

**ANATOMY OF SPECTATORSHIP:  
TRACING THE BODY IN *BODY WORLDS*,  
THE ANATOMICAL EXHIBITION  
OF REAL HUMAN BODIES**

by

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Bachelor of Arts, Simon Fraser University, 2005

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## Abstract

*Body Worlds* is an exhibition of real, recently-deceased, dissected and posed human bodies. Far from being just educational, as *Body Worlds* purports them to be, I argue that the bodies are stripped of social and affective meaning in favor of scientific understandings. I conduct a genealogy of the exhibition, outlining its preferred reading and subject. I then explicate the process of spectatorship as a specific kind of seeing called the *autopsic gaze*. The preferred reading and subject and the autopsic gaze constitute a process of control of the body and its meaning. I refer to this as *closure*. Seeking to problematize closure, I develop a counter reading strategy, called *critical spectatorship*, which uncovers lost elements of the exhibition, called *traces*, that defy the preferred reading. I deploy critical spectatorship to construct a counter reading through the lens of affect. I also comment on different theoretical approaches to the body.

**Keywords:** *Body Worlds*; the body; genealogy; affect; science studies; the gaze; anatomy

 *To Alejandro Yoshizawa*

*Always longing to dig in the garden, pick figs,  
and have tea and hot chocolate with you.*

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## Introduction

*Body Worlds, the Anatomical Exhibition of Real Human Bodies*<sup>1</sup> is a traveling, internationally popular exhibition of real, recently deceased, dissected and posed human corpses. These corpses have been obtained from donors who in life bequeathed their bodies to be dissected and displayed in *Body Worlds* exhibitions after their death. The corpses are preserved through a process known as *plastination* which removes water and fat and replaces them with a polymer that is flexible before it hardens, making it possible to pose the dissected corpses. The resulting specimens are called *plastinates*, and each has a provocative title such as the *Skin Man* (see figure 3), the *Star Warrior*, and the *Balance Beam Gymnast*. The visual effect, didactic value, and “authenticity” of the plastinates, creators argue, lends to the educational purpose of the exhibitions, which “democratize” medical knowledge of the body. *Body Worlds* exhibitions, featuring dozens of “whole body” specimens, body parts, visual graphics and textual posters and banners, have been viewed by nearly 25 million spectators in North America, Europe and Asia in museums, science centres and art galleries since 1995 (Institute for Plastination [IfP], 2006a). According to German creator and anatomist, Dr. Gunther von Hagens,

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<sup>1</sup> *Body Worlds* is also called *Körperwelten*. In addition, as of late, *Body Worlds* has changed its subtitle to “The Original Exhibition of Real Human Bodies,” presumably in light of its criticism of so-called “copycat” exhibitions.

“*Body Worlds* stands at the intersection of science, medicine, and art as a towering achievement in the field of anatomical science” (IfP, 2006b, para. 1).



**Figure 1: Visitors at *Body Worlds* in Berlin, Germany, 2001**

© Gunther von Hagens, Institute for Plastination, Heidelberg, Germany, [www.bodyworlds.com](http://www.bodyworlds.com), by permission.

*Body Worlds* exhibitions are notable for their almost exclusive focus on the human body, which is their object of study, reverence and pleasure. Yet far from being merely “instructive” and “educational” as creators claim, plastinated bodies are stripped of social and affective meaning in favor of material and scientific understandings which conceive of the body as comprised of “organic and therefore detachable parts” (Braidotti,

1994, p. 103). The exhibition is seemingly immune to taboos about the naked body, the corpse, and death, defying the natural decay of the dead body. Ignoring the complex and ritualistic ways in which the dead are dealt with, social values which normally govern our relationship towards the human body are erased in the process of viewing. Similarly, normal and expected visceral and embodied reactions to viewing naked, dead and dissected bodies most often do not figure in the viewing of the plastinates: viewers do not shudder, vomit, faint, or cry. As Walter (2004a) argues, “the physical nature of the exhibits, together with the context of their display, makes possible a proto-scientific gaze that lacks the emotional complications inherent in the dissection lab and the autopsy room” (p. 484). The “*Body Worlds* body” is presented as knowable by anatomical science. Frozen in form and time, it serves as a self-celebratory statue that commemorates the triumph of the anatomical gaze.

Seeking to understand the experience of spectatorship of *Body Worlds*, I first conduct a genealogy of the exhibition, drawing on the work of French philosopher and historian Michel Foucault. I outline *Body Worlds’ preferred reading*: the understanding of the exhibition and of the human body that *Body Worlds* advances. To construct the preferred reading, I conduct an empirical analysis of the visual and textual dimensions of the exhibition, and also consider its social, political, cultural and historical context. I argue that the preferred reading has a *preferred subject*, exemplified by the figure of the body donor. I then explicate the process of spectatorship of *Body Worlds* as a specific kind of viewing or seeing, which I call the *autopsic gaze*. Together, these three elements – the preferred reading, the preferred subject, and the autopsic gaze – constitute a process

of control and containment of the human body and its meaning. I refer to this process as *closure*.

Seeking to problematize closure, I develop and then deploy a counter reading strategy that I call *critical spectatorship*.<sup>2</sup> Critical spectatorship is rooted in a practice of seeing that contrasts with the autopsic gaze. It uncovers lost or absent elements of the exhibition which defy and elude the preferred reading. I call these lost or absent elements *traces*. I operationalize this concept and detail what I found while deploying it during my fieldwork. Through these traces, I construct a counter reading of *Body Worlds*. This counter-reading draws on the work of cultural theorists Brian Massumi (2002) and Vivian Sobchack (2004), and problematizes *Body Worlds* through the lens of affect.

At each stage of my argument, I comment on the different approaches I deploy to theorize the body. The genealogical approach, which asserts that the body is socially constructed through discourses and practices, exposes the preferred reading of *Body Worlds*. However, it is limited in its capacity to fully explicate the human body because it does not attend to the body's materiality and in particular the felt and lived nature of embodiment. My counter-reading is premised on the material, lived, felt and embodied body, which raises complexities sometimes left unaddressed by researchers of the body.

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<sup>2</sup> I use the word *spectator* instead of *observer*. This differs from, but is informed by, the work of Jonathan Crary, who writes: "Most dictionaries make little semantic distinction between the words 'observer' and 'spectator,' and common usage usually renders them effectively synonymous. I have chosen the term *observer* mainly for its etymological resonance. Unlike *spectare*, the Latin root for 'spectator,' the root for 'observe' does not literally mean 'to look at.' Spectator also carries specific connotations... namely, of one who is a passive onlooker at a spectacle, as at an art gallery or theatre" (1990, p. 5). Because I argue that that experience of spectatorship at *Body Worlds* is defined by a particular kind of looking that entails passivity (I outline this in detail in chapter two), and that the exhibitions are in many ways spectacles, I use the term *spectator* here.

## Background

This project is seated in my own experience as a spectator of *Body Worlds*. During my first visit to the Vancouver exhibition – which was initially unrelated to my research project – I was struck by decidedly strong, ambivalent feelings towards the exhibition and to the plastinates in particular. I am aware of the paradoxical nature of such feelings, and understand them in reference to my previous work on the body, women's bodies and menstruation which drew on psychoanalytic thought – in particular, the work of Julia Kristeva – to explore the body's interior and its relation to subjectivity. According to Kristeva (1982), materials that pass from the interior to the exterior (such as feces or menstrual blood) provoke horror and disgust because they threaten the very foundations of subjectivity: the subject/object and inside/outside divides. Kristeva terms such horror *abjection*. What is striking about the exhibition in relation to Kristeva's work was that I did not experience any sort of feelings of abjection during that first visit, despite being confronted with what Kristeva cites as the ultimate abject material, the corpse. These corpses were also both skinned and dissected, exposing their interiors. Elkins (2001) adds that

It is normally impolite even to look at the places where the inside of the body becomes visible – the twilight of nostrils, ears, mouths, anuses, vaginas, and urethras. The inside is by definition and by nature that which is not seen. The inside is also, by definition, that which is painful or unpleasant, as opposed to the outside, which is and smooth [*sic*]. The inside is liquid, the outside is dry. The inside is disgusting, the outside is beautiful. The outside is public, the inside is private; the outside is life itself, and the inside is death. (p. 9)

Yet, taboos against the display of the inside of the body, the naked body, and corpse, as well as moral and religious objections regarding desecration of the dead, are equally pacified in the viewing of *Body Worlds*, both for myself, and for much of the

public at large, given the exhibition's staggering popularity and success and lack of substantial controversy or moral outrage. For example, reception studies included in the exhibition catalogue attest to the overwhelmingly positive response of visitors to the exhibition. One poll of 2,000 visitors to the exhibition in Mannheim in 1997 and 1998 found that "A total of 92% of the visitors were affected particularly positively by the whole-body plastinates; only 6% rejected them" (Lantermann, 2007, p. 307). Indeed, there probably are some biases in this poll, particularly in the selection of the sample. For example, the cost of visiting the exhibition can be prohibitive for some people (in Portland and Vancouver, the price was over \$20 for an adult and over \$10 for a child), and the exhibition is normally staged in urban areas. However, I've found that this positive reception conforms to the experience of most spectators who attend – even across highly diverse countries. Another visitor poll conducted in cities in Asia, Europe and North America found that 84% of visitors assessed it as either "very good" or "good" (Whalley, 2007, p. 299). This same poll also found that

Among those interviewed, very few were found who felt that their moral concepts had been violated by the sight of plastinates. On the average, it was only 9%, and even in Osaka, Japan, where this opinion was most frequently expressed, it was no more than 10%. (p. 299)

These positive visitor reactions suggest that either psychoanalytic thought cannot explain the experience of spectatorship, or that something powerful assuages the expected feelings and reactions.

While most spectators appear unaffected by the plastinates, I've encountered a few individuals who were horrified, disgusted or offended by the exhibition. Indeed, the reception studies themselves do not include those who chose not to attend. This suggests



that while the exhibition can be read in multiple ways, it has a dominant or preferred reading, which may be captured by von Hagens' description:

The presentation of the pure physical reminds visitors to *Body Worlds* of the intangible and the unfathomable. The plastinated post-mortal body illuminates the soul by its very absence. Plastination transforms the body, an object of individual mourning, into an object of reverence, learning, enlightenment and appreciation. (*Body Worlds 3*, Vancouver, 2006)

How is this preferred reading accomplished? *Body Worlds* is constituted through multiple discourses. Within the expansive arena of science, *Body Worlds* draws on the epistemology, history and discourse of anatomy;<sup>3</sup> the discourse of body and organ donation; and discourses of medicine and public health. It also draws on discourses of education, art, entertainment, and religion. Political discourses, particularly those concerned with rights and freedoms, also play a role in the construction of the exhibition. I argue *Body Worlds* draws on these discourses and histories selectively to establish the persuasive power of its conceptualization of the body. In particular, this permits creators to skirt and reject criticisms that could be launched against its exhibitions. Thus, in her well-known article, van Dijck (2001) writes:

From the history of anatomy we have learned that anatomical practices, objects, and representations have always been an intricate mixture of science and art, and a hybrid of medical instruction and popular entertainment. During the Mannheim exhibition [an early *Body Worlds* exhibition in Germany], the ethical debate centered primarily on the question whether plastination should be looked upon as *either science or art, either instruction or entertainment*. What makes von Hagens' anatomical art controversial, though, is not that it cannot be classified in clearly defined boxes, but that it defies the very categories on which ethical judgments are grounded. (p. 102, emphasis in original)

Yet these discourses do not account for the entirety of what is in operation in *Body Worlds*. Literally, the body as an organic entity, one that is messy and raw, is

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<sup>3</sup> In this thesis, I use the word *anatomy* in reference to the science of biological structures – most often visually represented and sometimes using real, physical specimens – conceived as discrete parts functioning in an integrated system. I am not referring to the use of the word *anatomy* for the actual physical structures.

*petrified* in plastic, negating its decay and giving it an unlimited shelf-life (like most plastics). Plastinates thus become object-like, a materiality that contributes to *Body Worlds*' preferred reading.

Both the feat of petrifying bodies into plastinates as well as the choreography of multiple discourses and histories to secure a preferred reading are powerful achievements. In this project, I refer to this as *closure*. It is closely related to Foucault's concept of discipline which describes the ways in which power constitutes bodies and minds. In *Body Worlds*, the dead body becomes an object that is subject to many of the discourses that constitute the living body and subjectivity. However, closure differs from discipline in that it focuses on the dead body, which imposes its own set of demands on those who seek to control and contain it. This research project serves as an effort to both explore the ways in which closure operates in *Body Worlds*, and to "open up" or problematize this closure.

## Study Delimitation

There are four *Body Worlds* exhibitions currently traveling the world. Each features different specimens and is loosely organized around a theme. *Body Worlds 1* was the first exhibition, inspired by Renaissance anatomists and anatomy (IfP, 2006b, para. 1). *Body Worlds 2* "is more exhilarating and dynamic because it offers more sportive poses that elucidate the body's capabilities while engaged in familiar activities," especially sports activities (IfP, 2006b, para. 1). *Body Worlds 3*

is a return to the Renaissance, with plastinates such as *The Emerging Skeleton*, *The Wizard*, and *The Praying Skeleton* all referencing the Middle Ages and the Renaissance. *Body Worlds 3* is the culmination of Dr. Gunther von Hagens' 30-year career in anatomy and captures the evolution and refinement of his invention to its outer limits. (IfP, 2006b, para. 2)

*Body Worlds 4* focuses on the body in everyday activities (Museum of Science and Industry, 2008, para. 6).

In this research project, I focus on *Body Worlds 3*,<sup>4</sup> which I will henceforth refer to simply as *Body Worlds*. My fieldwork consisted of viewing the exhibition twice in Vancouver and over a period of two days in Portland. I also examined promotional materials written about *Body Worlds* available either at the exhibition, such as the exhibition catalogue, or from outside sources, as well as *Body Worlds*' vast website ([www.bodyworlds.com](http://www.bodyworlds.com)), which includes numerous articles, press releases, photographs and other information.

In doing this project, I situate myself as a critical spectator of plastinated bodies. I focus on the experience of reception, rather than the history of the exhibition's production. Specifically, I develop my analysis drawing from my own experience of reception. Though this project is empirical in nature, no human research was conducted. While interviews with visitors to the exhibitions or with others involved in their organization would be interesting, this would entail another project. I draw on theoretical work that is primarily concerned with texts and representation to explore my own experience as a spectator. In order to assess the ways in which texts are suggestive of a preferred reading, researchers ascertain the "ideal reader" or "ideal spectator" rather than working with a representative sample of actual spectators or readers who, due to various reasons, may or may not be persuaded in the ideal ways suggested by the text (see Gray, 2003, p. 133-134).

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<sup>4</sup> At the time I began my research, *Body Worlds 3* was the most recent iteration.

Recognizing that the exhibition operates differently in various cultural and political contexts, I also limit my scope and analysis to the North American context, where I researched exhibitions in Vancouver, Canada, and Portland, USA. As part of the “Western World,” these countries share a similar origin in Enlightenment metaphysics and epistemology, which espouses dominant liberal conceptualizations of the body and subject. This means that, while focusing on the North American context, I situate *Body Worlds* in larger paradigms whose origins are European. For example, creators argue that *Body Worlds* is an extension of the history and development of anatomy, thus bringing into the scope of this project Italy, Germany, Britain and Holland, countries where anatomy first flourished. I consider these influences a part of the North American experience of reception.<sup>5</sup>

## Literature Review

### **The Body**

This thesis builds from the sociological literature on the body that takes Cartesian dualism as its negative starting point. Cartesian dualism is the dominant version of selfhood which emerged from Enlightenment thinking that remains dominant today. This version of selfhood “radicalized the distinction between the mind and the body... and privileged the former over the latter” (Fraser and Greco, 2005, p. 6). The distinction tends

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<sup>5</sup> At the same time, the reception of *Body Worlds* in these countries has been different than in North America. For example, according to one poll, the exhibition has been slightly less positively received in European countries than in North America (Whalley, 2007, 302). The following cities were polled: Osaka, Mannheim, Cologne, London, Seoul, Munich, Taipei, Los Angeles, Chicago, Toronto, Philadelphia, and Denver. Interestingly, according to the poll, compared with the visitors in the other cities, visitors in Toronto were the least morally offended, and only Denver had more visitors rank the exhibition as “very good.” This raises some interesting questions that could be explored in a cross-cultural study of *Body Worlds*’ reception.

to represent knowledge as disembodied, the body being the “other” of knowledge (Fraser and Greco, 2005, p. 7).

Because of the prevalence of dualism in the social sciences, there was little interest in research on the body (Schilling, 2005; Longhurst, 2001) until Michel Foucault’s work and Bryan Turner’s “agenda-setting work” in 1984 (see 2<sup>nd</sup> edition, 1996). Since then, scholars have sought to conceptualize what the body *is* in order to critique the Cartesian subject. The “canon” of sociology of the body is considerably varied and diverse. Schilling writes, “While philosophy had historically imparted the body with a good deal of negative content, this left contemporary writers seeking to invest it with theoretically productive and positive meanings with a high degree of latitude” (2005, p. 6).

One influential stream of scholarly work figures the body as multiple, fragmented, constructed, or contingent (see for example Braidotti, 1994; Grosz, 1994; Haraway, 1991; Hayles, 2005; Longhurst, 2001; Holliday and Hassard, 2001). The two most prominent approaches figure the body as either corporeal and the seat of experience, or as an effect of discourse, which is socially-constructed (Holliday and Hassard, 2001, p. 1).

Perhaps the most-well known scholar whose work demonstrates the latter is feminist theorist Judith Butler. In her ground-breaking work *Gender Trouble* (1990), Butler argued that selves, bodies and identity are not pre-given. Her notion of performativity posits that gender is the outcome of expressive, performative acts, continually prescribed and repeated, including thought, speech, comportment, artifacts and spaces (Rose, 1998, p. 186). Her argument that gender is ascribed to and inscribed on bodies was a radical critique of notions of biological sex.

The social construction approach is also used by scholars who focus on body norms, and, as Holliday and Hassard (2001) call them, “pariah bodies,” including disabled bodies, black bodies, mad or hysterical bodies, and queer bodies (p. 9). This approach reads the body as a signifier – as a “text” to be read (Sanders, 2006, p. 280) – whose status and value are arbitrary and socially constructed, but with powerful material outcomes. As Holliday and Hassard (2001) write,

This is a double process: first the body of particular subjects is coded as in need of (physical) control, second this coded body is reflected back upon the subject’s mind, as in need of (psychological) control. This process is at the heart of imperialist and patriarchal imperative that sought to keep unruly subjects in their place. (p. 9-10)

Other theorists who use the first approach focus on the body as a corporeal phenomenon, seeking to “re-embody” the subject, starting from the premise that “selfhood is not only social but embodied” (Hockey and Draper, 2005, p. 41; and see Featherstone, Hepworth and Turner, 1992; Jenkins, 2004; Shilling, 1993). Following Schilling, to be embodied “includes thinking, feeling bodies, rather than disembodied minds unaffected by their senses and habits” (2005, p. 1).

Feminist Elizabeth Grosz’s *corporeal feminism* is an example of this work, developed in *Volatile Bodies: Toward a Corporeal Feminism* (1994). Like Derrida’s work on deconstruction, Grosz argues that logocentrism necessarily operates to marginalize women and women’s bodies. But unlike Derrida, her work is situated in a tradition of phenomenology. She focuses her critique on the mind/body binary and correlated binaries, especially the man/woman binary, whereby “man and mind, woman and body, become representationally aligned” (p. 4). Arguing that the feminist tradition itself is guilty of accepting many problematic binaries as truth, and the mind/body binary in particular, Grosz formulates a feminism that “resuscitate[s] the concept of the body for

their [feminists] own purposes” (p. 20). She suggests that the binary opposition between the cultural and the natural needs reconsideration and reformulation, so the body is no longer limited to “naturalistic and scientific modes of explanation” (p. 20). Refiguring the body as corporeal is part of this project.<sup>6</sup>

While conceiving the body as corporeal, some theorists have argued that the body is not simply organic material comprised of the insides and ending with the skin. In considering the ways in which the body defies boundaries, they have argued that the body is a composite entity made of different kinds of stuff. For example, Donna Haraway seeks to destabilize conventional notions of selfhood through the “political fiction” of the cyborg. In her groundbreaking work, “A Cyborg Manifesto” (1991), she writes,

By the late twentieth century, our time, a mythic time, we are all chimeras, theorized and fabricated hybrids of machine and organism; in short, we are cyborgs... The cyborg is a condensed image of both imagination and material reality, the two joined centres structuring any possibility of historical transformation. In the traditions of “Western” science and politics – the tradition of racist, male-dominant capitalism; the tradition of progress; the tradition of the appropriation of nature as resource for the productions of culture; the tradition of reproduction of the self from the reflections of the other – the relation between organism and machine has been a border war. (p. 150)

Haraway writes that the unstable and blurred boundaries invoked by the cyborg are necessary in conceiving of a new body politics.

Nikolas Rose has also advanced this approach, tracing how subjectivity is “assembled” and “invented,” with a particular focus on psychology, psychiatry, and

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<sup>6</sup> Longhurst, however, points out a limitation in approaches that focus on the corporeal. She notes that while the recent “turn” to the body has allowed theorists new ways of arguing that subjectivity is “fluid” – for example, that the binary of sexual difference is in fact unstable – there has been little interest in examining the ways in which the body is literally, corporeally “fluid.” In other words, “There is little in the discipline that attests to the runny, gaseous, flowing, watery nature of bodies. The messy surfaces/depths of bodies, their insecure boundaries, the fluids that seep and leak from them, that which they engulf, the insides and outsides that sometimes collapse into each other remain invisible” (2001, p. 23). Her work on pregnant bodies and toilets advances the project of attending to these elements of corporeality (Longhurst, 2001).

psychoanalysis. As an alternative to “the conventional image of subjectivity as coherent, enduring and individualized” (1998, p. 170), Rose proposes “a view of subjectification in terms of an array of “foldings” of exteriority, themselves assembled and machinated in particular apparatuses” (p.21).

Rose warns against theorists whose work suggests that the corporeal, material body is an *a priori* foundation upon which signification, culture and history “write.” He calls this “fleshism” (1998, p. 183), and advances an inquiry that conceives of the body as “linkages established between particular surfaces, forces, and energies” (p. 184). Rose continues

Rather than speak of “the body,” we need to analyze just how a particular body-regime has been produced, the channeling of processes, organs, flows, connections, the alignment of one aspect with another. Instead of “the body,” then, one has a series of possible “machines,” assemblages of various dimensions of humans with other elements and materials. (p. 185)

In other words, Rose combines both the social construction and corporeal approach. This suggests that while current thinking on what a body *is* may be trapped by its focus on the corporeal or the discursive, emergent work in the field has begun to attend to the very problems that *Body Worlds* presents by combining discourse with material objects and bodies.

Another approach that has combined the corporeal and social construction approach is affect theory (see Sedgwick, 2003; Massumi, 2002). Affect theory provides a way to attend to emotions which are often unaddressed in other theories of the body.

Hemmings (2005) notes that

post deconstruction we doubt the capacity of constructivist models of the subject to account fully for our place in the world as individuals or groups...Theorists of affect argue that constructivist models leave out the residue or excess that is not socially produced, and that constitutes the very fabric of our being. (p. 549)



Broadly defined, affect “refers to states of being, rather than to their manifestation or interpretation as emotions” (Hemmings, 2005, p. 551). Affects are registered as feelings or intensities at the level of the body in, for example, feelings of suspense, “goosebumps,” visceral responses, and the like. They are bodily experiences that become intelligible within social structures, and are a person’s

experiences to date that are remembered (or better, perhaps, registered) in the moment of responding to a new situation, such that we keep “a trace, within [our] constitution” of those experiences (Hemmings, 2005, p. 552, citing Al-Saji).

In other words, affects are simultaneously corporeal *and* social, affording researchers new ways of theorizing the body. This is the approach that I use for my counter reading of *Body Worlds* in chapter three.

### ***Body Worlds***

Despite its massive international success, *Body Worlds* hasn’t received the scholarly attention it begs from the social sciences and humanities. Scientific articles about the techniques and technologies of plastination abound. The *Plastination Index* ([www.uqtr.ca/plastination/index-Anglais.html](http://www.uqtr.ca/plastination/index-Anglais.html)) is a convenient bibliography of nearly every article on plastination since 1978, and lists hundreds of articles about techniques, specimens (animal, human, plant and ancient, including diseased and healthy tissues, atomized parts and entire body specimens), uses, pedagogical value, plastination chemistry, financial costs, ethical considerations for scientists, and technological advancements. This field of research, I would argue, contributes to the preferred reading of *Body Worlds*.

Social scientific studies on the *Body Worlds* exhibitions include those that focus on pedagogical value (Satyapal, 2005; Jones, 2002; Dawson et al, 1990; Shibata et al,

1991), ethical considerations (Miah, 2006; van Dijck, 2001; Jones 2002), historical perspectives, especially the long history of the fusion of anatomy and aesthetics (Kuppers, 2004; Moore and Brown, 2004; Olry and Motomiya, 1997; van Dijck, 2001<sup>7</sup>), legal aspects (Leiboff, 2005), body donors (Walter, 2004b), visitor attitudes and reactions (Leiberich, 2006; Walter, 2004a), and the “posthumanity” of plastinated bodies (Wegenstein, 2002).<sup>8</sup> There are no studies that conduct an in-depth genealogy of *Body Worlds*, as are there no sustained studies on the *Body Worlds 3* exhibition. While many of the articles cited above address the experience of spectatorship of the exhibition, there are no sustained studies that examine its preferred reading and preferred subject, or that construct a critical counter reading based affect, which is what my study proposes to contribute.

## Methodology

*Body Worlds* is a visually consumed product.<sup>9</sup> Taking up the position of spectator, my methods included empirical observation as well as archival and textual research, otherwise known as unobtrusive methods (Palys, 2003, p. 228).<sup>10</sup> According to Palys, society and culture can be understood by the things people produce. Using unobtrusive methods, a variety of materials can be examined, including archival data, everyday objects, and historical material (p. 228). My analysis also required me to develop a

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<sup>7</sup> Van Dijck's appears to be the most well-known and most-often cited.

<sup>8</sup> My review is limited to articles written in or translated to English. There are many other articles in other languages, especially German.

<sup>9</sup> In chapter two, I argue that *Body Worlds* is a form of visual culture.

<sup>10</sup> While some researchers may argue that unobtrusive methods provide only indirect evidence for any claims about human behavior, Palys (2003) notes that one of the benefits of unobtrusive methods is the minimization of the problem of “reactivity.” Participants in studies are almost always aware of being studied, which interferes with their behavior and changes results (p. 228). Data gained from unobtrusive methods are not affected.

method of critical self-reflection, through which I was attentive to my experiences, emotions, feelings, and embodied reactions (or affects).

According to Palys, “Unobtrusive measures are generally divided into two categories: physical trace and archival measures, although it might be argued that the latter are merely a special case of the former” (2003, p. 228). Physical traces are left-behind impressions which indicate human action and intent, and can be both *missing* and *present* (p. 229). If extended from individual actions to the larger domains of society and culture, this is relevant for my examination both of the exhibition and what is absent.

My observational techniques were informed by visual examination methods developed by researchers working in the field of material culture. Following Kingery (1996), material culture is any human made or used artifact that can be understood as a product of culture, which includes tools, art, technology, toys, etc. Though often regarded as part of the disciplines of archeology and anthropology, material culture is gaining momentum in areas such as technology studies, aesthetics, feminist analyses, and historiography (Kingery, 1996).

As Kingery notes,

The grammar of things is related to, but more complex and difficult to decipher than, the grammar of words. Artifacts are tools as well as signals, signs, and symbols... Some authors have talked about reading objects as texts, but objects must also be read as myths and as poetry. (1996, p. 1)

In this way, discourse is constituted in spoken and written language and in cultural imagery and artifactual objects. In other words, artifacts can also be “read” like texts, with some special considerations. Kingery explains:

Careful visual examination and a substantial physical analysis of the materials contained, the ways in which various parts of an object are fabricated and joined, composition, surface texture, internal structure, sources of raw materials, and other appropriate measurements are necessary to enhance a primary visual

examination. All objects are to some extent art and thus require consideration of both form and content. Subsequent analysis can take many roads, objective and subjective, and must be guided by some purpose, some objective, some problem. It will almost always call for breaking out of narrow disciplinary bounds if truly important insights are to be gained. (1996, p. 14-15)

Drawing on this approach, I conceive plastinates and other specimens at the exhibition as material culture that provides insight into social structures and beliefs. At the same time, I also go beyond reading the plastinates as texts in exploring their materiality and affective dimensions.

In conducting observation at the *Body Worlds* exhibition in Portland, my goal was to record it as extensively in as much detail as possible. Observation included sketches of the overall layout of the exhibition; sketches of the plastinates; observations about the composition of the plastinates, including colour, texture, and size; copying accompanying textual information; and looking for references to dominant discourses about the body such as aesthetic and popular culture references and normative poses – for example, women posed in feminine and sexualized positions. I also looked for “absences” by picking up on traces (I detail my method of doing this in chapter two). I viewed the exhibition on different levels, considering each plastinate on its own, the coherence and contradictions between and across plastinates, and the exhibition as a whole. Importantly, I also noted my affective responses. My observations did not include other spectators except in minor, anecdotal roles, such as when they talked to me, when I overheard their comments, or when I observed common behaviors at the exhibition.

I deployed this methodological framework not only at the Portland exhibition, but also in my reflections on my prior experience at the Vancouver exhibition. In this way, I became what Palys (2003) calls the *post hoc observer*. He writes,

the observer really is a participant, with any efforts at “observation,” in its empirical sense, done on a *post hoc* (a Latin phrase meaning “after the fact”) basis. That is, someone who has been a participant decides to write about it after his or her participation ends... The definitive aspect here is that as the process occurs, the person is a participant; only after the fact does he or she decide to reflect on his or her experiences and write an analytical account based on earlier observations. (p. 208-209)

While there are some limitations to this approach, it is very well suited to my research. Unmediated by prior research, restraints or expectations, which can occlude experiences in pre-defined instances of research, my experience of being a spectator at the Vancouver exhibition is valuable, raw data for my project, which has sought to detail precisely that experience.

I also examined the extensive *Body Worlds* website, promotional materials and other textual materials. I argue that they are part of the experience of being a spectator at *Body Worlds*.

Drawing on the data obtained during this primary observational research, I also deploy genealogical methodology as a mode of enquiry in conducting research on the social, historical and cultural context of the exhibition. Genealogy may be broadly conceived as both a methodological approach and a theoretical framework which reconceptualizes traditional notions of history to develop a critique of what is taken for granted as “truth,” “knowledge,” and “power.” This approach is closely associated with the work of Michel Foucault. While problematizing established notions of history, Foucault applied a historical eye towards phenomena which are often viewed as natural, timeless, and without history, including “sentiments, love, conscience, instincts” (1977b, p. 139-140), and, in particular, the body. Genealogy “fragments what was thought unified; it shows the heterogeneity of what was imagined consistent with itself” (Foucault, 1977b, p. 147). The body was of particular concern for Foucault because of its

history of being conceived as *a priori* to the subject that inhabits it, free from the effects of discourse and history. Foucault (1977b) argued that

The body is the inscribed surface of events (traced by language and dissolved by ideas), the locus of a dissociated self (adopting the illusion of a substantial unity), and a volume in perpetual disintegration. Genealogy, as an analysis of descent, is thus situated within the articulation of the body and history. Its task is to expose a body totally imprinted by history and the process of history's destruction of the body. (p. 148)

Foucauldian thought on the body has been perhaps the most important impetus of the recent academic interest on the body. It has given scholars a means to argue that the body is “not as a stable, unitary volume or a constant set of rhythmic processes unaffected by historical change, but rather as a locus or point of intersection of historical matrices of power” (McWhorter, 1989, p. 609).<sup>11</sup> In the next chapter, I conduct a genealogical inquiry of *Body Worlds*. I construct *Body Worlds*' preferred reading, as well as the preferred subject suggested by this reading.

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<sup>11</sup> It could be argued that my project is relativistic: “genealogical accounts are just so many more stories on an equal footing with the stories genealogy opposes” (Prado, 1995, p. 38). However, while my project certainly draws heavily from my own experience, I situate this experience in a larger political, social, cultural and historical milieu and draw on established theoretical frameworks. Therefore, this project's analysis is not merely a self-reflection, but an informed critique.

## Chapter 1: Genealogy

### Closure (n)

1. the act of closing or the state of being closed
2. an end or conclusion
3. something that closes or shuts, such as a cap or seal for a container
4. a procedure by which debate may be halted and an immediate vote taken
5. the resolution of a significant event in a person's life

(Collins Concise Dictionary, 2001, p. 282)

The ways in which *Body Worlds* is viewed and understood is constrained by a process that I call closure. A key element of closure is the selective invocation of discourses and histories to construct a preferred reading for the spectator, through which *Body Worlds* appears to be the “author” of its own lineage. In this chapter, I outline *Body Worlds*' preferred reading by examining the lineage it constructs for itself. In order to elucidate this reading, I perform a genealogical analysis by mining the exhibition, website, exhibition catalogue, and other materials. Simultaneously, I deconstruct and problematize the preferred reading. In addition, I suggest that this preferred reading envisages a preferred subject (or “ideal spectator”) who would be most apt to understand the exhibition through its preferred reading. I argue that the figure of the body donor most closely conforms to this preferred subject.

## Preferred Reading

There are many normal and expected reactions to viewing the kinds of bodies displayed in *Body Worlds* that are not easily amenable to a popular, entertaining and educational exhibition including horror, disgust and moral offense. For example, Jordanova (2004) notes that scientific exhibitions on the human body can be viewed as pornography, and probably sometimes are (p. 447). The body is a rich and wayward signifier and an unwieldy material entity. As such, the body has been subject to mechanisms of control which serve to constrain its possibilities as both a material entity and a signifier imbued with cultural meaning. The closure of the body in *Body Worlds* is no exception to this pattern.

Being made from the remains of a living human body, the corpse shares its waywardness in meaning. Yet, while retaining much of the ambiguity of the living body, a corpse is perhaps only ambiguously a body itself. Its animating force lost, the corpse is no longer a subject, but just the same resists objectification. Ariès (1982) writes that “The cadaver is still the body and already the corpse; death has not robbed it of a certain sensibility. It retains as *vis vegetans*, a *vestigum vitae*, a remnant of life” (p. 355). As such, corpses operate ambiguously and contradictorily in numerous fields of central importance to human life: religion, memory, medicine, and the like. They are the focus of mourning and reverence, lifeless on a death bed or at a funeral; at the same time, they are feared “health hazards” that smell, rot and can carry disease. A corpse may be a loved one recently passed who is kissed on the cheek by a mourner; that same corpse may be the cause of visceral pangs of revolt and disgust for someone else. A corpse may be chemically altered and embalmed, sealed from the transformative effects of the passage



of time, or it may be a “wet cadaver” set on a dissecting room table, ready for its progressive disintegration at the hands of the anatomist.

By virtue of their work and status, anatomists can erase some of this ambivalence in the transformation of corpses into *cadavers*. The material – the dead human body – is the same but the constellations of objects, actions, and people that make the material meaningful are different, such that, supposedly, cadavers are removed from the sphere of mourning and become objects of science (see von Hagens, 2007a).<sup>12</sup> But anatomists, too, are ambiguous, and have been thought of as “disembodied,” objective reason by some groups, and as “flesh-eaters” by others, (Sappol, 2002, p. 15), associated with a dark eroticism in exposing the naked body’s interiors.

Forces that serve to constrain the meaning of the corpse, not as a rotting and revolting object, deceased loved one, or health hazard, but, in the case of *Body Worlds*, as a didactic, pleasurable and entertaining object must be very powerful indeed. These forces, I argue, constitute the process of closure, and they function on numerous levels and in various ways.

A genealogical inquiry can uncover and problematize some of these forces and thus the closure of the body in *Body Worlds*. Genealogy is most closely associated with the work of Michel Foucault, and in particular, *Discipline and Punish* (1977a) and *The History of Sexuality* (1978). According to Prado (1995), Foucault’s work was indebted to philosopher Friedrich Nietzsche, who argued that “history is misconceived as ‘an attempt

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<sup>12</sup> This same process occurred on an ideological scale during the Renaissance. According to Sappol (2002), “Before anatomical discourse pervaded thinking about the body, many different notions of self shared the space that anatomy would come to monopolize” (p. 20-21). Thus, “The body had to be ‘placed’ within a nexus of complementary discourses, so that its full symbolic significance would be appreciated by those gathered to watch its progressive disintegration” (Sawday, 1996, p. 63).

to capture the exact essence of things” (p. 33, citing Foucault) through the search for origins or a causal and ordered linear unfolding of history (in other words, teleology). In contrast, genealogy posits that behind things there is “not a timeless and essential secret, but the secret that they have no essence or that their essence was fabricated in a piecemeal fashion from alien forms” (Foucault, 1977b, p. 142).

Genealogical analysis involves exploration of what Foucault called *descent* and *emergence*. Foucault understood their conventional usage to entail the retrospective imposition of “some grand synthesis or design on past events” (Prado, 1995, p. 35). He reformulated them towards a genealogical project. In the teleological version of history, descent is normally thought of in terms of likenesses, familial relations and shared characteristics, which are determinative in nature; in genealogy, descent is reconceived as the search for disparities. Foucault (1997b) writes that genealogy’s duty “is not to demonstrate that the past actively exists in the present, that it continues secretly to animate the present, having imposed a predetermined form to all its vicissitudes,” but rather “it is to identify the accidents, the minute deviations – or, conversely, the complete reversals – the errors, the false appraisals, and the faulty calculations that gave birth to those things that continue to exist and have value for us” (p. 146). As disparate details are uncovered, it becomes more difficult to impose a grand, linear narrative of creation – or in the case of *Body Worlds*, a singular reading of the exhibition.

Similarly, while emergence is conceived as the “perfect” moment of birth, or initial appearance, the analysis of emergence in a genealogical study attempts to show that when something “comes to be,” this is not the “final term of historical development,” but merely an event in a chain that has no ontological beginning (descent) or final end

(emergence). What emerges appears inevitable but is actually the result of haphazard plays of forces, which are often “lowly” and not at all poignant or special in nature. According to Prado (1995), “It is only the retrospective imposition of some historical interpretation that makes those factors appear to be more than coincidentally related” (p.37). Emergence is simply the appearance of the achieved dominance of one force over another.

Descent thus points to multiple and disparate possible origins in the past, while emergence calls into question the present, and, in particular, those moments which are said to be the birth of anything new; such a historical trajectory includes the past, present and future, and genealogy equally contests the meaning of each.

Genealogy as a method of reading can be productively applied to *Body Worlds*. For example, the exhibition suggests that its origins are situated in a time when society was more comfortable with death. The very idea of displaying corpses itself harkens to another time. A banner that is seen early on in the exhibition reads

Thoughts of dying and death were not always considered taboo in daily life as they are today... Paintings, sculptures, plays and written text served both as reminders of human mortality and as intellectual attempts to come to terms with death. (*Body Worlds 3*, Portland, 2007)

Another banner further suggests

Not too long ago our dealings with death were much more free than they are today... [Practices surrounding the dead] are cultural conventions that [are] established over time and with extended practice. (*Body Worlds 3*, Portland, 2007)

These banners suggest to spectators that reactions of horror, disgust, and moral offense are not “natural,” but rather mere products of our time. The banners serve to normalize the plastinates by comparing them to (supposedly) once accepted values and ideas that have existed throughout history. Though these particular banners identify

neither when nor where these other norms existed, using the genealogical method of analysis it is possible to identify anatomical history since the 16<sup>th</sup> century (but including events and people from as early as the 2<sup>nd</sup> century)<sup>13</sup> as *Body Worlds* most central and important constitutive element. As Koppers (2007) suggests,

Time and history play parts in the exhibition... [T]hese bodies and their presentation are anachronistic, are of a different time: the exhibition references the history of “official” anatomy... Historic paintings and drawings of famous anatomy scenes are not only reenacted in the arrangement of the exhibits but also reproduced on the walls of the exhibition. (p. 42)

Along with other elements of the exhibition, the banners and reproductions of paintings construct *Body Worlds*' anatomical lineage in a particular way; at the same time, they reconstruct the “official” anatomical lineage to include *Body Worlds*. A banner at the entrance of the exhibition is illustrative:

The exhibition you are about to see is a towering achievement in the field of anatomical science, and an unprecedented gaze at humanity in all its glory... With his groundbreaking invention of plastination, Dr. Gunther von Hagens joins the pantheon of great anatomists, for he has irrevocably changed anatomy and the way we view the human body forever. (*Body Worlds 3*, Portland, 2007)

Primarily and perhaps most importantly, *Body Worlds* is situated as an extension and achievement of a long history of anatomical science. Indeed, Wetz (2007) has suggested that *Body Worlds* is a “Renaissance of the ‘Renaissance’” (p. 294). This is achieved by direct comparison to the anatomy of the Renaissance and indirect rhetorical moves to validate *Body Worlds*' place within a trajectory of anatomical representation. These tactics themselves were mainstays of Renaissance anatomical representation. Sawday (1996) writes,

in these [well-known Renaissance anatomical] images, the anatomist anxiously glanced back to familiar motifs and well-rehearsed programmes, and thus he

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<sup>13</sup> Anatomy, of course, has a much longer history than that. Perhaps as early as 1600BCE, Egyptians were identifying and describing human organs.

maintained the older truth of his new science in terms to which his audience would have been able to respond. (p. 116)

In keeping with this, von Hagens is compared with and placed in the “pantheon” of great anatomists which includes Galen, a 2<sup>nd</sup> century Greek physician whose writings based on the examination of animals were the mainstay of anatomical study and instruction until the 15<sup>th</sup> century; Leonardo Da Vinci, 15<sup>th</sup> century Italian polymath emblematic of the early interplay of art, science and philosophy; and Andreas Vesalius, 16<sup>th</sup> century Belgian physician identified as the “founder of modern anatomy,” renowned for his illustrated anatomical textbook, *De Fabrica Humani Corporis*. According to the above banner quotation, as inventor of plastination and creator of *Body Worlds*, von Hagens joins these anatomists in the unfolding, progressive history of anatomy. In addition to direct comparisons (von Hagens has even dubbed himself the “modern day Da Vinci” (see IfP, 2006c)), the graphics, texts and portraits of these anatomists can be seen throughout the exhibition.

Von Hagens is also placed in this “great pantheon” by invoking their philosophies, personalities, intellectual concerns and even personal styles. Respect and reverence for predecessors combined with rigorous intellectual brinkmanship characterized the field of anatomy. For example, while Vesalius recognized the tremendous erroneousness of Galen’s writings, he laboured to contribute commentary and revisions to translated versions of Galen’s texts (Saunders and O’Malley, 1950, p. 19). Kemp (2000) writes, “Vesalius... [aspired] to surpass Galen in first hand knowledge and [set] himself up as a second Galen” (p. 23). Von Hagens also shows respect for predecessors even as he strives to overtake them by displaying their work and

maintaining their traditions. His colleagues have said that that von Hagens' "great predecessor" is Vesalius (Hillebrands, 2005, p. 146; see also Brock, 2005, p. 270).

The anatomists of the "great pantheon" were not only concerned with surpassing their predecessors in terms of their findings, but also the forms and methods of display, which are central to the field of anatomy. Desiring to improve on Galen, Vesalius and Da Vinci (almost contemporaries in the mid-15<sup>th</sup> and early-16<sup>th</sup> centuries) "invented or perfected virtually all the possible methods of depiction" until modern advents such as photography (Kemp and Wallace, 2000, p. 35). These methods included developing inventive perspectives, isolating organs from their context in the body, transparencies, labeling, and folds of paper to show underlying structures (Kemp and Wallace, 2000, p. 35). Frederik Ruysch (1638 – 1731), successor to Nicolaes Tulp, Dutch anatomist and subject of Rembrandt's famous *Anatomy Lesson of Dr. Nicolaes Tulp*, further "developed unprecedented standards for the preservation and display of bodies" by injecting the veins of cadavers with a preservative agent and sealing them in jars (van Dijck, 2001, p. 104). Despite this achievement, wax models saw their heyday in the late 18<sup>th</sup> to early 19<sup>th</sup> centuries. Wax models "transcended both the flatness of the page and the customarily monochrome character of standard sculptural techniques" (Kemp and Wallace, 2000, p.35). Examples and explanations of each of these techniques can be seen at the exhibition.

Against the backdrop of the history and development of these techniques, plastination appears as an improvement on these methods of display, while simultaneously continuing their work. "Plastination, according to its inventor, manages to combine the qualities of real bodies" – which *Body Worlds* suggests are pedagogically

superior – “with the advantages of body models” because they do not decay (van Dijck, 2001, p. 108). Plastination purportedly solves what van Dijck (2001) calls the body-or-model dilemma that has plagued anatomists since the Renaissance (p. 111). As van Dijck notes,

Throughout the history of anatomical practice, anatomists have tried to reconcile the contradictory requirements of authenticity and didactical value in the teaching of medical knowledge. On the one hand, the anatomical body should consist of real flesh, so that cutting into a cadaver teaches future doctors the organic complexity of a living human body... [Yet] [m]odels have the advantage that certain physiological features can be disproportionately accentuated in order to convey particular anatomical insights... From the time of Vesalius to the days of von Hagens, we see anatomists struggling to combine a preference for authentic bodies with the educational advantages of body models. (p. 103)

Plastination is presented as a solution for this dilemma in providing specimens that are “authentic” and demonstrative of “a living human body,” that do not decay, and that permit the display and accentuation of body parts.

Vesalius, Da Vinci and other anatomists’ preferred modes of display were also accompanied by what today seems bizarre, hyperbolic and even inappropriate, such as pastoral settings, garments, heroic or seductive poses, and even the corpse assisting in his or her own dissection by peeling away and holding skin. For example, because Ruysch’s preservation process transformed cadavers from transitive, decaying objects to more permanent ones, no longer fighting against time, he was able to develop aesthetic objects of display. Adorning preserved infant and fetal heads with lace, flowers and glass eyes, Ruysch is “consistently referred to as an artist who elevated anatomical bodies to the status of sculpture and painting” (van Dijck, 2001, p. 104). According to Kemp and Wallace (2000), “the stylishness and the rhetoric of presentation” inherent in these seemingly redundant or grandiose details “were absolutely integral parts of the image if they were to function effectively within their given contexts of communication” (p. 94).

This context of communication was the Renaissance, a period when the philosophy of humanism was dominant in scholarship. Renaissance humanists developed a fascination with classical Latin and Greek texts, which they believed were written in a time of great human achievement. These texts complemented new scientific thinking that emphasized rationality and logic, as well as new found interests in aesthetics. Yet Renaissance humanists were also deeply committed to Christian religion. As such, Gent and Llewellyn (1990) argue that

Art historians often present the Renaissance as the moment in human history when a tradition that was abstract and mathematical came together with the exemplary religious tradition to create a new version of bodily perfection. The key concept is that the human figure can express perfection. (p. 2)

Thus Renaissance humanists were interested in exploring, examining and representing the human body through modes of inquiry we now understand as science and art, as they believed that “an enquiry into the definition of bodily perfection was, by implication, an enquiry into the nature of the Godhead itself” (Gent and Llewellyn, 1990, p. 3).

Descartes’ mind/body dualism became the preferred understanding of the self, in which the body was a vessel for the soul which was, under Christian dogma, immortal and escaped the body in death.<sup>14</sup> Porter (1997) notes that the individual thus became absolutely central:

it is the Renaissance that signals the truly decisive breakthrough for individualism... [H]istorians and art critics... have acclaimed Renaissance Italy as the time and place when mankind – by which was implicitly meant literate, gifted, elite males – began to liberate itself from the chains of custom, conformity and the Church, taking a fearless leap forward into self-discovery and self-fulfillment. The literary and scholarly movement called humanism... began to

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<sup>14</sup> Somewhat contradictorily then, the body is disparaged while also considered an expression of God’s perfection, a tension which plays out in many Renaissance representations. In any case, there was a new found fascination with the self.



take delight in man himself, the apex of creation, the master of nature, the wonder of the world. (p. 3)

The quest to “know thyself” was part of a deep religious commitment in which self-knowledge was concomitant with “moral education.” This resulted in an emphasis on persuasion and rhetoric. According to Gray (1963),

The Renaissance humanists believed that education should equip man to lead a good life, and that therefore the function of knowledge was not merely to demonstrate the truth of given precepts, but to impel people toward their acceptance and application. They believed also that men could be moulded most effectively, and perhaps only, through the art of eloquence, which endowed the precept with life, immediacy, persuasive effect, and which stimulated man’s will as well as informing his reason. (p. 501)

Inspired by the forms, aesthetics and ethics of antiquity (Saunders and O’Malley, 1950, p. 19), Renaissance humanists added rhetorical adornments – “the art of eloquence” – to their otherwise “rational” representations of the body in order to educate and mould their audiences.

*Body Worlds* carefully frames itself within this ideological and aesthetic tradition, in particular by purporting that it is a pedagogical tool. *Body Worlds*’ plastinates are the most obvious example of humanism’s persuasive rhetorics of display, allegorizing Renaissance stylings. For example, the *Praying Skeleton* features a skeleton with bits of flesh, tendons and other viscera still attached, posed praying to a plastinated heart set on a black velvet pillow atop a wooden memorial cross. Its description reads, “In its open hand the skeleton praises the vessels of the heart, indicating the fragility of our existence” (*Body Worlds*, Portland, 2007). The “fragility of existence” trope, which was a mediation between science and religion, was extremely common to Renaissance anatomical art.

This plastinate also suggests the amenable relationship *Body Worlds* has to religion, much like the one Renaissance anatomy achieved with the dominant religion of

its time. Serving as a memorial to the 120 body donors of the exhibition, this plastinate invokes Christian symbols because, according to the information accompanying this plastinate, many donors are Christian (*Body Worlds 3*, Portland, 2007). Donors' words indicate that they, themselves, took up humanistic understandings of selfhood, noting the beauty and perfection of "God's creation" whilst also disparaging their bodies as mere vessels. One noted that the body is "the natural work of art;" another believed that "When this world comes to an end and Christ returns, He will raise me to new life with a new body, as is written in the Bible," echoed by yet another, who said that "I'm a Bible-believing Christian and I know that man has a soul, and when he dies, the breath of life within him will return to God, and when Christ returns I will be raise to a new life in a new body" (von Hagens, 2007a, 30-31).

In addition, "Including the symbol of the cross in this plastinate is a sign of appreciation as Christianity is the one religion that made modern anatomy possible" by first permitting human dissection in the 16<sup>th</sup> century (*Body Worlds 3*, Portland, 2007). It is also the religion most associated with Cartesian dualism – a view of the body amenable to use of the corpse for study and the benefit of the living. Von Hagens (2007b) writes that the

philosophy on the dualism of body and soul found its way into Christianity via the Roman Catholic world. As a consequence, the Christian religion at the same time became the most amicable of all towards anatomy. Modern anatomy was thus able to become established in Italy, the land of anatomy-friendly popes. (p. 268)

Likewise, the exhibition displays the following quotation from Augustinus ("Father of the Church, theologian, and Philosopher"), and many like it: "The arrangement of the body is so well proportioned, the symmetry of its parts so beautiful,

that it can be doubted whether at its creation utility was more of a determining factor than beauty” (*Body Worlds 3*, Portland, 2007).

Aside from a Christian perspective, *Body Worlds* enacts spirituality in general, with a focus on the individual experience of reverence (see chapter two for an additional discussion of reverence).<sup>15</sup> A banner at the exhibition reads that von Hagens hopes for “*Body Worlds* to be a place of enlightenment and contemplation, even of philosophical and religious *self recognition*” (*Body Worlds 3*, Portland, 2007, my emphasis). Thus, we understand religion from the humanistic perspective: individualized and private.

Anatomists found the freedom they needed in humanistic ideology, which placed great importance on individual freedom, to pursue their studies and, to use the language of Bodyworlds.com, “push the envelope” (IfP, 2006d). This is reflected in the notion that individuals who advanced anatomy carried its legacy, ergo the emphasis that *Body Worlds* places on the “great pantheon” of Galen, Vesalius, and Da Vinci. A certain arrogance accompanies such a vision. Von Hagens’ claim of a “towering achievement” is not a far cry from Galen’s self-aggrandizing claim: “Anyone looking for fame simply has to familiarize himself with all that I have achieved” (von Hagens, 2007a, p. 9). The attitudes of mastery and triumph are not merely characteristics of these individuals, but rather a part of the mythology of the Renaissance scientist and his humanistic ideology:

scientific endeavor [was equated] with the triumphant discoveries of the explorers, cartographers, navigators, and early colonists. And in the production of a new map of the body, a new figure was also to be glimpsed – the scientist as a heroic voyager and intrepid discoverer. (Sawday, 1996, p. 24)

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<sup>15</sup> I think this is because while Christians, according to creators, are some of the most committed to *Body Worlds* and plastination, they are also some of the exhibitions’ most staunch critics.

Von Hagens' characteristic wide-brimmed black hat, without which he is never seen, constructs him as this kind of "Renaissance Man." He states that it follows a tradition of Renaissance "anatomy artists" who wore unusual hats to demonstrate "their independence from the social norms of their time" by dissecting and studying human remains (IfP, 2006e, para. 1). Brock (2005) even asserts that the hat attests to the ways in which von Hagens is a "gestalt" embodiment of the "great pantheon:"

we have to remind ourselves again and again that no one will be anchored in collective memory who does not resemble others. Everyone who makes a lasting impression on the collective memory optimally represents a combined set of recognized patterns, also referred to as gestalt schemas... von Hagens represent[s] the schema of embodiment of the spiritual ascetic whose self-confidence is an expression of his or her radical nature. (p. 270)

In defying social norms by being "radical," this also asserts individualism. Thus, von Hagens has also said the hat "symbolizes... [that] I am a democrat and individualist with all my heart. The strength of our Western democracy lies within the promotion of individualism, based on the maxim, 'live and let live'" (IfP, 2006e, para. 2). In keeping with this emphasis on individualism, von Hagens has suggested that "The person who seems to be... in line with my hat fad is the eccentric Englishman and contemporary of Goethe, Jeremy Bentham (1748-1832)" (IfP, 2006e, para. 2).

The connection to Jeremy Bentham is important for von Hagens' construction of the lineage of anatomy. A lawyer and utilitarian philosopher, Bentham aimed to legitimize the use of human remains for anatomical science. In support of the United Kingdom's *Anatomy Act* of 1832, which effectively halted graverobbing by providing anatomists with the bodies of the executed, the unclaimed, and those who died in prison and workhouses, Bentham bequeathed his body to be dissected and preserved before his

death the same year. The resulting specimen is referred to as the “auto-icon,” now housed at University College London.<sup>16</sup> According to Marshall (1995),

It was [Bentham’s] desire that his body should be used to illustrate the structure and the functions of the human body, and to promote a recognition within society of the usefulness of this kind of knowledge. It was a gesture of solidarity with the medical profession of the day and a recognition of the legitimacy of the then relatively new science of morbid anatomy. (p. 19)

Thus, there is a slippage from individual freedom associated with democracy, to the freedom to will one’s body away to science and to finally dissect and display bodies. Von Hagens’ personal narrative is very important in this context. It brings together the spirit of humanistic freedom and the myth of the heroic explorer and inventor embodied by the Renaissance anatomist, without whom, according to humanistic ideology, we might have never benefited from great medical advancements.<sup>17</sup> At the same time the narrative borrows from more contemporary ideologies. The details of von Hagens’ personal narrative are difficult to verify, since this construction is largely gleaned from von Hagens and *Body Worlds*’ own representations, yet the truth matters little. The story begins with a frail child growing up in East Germany under Soviet occupation. Nearly dying at the age of six from a rare bleeding disorder, Gunther von Hagens spent a great deal of time in hospitals, “fostering in him a sense of alienation and nonconformity” (IfP, 2006f, para. 4), a sense which would later prove contrary to communist ideals. This experience also inspired his dream to become a doctor.

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<sup>16</sup> A picture of it is featured in the exhibition catalogue (see Brock, 2007, p. 283).

<sup>17</sup> Sawday (1995) notes that despite awareness of atrocities that are known to have been committed during the Renaissance in the name of medical advancements (such as, for example, vivisection), some might argue that “given that we, in the west, are all beneficiaries of the ‘anatomical Renaissance’ of the sixteenth and seventeenth centuries, it might be considered more tactful simply to keep quiet about the whole matter” (p. 4).

While a young medical student, the beginnings of his future radical work were already in the making. A teacher's assessment of him from that time reads:

[He] does not approach tasks systematically... This characteristic and his imaginativeness, that sometimes let him forget about reality, occasionally led to the development of a very willful and unusual way of working – but never in a manner that would have harmed the collective. (IfP, 2006f, para. 5)

However, reading Western news sources made him question the authoritarian regime under which he lived, which he said “killed invention” (Gubener Plastinate GmbH, 2007a, para. 5). In 1969, von Hagens attempted to defect into Austria, resulting in a two year imprisonment that was meant to rehabilitate him to the Soviet way of life. Defining science as a force in opposition to stifling political and social control, “Personal autonomy and collective freedom, which were so urgent to him then, are, he says, the impulse and inspiration for his career in science” (Gubener Plastinate GmbH, 2007b, para. 5).<sup>18</sup>

He was later released into West Germany,<sup>19</sup> where he became a medical doctor and then a flourishing professor of anatomy. In 1975 he invented plastination, a process which he patented. In 1993, he founded the Institute for Plastination (IfP), which prepares and distributes plastinates for educational use and *Body Worlds* exhibitions. In the face of the repression of former Soviet regimes, which served to “kill invention,” *Body Worlds*, creators argue, is meant to democratize scientific knowledge.

“Apparently determined to exhaust the limits of living in freedom, Dr. von Hagens has made a concerted effort to travel and propagate his interests around the

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<sup>18</sup> This serves as a parallel to Renaissance scientists' struggle with the Catholic Church (which eventually succeeded).

<sup>19</sup> According to Bodyworlds.com, West Germany “purchased his freedom” for \$20,000 (IfP, 2006f, para. 2 – 8). While it is difficult to ascertain what program, if any, this was a part of, or how this process worked, Maximilian Horster (2004) suggests that the “trade in prisoners” between East and West Germany was an institutionalized though “secretly maintained” process that continued till the 1990s.

globe” (IfP, 2006f, para. 12). Plastinates even made “cameo” appearances in the most recent James Bond film, *Casino Royale* (2006).<sup>20</sup> Von Hagens has said that James Bond “stood for the power of the individual against communism and was anti-authoritarian and unconventional... He was for us the embodiment of freedom and possibilities” (Gubener Plastinate GmbH, 2007a, para. 4). This sense of freedom is especially cherished by von Hagens as a former East German.

This long-winded story is prominent in almost all *Body Worlds* materials available to the public. It draws again from the ideology of humanism and peppers it piecemeal with the popular binary of the West versus the Communist Soviet Union, contrasting oppressive totalitarianism with individual freedom. Von Hagens’ story presents individual freedom as good and right, whereas communism is anathema to its largely Western, liberal democratic audience, invoking Cold War memories and fears. It appeals to the notion that science, innovation, invention and discovery can only flourish within a system that facilitates and encourages the individual through the provision of rights to freedom of thought, speech, expression, and movement. Partly, this is expressed in *Body Worlds*’ claims to “democratizing” scientific knowledge. The exhibition notes

The democratization of anatomy through Plastination, his *Body Worlds* exhibitions... and the Plastinarium, his plastination laboratory in Guben, all address the rights of lay people to access knowledge previously available only to the medical elite. (Gubener Plastinate GmbH, 2007b, para. 5)

Rights and freedoms also play a role in legitimizing von Hagens as an inventor. While “envelope-pushers” (as they are called in *Body Worlds*) like the Renaissance anatomists were fiercely criticized, shunned and repressed, their having done the work they did is of great benefit today; therefore, according to this construction, while von

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<sup>20</sup> Plastinates, then, indeed are treated as objects – in this case, product placements.

Hagens also “pushes the envelope,” it will eventually become clear even to his critics that his work is of great value. Thus, von Hagens (2007a) has explained the inventive process:

Society praises its living conformists and honors its deceased rebels. As a result, people are caught up in a conflict between individuality and group consensus. If an individual con-forms [*sic*] to the group, he will be popular. If he goes his own way, he will lose the group’s approval and quickly come to be considered an oddball. The lure of this status is enhanced by ever increasing specialization, which offers a previously unknown degree of choice and potential for personal development, thereby permitting individuality to a degree never seen before. The more individualism a society allows, the more inventors it will produce. Inventions have always been created by individuals – particularly when these have been individualists. Groups do not invent; their existence is dependant on conformist thinking. (p. 28)

The discourses of individual rights and freedoms are not restricted to von Hagens’ ability to create *Body Worlds*. Straddling not only art and science but biotechnology and medicine, *Body Worlds* draws on a discourse that legitimizes body donation. Von Hagens (2007b) has even said that “Christian burial is quasi a tacit, accepted body donation for Christian funeral services” (p. 272), succinctly illustrating the framing. This resolves many ethical issues plaguing early anatomists regarding the provenance of cadavers since body donation is considered an exercise of free will. Von Hagens writes,

Introducing a formal donation policy for plastination reflects the conviction that the values of a democratic society, i.e., that individuals have as much discretion over the use of their bodies as possible, dictate that public exhibition can only be based on a conscious decision on the part of the donors. (p. 278)

The idea of “gift” gives body donation an admirable quality, aligning it with organ donation which is heartily seen as both an ethical and socially responsible way to help other members of society. A banner at the entrance of *Body Worlds* reads

All [donors] wanted to contribute to the medical enlightenment of lay people and without their contribution, this exhibit would not be possible. For their clear vision and tremendous generosity, we are deeply thankful. (*Body Worlds 3*, Portland, 2007)



Effectively, this quiets many objections. Critics are reminded that when donors will away their body to the Institute for Plastination, they are fully informed of its potential uses, which can include dismemberment, dissection, and exhibition (IfP, n.d.).

However, as Margaret Lock (2002) as shown, organ donation itself is fraught with its own challenges of legitimation.<sup>21</sup> In fact, body donation's path to its preferred reading is very much like *Body Worlds*:

Hesitation about commodification of dead bodies and their use for medical purpose arose less from a concern about the moment of the departure of the soul than from reservations about desecrating the human body. Only when corpses could be conceptualized as neutral biological objects, as part of nature and therefore autonomous and without cultural baggage, was it possible (for medical men, at least) to divest them of social, moral, and religious worth; commodification for the benefit of scientific advancement then became not only legal but laudable...[However,] for involved families the bodies of their relatives were not so easily divested of social meanings. (Lock, 2002, p. 39-40)

Lock has shown that the legitimation of body donation is concomitant with the body gaining commercial value "as a source of spare parts and therapeutic tools" (p. 47). These aspects of body donation's story aren't a part of *Body Worlds*' preferred reading; thus, body donation functions selectively and seamlessly in conjunction with other elements such as individual freedom and scientific progress.

In addition to examining a phenomenon's descent, emergence and those things "without history," a genealogical analysis is concerned with discourses and histories that are not acknowledged in the phenomenon's origins: what has been disguised, displaced, substituted or reversed in the emergent play of forces, like the story of each body's donation. Genealogy "must define even those instances where [invasions, struggles, plundering, disguises, and ploys of certain forces] are absent, the moment when they

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<sup>21</sup> She coins the terms *living-cadavers* and *patient-cadavers* for "brain-dead" individuals who are "particularly complex hybrid[s], constituted from culture and nature while in transition from life to death; both person and nonperson, entirely dependant on a machine for existence" (Lock, 2002, p. 40).

remained unrealized” (Foucault, 1977b, p. 140) in order to deconstruct cleanly honed narratives of descent. In keeping with this, Kupperts (2007) has called what is absent in *Body Worlds* its *other histories*.

An example is noted by van Dijck (2001): during an early exhibition in Germany “reporters suggested that while any other country could, in good consciousness, feature such an exhibition, Germany could not, due to its dubious medical experiments on living and dead bodies during the Nazi era” which were not acknowledged by the exhibition (p. 102). Indeed, some may find *Body Worlds* a macabre and morbid recollection of Nazi human experimentation, particularly in questioning the exhibition’s actual contribution to human knowledge. Some commentators have also noted the striking similarities of the “Aryan” aesthetic and the poses of plastinates. Shulte-Sasse (2006) has succinctly articulated the problem:

this choice of bodies and postures is not without its cultural implications. This kind of aesthetic, presenting the human body in gloriously idealized form, was the major tenet of Nazi art, which privileged sculpture (called *Plastiken* in German) above other art forms for its alleged ability to represent Aryan perfection. As Klaus Wolpert stresses in his study of Nazi art, the monomaniacal representation of the naked body was one of the few distinguishing traits of National Socialist sculpture; it celebrated the body “untouched by the stigma of decay or “degeneration,” of the ugliness of everyday life and the sickness of the times.” (p. 379, citing Wolpert)

For example, a plastinate known as the *Javelin Thrower* recalls a highly trained Olympic athlete in its fine musculature and long lines.<sup>22</sup> Shulte-Sasse adds the “instrumentalization of real human beings” in the transformation of the “raw material” of

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<sup>22</sup> In fact, a javelin thrower is featured prominently in Leni Riefenstahl’s *Olympia* (1938), which documents the 1936 Summer Olympics in Berlin and is considered one of Nazi Germany’s most influential propaganda films since it so clearly demonstrates “Aryan” body ideals and aesthetics.

human bodies into plastinates as another aspect of *Body Worlds* that harkens to Nazi Germany (p. 379).<sup>23</sup>

The history of anatomy that *Body Worlds* places itself in is also shared uneasily with the now-defunct pseudo-sciences of physiognomy and eugenics (indeed, espoused in Nazi Germany). These pseudo-sciences are, in fact, more recent “fruits” of anatomy than the Renaissance discoveries and advancements; however, *Body Worlds* limits its historical glance to the Renaissance which is less controversial and problematic in popular imagination (however, I will show in chapter two some ways in which Renaissance anatomy was also problematic).

By the late 19<sup>th</sup> century, anatomy had become “popular” (Sappol, 2002, p. 169), though anatomical theatres were always visited by a paying crowd. According to Sappol (2002), during this time “anatomy overflowed the boundaries of professional medical discourse and performance” (p. 168). Middle- and upper-class men and women would visit anatomy and “natural history” museums and hear lectures on anatomy, and anatomical books for a general audience were published (p. 168). A popular interest in health and hygiene developed, where healthfulness was associated with moral cleanliness (p. 175). Many members of the upper classes also had their own “curio” collections: cabinets of supposed relics and religious objects, items such as tortoise shells and animal horns, and human remains such as bones. Such cabinets were a sign of cultural status,

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<sup>23</sup> I am aware of the sensitivity of this subject as well as the problems associated with such a comparison. I’ve seen commentators in many fields and on many topics make too quick a comparison to Nazi Germany, Adolf Hitler or the Holocaust, and the politics involved in such comparisons are immense. For example, PETA (People for the Ethical Treatment of Animals) launched a controversial social awareness campaign in 2003 called “Holocaust on your Plate,” comparing farm-animal slaughter with the genocide of Jewish people during the Holocaust. Modestly, I am suggesting that some may make such a connection between *Body Worlds* and Nazi German aesthetics, and that this connection is not merely random or subjective and needs to be considered as part of the experience of being a spectator at *Body Worlds*.

wealth and enlightenment (Ewen and Ewen, 2006, p. 34). In particular, concomitant with the colonialism of the time, museums and curio cabinets were dominated by “exotic” objects and remains which made distant worlds legible and consumable (Ewen and Ewen, 2006, p. 42). Kemp and Wallace (2000) note that some displays “tended at best to parade other races as curiosities and at worst to feed the prejudices of those who wanted their Caucasian superiority to be confirmed” (p. 122; see also Ewen and Ewen, 2006, p. 41). Thus, popular anatomy served to associate those “primitive” peoples from “distant worlds” with moral uncleanness.

Physiognomy, the “science” of taxonomies of appearance, was popular and influential during the late 18<sup>th</sup> and 19<sup>th</sup> centuries. While physiognomy was concerned with external presentation in contrast with anatomy’s concern for the interior, physiognomy shared anatomy’s epistemological privileging of the visible (see chapter two for an extended discussion). Ewen and Ewen (2006) write,

Explorations had brought Europeans in touch with a diversity of peoples from around the world. Cities were amalgams of migrants coming from different regions, different experiences, and occupying different social classes. Within the budding taxonomical enterprise, Western eyes sought to make sense of this new situation in their own terms. Matters of human difference, real and imagined, began to wend their way into scientific lore. The facticity of images, an unfailing belief in the veracity of visible evidence, helped to make this possible. (p. 23)

Physiognomists, like anatomists, sought to go beyond the surface and access more “internal” dispositions, which they believed manifested in outward appearances. Taking the Western Enlightenment metaphor of the eyes being the “window to the soul” quite literally, they developed extensive catalogues – especially with the aid of advents in photography – of human external features in order to read “human types” accurately. Physiognomy’s assumption was that piety, mental capability, sanity, criminality and

other features could be discerned through careful examination of the semiotics of external representation (Kemp and Wallace, 2000).

Phrenology, the study of the shape of the human head which purported to read the same human characteristics, was a specific iteration of physiognomy. According to Sappol (2002), “Phrenologists presented their science as a subset of anatomico-physiological science” (p. 174).

Influenced by the ideologies of colonialism, physiognomy and phrenology also sought to explicate racial character (Ewen and Ewen, 2006, p. 56). For example, German doctor Johann Friedrich Blumenbach (1752-1840) proposed five types in descending order of remove from primate species: caucasian, mongol, etheopian, american, and malayan (Kemp and Wallace, 2000, p. 119). According to Kemp and Wallace (2000),

It was in such a climate that the new sciences of anthropology and eugenics were created. Information about the physical characteristics of the races of mankind was assembled on a huge scale, above all quantitative data based upon measurement. (p. 119)

In this, physiognomic and phrenologic data was used to demonstrate the mental superiority of White Europeans over what were considered more “primitive races.” This was the basis for “projects” in eugenics, which, based in interpretations of Darwinian theory, sought to “tactfully assist” “survival of the fittest” in ensuring the genetic lineage of Caucasian Europeans and discouraging that of those deemed “lesser” (Kemp and Wallace, 2000, p. 136) through such measures as sterilization and selective immigration (Ewen and Ewen, 2006, p. 313).

*Body Worlds* exhibitions do not acknowledge these histories because they contradict its preferred reading as democratic, scientific, and free from violence or

coercion. By seeking out and exploring the implications of these other histories, I contest these interpretations of the exhibition.

Besides selectively recounting anatomical history, *Body Worlds* sets the terms of its own reading in other ways. For example, a list of definitions is included in the exhibition catalogue. It is noted that

In discussions on the ethical justification of utilizing human specimens, varying ways of understanding certain terms have frequently been the cause of misunderstandings. This list of definitions should aid in preventing such misunderstandings in the future. (von Hagens, 2007a, p. 37)

Terms that could be deployed against *Body Worlds* to problematize the display of dead bodies, such as *corpse*, *dignity*, *ethics*, *morals*, and *reverence*, are each given their own preferential definition. For example, von Hagens (2007b) notes that competing definitions of *corpse* have spurred criticism of *Body Worlds*. He writes,

The controversy surrounding the *Body Worlds* exhibition in Cologne came to a head when representatives of the Lutheran Church of Cologne demanded that municipal authorities prohibit the exhibition. At the root of this public dispute are widely disparate views of what a corpse really is. The passions unleashed by this controversy have been further inflamed by the lack of uniformity in the use of various terms. The words “corpse,” “cadaver,” “the deceased,” and “body,” for instance, are used as synonyms, although their distinctions should really be clearly defined. (p. 273)

Therefore, in the list of definitions, the entry for *anatomical cadaver* reads, “Preserved corpse that is anatomically dissected and is buried upon completion of dissection,” while the entry for *corpse* reads, “A deceased human body, which will decompose and for which a funeral will be prepared. In contrast to an anatomical specimen, it is the object of personal grief or human sympathy” (p. 37). The difference centres not on the intrinsic nature of the body, but what can be done to it based on whether it is considered to be an object of human emotion or not. This difference is therefore almost entirely intangible and immaterial (I discuss emotion and related issues

in extensive detail in the last chapter). It is precisely through these kinds of discursive moves that *Body Worlds* sets the terms of its own reading.

Creators also strive to control public discourse about *Body Worlds*. For example, many journalists criticize the ways in which *Body Worlds* has obtained corpses. Issues of provenance of cadavers have plagued *Body Worlds*, resulting in investigative journalism, legal investigations and public attention. For example, a German paper published a controversial cover story alleging that von Hagens obtained cadavers from questionable sources including the Chinese government, prompting some to speculate that these were the bodies of executed Chinese prisoners. The article also reproduced “emails with callous references to cadavers, and charg[ed] von Hagens with profit-mongering” (Schulte-Sasse, 2006, p. 370). This unwanted criticism and attention came on the wake of the relocation of some laboratories of the Institute for Plastination to China and Kyrgyzstan, where, according to Stern (2003), “legislation concerning the use of dead bodies is far looser than in Europe” (para. 12).

The *Body Worlds* website itself has an extensive collection of “Responses to” press releases to charges such as these, in which *Body Worlds* staff point out “journalistic biases, “bad journalism,” “bigotry” and even charge that, to some journalists, “truth is merely an exotic concept” (IfP, 2008a).

Indeed, the public relations efforts of the *Body Worlds* phenomenon are immense. An interesting recent press release attests to the attempt to control discourse about *Body Worlds* – even constrain the words of von Hagens himself:

the Institute for Plastination wishes to clarify two vague statements made by anatomist, Dr. Gunther von Hagens... that may have confused Associated Press, other media, and the public about the origin of the bodies in *Body Worlds* exhibitions. In [an] interview conducted entirely in English (Dr. von Hagens’ second language), he said that he had “stopped using bodies from China,” and

that “he had cremated some bodies that showed head injuries.” His incomplete statements – presented without context or chronology – led some to conclude that he had once used Chinese bodies in the *Body Worlds* exhibitions, and had since ceased to do so. In his interview, Dr. von Hagens neglected to mention that from 2003 to 2004, he was frequently asked by Chinese universities to complete plastination of anatomical specimens belonging to their medical schools... In his interview, Dr. von Hagens failed to explain that he was referring to his secondary plastination work for medical schools, and not his primary work of donor plastination for *Body Worlds* exhibitions. (IfP, 2008b, para. 1-3)

This press release appeared just days after the airing von Hagens’ comments on the national television program, *20/20*, an American current events and investigative primetime television show.

In sum, by selectively constructing its own lineage, and attempting to control the terms of its own reading, *Body Worlds* places itself in a self-sensible network of discourses and histories that make the viewing of real human corpses morally and politically inoffensive for a paying public. These processes attempt to close off any readings of the exhibition that do not conform to the preferred. In its preferred reading, *Body Worlds* is an extension of Renaissance anatomical science and an exemplar of democracy and individual freedom that is educational. Klaver (2005) argues that “medical science is not only the author of the body, but the reader of it as well” (p. 5) – and, as this analysis has shown, the same can be said of *Body Worlds*.

## Preferred Subject

In addition to a preferred reading, I suggest further that *Body Worlds* also has a preferred subject – one who would make sense of *Body Worlds* in the preferred manner. The lines of analysis followed in this genealogical analysis suggest a subject who values and embodies individualism and free will, and who has faith in science and democracy. Kitcher’s (2001) summary is succinct and pointed:



What is the role of the sciences in a democratic society? Some people, let us call them the “scientific faithful,” say this: “the sciences represent the apogee of human achievement. Since the seventeenth century, they have disclosed important truths about the natural world, and those truths have replaced old prejudices and superstitions. They have enlightened us, creating conditions under which people can lead more satisfying lives, becoming more fully rational and more fully human. The proper role of the sciences today is to continue this process, by engaging in free inquiry and by resisting attempts to hobble investigations for the sake of any moral, political, or religious agenda.” (p. 3)

Clearly, *Body Worlds*’ preferred subjects are the “scientific faithful.” But this does not fully encompass the subject position. I suggest that the figure of the body donor, who heartily believes in and supports the exhibition and desires to be involved in the most tangible, lasting and intimate way, most aptly captures the preferred subject. This parallels Bentham’s donation of his body to science, which, according to Marshall (1995), “was a gesture of solidarity with the medical profession of the day and a recognition of the legitimacy of the then relatively new science of morbid anatomy” (p. 19).

Given description of the “scientific faithful” outlined by Kitcher, and the analysis I have done here, the donor comments selected for inclusion in the exhibition catalogue, I argue, are the words and voices of *Body Worlds*’ preferred subject:

“I’ve always felt a need to donate my body to science, and the idea of being plastinated fills me with a sense of inner tranquility and happiness.”

“There’s one thing I’m now sure of: when I’ve breathed my last, my body will perform an important function for mankind. Mind and spirit will gaze upon it with envy... I even dreamed that I had been cut into fine slices and was admiring myself. It was a lovely dream.” (von Hagens, 2007b, p. 30-31)

To dream about and take pleasure in the idea of having ones’ body cut into slices and displayed – could there be any more of a buy-in into *Body Worlds*’ preferred reading? In the following chapters, I further explore this figure and suggest a method of spectatorship that can escape it.

## Chapter 2: Vision of Anatomy

In the previous chapter, genealogical inquiry provided a way to conceptualize *Body Worlds* as a social, historical and discursive construction. The approach facilitated the articulation of *Body Worlds*' preferred reading, which I problematized through reading the exhibition against its other histories. Along with the preferred reading, I also suggested that *Body Worlds* has a preferred subject captured in the figure of the body donor.

However, a critical approach to *Body Worlds* cannot end with a genealogy. There are two limitations of this reading strategy. First, by locating social phenomena within particular historical trajectories, genealogical inquiry binds itself to histories that have already been written and, to a great degree, closed from refiguring. The centrality of closure remains intact in genealogy by tethering analysis to pre-defined lines of inquiry. McAllister's (2001) experience of writing through Japanese-Canadian history is illustrative:

As I began writing, I found myself compulsively repeating what was established as the history of Japanese Canadians. Like all histories that narrate heterogeneous experiences into linear trajectories, this history could not give shape to worlds other than those which it had already constituted. (p. 98)

This means that some questions cannot adequately be asked or addressed. For example, the inquiry provided some answers to the question *Why anatomy?*, but not the question *Why not anatomy?* In other words, in tracking down "accidents, the minute

deviations... the errors, the false appraisals, and the faulty calculations” (Foucault, 1977b, p. 146) of the anatomical history that *Body Worlds* constructs, I am able to deconstruct *Body Worlds*’ deployment of anatomical history but not displace it altogether. The same can be said for any of the other discursive elements of *Body Worlds*’ preferred reading.

There is another limit of the genealogical reading strategy, perhaps more central to this project. Klaver (2005) fields a criticism against Foucault:

despite Foucault’s claim of resting his genealogy on a rejection of the body’s ontological or prediscursive existence outside of power regimes, he nevertheless ends up treating the body as a surface of inscription. (p. 55)

In other words, this genealogical inquiry has not attended to the material and embodied aspects of the body – of the spectator *or* plastinate. In terms of the spectator, the genealogical inquiry has not explored the ways in which the spectator’s own body is wrapped up in the process of spectatorship. Jordanova (2004) notes that anatomical representations are

designed to be touched. They come in many shapes and sizes, numerous colours, textures, and materials. In other words, they invite distinctively *bodily* reactions in their audiences. (p. 449, emphasis in original)

A critical approach to *Body Worlds* must attend to emotions, visceral reactions, affects and other embodied experiences of being a spectator. And, as the quote from Jordanova implies, these bodily reactions are intimately connected with the physical characteristics of what is being viewed. In terms of the plastinate, the genealogical inquiry has not considered plastinates’ material aspects directly, including their being infused with plastic, their colour, texture, smell, and has also only peripherally considered the dead body, which is as much an insistent material entity as it is a socially- and discursively-meaningful one.

I will attend to these issues by focusing on *vision* and the *visuality* of the exhibition. Following Walker and Chaplin (1997), vision “refers to a physical/psychological process in which light impacts upon eyes, while [visuality] refers to a social process: visuality is vision socialized” (p. 22). Foster (1988) further explains,

Although vision suggests sight as a physical operation, and visuality sight as a social fact, the two are not opposed as nature and culture: vision is social and historical too, and visuality involves the body and the psyche. (p. ix)

By conceptualizing seeing as an embodied experience that is socialized, these concepts provide a way to consider both materiality of the viewing experience and the dimensions of spectatorship brought out in the genealogical analysis.

In the following sections, I suggest that spectatorship of *Body Worlds* is enacted primarily through seeing, and that it is a particular kind of seeing that is dominant. I develop my conception of *Body Worlds*' preferred subject by arguing that the preferred subject also sees in a particular way. In other words, vision, too, is subject to closure in *Body Worlds*. Then, I outline and deploy an approach to spectatorship that enacts a different kind of seeing that defies closure, towards a reformulation of the spectator experience in chapter three.

## Visual Culture

Because spectators are not permitted to touch the plastinates, it could be argued that their sensory experience of *Body Worlds* is dominated by vision. However, it is true that plastinates are not just seen. Sound is an integral part of the experience of the exhibition's ambiance. The soft, soothing, “New Age” music played throughout the exhibition reminded me of the kind played at health and beauty spas. Tactility also plays a role. There was an “Ask an Expert” booth midway through the exhibition that

sometimes made special specimens available for spectators to touch and handle.<sup>24</sup> Yet these other sensory experiences,<sup>25</sup> I argue, are both peripheral to and mobilized in support of a largely vision-centric experience. The soothing music encourages the spectator to indulge in quiet and calm visual consideration of plastinates and experience pleasure and reverence; as a result, spectators are generally themselves very quiet, and they talk quietly or whisper. Touching of plastinates is strictly forbidden, and the existence of special specimens that can be touched and handled by spectators reinforces the notion that the large and full-body plastinates are meant to be visually experienced.

The vision-centric experience is further entrenched by the ways in which plastinates are displayed. Spectators can walk around them to view them from all sides, and large, bright spotlights centered on the plastinates draw the attention of the eye,

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<sup>24</sup> I was able to hold a plastinated kidney and a plastinated liver. This experience was probably one of the most interesting I had during my fieldwork for a few of reasons. One was the experience itself of touching and handling these specimens. Their weight was surprising – in my hand, they felt like they weighed much more than their non-plastinated counterpart. To me, plastinates look rock-hard. So I was also surprised to find that the liver and kidney were rubbery. Their texture was waxy, like crayon. I also found that they showed considerable wear from being handled, including little rips and tears and brown-black dirt smudges. This suggest that plastinates are subject to decay (I explore this in detail in chapter three).

But probably the most interesting aspect of this experience was the freedom I was given to examine these specimens. I knew that some specimens were available for visitors to hold but they weren't available at the time I was there. I decided to ask if they would bring them out for me to look at. I expected them to say no, since specimens like these are now closely guarded following incidences of theft of specimens by spectators. In addition, I had already been observed and questioned as to what I was doing (taking notes and making drawings) there as a researcher. So when I asked if I could see the specimens, and they (given the resources *Body Worlds* commits to responding to critiques, in order to protect the workers, I am careful to indicate neither the gender or position of the workers, nor at which exhibition – Vancouver or Portland – I had this experience) called on the very person who had policed me before, I was sure they would say no. However, not only were they completely willing to give me the specimens, they also gave them to me exclusively and *outside of* the exhibition's entrance, told me to return them whenever I was done, and left. This suggests that while the exhibition itself is structured and controlled, and that workers serve and maintain this control, there are in fact moments of agency for both spectators and workers.

<sup>25</sup> Insofar as plastinates are odorless, smell is not meant to figure in this experience. Plastinates, however, are not odorless as the exhibition's creators claim. My experience was of a thick, plasticky odor, not unlike the smell of crayon.

setting highlights on the bodies' features and casting shadows over everything else, including the spectator him or herself.

During my fieldwork I observed spectators arching and twisting to get new angles of sight, or pointing with their fingers at body parts that they wanted their companions to look at. Thus, along with the dimensions I outlined in the previous chapter, *Body Worlds'* preferred subject is also one who behaves in a particular way at the exhibition. Their behavior is dominated by the act of *seeing*.

Because it is primarily a visual experience, *Body Worlds* can be conceived as an instance of visual culture. Visual culture studies are not unlike material culture studies, which establish that

the potency of objects in providing an entrée into cultural beliefs lies in the universality of many human experiences – life/death, male/female, stasis/change, giving/receiving – which can be expressed in language of formal oppositions – smooth/rough, hot/cold, clean/dirty – that allow us to begin an analysis in a structural mode. (Kingery, 1996, p. 4)

In other words, studying material culture is a way of elucidating cultural beliefs and values; material objects mediate culture. Visual culture studies focus specifically on those things which serve as representations, including drawings, photographs, sculptures and models, and often on those technologies which translate the non-visible to the visible, including medical imaging technologies.<sup>26</sup> These forms of culture signify a gap between

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<sup>26</sup> Visual culture studies' object of analysis can be immaterial in nature including digital images, information and codes. Crary (1990) writes, "If these images can be said to refer to anything, it is to millions of bits of electronic mathematical data. Increasingly, visibility will be situated on a cybernetic and electromagnetic terrain where abstract visual and linguistic elements coincide and are consumed, circulated, and exchanged globally" (p. 2). Though emerging in the context of this new paradigm of visual culture, *Body Worlds* is more like Renaissance visuality than postmodern forms of distracted, fragmented seeing. As Crary notes, "familiar modes of 'seeing' will persist and coexist alongside these new forms" (p. 2). However, even immateriality is in some ways a kind of materiality. N. Katherine Hayles' (2005) concept of *embodied text* captures this notion. She writes that "The materiality of an embodied text is the interaction of its physical characteristics with its signifying strategies" (p. 103). An embodied textual

the representation and the “reality” it is said to represent, enacting an additional mediation that itself signals much about culture.

Anatomical representations have often been thought of in terms of a specific kind of visual culture: the *model*. There is a body of literature attesting to nuances of conceptualizing and theorizing the model (see Griesemer, 2004; see p. 433-439 for a literature review), but here, I draw on the work of Ludmilla Jordanova, who explains that models “exemplify something, make it material, or give it a more accessible shape” (2004, p. 448). In other words, models are generalizable representations of form, and can give form when the “reality” the model represents resists tangibility. Thus models serve anatomical study by providing a way of representing the knowledge of general anatomy,<sup>27</sup> and representing the dead body, whose decay makes it resistant to permanent visual examination.

Conceptualizing plastinates as models allows me to focus on their materiality. The physicality of models means they are not just “bearers of concepts” (Jordanova, 2004, p. 443); rather, Griesemer (2004) explains that

words are means of comparing models – abstract or concrete, symbolic or physical – with worldly phenomena, but knowledge is produced in contact between models and world. (p. 433)

Plastinates, then, serve as models in the encounter between the spectator and the material of the plastinated body.

For *Body Worlds*, though, there is a salient point of ambivalence: it is precisely the non-modelness of plastinates that creators purport makes them so special. For

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reading seeks to uncover the ways in which the text mobilizes aspects of its physicality in the creation of meaning (p. 105). Her study of digital media exemplifies this approach.

<sup>27</sup> General anatomy is abstract and its representations illustrate the “normal” or “average” body; this contrasts with some anatomical representations of the Renaissance which sought to record the individual body in its unique details.

example, the Vancouver exhibition's tagline was "Real humans. Real science. Really amazing!" The website explains that

The authenticity of the specimens on display is essential for... insight. Every human being is unique. Humans reveal their individuality not only through the visible exterior, but also through the interior of their bodies... It would be impossible to convey this anatomical individuality with models, for a model is nothing more than an interpretation. All models look alike and are, essentially, simplified versions of the real thing. The authenticity of the specimens, however, is fascinating and enables the observer to experience the marvel of the real human body. (IfP, 2006g, para. 3)

Therefore, the "realness" of plastinates not only serves to distinguish them from the pedagogically inferior anatomical models of the past; it is also absolutely essential in asserting the truth value of the exhibition. The exhibitions creators suggest that as "real" bodies, plastinates present unmediated and unbiased knowledge.

These claims are in keeping with those of natural history museums, whose displays are similarly thought of as authentic. Nyhart (2004) writes that natural history exhibitions are

full-scale, realistic representations of once-living creatures. Crucially, actual parts of original animals, plants, or landscapes form a prominent and necessary feature of display... Indeed, the key quality of such models is... their authenticity. When a family stands before a natural history diorama or walks around a free-standing biological group, they are in the presence of "the real thing." No matter how complex the process of reconstruction, this experience of authenticity depends on the fact that the skins and feathers of the animals displayed once covered living creatures. (p. 308)

Claims to "realness" and "authenticity" legitimate and confer authority upon these exhibitions as bearers of "truth."

Since Jordanova (2004) asserts that models "always refers onwards," and "as a result there are interpretive gaps for viewers to fill in" (p. 447), it seems that, in being "really real" bodies, plastinates do not refer onwards to something else that exists "in



reality” – they are the reality. This means that, if spectators accept plastinates as real bodies and not as models, little interpretive space is left open.

However, here I insist that, despite these claims, plastinates *do function* as models, and not merely as “real” bodies; furthermore, the fiction of realness serves this. Griesemer (1990) has asserted that models like those in the natural history museum – and, I argue, plastinates – are in fact models. He calls them *remnant models* (Griesemer, 1990), noting that in their composition of both “organic” and synthetic materials, the organic parts are “remains” or “leftovers.” The concept is useful in contesting natural history exhibitions, because it subordinates realness to an exhibition’s artifice.

Despite the fact that much of the material that comprises remnant models is “real,” curators and scientists put incredible effort into the staging of their realness. These models are man-made. Techniques and technologies are needed to ensure their preservation in the constructed environment of the museum. This creates a need to sustain the truth value of the exhibition through the concealing and staging of non-organic elements. In seeking to display “truth” accurately, aesthetic and value judgments are made. Thus the display constitutes a rhetorical,<sup>28</sup> rather than truth-bearing, message. In other words, these models are designed to conceal their modelness. Jordanova (2004) further explains:

Viewers are not on the whole totally free to make what they will of such models, which were designed to demonstrate something to which the maker had a set of commitments. (p. 447)

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<sup>28</sup> Prelli’s concept of rhetorics of display is useful in understanding these exhibitions. According to Prelli (2006), “Whether constituted through vocal enunciation, textual inscription, visual portrayal, material structure, enacted performance, or some combination, rhetorical study of displays proceeds from the central idea that whatever they make manifest or appear is the culmination of selective processes that constrain the range of possible meanings available to those who encounter them” (p. 2).

For example, staged exhibits of animals hunting are considered more accurate depictions of natural history than stand-alone models stripped of aesthetic appeal and drama (Nyhart, 2004). Thus Crary (1990) argues that “certain forms of visual experience usually uncritically categorized as “realism” are in fact bound up in non-veridical theories of vision that effectively annihilate a real world” (p. 14).

Perhaps more central to this project, plastinates also serve as models because of the relationship they assert between the plastinate body and the spectator body. By virtue of being “real,” the plastinate body becomes synonymous with the “real” body of the spectator. The likeness – similitude – reveals how, as Jordanova (2004) explains, models are normative: “Since they exemplify, ‘model’ as a verb and adjective refers to standards, even to perfection” (p. 448). In other words, models assert particular normative conceptions of ideal subjects – just like *Body Worlds*.

Yet these ideal subjects are ideal not only in their characteristics and qualities, but in the manner in which they see. They view models with a particular kind of gaze. It is constrained by the historical, social, political, and cultural milieu of the subject. In his well-known work on the historical construction of vision and, in particular, the events and forces that forged a “new kind of observer” in the nineteenth century, Jonathan Crary (1990) argues that particular modes of seeing emerge in nexuses of heterogeneous histories, discourses, technologies, modes of representation, and material objects. Knowledge about the body – what a body is, what it is capable of doing, what can be done to it, and what can be done with it – also emerges from these nexuses. Therefore, in taking up a particular kind of seeing, the spectator is embedded into a system of

knowledge about the body that has its own set of limitations and possibilities. Crary explains:

what determines vision at any given historical moment is not some deep structure, economic base, or world view, but rather the functioning of a collective assemblage of disparate parts on a single social surface... [T]here are more or less powerful arrangements of forces out of which the capacities of an observer are possible. (p. 6)

To put it another way, Hal Foster (1998) writes that there are

many differences, among how we see, how we are able, allowed, or made to see, and how we see this seeing or the unseen therein. With its own rhetoric and representations, each scopic regime seeks to close out these differences: to make of its many social visualities one essential vision, or to order them in a natural hierarchy of sight. (p. ix)

In other words, vision, too, becomes subject to closure by way of *scopic regimes* that constrain it within a particular historical milieu. The next section explores the scopic regime of *Body Worlds*.

## Vision of Anatomy

Greece is where autopsy was first practiced in the Western world, Galen's anatomical texts being the most notable examples.<sup>29</sup> The word *autopsy* comes from the Greek *autopsia* – which scholars have translated as *to see with one's own eyes*, from *autos* – self, and *opsis* – sight (Klaver, 2005, p. 3). This suggests that autopsy – dissection and examination of the dead – is primarily about vision and witnessing, a “searching gaze” deployed by the subject to “ferret out meaning and significance” (Klaver, 2005, p. 3). The seeds of this epistemology were re-forged during the Renaissance from the 14<sup>th</sup> to the 17<sup>th</sup> century – indeed, a renaissance of classical Greek and Roman forms – and consolidated during the Age of Enlightenment beginning in the 18<sup>th</sup> century.

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<sup>29</sup> All or most of Galen's study subjects were animals.

This epistemology privileged the individual who saw and witnessed for themselves, and it permeated not only then-burgeoning scientific practice, but also politics and aesthetics. For example, it was commensurate with the Renaissance invention of *perspective* in art. Perspective, the mathematically accurate representation on a flat surface (such as a canvas) of distance between objects made it possible for artists to

re-create reality in a way that is convincing to the eye, as well as to the mind. The relation of solid objects to each other, and to the space which separates and surrounds them, attains a new clarity. It is possible to “portray” space convincingly, not merely to suggest it. In addition to this, it enables the artist to give a new kind of unity to his composition. He can organize its interrelated parts more clearly, and at the same time he can control the spectator’s interest and attention more firmly within the boundaries of this new-found unity. (White, 1951, p. 42-43)<sup>30</sup>

Thus perspective emphasizes the unity of objects and their objective relation with space, while simultaneously allowing for objects to be displayed “correctly” and “truthfully.” Perspective then, as can be deduced, was important for Renaissance humanists and anatomists. For anatomists, it aided in producing mathematically accurate representations but also framed the subject of dissection as an inert object of study. Rotman (1993) describes how, within the spatial relationships of perspective, the human body becomes objectified:

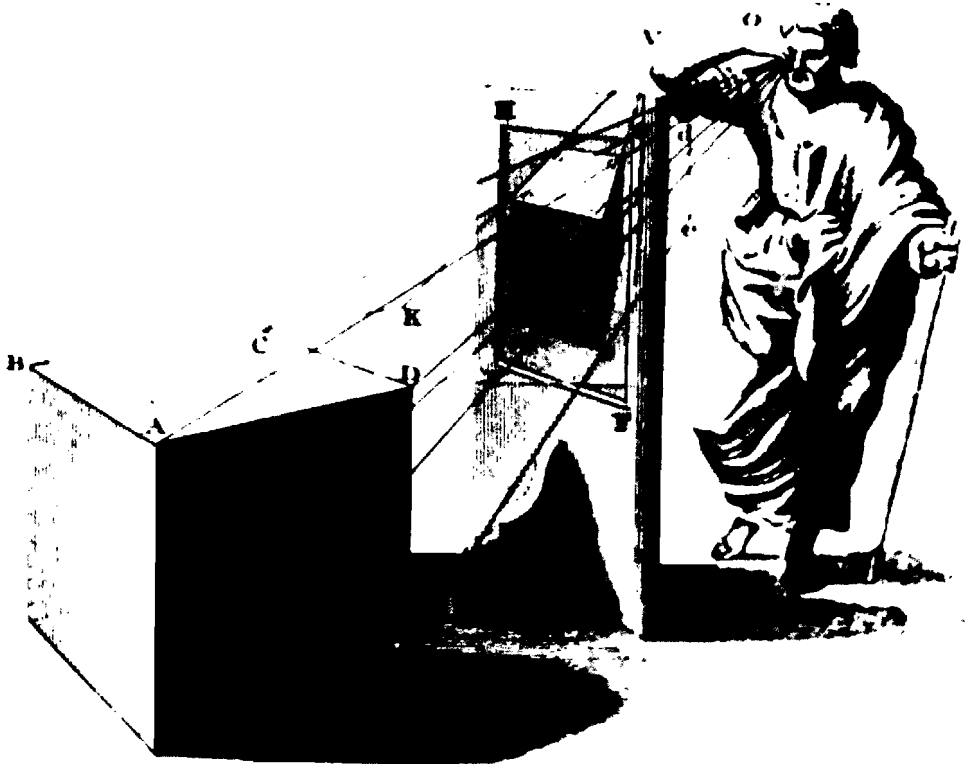
The vanishing point acts as a mirror, reflecting back to the spectator an imagined version of himself... Each image within the code of perspectival art thus offers the spectator the possibility of objectifying himself, the means of perceiving himself, from the outside, as a unitary seeing subject, since the image makes a

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<sup>30</sup> Perspective was related to the Renaissance humanists’ search for perfection, noted in chapter one. Wittkower (1953) writes, “the invention of linear perspective was a vital and necessary step in the rationalization of space, a conception on which the whole edifice of Renaissance art rests... When we talk of Renaissance rationalization of space we mean an optical space of measurable quantities; we mean, moreover, that distances of objects seen by an observer can be rendered mathematically correctly in the two dimensions of a picture. Renaissance artists found that the same law relates every point in space to any observer’s eye, and in consequence the problem of the rationalization of space was from the very beginning also the problem of the harmonization of space” (p. 275). Expressed mathematically, perspective was not only “correct,” but, humanists believed, aesthetically perfect.

deictic declaration: this is how I see (or would see) some real or imagined scene from this particular spot at this particular instant in time. (p. 19)

Thus, Newman (1996) argues that “Renaissance perspective takes vision as the basis for representation; more specifically, it adopts a particular point of view, that of the unified, seeing subject” (p. 62).



**Figure 2: Perspective, from *New Principles of Linear Perspective***

Created by B. Taylor, London, England (1715). This image is in the public domain.

Along with Renaissance humanistic thinking on individualism and the supposed inherent “unity” of the subject, this epistemology of “seeing for oneself” was also concomitant with new thinking about politics and liberal democracy, expressed in, for

example, John Locke's (1632 – 1704) concept of possessive individualism.<sup>31</sup> This contrasted with the passivity and obedience of Christian epistemology. In the specific arena of anatomy, this meant that, although initially entwined with religious discourses and doctrines, anatomy eventually became an authority in its own right. In seeing for themselves, anatomists asserted a democratic, liberal ethic. As I discussed in chapter one, *Body Worlds'* claims about democratizing scientific knowledge tap into this legitimizing discourse.

These discourses of democracy and individualism, however, obscure some of the more disturbing aspects of anatomical history. Anatomists have pilfered bodies from fresh, ill-guarded graves (grave-robbing has also been given the rather euphemistic name of “resurrectionism” (Sappol, 2002, p. 5)), aligned themselves with executioners and waited anxiously near the gallows, lobbied for and accepted “unclaimed bodies” from the work houses, and even abetted murder (see Marshall's (1995) analysis of the infamous Burke and Hare murders in the 1820s known as the Edinburgh Scandal). Bodies have been used not only to learn and teach anatomy, but to create a spectacle for a paying, entertainment-seeking crowd in anatomical theatres all over Europe in the 16<sup>th</sup> and 17<sup>th</sup> centuries. Thus, the rights and freedoms associated with seeing with one's own eyes have been exerted *over* and *at the expense of* those who became the object of the cut<sup>32</sup> and the gaze – the unclaimed, the poor, the executed, the murdered, women, and the colonized

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<sup>31</sup> This is captured in the famous Lockean quotation: “every Man has a Property in his own Person. This no Body has any Right to but himself” (Locke, cited in Pateman, 2002, p. 24).

<sup>32</sup> Sawday (1995) argues that in the word *anatomy*, “there lurks... a constant potential for violence” (p. 1). Anatomical seeing itself shares this potential for violence. Garland-Thomson (2006) notes vision metaphors that capture this association: “penetrating looks,” “staring daggers,” and “piercing eyes” (p. 174).

(bodies of “Tasmanians” were particularly sought out by anatomists; see MacDonald, 2005, p. 108).

These conditions conform to a more direct translation of autopsy – *self-sight*.<sup>33</sup> Self-sight turns and enfolds itself back into the gazer, instating an individualization and unification of the subject. The self thus becomes an object to itself. This enables the process of reducing all selves to objects. The objectification associated with self-sight therefore affirms the right to look at and cut others’ bodies, which, too, are objects.<sup>34</sup>

In autopsy’s self-sight, then, the gazer and gazed-at collapse as the object of the gaze – but with very real and very different material outcomes in their relation to power. Self-sight imbues the gazer with power, confirming the disenfranchisement of those cut and gazed at. For example, as Sappol (2002) notes “In dissecting the cadaver, the student [anatomist] penetrated, surveyed, and appropriated the interior of the body – and transformed himself” in a ritual that initiated him<sup>35</sup> into the “fraternity of dissectors” (p. 3; see Klaver, 2005).

As forms of visual culture, representations of dissection, such as anatomical drawings, wax models, and plastinates, do not simply serve to educate and demonstrate skill and handiwork; they also serve to reify relations of power between the gazer and the

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<sup>33</sup> A personal friend who speaks fluent modern Greek wrote the following to me in a personal communication email, which I think illustrates my point even more clearly (though Ancient and Modern Greek are of course different): “I can appreciate your definition of ‘self-sight.’ ... According to Modern Greek, ‘auto’ is more of an external view, so I believe the definition would be ‘to view a self.’ Although rough, it is quite interesting. As for the scholar’s translation, I do not believe that the terms of ‘auto’ or ‘opsis’ mentions anything specifically about eyes” (P. Korodimas, personal communication, January 1, 2008).

<sup>34</sup> Gent and Llewellyn (1990) note the prominence of the “figure” in Renaissance modes of representation. They suggest that *figure* “can mean number and symbol, which seems irrelevant... until one remembers the many images of the human figure inscribed within a geometrical shape. As meanings of ‘figure’ move in the other direction towards ‘bodily shape’ and ‘embodied human form,’ the word still carries a note of *abstraction and distance, as if the human form were viewed by someone*” (p. 1-2, my emphasis).

<sup>35</sup> There were no female anatomists that I am aware of.

gazed-at. The making of an artifact which portrays something “gives one power over that which is portrayed” (Taussig, 1993, p. 13). Michael Taussig (1993) has termed this feature of images and simulacra the *magic of mimesis* (p. 13). Not only the will to possess the other, but also the will to self-possession through self-sight is reified in images and simulacra. Thus, anatomical representations are of bodies conquered, including both certain *types* of bodies – criminal bodies, women’s bodies, poor bodies – and bodies in general, as in dualistic thought, the body is subordinated to the mind.<sup>36</sup>

*Self-sight* suggest another turn and enfolding of the gaze back onto the gazer, and a different kind of mimesis. In the viewing of dissected bodies, we think and wonder about, map and project onto, feel and move, reflect and create knowledge about our own bodies. In other words, they *do* serve as models. This certainly figures in the spectatorship of *Body Worlds*. Von Hagens (2007a) notes that “Posed specimens [plastinates] provide an optical bridge to self-awareness” (p. 32). Kuppers (2007) also describes the process: “I felt myself oscillating between the different registers the body before me signified: a corpse, a dead person, a map, a signifier that signified my own body or some conception of a ‘general body’” (p. 36). This process is mimesis as *mimicry* which “can be transformative insofar as it entails a ‘death’ of the self” (McAllister, 2001, p. 101). Therefore, autopsy is not merely a viewing but a *taking up of* another’s body.

Therefore, while affirming our individuality, autopsy also paradoxically insists on our alterity. Reverence or humility at the sight of death and the dead – reified in artistic

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<sup>36</sup> However, some anatomical representations also illustrate the tensions and fissures in dualism. Particularly images from the Renaissance, during which time dualism had not yet completely captured popular thinking on bodies/minds (the mind/body “problem” had only just become a problem with Cartesian thought), illustrate the fear and mystery of a body not yet “mastered” by science. Images of Death or the Reaper coming for sleeping women and self-dissection are examples.



creations and death artifacts known as *memento mori*, translated as “remember that you are mortal” – are examples of this, and often claimed as part of the justification for *Body Worlds*. The creators hope for “*Body Worlds* to be a place of enlightenment and contemplation, even of philosophical and religious *self recognition*” (*Body Worlds 3*, Portland, 2007, my emphasis).<sup>37</sup> In these ways, autopsy paradoxically confirms profound senses of both power and vulnerability, both between and amongst gazer and gazed-at. However, again, this figuring obscures disturbing histories. “Reverence” is not without expense in anatomy.

Sawday (1996) argues that “The ‘heroic age’ of scientific discovery, initiated in Europe in the sixteenth century, was not a neutral or disinterested arena. It was a voracious consumer of the vestiges of the human frame” (p. 4). Beginning in the 17<sup>th</sup> century, the human body began to be “consumed” – or “cannibalized” (see Haraway, 1991) – in generating what Foucault (1978) called *biopower*, or “power over life.” According to Rabinow and Rose (2006), biopower has two “poles:”

one pole of biopower focuses on an anatomo-politics of the human body, seeking to maximize its forces and integrate it into efficient systems. The second pole is one of regulatory controls, a biopolitics of the population, focusing on the species body, the body imbued with the mechanisms of life: birth, morbidity, mortality, longevity. (p. 196)

In his three most studied works, Foucault details the shift from sovereign power to biopower, signaled by changes in the penal system, sexual norms and medicine. A new politics and economy of the body was heralded, characterized by the concern of governing powers over the body: its health, hygiene, capacities and transgressions,

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<sup>37</sup> The exhibition catalogue even includes *reverence* in its list of definitions: “A feeling of profound awe and tactful respect shown towards the dead” (von Hagens, 2007a, p. 37). These definitions are purported to aid in preventing misunderstandings in the use of terms “in discussions on the ethical justification of utilizing human specimens” (von Hagens, 2007a, p. 37). This is of course, an example of closure, because *Body Worlds* creators and promoters are setting their own terms for debate.

*discipline* being the mechanism by which the body was monitored, molded and maintained. Discipline was in large part based in the sciences of the human body. Foucault shows how, as a science of data generation and cataloguing, anatomy began with meticulously detailing individual characteristics. Amassing huge amounts of data, anatomists were then able to develop models of abstract and general anatomy which detailed the “normative body.”<sup>38</sup> The exhibition catalogue describes the history:

Anatomy as it was shown in the drawings of that time [the 16<sup>th</sup> century] was initially a very individual type of anatomy. The specimen and all of its unique anatomical features were copied in as great detail as possible... All that changed with Bernhard Albinus (1697-1747)... [who] compiled the many variations that he found into a standard, thereby clearing the way for the statistically average anatomy. Organs were no longer sketched individually or as they were found in the body; instead, they were drawn together with their associated functional structures, thus emphasizing systems of organs... This provided the foundations for developing schematic diagrams of the anatomy – an abstraction that arose from a more functional understanding of the body. (von Hagens, 2007a, p. 11)

Bodies were then compared against the normative body in a process of surveillance, discipline and self-discipline, structured into everyday life. Foucault’s metaphor of the *panopticon* (though it was also a real structure) explains the process. As discussed in *Discipline and Punish* (1977a), the panopticon was a prison design devised by Jeremy Bentham in which a semi-circular, backlit structure concealed the prison guards while simultaneously illuminating the prisoners, the “panoptic eye” having the power to see everywhere at once without being seen. It was designed so that, even if prisoners were not being observed, they acted as if they were – a maximally efficient system. Identifying how the power of surveillance was extended to many other social

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<sup>38</sup> Physiognomy and phrenology also sought to generalize human types. One way of discerning types was the technique of composite portraiture, or the combining and overlay of different photos in order to produce a composite of the likenesses of several people. Interestingly, Ewen and Ewen (2006) trace the roots of the eugenics movement to the inventor of this technique, Sir Francis Galton, whose cousin was Charles Darwin.

structures in everyday life so that subjects internalized the panopticon's gaze, Foucault showed that discipline's mechanisms appear voluntary.

However, as Foucault argued, disciplined bodies are in fact made "docile" by their own self-subjugation. Thus subjects internalized the surveying eye, disciplining themselves – literally they enacted their own *self-sight*, their own autopsy, subjecting their own bodies to relations of power (this harkens back to the figure of the body donor outlined in chapter two).

Vision as surveillance became the tool of biopower, contributing to the production, maintenance and discipline of classed, racialized and sexed selves.<sup>39</sup> By generating knowledge primarily through vision, and creating comparative and thus normative models, anatomy is biopower *par excellence*. In this way, anatomical representations *are* the panopticon: the construction of the representations "corresponds to the panopticon with its self-regulatory content and the absent presence of the disciplinary mechanism that sustains this mode of being" (Peim, 2005, p. 72). Foucault called this the anatomico-politics of the human body.

In these relations, vision has a totalizing nature, erasing *all that can't be seen* because, according to its logic, everything can be seen, and can be made to be seen – a necessity of biopower. Autopsy and dissection defy us to assert that *not everything can be seen* because they expose the body's interior – that place of horror, fascination and the unknown. This is even more efficacious given that our own embodied perception of the interiors of our bodies is often a *blind spot*: "Although we tend to perceive our own bodies as objects in space... the insides of our bodies offer uncharted areas to our

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<sup>39</sup> See Sappol (2005) for a discussion of this in the American context.

senses,” accept for, for instance, in moments of pain, themselves often mysterious (Kuppers, 2007, p. 33). Through apparent mastery over the body’s interior, a site of primal and abject fear and wonder, the magic of mimesis imbues anatomy with an all-seeing eye.

I refer to this scopic regime as the *autopsic gaze*.<sup>40</sup> In sum, this scopic regime is characterized by surveillance and discipline. It instates and enforces power relations that are not “democratic,” and it is characterized by modeling the self to conform to the normative body and ways of behaving. In other words, it is self-autopsy. Connecting this back to the preferred subject outlined in the first chapter, the body donor, who willingly submits their body for dissection, is therefore the model of normative selfhood in *Body Worlds*. Can this regime of vision be displaced by developing a critical spectatorship of *Body Worlds*?

### **Alternative Visual Regime**

Vision more generally is associated with knowledge and power. Indeed, even the word *autopsy* (*to see with one’s own eyes*) was at first “connected just to the acquisition of knowledge and not specifically to human dissection” (Klaver, 2005, p. 3). As Braidotti (1994) notes,

feminist philosophers have emphasized the primacy of looking, that is, the scopic drive as the paradigm of knowledge. They have also pointed out that scientific discourse has always – that is to say since Plato – privileged the image of “the eye” as metaphor for “the mind,” that is, “I see” as a synonym of “I know.” (p. 49)

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<sup>40</sup> This is in some ways a play on or variation of Sawday’s (1995) *autoptic vision*. *Autopsic* is defined as *pertaining to autopsy*, whereas *autoptic* is *to see with one’s own eyes*.

Thus, in what Vivian Sobchack (2004) has called “the hegemony of the merely visible” (p. 179), the visual presides over all other senses and sensibilities and generates and entrenches relations of power.

According to Sobchack (2004), this primacy is historically contingent as well as damaging, constituting “a particular phenomeno-logic” that is “a consequence of specific cultural practices that could – and should – be other than they are” (p. 182). Developing distinctions of *kinds of vision* – *objective sight* and *subjective imagination* – Sobchack asserts “the lived body’s material reality as something more than the merely visible” (p. 181). She notes Merleau-Ponty’s contention that ‘I am *not in front of* but rather *in my body*’ corresponds to these two kinds of vision, objective sight corresponding with still images, a distanced perspective (consider also the surveyor in the panopticon) and the body-as-“house,” and subjective imagination corresponding to the lived, embodied dimensions of bodies, or the body-as-“home.” Through a reduction and erasure of the subjective imagination, objective sight reduces and renders the body a two-dimensional shadow of its lived dimensions which permits that our bodies “become increasingly distanced and alienated, increasingly viewed as ‘resources,’ and increasingly lived as ‘things’ to be seen, managed and mastered” (Sobchack, 2004, p. 182).

Sobchack’s work is an effort to “remind ourselves that our bodies are lived and make meaning in ways that inform and include but also far exceed the particular sense and image-making capacities of vision” (2004, p. 187). I take up this project in the final chapter. But some conceptual and methodological legwork is necessary to get there. How can spectatorship of *Body Worlds* be reembodied, and vision be extended, complicated and salvaged?

## Critical Spectatorship

### Trace (n)

1. mark or other sign that something has been in a place
2. a scarcely detectable amount or characteristic
3. a footprint or other indication of the passage of an animal or person

### Trace (v)

4. to follow, discover, or ascertain the course or development of something
  5. to track down and find
  6. to outline or sketch
  7. to decorate with tracery (Tracery (n): a pattern of interlacing ribs)
- (Collins Concise Dictionary, 2001, p. 1597)

Resisting closure entails resisting the surveillance and modeling of the self that characterizes *Body Worlds'* preferred subject, the body donor. In order to resist modeling of the self, *Body Worlds'* preferred reading must be resisted. I argue that this can be accomplished by seeking out, prioritizing and exploring elements present at in the exhibition which fall outside of or can't be contained by, and thus disrupt, the preferred reading.<sup>41</sup> I call this *critical spectatorship*.

Critical spectatorship has already been performed in this thesis to a certain degree. The exploration of *Body Worlds'* other histories the previous chapter is a part of critical spectatorship, since seeking them out and bringing them to light certainly contests the preferred reading. However, as noted, the preferred reading is also intimately connected to the embodied experience of being a spectator. This experience is generated in the

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<sup>41</sup> Gordon (1997) provides a summary of a related approach practiced by Walter Benjamin called *blasting*, "a method of dialectics that reconstructs a lifework by following the scrambled trail the ghost leaves, picking up its pieces, setting them down elsewhere. Blasting might be conceived as entering through a different door, the door of the uncanny, the door of the fragment, the door of the shocking parallel" (p. 66).

contact between the body of the spectator and the material of the plastinate body. This contact is primarily visual. This means that critical spectatorship requires its own alternative visuality or mode of seeing that is the “other” of the autopsic gaze.

Thus, I argue that critical spectatorship also entails ferreting out details in the field of vision that disrupt *Body Worlds*’ preferred reading. I call these details *traces* – fragments, leftovers, residues, junk, tracks, or things left behind that signal a former or hidden presence or prior form.<sup>42</sup> Traces are potent. Being discarded or unwanted, these residues always fall outside of dominant ideologies or readings. Their presence signals the bounds of those ideologies and readings while simultaneously offering something else, something more, or something different. Thus, such entities unsettle given power structures.

Scholars of *the trace* can be found in material culture studies, linguistics, archeology, and history. According to Turkel (2006), this approach conforms to a mode of thought

whereby interpreters use latent or seemingly insignificant traces to draw wide-ranging conclusions... Such reasoning is ubiquitous. In a bewildering variety of settings, people who are not historians try to reconstruct past events from the material traces that they find in particular places. (p. 263)

Traces can be found everywhere. Writing from the field of environmental studies, Turkel notes that

The sites where this kind of reconstruction occurs may be exploration camps, abandoned villages, airplane or automobile crashes, archaeological digs, oil spills, seismographic stations, crime scenes, railway cuts, burned-over forests or toxic waste dumps. (p. 264)

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<sup>42</sup> Julian Henriques (2002) explores the concept of the trace in music. He laments the loss of “noise” – another kind of junk or leftover – concomitant with the transition from analog to digital formats. He writes, “The price for our tendency to focus exclusively on the visual and the digital, at the expense of the acoustic and the analogue, is the loss of our bodies. When we take leave of our senses, we lose all connections – with the world, ourselves, others, our past and our future. We’re sunk without trace” (p. 372).

In this field, traces are often examined in order to shed light on “mysteries” – a plane crashed and investigators need to know why; an illegal toxic dump site is uncovered and investigators need to know who committed the crime. Traces are *evidentiary*, sought out by a subject who performs the work of a detective with a keen eye and sharp imagination. In this way, they are an entrée into the unknown or suppressed.<sup>43</sup> Turkel’s examples also suggest that traces are associated with scenes of violence, destruction, or loss.

Approaches which seek out and explore traces or residues are also found in other fields. For example, the concept is probably most well-known in the field of philosophy. Algerian-born French philosopher Jacques Derrida coined the term *the trace* in his deconstruction of language and Western epistemology. For Derrida, the trace is the name given to “the part played by the radically other within the structure of difference that is the sign” (Spivak, 1976, p. xvii), also known as alterity. Derrida argued that the basis of Western thought is structured by binary oppositions, whereby one term of the binary is privileged over the other (McQuillan, 2001). Perhaps the most prominent and central binary opposition in Derridian thought is presence/absence. Derrida argued that “The ‘formal presence’ of the sign can only be determined in terms of presence” (1976, p. 18), and that this is a foundation of Western thought.<sup>44</sup> This has been called the *metaphysics of*

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<sup>43</sup> Sometimes, these traces are so potent – such as DNA evidence in murder cases – their implications are virtually undeniable.

<sup>44</sup> Logocentrism is the term used to describe this binary structure of Western thought. More simply, in logocentrism, things are defined by what they are not; presence is similarly defined against absence. Thus Spivak (1976) writes that “Such is the strange ‘being’ of the sign: half of it always ‘not there’ and the other half always ‘not that.’ The structure of the sign is determined by the trace or track of that other which is forever absent” (p. xvii). As Spivak argues, underlying “the rage for unity” (p. xvi), the sign is unstable and in perpetual dissolution, the effect of its trace.



*presence*. For Derrida, the trace is “that which does not let itself be summed up in the simplicity of a present” (p. 66).

In terms of the framework I have outlined thus far, presence may be thought of as being synonymous with the preferred reading which privileges elements of its genealogy by making them present (i.e., selectively invoking discourses and histories, and controlling public discourse about the exhibition, as outlined in chapter one) in *Body Worlds* discourse and in texts at the exhibition, on the website and in the exhibition catalogue. The other histories that I discussed in chapter one are absent, as are any other discourses, histories or demands that cannot be uncovered in the genealogical analysis. In other words, *Body Worlds* enforces a prioritization of *presence*, and suggests a binary logic that subordinates *absence*. This suggests that in order to defy closure, a reversal of this prioritization is required. As McQuillan (2001) argues, “The moment we recognize the inequality” of binaries, such as present/absent, “we are bound to question this way of thinking and so endanger the privileges of those who benefit by it” (p. 1).

However, Derrida’s concept of trace is based in his studies on language. Derrida’s thought would therefore suggest a social construction approach to theorizing the body, which is insufficient to understand what is at play in *Body Worlds*. As Hemmings (2005) writes, “constructivist models leave out the residue or excess that is not socially produced, and that constitutes the very fabric of our being” (p. 549).

Scholars interested in cultural memory have done some of this work, seeking to understand the “intrusiveness” (Van der Kolk and Van der Hart, 1995) of the past that is

signaled by residues. For example, Gordon (1997), writing of disappeared<sup>45</sup> people, considers the figure of the ghost,<sup>46</sup> an apparition of the deceased which asserts its presence by signifying death, loss and thus absence. Certainly, this is paradoxical: the “presentness” of ghosts signifies absence. Thus Gordon writes that

a disappearance is real only when it is apparitional. A disappearance is only real when it is apparitional because the ghost or the apparition is the principal form by which something lost or invisible or seemingly not there makes itself known or apparent to us. (p. 63)

It is because of this paradoxical nature that ghosts serve to unsettle and destabilize, or “haunt.”<sup>47</sup> Gordon provides three reasons why apparitions can haunt:

the ghost imports a charged strangeness into the place or sphere it is haunting, thus unsettling the propriety and property lines that delimit a zone of activity or knowledge... [T]he ghost is [also] primarily a symptom of what is missing. It gives notice not only to itself but also to what it represents. What it represents is usually a loss, sometimes of life, sometimes of a path not taken. From a certain vantage point the ghost also simultaneously represents a future possibility, a hope. (p. 63-64)

Thus, ghosts signal possibilities as much as they privilege a prior integrity or state by pointing towards something passed and presumed gone. Against closure, they insist on openings.

Other scholars have sought to find ways of conceptualizing excesses that are suppressed or that cannot be represented; photography is often the object of study.

Gordon (1997) notes that photographs are intrinsically ghostly:<sup>48</sup>

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<sup>45</sup> “Disappeared” in this sense refers to those who *have been disappeared*, also known as forced disappearance, whereby an organization, often a government or government arm, has caused a person to disappear from the public. Often, these people are considered to be either imprisoned in an unknown location, or, most often, murdered. Cases in Latin America are most prominent, where the disappeared are called *desaparecidos*.

<sup>46</sup> Derrida also employed the figure of the ghost or *spectre* in *Spectres of Marx* (1994).

<sup>47</sup> Derrida coined the term *hauntology* in considering this phenomenon in language. The meaning of hauntology is twofold: “to make a comment on the classic language of ontology; and to conjure at the same time an alternative set of principles... of being as presence” (Peim, 2005, p. 74).

The photograph is involved in the ghostly matter of things and not surprisingly, since the wavering quality of haunting often hinges on what sign or image raises the ghost and what it means to our conscious visible attention. The photograph's relationship to haunting is never simple. When photographs appear in contexts of haunting, they become part of the contest between familiarity and strangeness, between hurting and healing, that the ghost is registering. (p. 102 – 103)

This idea is expressed in Roland Barthes' (1981) concept of the *punctum*, which contrasts with the *studium*. The *studium* is

the most obvious tableaux of the photograph – [its] recognizable and culturally comprehensible signs... Because it appeals to our cultured habits, the *studium* generates "polite interest" and educates and communicates with civility. (Gordon, 1997, p. 106)

The *studium*, then, is akin to the preferred or dominant reading. In contrast, the *punctum* is a disruptive element in a photograph that breaks the *studium* and which begs a subjective and bodily feeling. Barthes argued that

photographs can puncture our received sense of reality and history in the sense of a *punctum* which disrupts, perforates or halts the *studium*... The *punctum* is the result of a subjective and unpredictable interaction between a spectator and an image, an accidental effect or a "supplement that is at once inevitable and delightful" beyond the intention of the photographer. Whatever the image claims to record may also include something that acquires an unexpected personal and affective relevance neither "rhetoric" nor *studium* could predictably produce. (Rau, 2006, p. 297, citing Barthes)

The *punctum* is potent and unsettling because it is unrepresentable, its significance collapsing when it is uttered into the symbolic logic of language. The *punctum* thus remains in its embodied and subjective space – a kind of haunting.

But, according to Gordon, it is not merely an "individual aesthetic experience" (1997, p. 107). The *punctum* also "brings to life the life external to the photo" (p. 107).

For example, Peim (2005) draws inspiration from Derridian thought in arguing that

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<sup>48</sup> In fact, there is a body of literature that asserts that there is an intrinsic relationship between photography with death. Christian Metz (1985) notes that the immobility and silence of the subject captured in a photograph recall death; that we often keep photographs of the dead; and that by capturing a moment in time already passed, all subjects represented in photographs are always already dead, invoking the spectator's own future death.

absence in photographs is not absolute; rather, *absent presences* disrupt the viewing process. He writes,

we are aware, at some level or other, of the metonymic filaments that lead out from the image... This image cannot be complete in itself, nor can it completely “capture” the field of vision of its agent. It is always already cropped. It hovers in a space that implies its larger physical context... As we begin to figure out the relations between what is framed within and what is connected outside the framing of the photograph, we become conscious of absent “presences.” (p. 70)

These “metonymic filaments” can disrupt a preferred reading by signifying contexts outside the frame of the photograph.

The Derridian trace, the ghost, Peim’s metonymic filaments, and the punctum draw from the same conceptual apparatus in approaching different objects of study. How might this apparatus be applied to *Body Worlds* and plastinated bodies, my objects of study? I attended to this conceptual and methodological question after seeing *Body Worlds* in Vancouver in preparation for my visit in Portland. I developed my own conceptual framework for approaching *Body Worlds* as a critical spectator that centres on a concept I also call *trace*, which I define as a residue or fragment that signals a former or hidden presence or form.

Turkel (2006) notes that a specific sensitivity is needed to ferret out traces or residual kinds of evidence:

tracks are not the only material trace of the past; in fact, every single aspect of our environment bears some physical and/or causal connection to past events. Every thing has a history, and our ability to reconstruct the past of anything is limited only by the knowledge that we bring to bear and by our ability to detect or discriminate or identify or measure the trace. (p. 261)

As such, I developed a typology that enabled me to operationalize this concept, delineating three kinds of *traces*. This enabled me to methodically seek out, record and define destabilizing details that had a material presence even as they signified, like the ghost, an insistent absence. I called these three kinds of traces *residue*, *outline*, and *loss*.

## **Residue**

A trace can be a signifying fragment which indicates a former presence – a *residue*. The residue, material in nature, is the remainder that signifies removal. Residues insist, however, that the removal was not quite complete; they insist on signifying the former presence. Residues may be described as “the fragments of experience that pull at ordinary awareness but rarely come into full frame” (Stewart, 2007, p. 19).

Residues can also signal a hidden presence. For example, the body has always been a source of fascination, desire and wonder, alongside of disgust, horror and fear, especially with regards to the body’s interior. Sawday (1996) writes that interiority is “inescapably central to the experience of the body within history” (p. 7) because it can normally only be accessed by witnessing another’s body, or by traces, including feces, vomit (abjected materials), lumps or pains. These traces are demanding, and often more than disturbing or disgusting; they can be a source of terror if evidence of bodily trauma:

Those traces, often (though not always) encountered at moments of trauma or potential danger – the glimpses of a wound cavity, the fluids of the body and its expelled substances in sickness or in childbirth – are greeted with varying degrees of fascination and horror. (p. 8)

Whether signifying removal or something hidden, trace-as-residue demands a practice of seeing different than the autopsic gaze in which surveillance is concealed and the spectator submits to the power of the preferred reading. In critical spectatorship, the spectator *seeks out that which attempts have been made to conceal*.

## **Outline**

A residue indicates something hidden or lost. Trace-as-*outline* also signifies a loss, but more specifically, a loss of form. Outlines that serve as traces suggest that

entities have *surface tensions*;<sup>49</sup> outlines resist resurfacing. They are apparitions that recall a prior unity and integrity. Thus Connor (2004) suggests that “ghosts are crustacean, for they tend to take the form of a vapour inside a shell: encased in amour, or... held together by cerements that they themselves hold up” (p. 33).

The autopsic gaze requires a kind of observation that privileges the moment of dissection with each new stage of the progressive disintegration of the body. Trace-as-outline, however, demands a seeing that has *memory* of an imagined image of the body developed out of the past, a former integrity, in the *mind's eye*.

## Loss

Compared with trace-as-loss, residues and outlines are easy to *spy*. Traces that indicate loss, however, are literally lost: missing, absent. They demand even more of memory for they have no form or residue but simply a presence that is absent. We may understand them as “rogue intensities:”

Rogue intensities roam the streets of the ordinary. There are all the lived, yet unassimilated, impacts of things, all the fragments of experience left hanging. Everything left unframed by the stories of what makes a life pulses at the edge of things. All the excesses and extra effects unwittingly propagated by plans and projects and routines of all kinds surge, experiment, and meander. They pull things in their wake. They incite truth claims, confusions, acceptance, endurance, tall tales, circuits of deadness and desire, dull or risky moves, and the most ordinary forms of watchfulness. (Stewart, 2007, 44-45)

The autopsic gaze, as self-sight, entails a modeling of the self to conform to the normative body, such that play and imagination are impossible. In contrast, one has an *imagination* in seeing losses. One must also have memory of prior experiences. Loss, like

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<sup>49</sup> Stewart (2007) writes, “The cultural landscape vibrates with surface tensions spied or sensed” (p. 45).

outline, implies a prior existence or presence, such that losses are *conspicuously missing* in lines of sight.<sup>50</sup>

Critical spectatorship entails actively seeking out elements in the field of vision that signal residue, outline, and loss. However, it is important to note that traces can also function in their own right in facilitating absences. Lock (2002) suggests that traces function to *displace* their referent. Of her research subjects,

one intensivist [practitioner who works in an intensive care unit] describes the numerous printouts, *traces*, films, and X rays that result from the close monitoring of patients as a kind of “displacement.” The subjective experience of the patients – their “personhood” – is unavoidably discounted and replaced by a medical narrative composed of graphs and *traces*. (p. 63, my emphasis)<sup>51</sup>

In other words, traces are mediators in the process of reductionism (in the case of *Body Worlds*, between the lived body and the plastinate), facilitating or destabilizing it. In this way, traces could facilitate rather than destabilize the autopsic gaze. In privileging absences and hauntings, however, my analytic practice draws from a prior integrity of the body, destabilizing the process of reductionism.

## Traces

During my fieldwork in Portland, I performed critical spectatorship and found a

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<sup>50</sup> Virilio (1994) provides an example in discussing movement and the ways in which people in photographs paradoxically seem to be “suddenly stuck with paralysis” even though they appear to be in motion (p. 1).

<sup>51</sup> To trace is also related to an emergent meaning of the body in cultural imagination: with the advent of forensic and crime technologies and their related cultural manifestations, such as TV documentaries such as *Cold Case Files* and dramas like *CSI*, the body – and in particular, the corpse – has come to be the object of particular kinds of knowledge and practices. Crimes are “written on bodies” in ways that can be tracked or traced (see Tait, 2006), because the body is “presumed to determine one’s movement into a pattern of lawbreaking or reveal his or her physiological propensity to misbehave” (Sanders, 2006, p. 279). In relation to this, Hibbs (2007) has written that *Body Worlds* “is in certain unhappy respects quite well suited to our culture, a culture currently awash in morbid fascination with vivisected bodies: from the explicit medical and forensic gore of *ER* and *CSI*” (para. 6).

number of traces which I detail below. In the final chapter, I select some key traces from those noted and explore their significance for a critical reading of *Body Worlds*.

## **Dead Ends**

Plastinates: clean, statuesque, uncompromised, unproblematic. When I first viewed them in Vancouver, I sensed I was being bowled over. I opened my mouth to say it to my sister who had accompanied me – but, nothing came out.

Some things were residues of a life lived, as simple as the wear and stains on the teeth of some plastinates, or as complex as the severely deformed spinal cord and pelvis of someone with scoliosis, or a curved, ‘s’-shaped spine. The small, cramped spine resonated with pain, belied by its simple presentation in a glass case accompanied by a medical description of the disease.

Such residues then served as their own traces of loss. Apart from signs of sexual difference, there were few signifying markers on plastinates that I could understand. No information about plastinates identity or “former life” is afforded, no names, ages, or causes of death, not to mention personalities, experiences or memories. All are lost and supposedly replaced by what von Hagens (2007a) calls the “individual interior face,” “inner individuality,” or “the face within” – the supposed uniqueness of internal features and the “imprint” of the soul onto them (p. 34).<sup>52</sup>

How do I read the signs and semiotics of these supposed “faces?” I was frustrated and saddened to strain to recompile a real human being. For example, the *Skin Man* is a

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<sup>52</sup> Similarly, the complex and ritualistic treatment of the human body in funerals/memorials is not acknowledged as a constitutive element of the corpse in *Body Worlds*. Mourning and memory of the dead is lost by this omission. This captures Kuppers’ (2007) experience: “The dried plastic in front of me did not speak – it pointed to an absence” (p. 35).



plastinate whose skin has been removed almost entirely intact, and he holds it up like a cloak in his outstretched hand. It serves as an outline of his prior bodily integrity and form. I stretched and contorted my body to glimpse the facial skin that the *Skin Man* held up, but I wasn't able to see his face. I could only faintly imagine its outline, a spectre that haunted every moment I contemplated him.



**Figure 3: The *Skin Man***

© Gunther von Hagens, Institute for Plastination, Heidelberg, Germany, [www.bodyworlds.com](http://www.bodyworlds.com), by permission.

The wear, the pain, the faces – these details that beg me to contemplate the lives lived are dead ends, ghosts that no life can be breathed into, forever lost and enmeshed in a plastic entombment, remaining only as *potential*. Perhaps only von Hagens himself knows who these people were in life.

Or perhaps, these *traces* are for another, different project.

### **Staging**

Other traces I noticed are those that destabilize the stagedness of the exhibition. As noted, the truth value of exhibitions is sustained by a careful staging of elements. Yet during my fieldwork I noticed some traces that disrupted the finely crafted staging of *Body Worlds*. For example, I saw fine filaments of a spider's silk extending from shoulder to head or head to glass case on more than one plastinate. Bits of dust and lint collected on some spots. These residues suggest the exhibition is not infallible, but in need of maintenance work. The environment encroaches on it.

I also noted many residues of plastinates' construction – in other words, plastinates are not merely “authentic,” “real” bodies but modified bodies, changed and managed by the “artist's” hand. One does not notice these much if one is not looking for them, precisely because the artistry is in many ways meant to go unnoticed. Yet these residues serve to signify the “artist” dissector that intervened in the body. The realization that such intervention has taken place itself serves as a trace – a trace-as-loss – that begs the spectator to imagine the body in an unintervened state. Little mistakes, like a splotch of misplaced dye, the imprint on skin of a piece of cloth, and even repairs signaled by what appeared to me to be opaque white glue were present on many plastinates.

Poor and imperfectly-done cuts were also present. The cutting away of flesh from discrete organs is supposed to be complete, as if the liver, for example, were a detachable part, capable of being removed from the body or even snapped back in like the eyes of Mr. Potatohead. However, organs and other body parts are not so cleanly made discrete. Ragged cutting jobs were visible, especially around areas like finger tips where body parts have different names but are not easily separated from one another.<sup>53</sup> On the *Star Warrior*, an empty chest cavity showed grey bits stuck to the back wall; presumably, they were remnants of the lungs, which are often stained grey by dust, air pollution or cigarette smoke.

The *Star Warrior* is comprised of other traces. It has alternating horizontal bands of flesh in various states of dissection from in-tact skin, to muscle, to viscera, to bone. Even the face is subjected to this pattern of alternating, progressive states of dissection. I looked at it as if, if only I could *squint hard enough*, I could recompose the face and what it looked like in life.

The skin thus functions as a trace-as-outline. Eyebrows, lips, nipples, belly buttons and other bits trace the plastinate's former surface and outline, providing faint indications of what it once was. The *Skin Man* is the plastinate that most clearly shows

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<sup>53</sup> I read these traces as what Saltzman and Rosenberg (2006) have called "the elusive visual symptoms of trauma" (p. x). This messiness, against *Body Worlds'* cleanly honed narrative and statuesque plastinates, is unsettling. Connor (2004) points out that this raggedness serves to unsettle because of its tactile nature: "Perhaps the libidinal charge of rags has something to do with the sense that rags are a compromise between skin and fur, or, more particularly, hair. Hair is immensely important as a way of focusing and amplifying skin sensation. Long, tangled hair, like ragged clothes, seems to signify... a body alert or awoken to touch, a body not intact, but a 'tangle of tatters' – tactile, tangible, touched, torn, touching itself, soliciting touch. So the ragged dead are scary partly because of the unnatural life that resides in their raggedness. It is as though the swarming attentions of the worms and flies had brought their skins to life" (p. 32).

the ways in which skin intervenes as a trace, holding the entirety of his skin but for a few bits, though all plastinates had skin traces.<sup>54</sup>

Against the apparent paralysis and *still life* of plastinates, I also noted a number of instances of “wobbles” and “wiggles,” either of the bodies themselves or their body parts. These function as losses in their absent-presence, announcing the loss of movement which is a fundamental aspect of a living (and, as I argue in the next chapter, dead) body.

What riches for a critical reading of *Body Worlds* do these traces hold? In the next chapter, I explore them in detail and suggest that they signal an alternative set of principles of the body. As such, I subject the exhibition to new demands that destabilize its closure.

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<sup>54</sup> The description of at the exhibition reads that the *Skin Man* demonstrates that the skin is “an independent organ” (*Body Worlds 3*, Portland, 2007). However, what the ragged cuts that remove the skin suggest is that it becomes an independent organ by virtue of being removed from the body.

## Chapter 3: Anti-Affect

In our society, death is repressed, blocked out, so to speak and the corpses of other people, at least, are viewed with a revulsive shudder – drilled into us through daily assaults by the same media pictures. Many people went to see the Mannheim exhibition<sup>55</sup> with such expectations and experienced that this revulsion actually decreased as they viewed the specimens, that it was lost completely and instead both amazement and a thirst for knowledge began to manifest themselves. For each visitor, this was ultimately a personal victory. They had overcome the taboos that surround human corpses. They were able to look at these specimens quietly and with interest in anatomical details. In doing so, they were able to pick out those organs or other tissue structures that particularly touched their lives due to a personal experience with a disease or for any other reason whatsoever. And they succeeded in doing this with frankness and without having to be on the defensive. This transition from expecting revulsion to looking at the specimens freely and uninhibitedly amounts to a personal break with these taboos.  
(Kriz, 2007, p. 6)

An aesthetic anatomy atlas, endowed with an emotionally positive ambience, instead of an abhorrently disgusting book, a richly colored gestalt plastinate instead of a grisly cadaver, will all help to make anatomy an emotionally positive experience. Why have schoolbooks and museums become so much better today than they were 20 years ago? Because they concentrate on presenting effects, colorful pictures and small stories that are easy to remember. Pedagogical research has proven that that which is presented in an emotionally positive way can be learned faster and is easier to remember. I gladly make use of effects when they facilitate learning. The church recognized this much earlier than pedagogical science. Whatever was supposed to stick in people's minds was gold-plated, optically refined in every imaginable way as well as put in monstrances and publicly displayed.  
(von Hagens, 2007b, p. 267)

### Movement

Dead bodies are not still. The body's own enzymes and other chemicals begin to break down tissues immediately following death in a process known as autolysis, while

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<sup>55</sup> This was an early exhibition in Germany in 1997 – the first in Europe.

bacteria do their own breakdown work known as putrefaction. These processes indicate that the body is always in states of change, flux, atrophy and entropy. Decay is a kind of movement.

Despite the uncertainty surrounding the meaning, status and value of plastinates, one thing is certain: plastinates are not meant to move, their hardened plasticky flesh paralyzed in an unchanging repose. “Plastination creates beautiful specimens as a sensuous experience that are frozen at a point between death and decay” (von Hagens, 2007a, p. 20), and this is represented as an improvement and advancement in anatomy, which has always been characterized by a race against the unstoppable, rapid, natural decay of the corpse. Anatomists’ reasons for abhorring decay were numerous. The decaying processes caused what were then mysterious changes in graves, contributing to spurring “superstitious” beliefs about corpses that created barriers for their work:

Comments such as “Corpses are ravenous and devour their own garments!” or “Corpses can hear!” were not uncommon in documents of the time. If the ground over a grave sank or if the gases that result from decay caused it to rise... the tombstones would rise and sink, thereby sending out what appeared to be encoded messages from the dead. (von Hagens, 2007a, p. 17)

These folk, quasi-religious beliefs sometimes underpinned riots or other challenges to anatomical work.

Another reason was that decay barred anatomists from the experiments they were most interested in. According to MacDonald (2005), uncertainty about the nature of the body’s death, as well as what characterized the exact moment of death (p. 14), often drove anatomists, and “fresh” corpses were thought to be more suitable for experiments pertaining to these questions. Experiments included how long a heart could be made to beat and facial muscles move by means of stimulation after death (p. 18), or ones which

sought to determine whether the dead could be brought back to life<sup>56</sup> (p. 15). Further, fresh bodies could be experimented on for longer periods of time (p. 14), and emitted less offensive odors, which was particularly important in anatomical theatres that held a paying crowd. Sawday (2006) notes that the demand for “fresh” corpses was so great that “There are numerous accounts of men and women... hurried from the scaffold only to revive on the dissector’s table” (p. 10). Therefore, the race against decay was itself anything but still. Anatomists would wait anxiously in the gallows to obtain bodies as quickly as possible, and just as quickly begin the dissection.

After dissection, anatomists would prepare the specimens using any number of preservative processes in order to halt decay and preserve their work. Specimens were placed in alcohol or formaldehyde solutions and sealed in glass, varnished, dried or embalmed in attempts to negate and master decay.<sup>57</sup>

Aside from racing against decay, anatomy and dissection were also mired in dramatic and often explosive politics and theatricality, spectacles the likes of which *Body Worlds* venues have never seen, and which contrast greatly from the quiet, “reverential” atmosphere of the exhibitions.<sup>58</sup> As Sawday (2006) notes,

In this drama, the body of the condemned felon was first hauled from the gallows and delivered into the hands of the anatomists and their servants, sometimes amidst scenes of near riot as relatives and friends of the condemned man or woman struggled to retrieve the corpse. From the gallows, the body would be conveyed to the public arena of the anatomy theatre. (p. 4)

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<sup>56</sup> This question was mostly unacknowledged; perhaps anatomists did not want to admit they too were a bit superstitious, and indeed, this would be an undesirable outcome for the executioners (MacDonald, 2005).

<sup>57</sup> Skeletons and bones were often kept, collected or sold (see MacDonald, 2005, p. 96-135). Or, the remains were simply buried in unmarked graves (MacDonald, 2005, p. 183), as the anatomists waited for the next corpse.

<sup>58</sup> Some early exhibitions were met with protests and some public controversies – this has since all but stopped (see an analysis by Schulte-Sasse, 2006).

In Bologna, public anatomy lessons even coincided with carnival time, and decrees were set forth so as to control the often chaotic spectacle of public dissection. In one from 1586, Ferrari (1987) finds that “It is quite apparent from what the decree prescribes and prohibits that the anatomy lessons generally took place amid anything but the calm and *modestia* that is several times invoked” (p. 70).

From the 18<sup>th</sup> century onwards, anatomy moved out of the public anatomical theatres and retreated into the lab, clouded in clinical detachment, supposedly and according to von Hagens, de-democratizing it in the process: “Anatomy was gradually reduced to medical courses on dissection and dissection in the service of pathology; as a result, it gradually became the sole privilege of doctors” (2007a, p. 13). This coincided with the de-stylizing of anatomical representations, as artists turned away from concerns for anatomical “correctness” towards the now familiar styles and themes in modern art – for example, cubism and impressionism (Kemp and Wallace, p. 17) – and anatomy was being drained of “obvious ornamentation, stylishness, and pictorial seductions” (Kemp, 2000, p. 4). According to Sappol (2002),

Dissectors increasingly sought to forestall any identification with the body as a person, any identification that would elicit feelings in the anatomical student or the laity... In so doing, the tendency was to make the triumph of scientific reason so complete as to minimize and eventually erase the presence of the cadaver, and perhaps even the anatomist, from the iconography of anatomy. (p. 320)

Anatomy was deadened and hidden.

A mourning of the loss of public anatomy lessons is invoked in *Body Worlds*. In fact, von Hagens revived this tradition in 2002, when he conducted an autopsy for a paying audience, which was also broadcast (Moore and Brown, 2004, p. 211). The divorce of art and science is also mourned: “von Hagens also follows in a long history of representing cadavers in artistic displays to help allay the sense of disgust... [He accepts]



the notion that the plastinates themselves are ‘anatomy art’” (Moore and Brown, 2001, p. 211).

*Body Worlds* has re-married art and science and salvaged the public anatomy lesson, but without the more chaotic aspects of public anatomy characteristic of the anatomical theatres and gallows. Yet it does this while playing on spectacle – paradoxically, *Body Worlds* is a *controlled spectacle*. It generates extensive media events – from press conferences, to public autopsies to cameo appearances of plastinates in movies (the most recent James Bond film *Casino Royale* (2006) featured plastinates “playing” poker), and a general “buzz” wherever it goes. Within this spectacle is also a concerted *stillness*. Plastination stops decay, allowing for the didactic value of specimens to continue indefinitely. It removes the conditions that create decay’s revolting smell and dripping putrefaction. It allows the anatomist’s handiwork to be preserved and permits new kinds of specimens. And, undertaken away from the public eye, and performed on self-donated corpses, plastination embodies nothing of the spectacle that was the gallows and the anatomical theatre.<sup>59</sup> With its dark backgrounds, spotlighting, soothing and twinkling music, and calm silence, the exhibition allows for a quiet, reverential “sensuous experience.”

It accomplishes all of this while still capturing the body as it is in life – “authentic,” “individualized,” and, most ambivalently, “in motion.” The poses of plastinates playing basketball and soccer, praying, and running mimic the animation of live bodies. In a magic of mimesis, plastination, it seems, has mastered movement via the

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<sup>59</sup> Gunther von Hagens has just recently created the Plastinarium, a “transparent laboratory” in Germany where visitors can view the plastination process.

*mimicry of movement*. There is the appearance of movement; yet movement is completely lacking: a loss of movement.

In the name of anatomy, education, art and medicine, the loss of movement must be a small sacrifice. Biologist Charleen M. Moore's experience with the plastinates is illustrative: "I was not particularly disturbed by the artistic poses in which many of the whole-body plastinates were presented, seeing the life-like postures as splendidly illustrating the workings of the body engaged in everyday activities" (Moore and Brown, 2004, p. 211). But is the loss of movement just a small sacrifice?

### **Projected**

In enacting the autopsic gaze as a spectator of *Body Worlds*, one enacts what Brian Massumi (2002) has called *mirror-vision*. It is a kind of self-sight: "A seeing of *oneself*. Specifically, a seeing of oneself *as others see me*" (p. 47, emphasis in original). Loosely synonymous with Sobchack's conception of body-as-house (as opposed to body-as-home) mentioned earlier, it is as if oneself were an object (p. 50). In other words, mirror-vision is literally looking at ones self, *with ones own eyes*, with an autopsic eye. It is an objective, disciplining sight (Foucault, 1977), creating a body image ready for assessment and "ready for transformation" (Featherstone, 2006, p. 234). Featherstone (2006) notes that

This well-formed image is akin to the photographic proof of one's body image and correlated self-identity that is made available within consumer culture advertising and publicity of the success of "make-overs" and "shape-overs." This objectively achieved effect is very much in line with the emphasis upon vision to the exclusion of other senses: we are what we look, and physical appearance is everything. (p. 234)

One illustration of the ways in which mirror-vision is taken up in the viewing of plastinates is the response of spectators concerning the health of their own bodies. Visitor comments (the ones made public anyway) often cite this lasting impression on spectators.

*Body Worlds* exhibitions purport explicitly to be about health education, encouraging more healthful lifestyles. The “I Quit!” campaign is an example. On a large television centrally located in the Portland exhibition, a public service announcement made by the late actor Yule Brenner continuously played, in which Brenner, ailing from lung cancer the time it was filmed, pleads with the audience not to smoke. A cut to text read, “Today, you don’t have to become a statistic. Ditch your pack here and say I Quit!” Beside the TV, there was a box with 30 or so packs and some loose cigarettes in it, and numerous pledge cards, signed by those who decided to quit smoking after having viewed the exhibition.

Thus, in viewing plastinates, spectators turned a comparative eye towards themselves.<sup>60</sup> Some may have done it as a result of the I Quit! campaign, while others as a result of the nature of the exhibition itself. Indeed, the response to turn one’s eye towards oneself was, for some, spontaneous: “*Body Worlds* conceived I Quit in 2006 when cleaning crews kept finding unfinished packs of cigarettes discarded on the glass display case containing the smoker’s lungs” (IfP, 2007, para. 1).

Massumi likens the process of mirror-vision to the performing of a script, in which you “perform” an assigned role and the “supporting actors” theirs.

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<sup>60</sup> I’m not suggesting that it is not beneficial that people quit smoking, but rather that this is an example of the autopsic gaze and mirror-vision. What’s ironic about this example is that, in a Foucauldian framework, by quitting, signing the pledge card and forfeiting cigarettes, one “becomes a statistic” after all: the volume will certainly be used to attest to the success of the program. (If not, why have cards at all?)

You interpret the script, you visualize or form a “mental picture” of what it means for you to be what you are... and embody that visualization for the benefit of others occupying the contrasting but complementary character roles. (2002, p. 40)

In these exchanges, one is mirrored in the eyes of the other(s). While conducting my field research at the exhibition, I was startled to gaze at my own reflection, hazily peering out against the backdrop of the plastinate known as the *Praying Skeleton*, when I became aware of the glass case in which it was housed (which was not “meant” to be noticed, since glass is clear). The overlaying of my image onto the plastinate convoluted our images, placing me and the *Praying Skeleton* into the same axis of sight. Mirror-vision indeed: mirrored in the eyes of the plastinate, *seeing with my own eyes*. Gazing at plastinates then is a process of comparison between self and other based on preexisting terms – the “script.” By sharing the same narrative and by being mirrored in each other’s eyes, “the difference between you and your specular complement is the minimal difference allowing movement” (Massumi, 2002, p. 49).

But mirror-vision cannot see movement. Like in film, movement is only represented as a series of freeze frames as a leap from one position to the next. Flip the frames fast enough and movement is *mimicked*, but not real. Mirror-vision suggests the self captured in an image or photograph: “you resemble yourself perfectly” (Massumi, 2002, p. 48), but you are frozen, posed and unmoving. Massumi (2002) explains

Mirror-vision is by definition partial. There is a single axis of sight. You see yourself from one angle at a time and never effectively in movement. If you keep your head motionless and your eyes level, you can see parts of yourself move, for example your arms, from one perspective. You can change perspective by immobilizing your body and moving your head. But if you try to move your body and your head together in an attempt to catch yourself in motion, you only succeed in jumping from one frozen pose to another. (p. 48)

By virtue of plastinates being still, and by virtue of the spectatorship of them enacting mirror-vision, if the difference between myself and the plastinate is the difference allowing movement, then a *paralyzed plastinate thus paralyzes me*.

### **Unmoved**

According to Koppers (2007),

No mess is left behind by the various plastic injections; everything superfluous, including fluid, is drained, and the dry, odor-free nature of the exhibits is mentioned in most of the exhibition's publicity. The body is presented as a quarry with different layers that can be opened to the gaze. (p. 37)

But plastinates are not so cleanly statuesque. Some plastinates have bits literally falling off of them. There are traces of the effort it takes to paralyze a dead body. At the ends of finger tips and toes I could sometimes see hiding in a waxy-plasticky casing fine silver wires that appeared to give the specimens stability and form, traces of their artifice. I could sometimes see metal rods coming from the base below the plastinate – in the case of the *Diving Goal Keeper*, shrouded in fake plastic shrubbery. As a spectator of *Body Worlds*, I was drawn to these interventions, more so even than the exposed organs themselves – an experience which, at first, I could not make sense of. When I was later able to hold and touch a liver specimen specially-prepared for visitors to examine, I found that it was surprisingly heavy. Plastination adds considerable weight to organic material, and significant stabilizing measures must be undertaken if specimens are to become erect. It takes about 1000 pins, foam pads and wires to pose the specimens (von Hagens, 2007b, p. 261) in addition to the permanent wires and rods noted. Such efforts at pinning and wiring suggest that it is not easy to stop a body from moving – at a minimum to counter its gravity.

Sometimes, the *weight* of the seemingly absent gravity demands contemplation (the *gravity* of gravity, or a trace-as-loss of gravity). After examining the *Hurdler*, a body seemingly suspended directly over a hurdle in mid leap, I wrote the following in my field notes:

This one is completely frozen... it is frozen in the air. What holds it to the hurdle is a total mystery. Where it touches is a tiny, small area. You can't see how it stays up. I saw a very thin wire by the groin that seems to give the extended leg stability. (Scott, Field notes, Portland, September 2007)

The wire could explain the extension of the leg to a certain degree, but nothing seem to explain how such a weighty extended body could be balanced with such stability on such a thin beam. And I didn't know what attached the body to the beam. That the *Hurdler* was caught in mid-hurdle so cleanly and convincingly indicated an apparent mastery against natural mechanical law: a powerful achievement.

While visiting the exhibition, I also noted numerous instances of actual movement. I noted in my field notes that the *Skin Man*'s "testicle wobbles;" that on the *Hurdler*, "a piece of flayed white flesh is wobbling in a breeze;" on the *Star Warrior*, "tendons wobble;" in the *Deep Body Dissection*, there was a "wobbly vein on the leg;" and that the *Female Orthopedic Body*'s "outstretched arm wobbles." I wrote, "They don't move, except some of them have this disgusting eerie wobble of some flayed body part that looks like it could fall off. Suggests decay."<sup>61</sup> The artery and vein specimens, where all flesh is removed and all that remains are these blood systems, suspended networks in

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<sup>61</sup> Koppers (2007) shared a similar experience of traces with regards to these specimens: "I looked closer. At the edges of the exhibit, something small seemed to grow. A small fungus seemed to have found nourishment somewhere in the plastic... I later queried an exhibit attendant... He confirmed that occasional cleanup was needed to keep the specimens in order... I do not think that *Körperwelten* would welcome such intervention. Its brand of realist knowledge, predicated on clarity and vision, not emotionality and fantasy, seemed ready to disavow the small symbolic excess the fungus signified to me. Finally, I was emotionally engaged. I found myself in the fantasy of 'guarding' that tiny little fungus" (p. 47).

the rough outline of a human head or heart,<sup>62</sup> show many red and blue bits and pieces having broken off of them, delicately dusting the stand below, the specimens themselves becoming ragged. Connor (2004) writes, “Rags are perhaps the busy life of decomposition, a dying that walks” (p. 32). These movements, within the framework of trace, are movement residue (Massumi, 2002, p. 7), announcing the spectre of the principle: a *body moves*.

In *Parables for the Virtual: Movement, Affect, Sensation* (2002), Brian Massumi argues for an ontological prioritization of movement over form, process over stasis, transition over positionality. These are radical assertions in the majority of the tradition of cultural theory on the body, which conceive the body as being constructed by ideology, language and culture (see my Literature Review and chapter one). Thoroughly mediated, such a body is sometimes even conceived as reducible to language and text – there is no matter or flesh, only discourse. The body exists in structured relations, forged by ideology and entrenched by language. In other words, the body is *positioned* in a grid-like structure that structures it and that it may in turn structure in a kind of agency. Changing positions is possible, and it is possible to occupy two or more positions in contradiction, but the body is always positioned – ergo the term *subject position*.

Massumi asserts that the concept of positionality rests on the subtraction of movement from the construction of the body. “This catches the body in cultural freeze-frame” (2002, p. 3), as if the body simply leaps from one subject position to the next.

Outlining the consequences of these theories, he writes:

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<sup>62</sup> These specimens are prepared by injecting veins and arteries with plastic and dyes. Remaining tissue is removed mechanically and chemically, such that the resulting specimen is comprised only of a fine network of vessels.

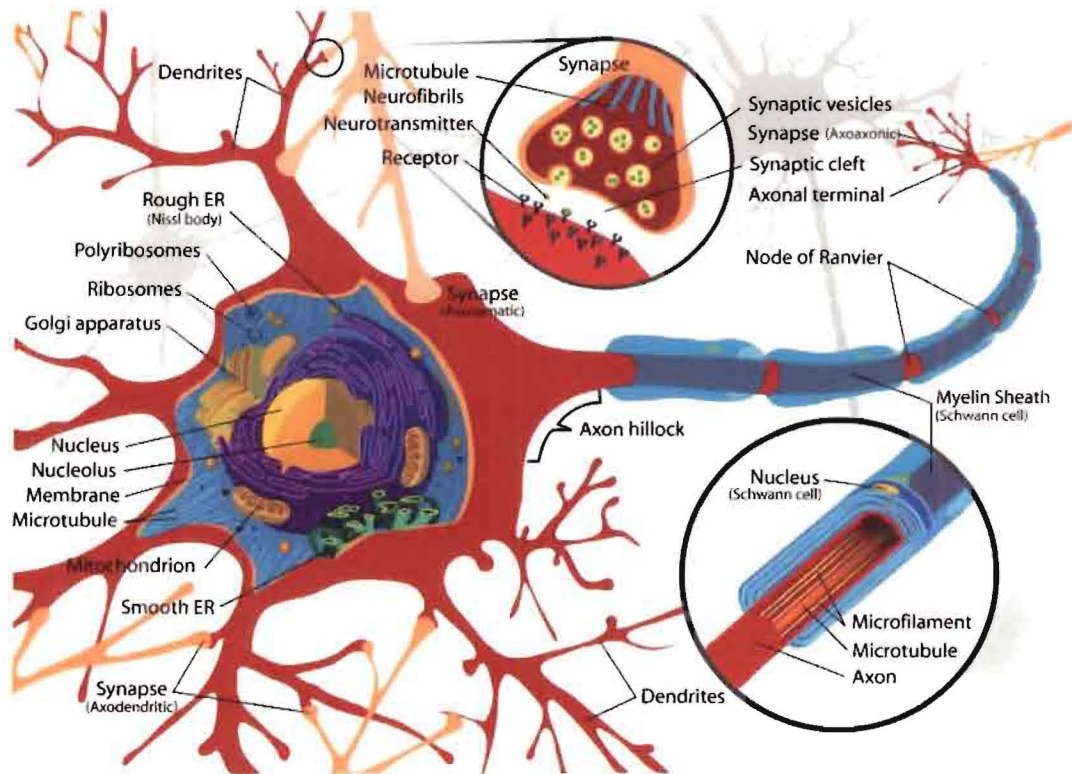
The space of the crossing, the gaps between positions on the grid, falls into a theoretical no-body's land. Also lacking is the notion that if there is qualitative movement of the body, it as directly concerns sensings as significations. Add to this the fact that matter, bodily or otherwise, never figures into the account as such. (p. 4)

In other words, these discursive theories cannot account for transition, bodily sensations and sensings (phenomenology and affect), and the corporeality of the body; they erase movement. Connor (2004) corroborates this position:

Of course, a languaged body is subjected to the orders of discourse. A languaged body can be regimented, cabined, confined, abjected, insulted by language. But never wholly so. The novice who bows her head, the squaddie who stiffens in salute, have another body beside, just to the side of the statue they have become: a subjunctive, a possible body, an imposture alongside the imposed posture. (p. 30)

But as this analysis has implied, this fact is also true of *Body Worlds*, and anatomy more generally, the grid-like structuring in discursive cultural theory isomorphic to the body in anatomy. Anatomical drawings, for example, are composed of labeled, coloured parts, discrete in their form and function, organized to scale and spatially fixed. Figure 4, an anatomical illustration of a neuron cell, and figure 5, an anatomical illustration of the human respiratory system, illustrate the beauty and utility – the seemingly perfect resemblance to what they represent – of such an approach, while at the same time illustrating its “gridlock.” Apart from representations, the act of dissection effects a similar anatomization: I’m reminded of my grade twelve biology class, in which we dissected frogs, cutting their skin open and *pinning* it back with little pins so we could poke around inside them and examine their organs.





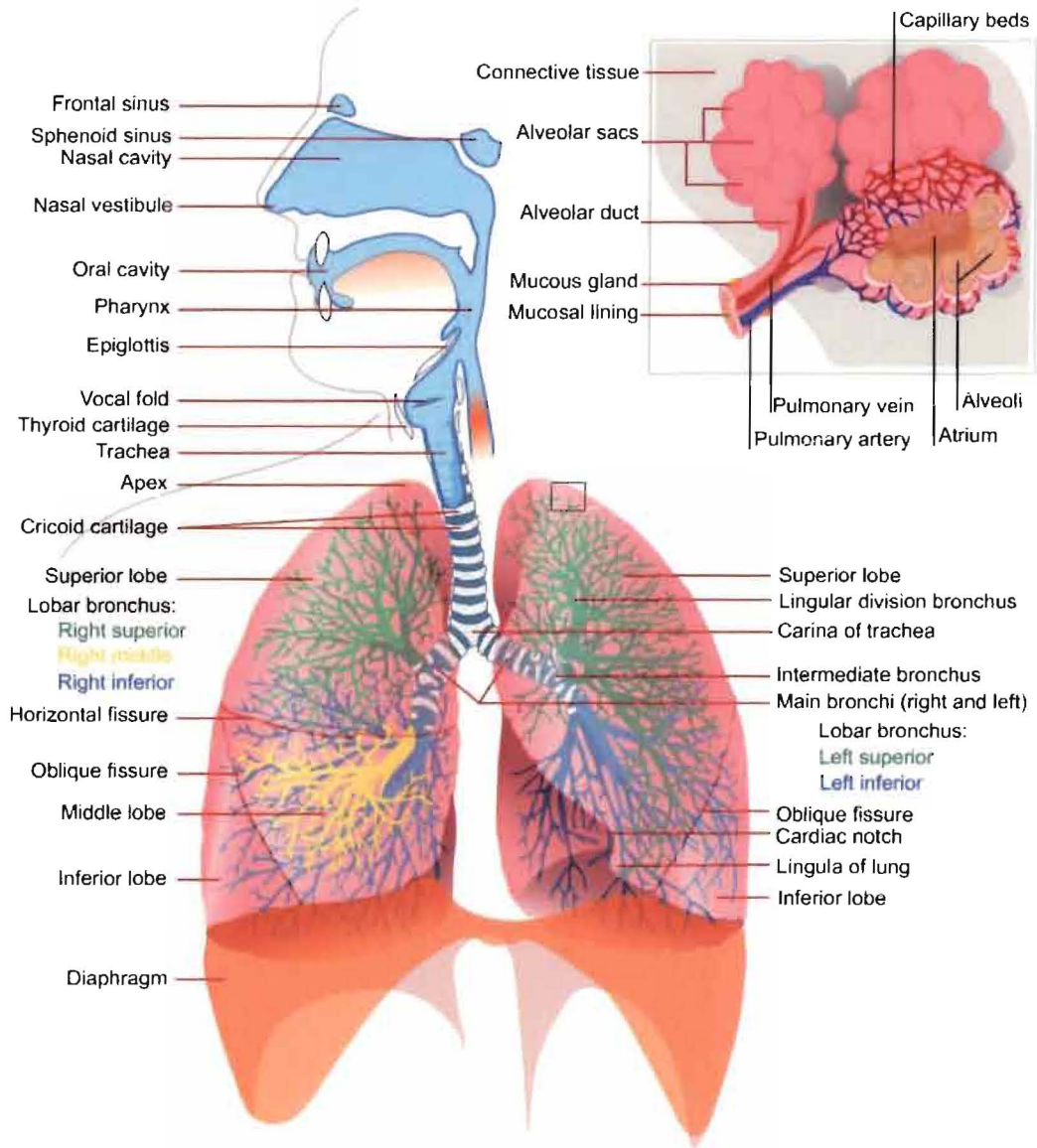
**Figure 4: Neuron Cell Diagram**

Created by Mariana Ruiz Villarreal, Hamburg, Germany (2007). This image is in the public domain.

Continuity between discrete parts, motion of and change of parts, flow between parts, and indeterminacy of parts are all lost, “For structure is the place where nothing ever happens, that explanatory heaven in which all eventual permutations are prefigured in a self-consistent set of invariant generative rules” (Massumi, 2002, p. 27). Yet as

Massumi notes

A path [of movement] is not composed of positions. It is nondecomposable: a dynamic unity. That continuity is *of an order of reality other than the measurable, divisible space* it can be confirmed as having crossed. (2002, p. 6, my emphasis)



**Figure 5: Human Respiratory System**

Created by Mariana Ruiz Villarreal, Hamburg, Germany (2007). This image is in the public domain.

When we conceive of the body as a series of positions, points, and discrete parts, it is in a state of arrest. But as I have noted, not even a dead body is in a state of arrest – movements of decay give dynamism to corpses, while corpses are also placed in dynamic rituals of the living, such as funerals. Positions are merely *movement residue* (Massumi, 2002, p. 7), traces of movement.

*Movement-vision* is Massumi's term for self-sight that, in contrast to the autopsic gaze which disciplines and enacts a closure of the body, insists on the body's radical openness, emergentness and contingency. It dislocates the body's surface, passing "into the body" while simultaneously multiplying lines of sight to "other spaces" (2002, p. 57). Thus, it is *sight embodied*. Movement-vision is a turn to look at one's self without *looking at* one's self merely with eyes. Thus Massumi has termed what it sees the *body without an image*:

The body without an image is an accumulation of relative perspectives and the passages between them, an additive space of utter receptivity retaining and combining past movements, in intensity, extracted from their actual terms. (p. 57)

Movement-vision's *body without an image* is "the involution of subject-object relations into the body of the observer and of that body into itself" (p. 57), signaling the receptivity of the body to its coincidence with the world.

#### **Involution (n)**

1. the act of involving or complicating or the state of being involved or complicated
2. degeneration or structural deformation
3. an involute formation or structure (involute (adj): having margins that are rolled inwards)
4. reduction in size of an organ or part
5. an algebraic operation in which a number, expression, etc., is raised to a specified power

(Collins Concise Dictionary, 2001, p. 766)

*Involution's* several definitions suggest both degeneration and regeneration, and the image of the tube – a *transformative backwards turn that reconnects with itself*.<sup>63</sup>

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<sup>63</sup> This also suggests an image researchers of the body are quite fond of: the Möbius strip. For example, Grosz (1994) writes that the Möbius strip is a fitting model for the body, because it "has the advantage of showing the inflection of mind into body and body into mind, the ways in which, through a

Another way of putting it is that movement-vision is a two-layered notion of mimesis: “on the one hand, a copying or imitation and on the other, a palpable, sensuous, connection between the very body of the perceiver and the perceived” (Taussig, 1992, p. 16), or in other words, copy *and* contact. In movement-vision, copy and contact fuse as one, thereby permitting the involution of subject-object relations. Taussig (1992) explains:

copy and contact are steps in the same process... [A] ray of life, for example, moves from the rising sun into the human eye where it makes contact with the retinal rods and cones to form, via the circuits of the central nervous system a (culturally attuned) copy of the rising sun. On this line of reasoning contact and copy merge with each other to become virtually identical, different moments of the one process of sensing: seeing something or hearing something is to be in contact with that something. (p. 16)

Movement-vision is sensuous, embodied alterity. It is not merely a comparison of one’s body with those of others or abstract bodies of hygiene and anatomy, but a dissolution of difference between one’s body and those of others in moments that *move*.

### **Viscerality**

*Body Worlds* is boring. This is how I found myself feeling among dissected, flayed, skinned, naked, dead bodies. I felt disappointed to discover that the exhibition was housed on two floors, since after having viewed the first floor I thought it was the end. I had to push myself to keep looking, to not let my mind wander... the hotel room, the flight tomorrow, what I am going to eat tonight.

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kind of twisting or inversion, one side becomes another. This model also provides a way of problematizing and rethinking the relations between the inside and the outside of the subject, its psychical interior and its corporeal exterior, by showing not their fundamental identity or reducibility but the torsion of the one into the other, the passage, vector, or uncontrollable drift of the inside into the outside and the outside into the inside” (p. xii).

*Body Worlds* is boring because it resides in the dispassionate space of mirror-vision:

Plain, old, everyday you progresses through a sequence of life passages photographically preserved as stilted poses. Your life passes before you in succeeding tableaux, continuity shots punctuating a banal script just bad enough to systematically but modestly miss the mark... Wherever you go, there you are again. Unavoidably you. Then you die. (Massumi, 2002, p. 49)

Consider the difference between plastinates and Marc Quinn's *Self* (1991).

Creating a mold out of a cast of a human head, filling the mold with six pints of his own blood, and then freezing the resulting sculpture with a continuously-running refrigeration system, Quinn created a frozen, paralyzed body (part), but without sacrificing movement:

The thing about the preservation of *Self* is that it is reversible. It is simply kept frozen and thus totally dependent every moment on the freezing mechanisms to keep its form. (Quinn cited in Kemp and Wallace, 2000, p. 171)

*Self* is frozen (literally), and made from the human body, like plastinates. Yet this does not result in the erasure of movement, which exists as a potential: a threat, ever-present and ready that will take over if the fridge is turned off. The humming refrigerator and cold touch of the glass are reminders. The congealed blood is fragile as it is disgusting: chunky and brown-black. I can *almost taste* the ironness of the blood in my mouth; feel the crusty-yucky scab I've had many times; *even cringe* at the globby clots of menstrual fluid that have so impressed me many times. The mixing up of my own body with *Self*, in which *my body shudders*, and through which I understand the reliance of the body on sustaining forces of factors outside of itself – fridge or otherwise – is assured by the potential, the *gap* between what is and what could (will) be: decay, abject, and affective.

The gap, the (potential for) movement creates suspense. Suspense is trace of movement, but one that, paradoxically, preexists it. It is embodied by sensations of what

Massumi calls *viscerality*, which is “a rupture in the stimulus-response paths, a leap in place into a space outside action-reaction circuits” (2002, p. 61).

Walking down a dark street at night in a dangerous part of town, your lungs throw a spasm before you consciously see and can recognize as human the shadow thrown across your path... Your heart stops before you consciously feel the tap on your shoulder and identify it as the greeting of a friend. (p. 60)

Viscerality “immediately registers excitations gathered by the five ‘exteroceptive’ senses even before they are fully processed by the brain” (p. 60). In other words, viscerality is felt in the flesh and is un-thought, pre-thought. Perhaps most simply, viscerality is known as gut-feeling, or a “feeling in my chest.” It is a feeling that resides in the body and is “interoceptive” (p. 58). Being un-thought, and not the stuff of the senses themselves (such as a taste or a smell), viscerality is the register of intensity preceding what is about to happen (p. 61) – so long as the potential for happenings exists.

## About Face

Suspense can be registered on the skin. For example, it is the site of the embodied feeling of “creepiness,” that nonrational feeling of unease. Registering as the bristling of hair, shivers or goosebumps, “Our fear is written over our skin, insofar as the skin is our first line of defense” (Connor, 2004, p. 244). These excitations are often most acute when the exciter is skin itself; the viewing of skin breaches like cuts often results in an analogous excitation on the viewers’ skin. Connor (2004) asks,

Why do we say that things give us the creeps, or that they make our skin crawl, unless it is that we sense a commingling, a commensality, a mimetic charming or fascination of the skin by the movement that it finds to aversive? (p. 247)

Thus while I was doing my fieldwork at the exhibition, I overheard some other spectators talking about the *Star Warrior*. As noted, the *Star Warrior* is a plastinate that has alternating horizontal bands of flesh differently dissected, leaving some bands of

completely intact skin, some dissected to the muscles or organs, and some down to the bone. One of the spectators noted, “The skin is really freaky,” to which the other replied, “Yeah, *that part is.*”

Of all the parts that could – and probably would normally – be considered “freaky” or abject, including organs, bones and other viscera, it was the skin that seemed to have moved these two spectators most – perhaps not much, but a *trace amount*. Perhaps skin functions most ambiguously of all of *Body Worlds*’ elements. Primarily, in *Body Worlds*, the skin functions as another organ along side the liver, brain, etc., as the container of the body but discrete in its own right. The *Skin Man* is the plastinate that most notably conjures this preferred reading of skin. This is a plastinate cleanly skinned, holding up the entirety of his skin in one piece in his outstretched hand. The description for this plastinate reads,

This posed plastination demonstrates on the one hand how vulnerable man looks without skin to protect him and on the other the nature of the skin as an independent organ. It is our largest and heaviest organ without which we could not exist. The skin lends individuality to our exterior; it imparts beauty and age. Its functions include shielding the body from the outside world, imparting pressure and tactile sensations, as well as regulating temperature and water metabolism. (*Body Worlds 3*, Portland, 2007)

The skin held by the outstretched arm, then, is a literal manifestation of skin-as-container, the skin being removed like a box, set aside to reveal its contents.

As is the case with movement, despite the uncertainty surrounding plastinates, it is certain that plastinates are bodies *skinned*. This feature is what fundamentally makes plastinates available for public consumption. If bodies were plastinated skin intact removed from the exhibition environment and placed in a space of mourning and ritual, there would be little difference, visually and affectively, between a plastinate and, for example, an embalmed body ready for funerary display, mourning and ritual. In fact, it is

most often the skin, as opposed to the internal organs, that is preserved and embellished after death. Connor (2004) writes,

Where it is the function of the skin in life to maintain the integrity of the body, embalming removes the putrescent viscera of the body in order to preserve the integrity of the skin. Thus the skin that has protected the body in life must be protected from it after death. So even after the separation of the inside and the outside of the body, the role of the skin is to maintain integrity of the soul – to be, as it were, the soul’s body. (p. 10)

It is the likeness of the corpse to the living body that is sought to be maintained in funerary display. In contrast, in *Body Worlds*, the removal of skin ensures anonymity of corpses, such that plastinates cease being objects of mourning:

Ensuring anonymity is important for distancing the body from its plastinated counterpart, as it is the only sure way of ending the sense of reverence surrounding that body, i.e., the sense of personal and emotional attachment to the deceased... It goes without saying that every human specimen continues to possess human qualities. (von Hagens, 2007a, p. 31)<sup>64</sup>

However, the *Skin Man*’s body has remnants of skin still on it: lips, eyebrows, ears and navel. Supplanting the “another-organ” discourse, these skin remnants are clearly design choices since they do not function to educate about the internal exposed anatomy, but rather appear to suggest that some form of identification between spectator and plastinate is important to *Body Worlds* creators. Giving detail to the human body and face, the skin bits breakup otherwise unremarkable masses of flesh. The sum of these ambiguities in the meaning of skin is that, in removing the skin, the external presentation of individualizing features, plastinates become de-individuated – still human, but *faceless*.

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<sup>64</sup> The excerpt continues: “That also means that a plastinated specimen must be used for educational purposes, as dictated by the testamentary disposition of the donor” (von Hagens, 2007a, p. 31). One wonders how “cameo” appearances in a James Bond film fulfill this imperative.



Giorgio Agamben (2000) has written about the centrality of the face in human experience. The human face is the exchange of the inside and the outside, the self and the other: “The face is at once the irreparable being-exposed of humans and the very opening in which they hide and stay hidden” (p. 91). Being “the only location of community” (p. 92), the prime location through which humans can contact and communicate with each other, but without having content (such as does language), the face, according to Agamben, is the *potential* (much like viscerality) for communicability. Agamben asserts: “only where I find a face do I encounter an exteriority and does an *outside* happen to me” (p. 100, emphasis in original).

According to Agamben, the face resides at the edge of an “abyss” (p. 96), in threat of losing its communicability which exists always only as potential. Collapsing the resemblance of the face and the face itself erases such potential. Agamben writes,

To grasp the face’s truth means to grasp not the *resemblance* but rather the *simultaneity* of the visages, that is, the restless power that keeps them together and constitutes their being-in-common. (p. 99, emphasis in original)

Mirror-vision sees the resemblance of the face and thus dampens potential for communicability. While plastinates might then *resemble* living subjects in particular as a result of their skin remnants, which afford them “human qualities,” their facelessness makes them *unmoving*. In this, the facelessness of the plastinates is an erasure of the potential to communicate: the potential to connect with and be affected by the other.

While affording communication, skin is also embodied. Psychoanalysts have explored the how embodiment not only has depth – such as Massumi’s explication of

viscerality – but a surface. Psychoanalyst<sup>65</sup> Didier Anzieu (1989) argues that the skin, far from being a “mask” (see Erving Goffman, 1959), a “costume,” a blank slate upon which discourse marks, a text, or a biological container, is a foundational and generative aspect of subjectivity. Challenging Lacan’s conception that the unconscious is structured like a language, Anzieu insists that, rather, the unconscious is structured like a body (see also Ahmed and Stacey, 2001, p. 7), and that it is the skin’s surface that matters most about the self in this equation. Thus, he developed the concept of the *skin ego* in his model of the unconscious. Prosser (1998) writes,

[Anzieu’s] concept of the skin ego takes the body’s physical skin as the primary organ underlying the formation of the ego, its handling, its touching, its holding – our experience of its feel – individualizing our psychic functioning, quite crucially making us who we are. Bordering inside and outside the body, the point of separation and contact between you and me, skin is the key interface between self and other, between the biological, the psychic, and the social. (p. 65)

As such, skin is deeply entangled with senses of self, which are derivative and social in nature. Like Agamben, skin ego suggests that skin is *the* connective surface, the interface, between the body, self and outside world, and the organ that enables one to *touch* the other.

But more than just mediating inside/outside, skin also enables the “psychic/corporeal interchange of subjectivity” (Prosser, 1998, p. 72) or the sense of self and the sense of the body, and their mutual construction. The skin is the site of the felt experience of the body image, as well as the psychically-projected surface of the body image. In this, the body image is not merely understood as the visual surface of the body (or mirror-vision image) but the “feeling of the lived body: the postural schema” (Prosser,

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<sup>65</sup> I am aware of some of the problematic assumptions and outcomes of psychoanalytic thinking in relation to, for example, women’s bodies and pregnant bodies. Here I use psychoanalytic theory as a jumping-off point to explore investments of selfhood in the skin. Many feminists use and reformulate psychoanalytic thought (see, for example, Creed, 1993).

1998, p. 78-79).<sup>66</sup> For example, Connor (2004) suggests that the skin itself is the “milieu” of *all* contact with the exterior outside of the body – in other words, of all of the senses:

This is because it is the most widely distributed and most various of the organs of the body. Unlike other organs, it is not concentrated in one portion of the body. Indeed, the skin is the ground against which the other senses figure: it is their milieu. (p. 27)

He notes further that the skin is

the element of which we feel [the senses] are largely made. The other sense organs exist as particular kinds of convolutions or complications in the skin, the labyrinthine turning inward to produce certain kinds of sensitivity – the scooping out of the mouth, the whorling of the ear, the knotting of the sphincter. (p. 34)

Because of its role as the environment of the body (Connor, 2004), like the face and viscerality, skin too is a site of potentials. Connor writes about its felt dynamism:

The experience of the skin is in great part [a] ceaseless fluctuation of excitations, the skin lived as a gusting curtain or aurora borealis or tickles and prickles and shimmers and quivers. Every time there is an itch, the skin presents itself as one pole of an energetic potential. (p. 230)

Such great investment in skin also means our skin is where we are vulnerable.

Damage to the integrity of the skin can result in psychical disturbance and trauma. Jay Prosser, queer theorist of transsexual bodies and author of *Second Skins: The Body Narratives of Transsexuality* (1998), notes, “Because skin is a psychic/somatic interface, not being able to live without one’s skin is not just a physical but a psychic state” (p. 72), and that

Selfhood, according to Anzieu, is fundamentally entangled with images of integrity, of bodily wholeness. Conversely, states of depersonalization, of not

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<sup>66</sup> Thus, just like Sobchack (2004) and Massumi (2002), Prosser writes, “In thinking body image, we seem to have emphasized ‘image’ at the expense of body, rendering the body equivalent to that which can be seen (the body in the eye of the other) and omitting to account for the subjective experience of the body, the body as it is (or is not)” (Prosser, 1998, p. 79).

feeling real, are enmeshed with images of inadequate containers on which boundaries are blurred, surfaces flawed, envelopes perforated. (p. 76)<sup>67</sup>

Dead bodies do not have skin egos as defined above. But according to Anzieu's model, by bearing only skin traces, plastinates are "depersonalized" by having "inadequate containers" and "perforated envelopes." Or, according to Connor, they are "body minuses:"

Skin has come to mean the body itself; it has become the definite article, the "the" of the body. But skin is not the body. I have even come to think... that the skin is really not even a part of the body. Skin is not a part of the body not because it is separate from it but, surprisingly, because it cannot come apart from it. Unlike a member, or an organ, or a nailclipping, the skin is not detachable in such a way that the detached part would remain recognizable or that the body left behind would remain recognizable a body: a body minus. (1998, p. 29)

## Proprioception

Viscera, skin, movement, face: the depths of the body have thus far been fleshed out, one final component drawing them together. *Proprioception* is the term given to the felt spatiality of the body the spatiality of the body – in other words, the space of the body in relation to its space in space – registered by movements and feelings of the muscles, ligaments and tendons. It is

that sixth and grounding sense we have of ourselves as positioned and embodied in worldly space, that sense that could be said to provide us our body image but for the fact that such an image emerges not from the objective sight of our bodies

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<sup>67</sup> Prosser's unique contribution is to argue that transsexuality is a manifest of a failure of skin ego: a failure of the self to take up the skin as "one's own." He explores sex-change surgery and treatments as attempts for transsexuals to embody their skin. Prosser, himself a transsexual, has sought to honor and explain the lived and felt embodiment of those who change the sex of their bodies. Often, transsexuality is theorized as an unabashed buy-in of socially-constructed gender roles, which many feminists have criticized. Reading and analyzing transsexual autobiographical accounts, Prosser uses the concept of the skin ego to counter these constructivist approaches to gender and attend to the lived dimensions of the body's surface. He writes, "What makes possible the psychic translation of the surgical incursions into the body into a poetics of healing is a kind of transsexual somatic memory. Surgery is made sense of as a literal and figurative re-remembering, a restorative drive that is indeed common to accounts of reconstructive surgeries among nontranssexual subjects and perhaps inherent in the very notion of reconstructive surgery" (1998, p. 83).

[or mirror-vision] but from the invisible and subjective lived feeling of our material being. (Sobchack, 2004, p. 192)

Sacks (1970) describes proprioception as

that continuous but unconscious sensory flow from the movable parts of our body (muscles, tendons, joints,), by which their position and tone and motion are continually monitored and adjusted, but in a way which is hidden from us because it is automatic and unconscious. (p. 43)

In this way, proprioception gives an embodied sense of *balance*: a kinetic coordination of limbs and stem, registering conditions of movement.

But also, proprioception is mediator between the five senses, the tactile, and viscerality, enfolding their registers within the body, *balancing* being in the world with internal life:

Proprioception folds tactility into the body, enveloping the skin's contact with the external world in a dimension of medium depth: between epidermis and viscera... [I]t draws out the subject's reactions to the qualities of the objects is perceives through all five senses, bringing them into the motor realm of externalizable response. (Massumi, 2002, p. 58)

In other words, proprioception then allows us to act, to react, in the world.

According to Massumi, proprioception couples with viscerality, what he calls the epidermis (but here also, skin) and the five senses to create *affect* (2002, p. 61).

Oliver Sacks' *The Man Who Mistook his Wife for a Hat* (1970) is an often-cited work that narrates a number of encounters with individuals afflicted with proprioceptive disorders. One patient, Christina, or "The Disembodied Lady," could not control her movements or concertedly move without looking directly at her own body – in other words, without employing mirror-vision. Christina described her situation: "This 'proprioception' is like the eyes of the body, the way the body sees itself. And if it goes, as it's gone with me, it's like the body's blind" (p. 47). Closely, Christina's experiences capture the differences between movement-vision and mirror-vision, and their

relationships with proprioception. Christina described herself as being “pithed” (p. 51), which is a method of immobilizing a specimen to ready it for dissection. A tool is inserted into the back of skull and wiggled around, thereby scrambling the brain but allowing for some physiological functions to continue such as a beating heart. What this suggests is that there is a conceptual – and felt – synonymy between the non-propriceptive body and one about to be dissected.

Massumi argues that “movement-vision opens onto the same space as proprioception” (2002, p. 59) as it registers movements. Proprioception coupled with viscerality produces *affect* (p. 61): a gut-feeling, its intensity, a reaction to the external world, enfolded with the feeling, un-thought, pre-thought, reactive. A *feeling*. Massumi writes,

An emotion or feeling is a recognized affect, an identified intensity as reinjected into stimulus-response paths, into action-reaction circuits of infolding and externalization – in short, into subject-object relations. (p. 61)

When excitations delivered from these registers are *stilled* – no literal movements of plastinates to see or sense, no skin to touch and to connect, and no gut-feeling or viscerality to incorporate – proprioception is merely balancing a body moving through space: a body wandering. A body wandering, as it were, through a *Body Worlds* exhibition, anesthetized. Affect is disaffected. Anti-affect. Closure, indeed.

## Conclusion

A still life is a static state filled with vibratory motion, or resonance. A quivering in the stability of a category or a trajectory, it gives the ordinary the charge of an unfolding. (Stewart, 2007, p. 19)

Peggy Phelan, a theorist of performance, wrote of a memory from her childhood. She had a pop-up science book with a male human anatomy figure which she “quickly demolished” (1997, p. 1), leaving a gaping hole in the page in its place. Like the unmoved plastinate, “the demolished pop-up page illustrated the outline of a body in a state of arrested movement” (p. 2). Phelan felt that this gaping hole, as outline, “revealed the anatomy of the body more fully than the drawing” (p. 1). For Phelan, the trace was truer to the body than the scientifically-produced picture of it. Likewise, I have asserted that the body may be composed of a number of traces. But these are not the body bits I imagined laying on the dissecting room floor in the Plastinarium. They comprise a collection which maintains its own integrity through its living and feeling in the world.

In this thesis, I began with a genealogical account of the exhibition which sought to explicate closure at the level of discourse. I outlined *Body Worlds*' preferred reading and suggested that the figure of the body donor is its concomitant preferred subject. In the next chapter, I extended closure to include the process of seeing that the preferred subject enacts at the exhibition, which I called the autopsic gaze. I problematized the autopsic gaze by examining it through the work of Michel Foucault and figuring it as an instance of biopower in play. Arguing that plastinates function as models, I showed the ways in

which the autospic gaze disciplines the subject, such that the preferred reading becomes the dominant experience of spectatorship.

While I employed the theories and approaches exemplified in Foucault's work extensively, I also suggested that they cannot account for all that is at play in *Body Worlds* because they tend to assert that the body is socially constructed, an effect of discourse. I argued that the corporeality of the body must also be taken into account. Donna Haraway (1997) writes, "biology is not the body itself, but a discourse on the body" (p. 217). Her words have a double meaning: biology, and I argue anatomy, is both a discourse *about* the body, one that makes it intelligible and meaningful in a symbolic system, and a discourse *marked on* the body, one that is productive of the body's capacities and features. However, while certainly bound up in them, the body is not reducible to these discourses. Its corporeal dimensions, by existing, to a certain extent, beyond and outside of discourse, cannot be wholly contained by discourse. For *Body Worlds'* preferred reading, the implications of this are dire. Despite its attempts to carefully situate itself within particular histories and discourses, and despite its extensive public relations machinery, the exhibition cannot fully enclose the body within its preferred reading. Attending to the corporeality of the body, including its material, fleshy, lived and embodied dimensions, then, was a way for me to counteract closure.

I attended to the corporeality of the body by developing a critical approach to researching *Body Worlds* that I called critical spectatorship. The work of Vivian Sobchack and Brian Massumi provided the theoretical basis for my figuring of critical spectatorship as an embodied mode of seeing that contrasts with the autospic gaze. It does so by seeking out traces, which I conceptualized as material fragments and residues



that destabilize dominant understandings and readings, drawing on literature that explores “ghosts” and “hauntings.”

I detailed the traces I found during my fieldwork at the exhibition, and explored them productively in the final chapter. This culminated in a discussion of proprioception, that felt sense of taking up the body spatially in the world. I showed the ways in which proprioception is a necessary feature of embodiment that allows for one to have affects. By disabling proprioception, *Body Worlds* disables affect, and therefore, in many ways, any critical capacity to contest the exhibition.

In doing this project, I have asserted a unity of the body that is different than the unity of *Body Worlds*' preferred subject. It assumes a corporeality of the body that is lived and embodied, and privileges a vision of bodily integrity.<sup>68</sup> This prior integrity assumes a unity even as it privileges traces, themselves fragments. This irresolvable contradiction insists on leaving the body open as a multiple, contested and contingent entity, against the closure of *Body Worlds*.

Thus, this thesis provides an “anatomy” of the spectatorship of *Body Worlds*, offering a detailed account of the spectatorship experience, both “preferred” and critical. But other projects are needed. For example, my study has not contended with arguably

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<sup>68</sup> Perhaps my invocation of trace, then, ultimately produces a *trope*. A trope is a metaphoric or metonymic figure of speech, turn of phrase, or play on words; it is also a theme or motif in literature. Above all, a trope is generative. In its utterance it becomes part of a large system of associations (i.e., connotations), and as such, defies closure. Trace is perhaps also a particular kind of trope: the figuration. Following Braidotti (1994), a figuration is a “figurative style of thinking” that “evokes or expresses ways out of the phallogocentric vision of the subject. A figuration is a politically informed account of an alternative subjectivity” (p. 1). In other words, in the face of a scholarly, philosophical and popular tradition of conceptualizing the body and self as an ontological unity, figurations capture an embodied subjectivity that is fragmented and multiple. For example, Braidotti explores the figure of the nomad, in which “the body, or embodiment, of the subject is to be understood as neither a biological nor a sociological category but rather as a point of overlapping between the physical, the symbolic, and the sociological” (p. 4). The nomad is a figure that both crosses and straddles boundaries – in the same way that a trope opens the utterance to systems of associations and connotations – allowing Braidotti to think through established categories in new, particularly feminist, ways.

the most controversial of *Body Worlds*' displays: those of plastinated embryos, fetuses and infants. Indeed, their reading will be extremely complex. Here, I have also not dealt extensively with issues of gender and race in the display and provenance of plastinates, leaving these questions for a different project.

I've sometimes been asked what I would change about *Body Worlds* so that it would answer to my criticisms. This is an impossible question to answer. In my opinion, *Body Worlds* could not *be* if it attended to my criticisms. Abjection would take over. Affect would take over. Outrage would take over. Without closure, there is no *Body Worlds*.

What are the larger implications of this research? Like Mary Shelley's *Frankenstein* illustrated of its time, popular culture can serve as a gauge or symptom of problematic yet dominant ideologies or contested terrains (see Marshall, 1995). It is possible that *Body Worlds*, like Mary Shelley's famous work, is heralding a new "body regime" in erasing social and embodied elements that normally figure in our understanding of the human body. This has implications for the ways in which the body is understood in society at large. The exhibition appears at a time when biotechnology industries are advancing projects in cloning, stem cells, gene therapy and reproduction, and it complements these endeavors in its view of the body. What kinds of violence are made possible by this new body regime? Research into this question is begged by my study.

Other questions remain. While today the "anatomical body" has been superseded by the advent of genetic sciences, which shift the focus from structures and parts to abstract codes and expressions, from material and visual representations to "vanishingly

small” (Keller, 1992, p. 179) and digital ones (Hayles, 2005), the shift from anatomy to genetics has been neither total nor clearly marked. Anatomy has re-emerged in other widely publicized, hugely popular international exhibitions and projects; for example, the *Visible Human Project* ([www.nlm.nih.gov/research/visible/visible\\_human.html](http://www.nlm.nih.gov/research/visible/visible_human.html)), a digital and internet-based anatomically-detailed dataset generated from real human cadavers, has received a great deal of attention. How can this apparent resurgence of anatomy in popular and cultural imagination in the midst of the explosion of genetic science be explained and theorized? What does this mean for theoretical explications of the contemporary human body? What are the bioethical implications? The present focus of bioethical debates on the futures of genetic sciences is too narrow if it doesn’t include questions raised by these anatomically-inspired projects.

Aside from my usage of the term here, *closure* is also a term used by (pop)psychologists to refer to the process by which we make sense of – and thus erase – the ambiguity of a difficult, traumatic event (Van Hiel and Mervielde, 2003). Thus, closure is so powerful because, as spectators of *Body Worlds*, our trauma, which would enable us to be critical spectators, is preempted by closure already assembled for us. Thus, by denying closure and looking for traces, I opened myself up to feeling uncomfortable, disturbed and dismayed. My own process of closure has come from writing this thesis – but there are still traces that insist themselves autonomously. Ghosts of the sickly, plasticky, crayon-like odor of supposedly odorless plastinates waft their way to my nose every once in a while – in the store, while cooking, waiting for the bus. This trace remains open, but it is as much promising as it is disturbing, a ghost signifying the hope for alternative possibilities.

These possibilities are of visions of the body that are just, hopeful, and generative. In this thesis, I've have asserted that the body perhaps is not just flesh, not just culture, and not just a mix of the two, but an assemblage of traces: metonymic, generative and open – but if only we are able to sense them.

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