self are one in the same.

In many ways, DNA portraits can be viewed as fulfilling the role of a hybrid object, in the sense outlined by Bruno Latour. In *We Have Never Been Modern*, Latour argues that scientific modernism, as a theoretical position, is based fundamentally on the separation of "exact knowledge and the exercise of power – let us say nature and culture." He continues:

The word "modern" designates two sets of entirely different practices which must remain distinct if they are to remain effective, but have recently begun to be confused. The first set of practices, by "translation", creates mixtures between entirely new types of beings, hybrids of nature and culture. The second, by "purification", creates two entirely distinct onto-

logical zones: that of human beings on the one hand; that of nonhumans on the other. P2 According to Latour, scientific modernity is marked by the attempt to construct a strict separation of humans and nonhumans, subjects and objects. However, much like Foucault's argument that Victorian "repression" of sexuality produced an increase in discourses concerning sexuality, Latour argues that this modernist attempt to separate nature and culture both results in and relies on the creation of *hybrids*, those types of beings that are mixtures of nature and culture. Donna Haraway puts it in a slightly different way:

This separation of expert knowledge from mere opinion as the legitimating knowledge for ways of life, without appeal to transcendent authority or to abstract certainty of any kind, is a founding gesture of what we call modernity. It is a founding gesture of the separation of the technical and the political.⁹⁴

⁹¹ Latour, We Have Never Been Modern: 3.

⁹² Ibid., 10-11.

⁹³ Michel Foucault, *The History of Sexuality: Volume I: An Introduction*, trans. Robert Hurley (New York: Vintage Books, 1978).

⁹⁴ Haraway, Modest_Witness: 224-25.

DNA portraits, in that they are constituted by the same disavowals that construct them (namely the simultaneous denial of the body and the reliance on the body's "deep structures"), can be thought of as hybrids in the sense outlined above. DNA portraits are also cultural hybrids in the sense that they attempt to separate human from nonhuman, mind from body, without acknowledging the changing definition of "human" on which they rely. The qualities that define "humanness" are culturally and historically bound, and they change over time. What constitutes a human is both culturally and scientifically ("naturally") defined, and thus "human" itself can be viewed as a hybrid (akin to what Haraway terms a "cyborg"). As evidenced in the comparison between traditional photographic portraiture and DNA portraiture, acceptable representations of humanness evolve over time and rely on changing cultural and scientific notions of what it means to be human.

Before I proceed further, I should first clarify the conceptualization of scientific modernity on which both Latour and Haraway are building their arguments. Modernism (like its cousin/offspring/clone Postmodernism) is a difficult concept to define. As such, the term is used in many different ways by many different disciplines. Rather than locating modernity at the cusp of an aesthetic or technological revolution, Latour and Haraway define modernism as a change in representational techniques. That is, rather than a matter of chronology, modernity is, for Latour and Haraway, a matter of representation, and they locate one nexus of this shifting mode of representation at the dawn of European natural philosophy in the sixteenth and seventeenth centuries. The development of the scientific method at this historical moment created an alternate means of viewing the world, conceiving of nature as an object to be tamed, isolated, and studied by the creators of culture, human beings. Rather than viewing culture and nature as mutually constitutive objects, Latour and Haraway argue that the modern subject position posits culture as a purely human-created entity, completely removed from nature; the Cartesian separation of (natural) body from mind is indicative of this kind of subjectivity. Nature, within this modern framework, becomes an

⁹⁵ Haraway, Simians, Cyborgs, and Women.

⁹⁶ This idea is echoed in: Heidegger, "The Age of the World Picture."

object external to the thinking mind – it is an enigma whose secrets need merely to be uncovered and "witnessed" by the brilliant minds of natural philosophy. Under this new modern constitution, "natural" law and "culturally created" law begin to clash with each other, creating hybrids, and we can witness this clash in the visualizations of humanity embodied in DNA portraits.

These changing rules of representation can also help to explain the ways in which popular culture and science are differently conceiving of humanity and the ideal means of representing the human/posthuman. Peter Galison argues that the history of scientific objectivity has been imbricated with changing cultural modes of representation, twining together science and its visualization. Galison identifies three major shifts in the relationship between science and image. In the seventeenth and eighteenth centuries, science recognized its visualization as a "metaphysical image"; in the nineteenth century it was the "mechanical image"; the twentieth century moved towards an "interpreted image." This framework bears a striking resemblance to the relationship between Benjamin's mechanical reproduction and Mitchell's biocybernetic reproduction, reinforcing the idea that modern representations of nature are intrinsically hybrid. Mutually constituted by science and culture, representations of the natural world (including humanity) cannot escape the scientific and cultural epistemologies of which they are a part. To clarify this concept, I quote Galison at length:

The *metaphysical image*, revealing the essence behind the appearance, mediates between the Genius and an audience that learns from the metaphysical images, but will never become the genial author himself. By contrast, the objective, *mechanical image* is produced by scientists committed to the role of a stoic, and, in this resolve, determined to become transparent to nature, a copying mechanism with the affective disengagement of the technical manufacturer. Third and finally, the *interpreted image* is produced not by a moral culture of "towering Geniuses" or neutral, self-abnegating bureaucrats, but by self-confident experts,

who trust the trained eye more than master philosophical systems or the automatic conveyance of picture. 97

This evolution of representational strategies is key to understanding the role of DNA portraits in representations of humanity, particularly the contemporary incarnation of the interpreted image.

Leaving aside the metaphysical image, let us begin with the mechanical image. The mechanical image, as I hinted at earlier, is the photographic image, and within nineteenth and early twentieth century discourses, photography was seen as a transparent reflection of nature, as the hand of nature writing itself onto the photographic plate. In relation to photographic portraiture, the mechanical image, existing as an objective, disengaged, and "automatic" observer, revealed insights into the subject, allowing viewers a window into the soul through the image of the body. However, as cultural attitudes towards mechanical images changed, in part due to digital technologies, widespread skepticism arose regarding the truth-telling ability of the photographic image. Scientific ideas visualized through the medium of photography became less trustworthy, at least to the untrained eye. Rather than speaking for themselves, photographic images needed interpreters, those whose trained eyes could see past the manipulations of the era of Photoshop. Thus began the era of the interpreted image, the era of biocybernetic reproduction, and the cultural and scientific context in which DNA portraits exist. DNA portraits, created through a combination of digital photographic processes and techniques of biological imaging, are interpreted images – their truth-value is not apparent on the surface and requires a trained viewer to see the embodiment of humanness that the image depicts. As culture becomes savvier with regards to these burgeoning forms of human representation, DNA portraits might seem as transparent and obvious as traditional photographic portraiture.

As hybrid creations of the modern attitude towards representations of nature and culture,

DNA portraits are objects that speak, nonhumans that have something important to say to us hu-

⁹⁷ Peter Galison, "Judgment against Objectivity," in *Picturing Art, Producing Science*, ed. Caroline A. Jones and Peter Galison (New York: Routledge, 1998), 353.

mans. They speak of the changing ways in which we, as humans, conceive of and represent ourselves, and they bear witness to the boundaries of humanity that we have defined for ourselves, both through science and culture. As a new form of an interpreted, biocybernetic image, DNA portraits cannot yet speak to us in the ways that traditional photographic portraiture can. DNA portraits do not contain the markers of age, class, gender, race, or even species that photographic portraits exhibit. As DNA 11 co-founder Nazim Ahmed intimates, DNA portraits speak to a utopia where markers of social stratification are largely invisible, where our similarities, rather than our differences, are emphasized. Unlike photographic portraits, DNA portraits do not wear their biases on their sleeves, and the images in DNA portraits speak to an abstract, disembodied idea of life. However, like the utopian discourse surrounding early photography, the utopian potential of DNA portraits that I am positing can quickly be co-opted by the more destructive tendencies of culture, sedimenting in the DNA the means of social stratification that inevitably plague any new form of representation of humanity. Perhaps the fundamental illegibility of DNA portraits will prevent this from occurring. Separated from their context of production, which would indicate from whom the DNA sample was derived, the sequence of DNA amplified, and the details of how the electrophoresis procedure of the agarose gel was run, the DNA portraits offer virtually no specific information about the subject depicted within the frame. Somewhat paradoxically, this emphasis on the individuality and personality of unique genetic codes belies the fact that DNA portraits fail to map the individual, and they have virtually no iconic ties to the individuals they represent. Though DNA portraits draw on the rhetoric and representational strategies of photographic portraiture, they are a different species, and their existence is made possible by the uniqueness of our contemporary moment, wherein the genomic revolution has created the conditions in which DNA can substitute for the subject and code can stand in for flesh. As with the films of David Cronenberg discussed at the beginning of this chapter, DNA portraits, through their expression of a vernacular posthumanism,

manifest the tendencies of a digital cultural logic, relying on a framework of biological essentialism in order to visualize the reduction of flesh and information to the common denominator of code.

4 CONCLUSION: THE LIMITS OF THE NONHUMAN: DEAD FLESH AND TAXIDERMIST HU-MANISM

In *When Species Meet*, Donna Haraway takes strong exception to Deleuze and Guattari's theorization of "becoming." In particular, Haraway takes issue with Deleuze and Guattari's desire to become molecular, and in the process, escape the molar body.

Despite much that I love in other work of Deleuze, here I find little but the two writers' scorn for all that is mundane and ordinary and the profound absence of curiosity about or respect for and with actual animals, even as innumerable references to diverse animals are invoked to figure the authors' anti-Oedipal and anticapitalist project.²

For Haraway, lived bodies matter, and she is reluctant to support a theoretical framework that advocates the dissolution of the lived body as its endpoint. While Haraway might be overlooking the subtle interplay of actual and virtual that undergirds Deleuze and Guattari's discussion of becoming, her critique nevertheless has merit. The fact of lived existence, the fact of our embodiment, matters, and a desire to dissolve the phenomenological boundaries of the lived body speaks more to a transhumanist idealization of information over materiality than a nonhumanist position that offers a strong theorization of the reality and existential equality of other the actants within a particular network.

Central to Deleuze and Guattari's theory of becoming is the relationship between the actual and the virtual.³ Becomings take place in the virtual, which is an area of pure potentiality and molecularity. When two actants "synchronize" affects and intensities between themselves, they have

¹ See Chapter Two for my discussion of becoming and *Planet Earth*.

² Haraway, When Species Meet: 27.

 $^{^3}$ For more on the interplay between the actual and the virtual, see my discussion of 300 in Chapter One.

entered into a relationship of becoming.⁴ The "reality" of becoming, however, is not quite so straightforward, and it involves a complex relationship between the actual and the virtual. As Deleuze and Guattari write, "There is a reality of becoming-animal, even though one does not in reality become animal." The physical and mental actions that constitute the process of becoming – the sharing of movement, affect, and intensity – take place in the realm of the actual, the realm of the physical, molar, and lived reality. However, the result of a particular becoming – e.g. a horseman assemblage – exists only in the realm of the virtual, a place of futurity and potentiality. The virtual is equally as "real" as the actual, but it exists in a spatial and temporal plane beyond immediate sensation and perception.

It is this virtual aspect of becoming that so riles Haraway. Rather than sharing with Deleuze and Guattari the goal of "becoming-imperceptible," which is the ultimate outcome of the process of becoming, Haraway prefers instead to recognize the unique and radical alterity of the other, and she does so to maintain the distinct existence of every actant. So, instead of turning to a virtual becoming, Haraway relies on a physical and biological fact of human existence in order to explore the interrelatedness of beings:

I love the fact that human genomes can be found in only about 10 percent of all the cells that occupy the mundane space I call my body; the other 90 percent of the cells are filled with the genomes of bacteria, fungi, protists, and such, some of which play in a symphony necessary to my being alive at all, and some of which are hitching a ride and doing the rest of me, and us, no harm. I am vastly outnumbered by my tiny companions; better put, I become an adult human being in company with these tiny messmates. To be one is always to *become* with many.⁶

⁴ Note that Deleuze and Guattari do not use the term actant. I am borrowing this term from Bruno Latour. For more on synchronization, see my discussion of *Dead Ringers* in Chapter Three.

⁵ Ibid., 273.

⁶ Haraway, When Species Meet: 3-4.

Haraway thus sets her framework of *significant otherness* in contrast to Deleuze and Guattari's framework of becoming. The former views the other as uniquely distinct from the subject, something that possesses its own particular mode of existence but that can be understood through a mutual respect and openness. The latter views both subject and object as a collection of similar forces, which through a sharing of movement and perception, can become a virtual assemblage. While Haraway fervently distinguishes her own stance from that of Deleuze and Guattari, both frameworks rely on a kind of empathy and respect towards the other. Haraway, however, is much more concerned with the world of the molar, and it is this world I explore in this conclusion through the works of Damien Hirst as well as Gunther von Hagens's art-science exhibit, *Body Worlds*.

In particular, I am interested in how these visual objects expose and critique the limits of a nonhumanist framework of understanding, a framework that includes approaches such as posthumanist theory, object-oriented philosophy, animal studies, actor-network theory, systems theory, and new media theory – precisely the bodies of thought I have engaged with in this project. Throughout this project, I have been diagnosing and theorizing the circulation of a posthuman image vernacular within contemporary culture, a vernacular that speaks of the growing dissolution of boundaries between humans and nonhumans and the increasingly pervasive ideological stance that collapses information and material, envisioning a networked world where everything is fundamentally reducible to binary units of exchange. This line of thinking, however, has its limits, and certain objects of visual culture speak to a dissatisfaction with the technological and informational utopia expressed through the image vernacular of posthumanism.

Through his work, British artist Damien Hirst reveals the limits of rendering visible the relationship between the human and the nonhuman. Although Hirst primarily addresses issues of

⁷ As a testament to the growing interest in "the nonhuman turn," two major conferences in 2012 were devoted to the subject: the annual conference for the Society for Literature, Science, and the Arts (http://litsciarts.org/slsa12/cfp_docs/SLSA%202012%20Call.pdf) and The University of Wisconsin-Milwaukee's Center for 21st Century Studies conference (http://www4.uwm.edu/c21/pdfs/conferences/2012_nonhumanturn/NonhumanTurn_CFP.pdf).

death, loss, and decay through the often-sardonic use of animal carcasses, his work more generally speaks to the difficulties of encountering the other – be it nonhuman object or animal – and Hirst envisions the encounter as one that ultimately fails. The cause of this failure arises neither through lack of imagination nor lack of artistic effort; rather, the failure stems from an inability of the human to inhabit fully the position of the nonhuman, which confounds any attempt to truly reach the posthuman.

Hirst's art, in particular *A Thousand Years* (1990), *Armageddon* (2002), and his various butterfly mosaics from 2006, uses the dead flesh of animals to signal the ultimate failure of the human to occupy the perspective of the nonhuman and the ways in which actants become alienated from each other. What these pieces have in common is that they fundamentally question the ability of humans to "become" posthuman, and they provide a visualization of a key tenet of theories of networks and human/nonhuman ontology, such as actor-network theory, object-oriented philosophy, and thing theory: namely that the nonhuman "thing" must be understood in terms of its "thingness" rather than in some mode of anthropocentric thinking. For Hirst, the attempt to "understand" or "empathize" with the nonhuman animal results in death, both literal and metaphorical (this can also be seen in other examples of his work, which provide an ironic critique of museum practices and specimen exhibition).

Hirst's art provides an actual manifestation of the virtual forces of a Deleuzian-Guattarian becoming-animal, which taken to its end point, results in a dissolution of the molar body. In effect, Hirst's art follows the line of critique established by Donna Haraway, which advocates for a framework of "significant otherness" and a "radical alterity" that acknowledges and *respects* the phenomenal body of the nonhuman other. Rather than engage in a mode of utopic posthumanist thinking, which envisions the easy exchange of information between bodies, Hirst acknowledges (and respects) the fundamental uniqueness of actants, and through his visualizations of static death, he

refuses the anthropomorphic extension of the human self onto the nonhuman other in favor of a relational paradigm that emphasizes the interaction between actants.

Many of Haraway's concerns stem from the largely unaddressed ethical ramifications of a Deleuzian-Guattarian becoming. What, exactly, is the ethical responsibility of the human who becomes animal? What happens when individual bodies lose their importance as embodied molar entities within the world and become mere informational assemblages? Gunther von Hagens's traveling art-science exhibit *Body Worlds* raises similar questions, though it deals primarily with plastinated human corpses, rather than the slowly decomposing animal corpses of Damien Hirst. Whereas Hirst's work exposes the limits of the nonhuman, Body Worlds instead operates within a framework that fetishizes the perfection of the human body through technological intervention as well as the potential for the human to survive long after its death. A central theme of posthumanist thought is the potential for science and technology to bestow upon the human immortality, either through the extension of biological life or through the survival of an individual consciousness within another informational network (e.g., uploading one's brain into a computer). Whereas Hirst makes thematic the decay and decomposition of dead flesh, von Hagens makes thematic the existence of dead flesh in perpetuity. For both artists, death is an aesthetic event. Hirst, however, emphasizes the messiness and materiality of death, while von Hagens presents death as clinical and sterile, as something that can be thwarted through technology. In discussing the materiality of death in Body Worlds, Uli Linke writes:

Such a sensual exhibit undoubtedly reinforces the feeling of a material presence of real and authentic corpses – a presumed intimacy with death. Of course, this contact with death is a staged illusion, a museum effect, because the displayed objects are not stinking corpses but rather synthetically sanitized bodies...But the installations retreat precisely from this reality [of death], insofar as they exhibit living corpses that have been normalized and eroticized. The prominent characteristics through which death might be experienced, the sensually ap-

prehensible signs of putrefaction, have been intentionally excised from the exhibited objects. These staged encounters with dead bodies, while granting sensual immediacy, also furnish the necessary emotional distance.⁸

Thus, we find two very different visualizations of the encounter with death, one of the fundamental limits of humanist imagining. For von Hagens, this encounter is stripped of its worldliness and transformed into a clean aesthetic relationship. Death is not a limit of humanist thought, but rather another informational and technological pattern that can be refigured and preserved for posterity. For Hirst, the encounter with death is indifferent to the concerns of the human,⁹ and it exposes the limitations of both a humanist approach to death as well as a nonhumanist desire to theorize beyond the human. As the entirety of my project argues, theories of the nonhuman have much to add to ethical, political, and critical discourses, but as the art of Damien Hirst demonstrates, the limits of this theoretical attitude must also be accounted for.

4.1 Damien Hirst and The Art of Extinction

In what is perhaps Damien Hirst's most famous artwork, *The Physical Impossibility of Death in the Mind of Someone Living* (1991), we are confronted with a dead tiger shark, suspended in a solution of formaldehyde, and exhibited in a vitrine. As with most of Hirst's art, which functions broadly as part of the "Young British Artists" group of the 1990s, the apparent simplicity of the work's construction and display belies the complexity of experience, perception, and sensation aroused by the work. The encounter with the preserved-but-slowly-decaying shark mimics that of an encounter with a taxidermied animal, with all of the sterile precision of violence on which both rely. However, the location of the shark within the formaldehyde-filled vitrine invokes the mad-

⁸ Uli Linke, "Body Shock: The Political Aesthetics of Death," Social Analysis 54, no. 2 (2010): 90.

⁹ See: Rob Bartram, "Nature, Art and Indifference," Cultural Geographies, no. 12 (2005).

¹⁰ Interestingly enough, Hirst has previously offered to buy a collection of art which included taxidermied animals: Michelle Henning, "Anthropomorphic Taxidermy and the Death of Nature: The

scientist's laboratory more than the hunters' lodge. The work's placement within the walls of the museum adds an additional uncanny element, reducing the previously living creature to a bourgeois aesthetic and scientific curiosity. It is through this staged encounter with the animal that Hirst explores the limits of the nonhuman.

As I have argued in this project, a primary goal of posthumanist theories is to theorize the nonhuman other, be it animal, machine, or thing. These theories attempt, both epistemologically and ontologically, to apprehend the nonhuman other in order to provide a more thorough philosophical reflection on the phenomenology and "thingness" of the nonhuman. In areas such as object-oriented philosophy, this is accomplished through a framework of *speculative realism*, which emphasizes the importance of the practical and material existence of the object. The value of this kind of approach lies in the fact that objects are theorized on their own terms, rather than as some byproduct of human perception or as some collection of Kantian qualities under which some "real" object lies. The application of these nonhumanist theories often results in a recognition of the indifference of the nonhuman to human affairs as well as a recognition of the fundamental impenetrability of truly "knowing" the nonhuman object. In reference to Hirst's art, Rob Bartram argues that:

[Hirst's] art affords nature the transformative qualities that rupture both its unproblematical differentiation from society and the belief that nature can be represented as an objectified truth through art. Importantly, it allows us to think of nature, not as an ontological world on which we impose value and meaning, but as something that we continually configure through the production of images and ideas. By interpreting his work, we can begin to conceive of a natural world that is not fixed or differentiated from society and culture, but indifferent to them. Nature in this way of thinking is not so much a fixed point in the polar-

Curious Art of Hermann Ploucquet, Walter Potter, and Charles Waterton," *Victorial Literature and Culture* 35, no. 2 (2007).

¹¹ For an overview of speculative realism, see: Harman, *Towards Speculative Realism: Essays and Lectures*; Bryant, Srnicek, and Harman, *The Speculative Turn: Continental Materialism and Realism.*

ized nature–society frame, but a circulatory process of intensity and affects that are provisional and emergent in their configuration of meaning.¹²

For Bartram, Hirst's art attempts to visualize an object-world that exists indifferently to the concerns of humans but that is nevertheless understood through its relationships to humans. Here we see echoes of Latour's framework of relationality, in which all "actants are defined entirely by their relations to other things." ¹³

While I would agree with Bartram's assessment that Hirst's art depicts nature as indifferent to us humans, I would also add that this is an indifference that is necessarily filtered through a referential and phenomenological framework of anthropocentrism. If all knowledges are situated knowledges, 14 then we must always remember that our own human-based theories of the nonhuman will never be so radical as to escape our cultural and phenomenological biases and bases. Nor should they strive to. A recognition and respect of difference is one of the primary values of nonhumanist-based theories, and they encourage practitioners to attempt to look beyond their humanism and extend their senses outside of anthropocentric boundaries. This is what both Deleuze and Guattari and Haraway are getting at with their respective frameworks of becoming and significant otherness (albeit with different valences of materiality and attention to the body). Hirst's art demonstrates what happens when we forget our situated knowledge and attempt to impose a human-based nonhumanism on the nonhuman other, and his works manage this through visualizations of death and decay.

Death is one of the primary organizing principles in the work of Damien Hirst. Many of his installations are created with the carcasses of animals, often eviscerated or segmented, and placed inside vitrines for viewers to see. The carcasses also form the very substance of Hirst's art, as can be

¹² Bartram, "Nature, Art and Indifference," 2.

¹³ Harman, *Prince of Networks*: 156.

¹⁴ Donna J. Haraway, "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective," in *Simians, Cyborgs, and Women: The Reinvention of Nature* (New York: Routledge, 1991).

seen in *Armageddon*, which is made entirely of dead house flies, or *Aubade – Crown of Glory*, which is constructed with the bodies of dead butterflies. In creating art from the formerly living tissue of animals (and placing that rotting tissue within the white walls of the art gallery), Hirst encourages viewers to confront the death, decomposition, and confinement of the nonhuman other as the endpoint of nonhumanist becomings and the limit of the human to apprehend a posthumanist image vernacular.

Hirst's medical, technological, and aesthetic engagement with dead flesh simultaneously opens up a new space of sensation while at the same time reasserting that space of perception as one that is inescapably human. The static, preserved animals in his works demonstrate that however much we might like to imagine ourselves as sharing a subjective space with the nonhuman other, this imagination can only be completely realized with the arrest and confinement of the nonhuman other. Much like trophy hunters show their appreciation of the sublime terror and beauty of the natural world through the killing and mounting of their prey, so too does Hirst's art reveal that a full epistemological understanding of the nonhuman other must ultimately be framed within cultural modes of human scientific and aesthetic knowledge. To become-animal might be a largely virtual process, but when this process is materialized in the actual, what results is a fleeting of the assemblage that this becoming creates. The only way to sediment this becoming is to kill the animal, to bring it into the comfortable realm of human perception. Imagination is an invisible process, but visual culture's desire to see (and thus, to know) requires that this imagination be made physical, and a requirement of vision is that the physical must fit within human-based processes of sensation. As with all of the other visual objects with which I have dealt in this project, Hirst's art objects are hybrid objects, both/and images that materialize the contradictory posthumanist imagination of contemporary visual culture.

Deleuze discusses this realm of perception within the context of the paintings of Francis Ba-

con, and his discussion of Bacon provides a conceptual framework for understanding Hirst's art.¹⁵ Hirst's work shares much with Bacon's paintings, namely a concern with the internal structures of the body, a confusion between the inside and the outside, the relationship between animality and humanity, and an interest in the "meatiness" of flesh. In fact, Hirst names Bacon as one of his influences, and their work was shown together at the Gagosian Gallery in London in the summer of 2006.¹⁶

Deleuze's primary interest in Bacon's paintings concerns the ways in which the art works produce sensations in the viewer, encouraging that viewer to enter into the molecularizing process of deterritorialization. Sensations, for Deleuze, are bodily in nature, bypassing the cognitive capabilities of the brain and acting directly on the autonomic aspects of the nervous system.¹⁷ This is about as close to articulating a theory of phenomenology as Deleuze comes – he is arguing that the experience of viewing Bacon's paintings produces very real physical effects in the viewer, causing him/her to enter into a symbiotic relationship with the painting. Deleuze states that: "As a spectator, I experience the sensation only by entering the painting, by reaching the unity of the sensing and the sensed." The description of this process is very similar to that given by Deleuze and Guattari regarding becoming: "Becoming is to emit particles that take on certain relations of movement and rest because they enter a particular zone of proximity. Or, it is to emit particles that enter that zone because they take on those relations." Becoming, for Deleuze and Guattari, involves the sharing of affects, speeds, movements, and intensities, and while the process of becoming itself might be real and produce actual effects, the end result of becoming resides in the virtual. In the context of viewing art, one does not actually become the painting, but one may enter into a virtual, molecular

¹⁵ Deleuze, *Francis Bacon*.

¹⁶ "Damien Hirst - June 20 - August 4, 2006 - Gagosian Gallery,"

http://www.gagosian.com/exhibitions/june-20-2006--damien-hirst.

¹⁷ Deleuze, Francis Bacon: 34.

¹⁸ Ibid., 31.

¹⁹ Deleuze and Guattari, A Thousand Plateaus: 273.

relationship with the painting, sharing affects with the image and becoming contaminated by the movements of the Figures within the image.²⁰

This exchange of affects and sensations between the work of art and the viewer creates a zone of indiscernibility, a place where the boundaries separating molar bodies break down and become confused. In Bacon's paintings, as well as in Hirst's work, this zone of indiscernibility is located within the virtual gap between human and animal, between the inside and the outside of the fleshy body, which connects both of their work to the concept of becoming-animal. In Bacon's *Triptych* from 1973, we can see the intertwining of human and animal through the animality of the human's shadow (particularly in the middle segment of the triptych). As Deleuze notes, it is important to recognize that the Figure's shadow is not merely a representation of a molar animal form; rather, the shadow indicates the extent to which the Figure is always already engaging in a process of becoming-animal. The shadow thus acts as an indication of the Figure's possession of an animal *trait.*²¹ It is not a representation of some mimetic activity that involves the Figure acting like an animal; the shadow is a visual account of the process of becoming-animal.

As a strategy of visualizing the process of becoming-animal, the shadow creates a zone of indiscernibility between human and animal, a zone of perpetual becoming where the boundaries of the body are in constant flux. Deleuze comments on this space in regards to Bacon's paintings *Two Studies of George Dyer with a Dog* and *Seated Figure*:

The shadow escapes from the body like an animal we had been sheltering. In place of formal correspondences, what Bacon's painting constitutes is a *zone of indiscernibility or undecidability* between man and animal. Man becomes animal, but not without the animal becoming spirit at the same time, the spirit of man, the physical spirit of man presented in the mirror

²⁰ In *Francis Bacon*, Deleuze differentiates *figurations* from *Figures*. Figurations are representational and narrativized, and they are understood through the cognitive capabilities of the viewer. Figures, conversely, are related to sensation and instinct, and they act directly on the nervous system of the viewer. See Deleuze, *Francis Bacon*: 31; Pisters, *The Matrix of Visual Culture: Working with Deleuze in Film Theory*: 148-49.

²¹ Deleuze, *Francis Bacon*: 20.

as Eumenides or Fate. It is never a combination of forms, but rather the common fact: the common fact of man and animal.²²

Bacon's paintings visualize this "common fact of man and animal," showing the extent to which human and animal are forever becoming. Animalistic shadows are, however, not sufficient to bring about a zone of indiscernibility, a zone of becoming. Meat is also required, and it is through meat, and the suffering attached to that meat, that a connection between the works of Bacon and Hirst can be drawn.

Deleuze states that: "Meat is the common zone of man and the beast, their zone of indiscernibility." The meatiness of our shared organic bodies is what connects human and animal, and it is on the surface of this meat that our bodily suffering is displayed. The body thus becomes an objective zone of indiscernibility, but only in terms of the body's flesh, its meat. As Bacon's *Painting* so grotesquely shows, there is a link between the suffering of humans and the slaughter of animals. The (human? animal?) carcass behind the headless man provides a visual connection between the suffering of humans and the suffering of animals that end up in the slaughterhouse. The vaguely human carcass is strung up like a piece of meat, ready to be further butchered and sold to hungry customers. Deleuze senses a pity in Bacon's paintings of this style: "If there is feeling in Bacon, it is not a taste for horror, it is pity, an intense pity: pity for flesh, including the flesh of dead animals." 24

Hirst pushes this meatiness even further, and in *Mother and Child Divided* (1993), *Some Comfort Gained from the Acceptance of the Inherent Lies in Everything* (1995), and *This Little Piggy Went to Market, This Little Piggy Stayed at Home* (1996), he literally displays the slaughtered flesh of animals. Though Hirst's works are much more sterile than Bacon's, eschewing ragged fleshy edges in favor of surgical precision, a sensation of pity and suffering still manages to overcome the distancing effect of the vitrines. The major difference between Bacon and Hirst's work lies in their

²² Ibid.

²³ Ibid., 21.

²⁴ Ibid., xxix.

strategies of creating the sensations that initiate becoming-animal: Bacon *represents* becoming-animal in his paintings (mostly through the use of shadow and color), while Hirst's work, rather than depicting becoming-animal, *creates the conditions* whereby becoming-animal might be initiated. The sensations of pity evoked by the works, however, function to derail the process of becoming-animal and return the experience of perception back to the phenomenological realm of the human. Pity is a human-based emotion and sensorial experience, one in which the individual human is made to "feel sorry" for the (nonhuman) other. The dead animals in Hirst's work have no need of our pity, and our pity does nothing to ameliorate their suffering. Rather than facilitating a more non-anthropocentric association with the animal, the sensation of pity reasserts the kinds of "humanity" we seek when observing the other, and it domesticates the alterity of the nonhuman by reframing its understanding within conventional human emotions – pity – and human scientific and aesthetic practices – vitrine preservation and museum exhibition.

Dead meat also provides the link between Hirst's work and the dangers of extinction through becoming-animal. While Deleuze and Guattari clearly state that becoming does not involve a literal, physical transformation of the molar body – except through a change in affect, movement, speed, and intensity – the very concept of the animal as something foreign to the human that the human must become creates a situation wherein the animal becomes pure Other. When animals are viewed as something that humans must become, as something to be desired by humans, the animals become metaphorized into an other that the human desiring machine must consume. As Lippit argues: "Animals can only appear as matter – meat – because they possess no discernible identity." While the molar bodies of the animals might not literally be destroyed by becoming-animal, "Animal" as a category becomes pure metaphor, which can result in very real violence to the molar bodies of animals. Becoming-animal leads to extinction because the idea of the animal becomes more important than the animal itself (consider Deleuze and Guattari's anecdote of becoming-animal

²⁵ Lippit, *Electric Animal*: 182.

through Little Hans and the horse – here, the flogging and suffering of the horse is of no concern; the only concern are the ways in which Little Hans becomes-horse). ²⁶ Animals thus become a rhetorical category, and as Katherine Young states: "Simply put, animal bodies become newly and familiarly inscribed, freshly packaged and sold in the slaughterhouse of the rhetorical (political) economy: dead meat." ²⁷ When bodies cease to matter, an opening is created for both the literal and metaphorical destruction of those bodies.

We must keep in mind, though, the indifference to human affairs possessed by the nonhuman object. Hirst's works are dense, in the sense that their static positioning presents them as completely oblivious to the gaze of their human observers. Though they are placed within the space of the museum – the bourgeois sphere of visuality *par excellence* – the works appear not to care about their status as visual object. They are indifferent to our prying eyes, even though we have exposed these animals in a most intimate manner. Even though they might arouse our pity, scorn, horror, or disgust, they simply do not care. *A Thousand Years* (1990) provides an example of this indifference, as the piece entombs the entire life cycle of a housefly, from its hatching in the bloody, severed head of a cow, through its development as a larval maggot, to its death in the fly electrocutor Hirst installed within the exhibit. This life cycle runs its course in a self-sufficient manner, completely indifferent to the watchful gaze of the museum patron. The flies feed, mate, give birth, and die, all without acknowledging the presence of the viewer. While a recognition of our own mortality might instigate a becoming-fly, the flies do not need us, and they gain nothing from becoming-human. The physical life cycle of the fly is a material enactment of "life irrelevant of yourself," and it provides a limit case for romantic ideals of empathy and becoming in certain strains of posthumanist theory.

Hirst's art provides a sardonic commentary on scientific and aesthetic practices of vision and display, and in doing so, it makes the argument that no matter how much we might wish to tru-

²⁶ Deleuze and Guattari, *A Thousand Plateaus*: 256-59.

²⁷ Young, "The Animal Question," 260.

 $^{^{28}}$ Ray Mendez, in discussing encounters with the naked mole-rat, uses this phrase in *Fast, Cheap & Out of Control* (1997).

ly escape an anthropocentric mode of perception and knowledge, we will never ultimately achieve this. Attempts to escape anthropocentrism will result with the nonhuman object displayed like Hirst's art: dead specimens offered up for our sight and understanding. Ultimately, Hirst's art may be about the posthumanist fantasy for immortality, achieved through medical and technological progress, and as Bartram notes, this fantasy is encoded into the structure of the pieces:

But I would argue that Hirst's installations inspire more obvious connections to the virtual, technical and scientific view of nature that appears as a recurrent theme in contemporary culture. The animals in these installations have been bisected perfectly; there is no hint of blood or disembowelment to suggest brutality. Instead, the installations attest to the scientific and clinical formality typified by Western culture's fascination with genetic and cryogenic research and modern medicine. Even the vitrines suggest bleak laboratories, life support machines and medical survival. They are cold and hygienic, reminding us of the scientific and medical obsession with categorization of the natural world in which the chaotic and dysfunctional are not allowed to exist. The vitrines parody the idea of nature being interpreted through systems, processes and equilibriums that all have their rational, scientific normativities.²⁹

This rationality of display can also be seen in *Isolated Elements Swimming in the Same Direction for* the *Purposes of Understanding* (1991) and *Love Lost* (2000), which use the space of the museum to provide a commentary on practices of exhibition. In the former, the members of a school of fish are isolated from each other and put on scientific display. In the latter, the medical office itself is the object of scientific examination, this time preserved in a water-filled vitrine with live fish.

In the next section I take this theme of scientific-aesthetic display and exhibition, and I analyze it within the context of van Hagens's *Body Worlds* exhibit. Here, the dead flesh of the human, plastinated and preserved in perpetuity, provides an example of the paradoxical circularity of en-

²⁹ Bartram, "Nature, Art and Indifference," 8.

counters with the nonhuman. Enacting a similar posthuman fantasy to that of Hirst's work – the immortality of the organic body – *Body Worlds* speaks in a vernacular posthumanism that emphasizes the power of vision and display to enact a utopia of posthuman life beyond death.

4.2 Body Worlds: *Taxidermy of the Human*

If a primary function of Hirst's art is the visualization of processes of death and decay, then it can be productive to place this visual decomposition in opposition to the sterility and plastic infinity of von Hagens' *Body Worlds*. Whereas Hirst's art demonstrates the limits of rendering visible the nonhuman, *Body Worlds* instead visualizes a posthumanist fantasy of the immortality of the human body and the ultimate knowability of the human through technologies of vision. In other words, Hirst's art exposes the inability of the human to inhabit the nonhuman while *Body Worlds* imagines that the encounter between human and nonhuman can be achieved through a biological reductionism that conflates seeing and knowing.

Body Worlds is a science-art exhibit that displays the plastinated corpses of humans (and sometimes animals).³⁰ Body Worlds opened in Japan in 1995 and then continued its tour to Germany, several other European countries, and then, in 2004, Body Worlds made its U.S. debut in Los Angeles.³¹ Since then, the exhibit has traveled across the U.S., and it has drawn huge crowds, often to the point where museums have remained open twenty-four hours a day in order to accommodate the influx of visitors, estimated to be around 34 million worldwide.³² Controversy has followed the

³⁰ The team behind von Hagens's *Body Worlds* has recently branched out to develop an exhibit featuring solely plastinated animal corpses. The exhibition, entitled *Animal Inside Out*, opened April 6, 2012 at London's Natural History Museum. "Animal Inside Out: Plastinated Specimens at the Natural History Museum," Telegraph Media Group Limited,

http://www.telegraph.co.uk/earth/earthpicturegalleries/9183859/Animal-Inside-Out-plastinated-specimens-at-the-Natural-History-Museum.html.

³¹ Jane Desmond, "Postmortem Exhibitions: Taxidermied Animals and Plastinated Corpses in the Theaters of the Dead," *Configurations* 16(2008): 367-68.

³² "Body Worlds: Past Exhibitions," Institute for Plastination, http://www.bodyworlds.com/en/exhibitions/past_exhibitions.html.

exhibition, specifically regarding the ethical concerns of the public display of corpses as well as the dubious provenance of the bodies used in *Body Worlds*. The *Body Worlds* team has claimed that the bodies all come from German donors, but investigations have discovered that many of the bodies originated from Russia, Kyrgyzstan, and China as part of a much larger global body trade.³³ Part of the difficulty in identifying and tracing the histories of the bodies is due to precisely the same factors that undergird the biodeterminist fantasies of posthumanism: a facelessness and anonymity resulting from the visualization of a skinless body, which emphasizes the fundamental formal and aesthetic equivalency of humans and nonhuman animals.

Von Hagens's stated goal in developing the *Body Worlds* project is to "increas[e] our appreciation for and understanding of anatomy and bodily aesthetics," but despite the lofty artistic and scientific aims of the exhibit, protests and complaints have followed *Body Worlds* wherever it has gone.³⁴ Key to *Body Worlds*' display of nondecaying corpses is the preservation practice known as plastination. As Jane Desmond describes it:

Originally developed by von Hagens and embraced by medical schools as an anatomy-teaching tool, plastination replaces bodily fluids (which comprise roughly 65 percent of human body weight) with acetone through diffusion. The natural fluids are drained from the body, and a vacuum technology impregnates the body's cells with the acetone in a pressure chamber. Unlike formaldehyde preparations of cadavers, which leave the bodily material a dull, water-logged grey, with little sense of life, the plastinated bodies retain a muscular tautness and emerge with a pinkish tint to the muscles and organs, almost as if the tissue were still living though somehow hardened and dry.³⁵

³³ Linke, "Body Shock," 94. Similar charges have been leveled against *Body Worlds's* primary imitator/competitor, *Bodies: The Exhibition*.

³⁴ Desmond, "Postmortem Exhibitions," 348.

³⁵ Ibid., 368. See also: Jose van Dijck, "Bodyworlds: The Art of Plastinated Cadavers," *Configurations* 9, no. 1 (2001); Jose van Dijck, *The Transparent Body: A Cultural Analysis of Medical Imaging* (Seattle: University of Washington Press, 2005).

The result of the plastination process is preserved body, whose biological matter has been largely replaced by plastic products, that can be touched, handled, and displayed with no fear of decay or contamination. In other words, the biological matter of the body has been rendered plastic, while at the same time retaining its fleshy appearance.

Body Worlds implicitly relies on a strong relationship between seeing and knowing, the idea that if we can see ourselves under the skin and in great detail, we will truly know the human. This desire to know through processes of vision follows my discussion of other objects in this project, such as the HD technologies of vision deployed in *Planet Earth* or DNA portraits' desire to burrow down into the human genome in order to find the secrets of life and personal identity. In this way, Body Worlds speaks in a mode of vernacular posthumanism that emphasizes the fundamental ability of the biological to be known through a reduction to its constituent parts. Though Body Worlds is a decidedly analog exhibition, it nevertheless inhabits a digital cultural logic, one that views both humans and nonhumans as open to modification through a tinkering of code (whether biological, informational, or mechanical). As Jose van Dijck writes: "The desire for a manipulable body perfectly fits a material, technological culture in which imitation has been replaced by modification."36 In turning the human into a thing, Body Worlds reduces and abstracts the human into an association with the nonhuman, and it imports the logic of distanciation that accompanies thingness. The human becomes another nonhuman thing, able to be observed, known, and understood through process of vision, and through its association with the nonhuman, the human can be understood through the logic of code that serves as a lens through which vernacular posthumanism understands the ontology and epistemology of actants within contemporary culture. Echoing this sentiment, Teodora Manea argues that:

Representing the body as the analogue of a computer adds to its extreme reification the idea of an unlimited morphological availability. The body is not only transformable in principle,

³⁶ van Dijck, "Bodyworlds: The Art of Plastinated Cadavers," 42.

but the – functional, but mainly aesthetic – transformation becomes an ideal in itself, and this does not happen only in the post-humanist scenarios. The body is often regarded as a machine which should serve our interests perfectly.³⁷

She continues, a few pages later:

The transhumanist metaphysical project seems to be a modern one, bold and very new, but, basically, it only means to turn the body radically into an artefact, completed with a gnostic soteriology adapted to the present age and metaphors. The salvation of the world and of the soul can be attained through knowledge. The supreme form of knowledge is represented by computer technology, ergo immortality lies in the silicon eon.³⁸

In turning the human into a nonhuman thing, *Body Worlds* provides a framework within which the human can be transcended.

However, as with all of the other objects discussed in this project, *Body Worlds* displays the contradiction central to the images of vernacular posthumanism: namely the desire to transcend the human while at the same time reasserting the importance of the flesh. Strangely enough, *Body Worlds* fantasizes about the transcendence of the human via the object most frequently seen as a barrier to such transcendence: the body. As demonstrated in my discussions of *300* and the films of David Cronenberg, the flesh lingers in our digital culture, and it provides a tether that counteracts the fantasies of digital immateriality visualized in many of the objects of contemporary visual culture. As an extension of this logic, *Body Worlds* uses the preservation of the human corpse as a means to achieve the immortality of the human. In turning the human into a thing, the human is allowed to become the nonhuman, and this is all achieved through a particular visualization of the flesh. This materiality of the flesh, writes Linke, is particularly important in combating the processes of commodification and abstraction of global capitalism:

³⁷ Teodora Manea, "New Dimensions of Body-Perception in the Present Biotechnological Context," *Philobiblion: Transylvanian Journal of Multidisciplinary Research in Humanities* 13(2008): 75. ³⁸ Ibid., 78.

In this era of globalization, which is governed by a perpetual "simulation of the sensual" through new media and communication technologies, the materiality of dead bodies clearly takes on new meanings. For under the impact of global capitalism, the non-virtual presence of corpses in the museum seems to accommodate a yearning for the "thingness" of things—the permanent, the tangible, the concrete. As such, the sensorial access to corpses might nourish a longing for an authentic reality, for a perceptual realism without simulation, without simulacra or copies.³⁹

As with the bodies of 300 inhabiting their virtual space, the plastinated corpses of Body Worlds rearticulate the importance of material presence while at the same time fantasizing about the persistence of the flesh in the digital "immateriality" of code.

Damien Hirst's art emphasizes the ephemerality of the lived body, focusing on the literal death of its subjects (the flies in *A Thousand Years*) or on the slow decomposition of the flesh within the vitrine (e.g., the shark in *The Physical Impossibility of Death in the Mind of Someone Living*).⁴⁰ This work not only displays the death of the nonhuman other that results from attempts at visualizing the nonhuman but it also imagines the ultimate disappearance/transformation of the flesh and the way in which the nonhuman other slows slips out of the grasp of the human. As much as we might try to sediment the nonhuman other and subject it to our anthropomorphizing gaze, argues Hirst's art, the nonhuman will ultimately exceed and escape our human view.

Body Worlds, conversely, has, through the process of plastination, created a scenario in which the human has been objectified and become subject to its own epistemological gaze. In halting the process of decay, the flesh, like the disembodied consciousness imagined by transhumanists, becomes immortal. Made into just another thing, the human body can circulate, converse, and ex-

³⁹ Linke, "Body Shock," 83.

⁴⁰ Petra Lange-Berndt, examining the ephemerality of much of contemporary art, notes that the original shark of *The Physical Impossibility of Death* had to be replaced in 2003 due to the cloudiness of the formaldehyde solution from the decomposing flesh of the shark. Petra Lange-Berndt, "Replication and Decay in Damien Hirst's *Natural History*," *Tate Papers* 8(Autumn 2007), http://www.tate.org.uk/download/file/fid/7361.

change with other nonhuman things. Once de-skinned and reduced to a collection of their constituent parts, both horse and human appear fundamentally the same. In subjecting the insides of the human and nonhuman animal to the power of vision, the two become knowable as manifestations of the same code of life. Treated to the same scientific-artistic process of plastination, which preserves the dead horse-human assemblage for a posterity of plastic infinity, the human and nonhuman become united in their sameness and exchangeability. As with the DNA portraits and migration maps discussed in Chapter Three, *Body Worlds* takes as its main concern a confusion of the inside and the outside, a making visible of the internal in order to domesticate the unseen. In its plastinated perfection, *Body Worlds* stages the encounter between the human and the nonhuman as one of sameness and distance, which conceptualizes the ease with which human and nonhuman might intermingle. Contrary to the messiness of the encounter staged by Hirst's art, *Body Worlds* reflects contemporary attitudes concerning the fundamental malleability of the body, the imbrication of vision and knowledge, and the exchangeability of all actants through functions of code.

4.3 Vernacular Posthumanism: Visual Culture and Material Imagination

Body Worlds and the art of Damien Hirst, like the other objects explored in this project, are messy, requiring a theoretical flexibility and sense of adventure adequate to the things themselves. These objects do not think straight, and a theory of vernacular posthumanism provides a framework for making sense of and thinking through the curves, folds, and sharp angles of these objects. As Mitchell and Haraway each, in their own way, advocate, what we need is a promiscuous theory in order to explore the fullness of perspective offered by these nonhuman objects. My exploration of Fast, Cheap & Out of Control in the Introduction to this project opens up a method for understanding this nonhuman perspective, and it introduces the ways in which understanding particular objects of visual culture as speaking in a dialect of vernacular posthumanism can release these objects

⁴¹ Mitchell, *Picture Theory*; Haraway, *When Species Meet*.

from an anthropocentric monopoly of subjectivity and control and instead offer a means for making sense of how the objects offer us a staging ground for encountering the nonhuman while at the same time providing a reflection on our contemporary human condition, influenced strongly by advances in computing and genetic technologies.

My analyses of the other objects in subsequent chapters unpack the fundamental contradiction of vernacular posthumanism: the objects display a desire to transcend the human while at the same time reasserting the importance of the flesh. This project has understood vernacular posthumanism in terms vision, subjectivity, and space in Chapter One; in terms of vision, perspective, and embodiment in Chapter Two; in terms of the body and information in Chapter Three; and in terms of its limits in the Conclusion. In doing so, I hope to have shown the power of a materialist theory of vernacular posthumanism – as one iteration of the contemporary emergence of nonhumanist theory – to explain and illuminate the relationship between human and nonhuman as manifested in contemporary visual culture.

However, while there is much to admire about nonhumanist theories – and I consider this project to have been an attempt at theorizing the nonhuman from a nonhuman perspective – we must also be critical of the limits of this kind of approach. My own theorization of vernacular posthumanism provides a nonhuman supplement to analyses of visual culture, arguing that we must take seriously the ability of objects and images of visual culture to speak in their own language. However, we must also remember that all such studies are conducted from the realm of the human, and we must respect that these studies are translations of a particular image vernacular. As with any translation, the original language is altered through the process, and the result is an approximation of the original. As Latour argues, relationships define actants, and the process of translation is one such relationship. I have tried to listen with sensitive ears to the language of vernacular posthumanism being spoken by the objects examined in this project, but my translation of this language is perhaps more about my relationship with these actants within our network than it is

about the actants themselves. I humble myself before these nonhuman objects, and I have done my best to respect their vernacular, however much my own human quirks and idiosyncracies have altered their message.

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