

Review Essay: Body Worlds and Body Worlds 2: Towards the Creation of an Instructive Museum of Man^{*}

Michael A. Di Giovine

Gunther von Hagens wants to create a “Museum of Man,” or so the *Body Worlds* founder has remarked (Jeffries 2002). This is certainly a complicated endeavor, for it at once singles itself out to be something unique, yet purports to be something that can define all Mankind; like each human, it must reveal universal human qualities yet affirm diversity; and, to borrow an Enlightenment truism, it must fuse nature and culture. As a museum, therefore, it must not only index, but in some way speak educationally to, the multiplicity and diversity of human beings in a comprehensible way.

Visited by more than twenty-five million people throughout the world, and inspiring long-running controversial “copycat” exhibitions such as *Bodies* in New York’s South Street Seaport, von Hagens’ *Body Worlds: The Anatomical Exhibition of Real Human Bodies* follows in the long line of public anatomical exhibitions that aim to educate the layman about the inner workings of their bodies through the use of preserved remains of the deceased. Perhaps because it reveals that which is commonly embargoed by scientists and morticians in the modern West (cf. Tippet 2004; Metcalf and Huntington 1991), or perhaps because it appeals to a seemingly universal penchant for morbid voyeurism (cf. Ariés 1981:608; Fitzpatrick, et al. 2003), it has become “one of the most stimulating and popular exhibitions since the grand expositions of the mid- to late nineteenth, and early twentieth centuries” (Ferrell 2005:1). Like the highly popular Universal Expositions of the past, *Body Worlds* traces its spectacular international draw to two factors integral for touristic engagement: resonance and wonder (Greenblatt 1991). Utilizing a medium every visitor possesses—the human body, aestheticized in life-like poses—and calling upon images and quotes from notable philosophers, artists and theologians of the Western Canon, *Body Worlds* both resonates with visitors and their sensibilities in an exceptionally visceral way, and also simultaneously fills them with wonder at the sight of unknown, and unseen, “universe within” the body.¹ Yet, as Michelle Ferrell points out, *Body Worlds* also resembles the famed World’s Fairs in the manner in which it stokes “public curiosity of ‘others’ to draw visitors...of varying backgrounds together” (2005:1) by displaying human beings for “profit, entertainment and edification” (Hinsley 1992:345).

The three separate *Body Worlds* exhibitions, circulating throughout North America since 2001, reveal von Hagens’ intention to be an “aesthetic and instructive representation of the inside of the body” (Van Dijk 2001:1). Although each of the three exhibitions differ slightly in their appearance—which is largely determined by the quantity and particular forms of the specific anatomical specimens on display—all are similar in their basic layout, contextual framework, and use of “authentic” human specimens. Specifically at Chicago’s Museum of Science and Industry’s (MSI) 2005 incarnation of *Body Worlds*, where fieldwork for the first part of this review was conducted, the exhibit occupied two large adjoining rooms totaling 20,000 square

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feet, which were transformed into a singular exhibition space through the employment of black-clothed barriers adorned with text-and-image banners, display cases featuring dissected organs slightly below eyelevel, and pathways bordered by white pavers and green plastic plants suggestive of a garden atmosphere. *Body Worlds 2* and *3* repeat this general layout.² With few exceptions other than the basic spatial constraints of each host museum, and the continual innovations in exhibit presentation by *Body Worlds* designers over time, a particular exhibition (*Body Worlds*, *Body Worlds 2* or *Body Worlds 3*) does not vary much from museum to museum, and the plastinates within each collection are not interchangeable.^{3,4}

Each exhibition consists of some two hundred human cadaver specimens, including roughly twenty complete human bodies, which have been preserved through a special technique termed “plastination.” Patented in 1977 by von Hagens as “Polymer Impregnation of Perishable, Biological Specimens,” plastination halts the natural process of cellular decomposition through a two-part procedure whereby fatty tissues and bodily fluids are first replaced by acetone, and then exchanged with a polymer solution that can be physically manipulated before hardening (figures 1 and 2). The resulting specimens are plastic in both the substantive sense (consisting of about 70 percent polymer) and in the formative sense (able to be shaped or molded). Indeed, while the majority of the “plastinates” are dissected organs in display cases, the draw of these exhibitions comes largely from the numerous full-body specimens—shaped in a variety of positions resembling three-dimensional Vesalius drawings—that punctuate the exhibition space. Despite the highly aesthetic quality of these plastinates, von Hagens consistently proclaims the exhibitions’ primary mission as anatomically instructive, bringing “health education” to a targeted “lay audience” (*Body Worlds* 2007a:1) by revealing both the universal ways human bodies respond to everyday activities and the internal diversity of each human being. As was the case at both MSI exhibitions, the *Body Worlds* exhibition design can also include a “medical information” desk, often staffed by volunteers, at which a few plastinated organs were available for hands-on examination.

Yet what meaning is ultimately made of these exhibitions in the minds of the millions of European, North American, and Asian visitors who have attended since 1995 seems to vary as much as the audience itself, and not a few questioned what, exactly, the exhibit is actually supposed to instruct.⁵ The following remarks from 2005 illustrate the larger sense of visitors’ uncertainty between *Body Worlds*’ artistic and scientific qualities—a primary concern for an exhibit billed as anatomically educational and housed in a science museum, and one that “clearly reflect[s] a number of historical tensions” (Moore and Brown 2004:218):

This exhibit was too revealing and disrespectful to the people whose bodies they are, even though they donated their bodies to science this is not the way to show it. [Erin, guest book entry, March 2, 2005]⁶

Interesting but offensive. I had the feeling this was “freak art.” [anonymous, guest book entry, March 5, 2005]

Anatomy professor 1: What was his original intention? It seems that it might go beyond science to art a bit.

Anatomy professor 2: There's a redundancy here—you could show the same [thing] in 5 or 6 cadavers.

Anatomy professor 3: But the way it is presented gives the layperson a good idea.

Anatomy professor 1: But if it's for the layperson, does that go beyond science?

[Anatomy professors from a Michigan community college, interview with author, April 24, 2005]

Though many either praised or criticized the “combination of art and anatomy that the display presented” (anonymous, guest book entry, February 14, 2005) or “the artistic view of human anatomy [which was] very educational” (anonymous, guest book entry, February 3, 2005), one guest book entry by “Beth” [last name withheld] gives particular insight into the complexity of emotions and the uncertainty of the stylized message that *Body Worlds* present:

I'm really not completely sure how to feel about this exhibit. I understand the advancements in medicine are important. But I do not understand why the artistic portion was necessary. I really do appreciate the tactfulness of the exhibit. I was offended by the plastinate with a hat and also the horse and rider. Some of this I do not think was necessary, especially at an event where young children could see. I personally was not offended by the nudity because that is the way God created us. Adam and Eve didn't know what clothing was before they sinned. I was very upset by the fetal development of the exhibit. Although, I do not agree with it once being live—I believe that a plastic replica should be placed in front of each and every abortion agency all over the world. Maybe ladies will think twice. [guest book entry, February 26, 2005]

If it is not clearly anatomical, but not clearly art; if it is not religious but has religious overtones; if it is not for children but is a learning experience from which all should benefit; then what, and how, is it instructing? After first noting the range of visitors' reactions at *Body Worlds*, this review will explore the exhibit's method of presentation and contextualization of its objects as it appeared at the MSI in May 2005, in an effort to pinpoint how it accomplishes its task of providing an “instructive representation” of the human body. A concluding analysis of the MSI's 2007 *Body Worlds 2* exhibition will further highlight some of the key issues raised in this traveling series.

Objectives and Theoretical Aims of this Review Essay

The objectives of this review essay are two-fold. The first is to review a series of exhibitions that is, in many ways, problematic for museums to stage. The contention that the museum community feels somewhat ambivalent about *Body Worlds* is well-founded. On the one hand, *Body Worlds* has been, and continues to be, a controversial exhibition. While much of the public's outcry inevitably stems from its *Wunderkammer*-like display of human and animal corpses in poses that seem to blur the line between science and art—something that has been exacerbated by rumors that von Hagens' Institut für Plastination procured its first bodies in unethical ways—von Hagens' own showmanship has particularly drawn critique.⁷ Though the media had portrayed von Hagens as more of an entertainer than an educator in the early years of *Body Worlds* (cf.

Ferrell 2005:29), the icon of a Barnumesque performer was brought to the fore in 2002 when he made headlines for staging the first public autopsy in 170 years in an East London art gallery prior to the opening of *Body Worlds* in the United Kingdom; the televised spectacle caught members of its live audience gasping and gagging (Stephens 2007:320). While von Hagens contextualized the public autopsy in the same way he does *Body Worlds*—"that he was merely following in the tradition of the great Renaissance anatomist Andreas Vesalius, who educated the world with such procedures in the 16th century" (Petropoulos 2002)—this effort at "democratizing" anatomy (Hamburg 2006) was portrayed more as commodifying and sensationalizing the dead. It did not help that von Hagens—a consummate marketer who sells a wide variety of *Body Worlds* memorabilia from coffee cups to sneakers, and who has even managed to place *Body Worlds* in the Bond film *Casino Royale*—"cheerfully" identified himself as the "Walt Disney of Death" on a subsequent DVD *Anatomy for Beginners* (Stephens 2007:320); as an interview with Stuart Jeffries suggests, von Hagens makes it clear that he welcomes this controversy as a means to raise awareness for his exhibitions. "It is an honor to cause this controversy," he remarks (Jeffries 2002; cf. Stephens 2007:321).

Indeed, in private discussions with museum professionals—both those who have staged the exhibitions and those who edit several different academic journals for the community—there is a clear sentiment that, at best, these are quintessential blockbuster exhibitions—those often "regrettable" tourist attractions that cater to non-regular visitors (De Montebello 2004:157) by emphasizing popular or sensational themes.⁸ In speaking of such "democratizing" blockbusters, Philippe De Montebello warns:

when the visitor, as opposed to the work of art, occupies center stage, he is likely to be less well-served, not better served...To ensure that he is counted at the gate, he will not be challenged. Instead, most likely he will be greeted, through the programs that are offered, at his present level of...sophistication. By definition that is not a broadening or enhancing experience of the kind we [museum professionals] are obligated by mission to provide. [2004:157-158]

Though *Body Worlds* clearly challenges its visitors—and its reviewers—by blurring the categories of science, art, and faith, this sentiment can nevertheless be perceived in the ways members of the museum community speak about *Body Worlds*. As a museum's junior staffer recently remarked, "[our museum] didn't have a mission statement until a few years ago, and many inside say that it was a response to *Body Worlds*...When planning an exhibition, people now say, 'I don't want this to be another *Body Worlds*'" (interview with author, January 7 2009). It is even more evident in the way that the professional museum community chooses *not* to speak about it; to date, reviews of this exhibition have been surprisingly rare in museum journals. Rather, the task of reviewing and discussing the complex implications of staging *Body Worlds* in a public museum has been largely relegated to the medical community. Thoughtful articles have been written by biologists (Moore and Brown 2007), medical sociologists (Walter 2004), and historians of sexuality (Stephens 2007); and have been published in journals devoted to medicine or physical science, such as *Sociology of Health and Illness* (Walter 2004; vom Lehn 2006), the *Journal of Medical Humanities* (Moore and Brown 2007), *Body and Society* (Hirschauer 2006), the *Journal of Historical Medicine* (Connor 2007), *Chemical Heritage* (Selvaggio 2006), and the *American Journal of Bioethics*, which dedicated nearly an entire issue to the exhibition (Vol. 7,

issue 4, 2007). Reviews of the exhibitions in the United States, which significantly oscillate between praiseworthy and critical, have been featured in local newspapers and mass-distributed publications such as *The Times Supplement* (Shaw 2008), *Men's Health* (Jones 2007), and *Touchstone: A Journal of Mere Christianity* (Reiners 2008).

The second objective of this essay is to use this venue to provide an unorthodox, and quite visceral, example of the ways in which a touristic experience within an exhibitional space can be truly educational and transformative. Museum practitioners and theorists alike have generally shied away from officially calling their patrons “tourists,” preferring the terms “visitors” (of which only a subset of the most transient or under-informed would be called “tourists”), “guests,” or “clients” (Doering 1999); yet in considering the inordinately high visitor numbers of *Body Worlds*, the use of the term “tourist” is particularly appropriate. While not always articulated, there has always been a lurking sense in academic discourse that tourism is somehow frivolous—that it is localized to the “new leisure class” easily duped by “staged authenticity” (MacCannell 1999:91-107) or craving “pseudo-events” (Boorstin 1994:79-80), although Nelson Graburn (1983) (among others) has powerfully argued against this dominant conceptualization. Graburn drew on Victor Turner’s understanding of pilgrimage and ritual to point out that tourism is undertaken to experience a formative change from the everyday akin to a “rite of intensification” (Chapple and Coon 1942:398-426). And although the negative aspect of commodification factors prominently into his theory, John Urry (2002) created another significant paradigm shift by contending that tourism is predicated on a “tourist gaze” that decontextualizes a site from its social-spatial milieu, and imposes a narrative claim upon it. Integral to his theory is that each tourist has his or her own gaze that is at once “as socially organized and systematized as is the gaze of a medic,” yet, I would add, also individuated. The tourist gaze “varies by society, by social group and by historical period...[and] is constructed in relationship to its opposite, to non-tourist forms of social experience and consciousness” (Urry 2002:1).

Building on these theories, and informed by the notion that a museum object is likewise contextualized by a “way of seeing” (Berger 1977; Alpers 1991), I have elsewhere contended that tourism is not only voluntary and temporary, but primarily perspectival (Di Giovine 2009); it is predicated less on the economics of movement than on the ways in which a site’s contextualization stokes a participant’s memory to create a meaningful experience.⁹ In undertaking fieldwork at the MSI’s two *Body Worlds* exhibitions, it became clear that one’s memory is called upon, indexed, and processually transformed as one peregrinates, physically and mentally, throughout the space.

I use the term “peregrinate” purposefully here, for it is clear that, in many ways, a trip through *Body Worlds* is intended to resemble a Turnerian pilgrimage—one that is transformative (like all touristic encounters) but that also creates a strong sensation of *communitas* among its disparate participants. While medical sociologists have noted that *Body Worlds* visitors “commented on the sense of human community and unity of races after seeing [what lies] beneath the skin” (Moore and Brown 2007:253), Turner’s term *communitas* means more than merely a sense of “community”—a term pregnant with associations of social status, political organization, and a geographical sense of common living (Turner 1974:201). Rather, occurring in the liminal phase of rituals wherein individuated statuses are suspended as individuals pass from one state to

another, *communitas* is “a spontaneously generated relationship between leveled and equal total and individuated human beings, stripped of structural attributes” (Turner 1974:202). Turner also calls *communitas* “anti-structure” to convey the sense that it is an inversion—or, rather, a subversion—of traditional social structure, the “‘patterned arrangements of role-sets, status-sets and status-sequences’ consciously recognized and regularly operative in a given society and closely bound up with legal and political norms and sanctions” (Turner 1974:201).¹⁰ It is the transcendence of traditional boundaries that mark daily social life, a recognition among individuals temporarily stripped of their social trappings that they are all the same. “*Communitas* is universalistic,” Turner writes (1974:217). At the same time, the structure never passes away; Turner recognizes that “seeking oneness is not...to withdraw from multiplicity; it is to eliminate divisiveness, to realize nonduality” (Turner 1974:217). Indeed, many of the comments—whether laudatory or critical of the *Body Worlds* endeavor—reflect some sense of this sentiment, a temporary feeling of unity in the diversity that is Mankind.

There is also a second aspect to pilgrimage, one that is perspectival, and that occurs deep in the participant’s consciousness. Ian Rutherford (2000) points out that many cultures do not base their concept of pilgrimage on movement, but rather on the act of viewing. As Rutherford shows, the ancient Greek practice was called *theoria*, or “contemplation while viewing,” and in India it is expressed in the Hindi as *darshan* (or in Sanskrit, *darshana*), which also means “contemplation” and which comes from the Greek verb *derkomai* or “look intensely.” *Darshana*, like *theoria*, was not limited to man-made objects, but could also be directed to the works of nature that, like the bodies on display in *Body Worlds*, could be singled out by the gaze (Rutherford 2000:139). Through the exhibition design, including banners emblazoned with philosophical quotes, visitors were urged to not only gaze upon the plastinates, but to contemplate them in relation to their own life. As each visitor brought their own memories, beliefs, and expectations to the exhibition, the focus of this contemplation varied: some pondered the presence (or lack) of “intelligent design” (Moore and Brown 2007:250); others considered their more mundane practices of a healthful lifestyle; and still others reflected on their own mortality.¹¹

Visitors’ Reactions: Bodies and Memory

An especially pertinent realization emerged quite early on in the fieldwork—the visitor demographic was noticeably skewed in favor of highly educated individuals who often had some scientific background beyond simple interest in anatomy or in the highly publicized exhibition. Indeed, although they were not formally trained in anatomy—and many had never seen a cadaver—a large number (80 percent) of private adult individuals (i.e., non school groups) did not consider themselves lay people; other than very few doctors (and they usually accompanied other people), they were either anatomy instructors, nurses, science teachers, nutritionists, or massage therapists, and one woman who said she was a practitioner of the “Feldenkrais method of movement.”¹² Nearly all of these informants immediately offered positive comments, 60 percent of which referred directly to the exhibition’s benefits to anatomy. Although nearly all indicated that it was “useful” and a “benefit” to them, upon further elaboration, however, many questioned its specific anatomical value, as this scientist did: “On a scale of 1 to 10, it was a 10. Eye-opening—[though] not at all anatomical” (interview with author, May 9, 2005). Furthermore, over half of the total adult population interviewed (both “laypersons” and

professionals) had specific ailments or anatomical questions for which they particularly came to learn about, ranging from sciatica and arthritis (the most common two) to their own pregnancies.¹³

This data seems to coincide with that of a survey conducted on behalf of *Body Worlds* by Ernst-D. Lantermann of the Psychological Institute of the University of Kassel, Germany, between 1999 and 2004.¹⁴ In his survey, 84 percent indicated they knew more about the human body after their tour of the exhibition, and 77 percent felt a “deep reverence of the marvel of the human body” (*Body Worlds* 2004:4). Lantermann was able to conduct a second interview with 30 percent of the visitors who were originally polled when they visited the 1999 Vienna exhibition six months earlier. He notes that 33 percent were following a healthier diet, 25 percent engaged in more sports activities, 14 percent continued to be more aware of their bodies on a regular basis, and 9 percent consumed less tobacco and/or alcohol (*Body Worlds* 2004). These statistics are indicative of *Body Worlds*’ instructive nature; not only did the experience create an impact at the time of visitation, but it was also shown to have produced very material results for visitors’ future activities on both the individual and social levels. These responses also underscore the very interactive nature of *Body Worlds*; the experience, though not often easily defined by the informants, touches the visitor and contributes to future action.

That the exhibit “touched” many a visitor is not simply a metaphor; the desire to physically touch—to bodily interact with the plastinates on display—is especially noteworthy (figure 3). Visitors seemed interested in holding the liver and lung specimens at the medical desk, often questioning their authenticity; to these laypeople, reaching out and physically touching the inside of a human body was desirable yet almost incomprehensible. The guest books also contain a number of passages where visitors confessed that they “had to constantly control the urge to touch” (anonymous, guest book entry, February 8, 2005) the full-body plastinates, and requested the staff to provide further possibilities to touch body parts (anonymous, guest book entry, April 16, 2005). One could also observe laypersons and anatomists alike grappling with this urge. While laypeople tried to make bodily contact with plastinates by extending their own hands to the hands of the specimens, anatomists would often be seen tracing the muscular or nerve systems with their fingers. Security guards were heard most often admonishing the guests to step away from the plastinates. And on more than one occasion, visitors, recognizing my own museum badge, asked me to replace the fallen chalk that the Teacher plastinate usually holds. “We touched,” one mother confessed, sheepishly handing back the dropped chalk (interview with author, April 29, 2005). Indeed, one volunteer guard commented, “I think this is the most interactive exhibit we’ve ever had, and we don’t even have a computer” (interview with author, May 9, 2005).

Interaction is key to constructing a formative experience for both medical students (Walter 2004; vom Lehn 2006) and tourists (Di Giovine 2009), and it factors heavily into theories of effective learning (cf. Dale 1946). Yet the physical touch is but one form of interaction; so too is speaking. The gaze is yet another. While certainly not negating vom Lehn’s observation that “people’s experience of the plastinates arises in and through social interaction and talk” (2006:241), as I have argued elsewhere (Di Giovine 2009:149, 171), it is primary through the gaze that tourists come into contact with an authentic site, and *Body Worlds* is no exception. Authenticity is a highly contested word, especially for *Body Worlds*; reviewers have gone to great lengths to

ascertain what, exactly, of the plasticized bodies could still be considered “authentic.” But authenticity is always associated with the object’s ineffable life history; as Walter Benjamin stated, it is the object’s “presence in time and space, its unique existence at the place where it happens to be” (1968:220). Its “unique existence,” Benjamin writes, is “determined [by] the history to which it was subject throughout the time of its existence. This includes the changes which it may have suffered in physical condition over the years, as well as the various changes in its ownership” (1968:220). It is also conceptual, a discourse that moves like an aura between the minds of men:

“Authenticity” animates objects, making them as real an actor as any other social being; it conveys the sense that the monument not only has a life history, but a life—a life which follows a biological conception of linear time, and subject to the same constructive and destructive forces of history and society...And in that auratic interaction, both life histories [of the gazer and the object] will contextualize the event; they will be called upon, indexed, and experienced by both parties with durable longevity. [Di Giovine 2009:26-27]¹⁵

The variability of visitors’ responses suggests a “tourist gaze” that is socially constructed yet individualized and dependent on the memories of its practitioners. Indeed, despite the relative silence of the place, which seems to have been implicitly suggested through the intimate design but rarely explicitly imposed, it was clear from post-visit responses as well as observed reactions within the space itself that many visitors were also interacting socially with the specimens on display.¹⁶ Especially for the laypersons observed, the postures, close proximity to the bodies and often intense stares differed from those observed in art or anthropological museums; arms were often crossed and many were observed touching their own face as if they were interacting with a living person with whom they were slightly uncomfortable. Despite the fact that vom Lehn suggests that visitors “inspect the exhibits as visitors to an exhibition”—that “their conduct is civilized and can be likened to that of gallery visitors” (2006:241)—these actions, coupled with informants’ emotional responses, seemed to suggest a human-to-human manner of interaction that diverged from the common “civilizing” gaze ritually inculcated in public museums (Duncan 2004:13-16).¹⁷

It also diverged from the clinical gaze that is inculcated in medical school. As sociologist Tony Walter states, “It is conventional wisdom in the history and sociology of medicine that a latent function of dissecting cadavers in medical school is that the students learn clinical detachment, that is, they suspend personal feelings and see...the body with objectivity” (2004:464). Stemming from Descartes’ and other early modern scientists’ treatment of the body as machine (Synott 1992; Walter 2004:465), the medic’s gaze (Urry 2002:1) is a socially constructed way of seeing the body that consciously attempts to deny the personal biography of the patient, so as to identify and treat malfunctioning bodily structures in a uniform and unbiased manner. Yet as Pierre Bourdieu has pointed out, a biography is but a discourse of events that

tend or pretend to get organized into sequences linked to each other on the basis of intelligible relationships...[It] is always at least partially motivated by a concern to give meaning, to rationalize, to show the inherent logic, both for the past and for the future, to make consistent and constant, through the creation of

intelligible relationships, like that of the cause (immediate or final) and effect between successive states, which are thus turned into *steps* of a necessary development. [1987:2]

Though purporting to be detached—even to the point, Walter argues, that it may create alienation between the body and self, and between a doctor and a patient (2004:464)—the medic’s gaze necessarily brings, in a ritualized fashion, a set of remembered narratives to the body that will inevitably recontextualize it as a (functioning) machine. What was once a body becomes a learning tool, and what it instructs varies day-to-day. It is at once a rite of passage, a site of exploration, and a visceral illustration of details previously studied in anatomy books. But this is only possible—it is only made meaningful—by bringing one’s unique set of memories into contact with the newly re-contextualized body. It is in that contextualization that new meaning is made.

Body Worlds also denies its gazers the donors’ life stories, but it does not seem as if it is inculcating in tourists a detached medic’s gaze. Even Walter notes in the abstract to his article that *Body Worlds* “is less a popularized anatomy lab than a shrine to the human body, a shrine in which medically untrained people can look at the body in new ways” (Walter 2004:464, also quoted in Moore and Brown 2007:237). Later, Walter continues:

[N]ot needing to develop clinical detachment, visitors are free to develop other orientations toward the dead bodies on display. It would seem theoretically possible for some visitors to adopt the beginnings of a medico-scientific gaze, without the emotional defences that accompany this in the medial student. [2004:475]

Indeed, though Charleen Moore and C. Mackenzie Brown point out that it is standard legal practice to anonymize donors (2007:242), commentators are split between those who feel it is done to foster clinical detachment (Walter 2004), and those who feel it is an act of commodification (Ferrell 2005). As Arjun Appadurai has argued, commodification, too, is an act that often denies an object’s life-history only to recontextualize it anew in terms of value (1988:3-4). Value is imbued on an object through another socially institutionalized framework, another recontextualizing gaze. For “economic objects,” Georg Simmel writes, “subjectivity is only provisional and actually not very essential” (1978:73). The loss of subjectivity is often exacerbated the farther removed an object is from its viewer: “As commodities travel greater distances (institutional, spatial, temporal), knowledge about them tends to become partial, contradictory and differentiated...[which often] lead to the intensification of a demand,” Appadurai has written (1988:41-46). The commodity aspect of these exhibits did not go unnoticed by visitors to Chicago’s MSI, either. In addition to long lines that may have served to discourage some, there was a double monetary cost for entering the exhibit; the visitor must pay for entrance into the museum itself, and then purchase a separate ticket that cost from \$17.00 for students to \$25.00 for general adults, with a \$4.00 additional charge for audio headsets. Despite von Hagens’ stated “democratization” effort, whereby the exhibit is “targeted mainly to a lay audience” (*Body Worlds* 2005:1; cf. Hamburg 2006), such costs may dissuade those who do not have a strong preconceived need or desire for this experience, as one guest book entry noted

(February 12, 2005): “The tour should be free for the public—for the ‘lay people.’ No, only for people with money.”¹⁸

Though these plastinates physically travel—across the country, across the oceans, across planes of existence—and though paying visitors are alienated from the plastinates’ personal biographies, tourists seemed to treat the bodies less as commoditized objects and more as another individual with whom the lay visitor was interacting, as one emotional guest book entry noted:

My eyes filled with tears over and over as I looked and was inspired by the design God has assembled to be us—but my eyes were also filled with tears, too, knowing these were daughters and sons—once alive and now forever captured—frozen in a moment. [anonymous, guest book entry, February 4, 2005]

Informants expressed a keen interest in the life histories of the specimens that went beyond the information used to contextualize them as anatomical specimens, commodities, or museum objects. Numerous respondents reported that they felt both “wonder and melancholy...these people are dead” (anonymous, guest book entry, May 9, 2005), and asked that *Body Worlds* “provide descriptions of the deceased” (anonymous, guest book entry, April 21, 2005). Looking at a plastinate, one young girl even asked her mother, “Who’s that man?” (field notes, May 11, 2005).

The desire to “know” those with whom one comes into contact fosters “social comparisons” that are not only psychologically “a key determinate of affect and self-esteem” (Tyler and Smith 1998), but is also integral in making meaning in the mind; it gives depth and understanding to an interaction. James Wertsch, in asserting the “omnipresence and importance of narrative in human activity” (2002:56) shows that in the mind, nothing becomes something when a narrative is affixed to it; abstraction is concreted when it is inserted into a narrative. “Knowing” someone connotes some form of interactive connection with the person; it indicates that there is a narrative that both share, if not in a past physical experience, then at least in one’s remembered thoughts. “We are especially ‘story-telling animals’ when it comes to recounting and interpreting our own and others’ actions—the motives that lie behind them, the settings in which they occur, the outcomes they produce, and so forth” (Wertsch 2002:56). The abstraction of previously hidden biological dimensions, which *Body Worlds* seeks to expose, is concreted not only through the plastinated bodies themselves, but by ascertaining their very identities. This point is emphasized by the volunteers stationed at the “medical information” booth, who report that a majority of the questions they fielded regarded the identities and personal histories of the individual cadavers (interview with author, May 9, 2005)—information that was specifically withheld by the *Body Worlds* organization. Indeed, a large banner that directly faces visitors as they enter the exhibit anticipates such a response, and states:

The Body Donors

The Specimen in this exhibit are from Body Donors, individuals who during their lifetime bequeathed that upon their death, their bodies could be used in this exhibition. The identities, ages and causes of death of the individual Body Donors are not provided in these exhibits because the exhibit focuses on the nature of our physical being, not on providing personal information on private circumstances.

The Body Donors chose to participate in this program for a variety of reasons. All wanted to contribute to the medical enlightenment of laypersons, and without their contribution, this exhibit would not be possible. For their clear vision and tremendous generosity, we are deeply thankful.¹⁹

The concern for the perpetuation of body donors' memories was but one example of the central role that memory plays in this exhibit. Interviews and guest book comments often reveal *Body Worlds'* powerful efficacy to stir collective and individual memories in the visitors' minds. Informants often recalled family and friends who suffered ailments whose bodily manifestations were displayed, such as lung cancer or arthritis. One woman, when asked what she thought of the exhibit, exclaimed, "Aack! My father had lung cancer....You can distance yourself from it until it hits home" (interview with author, May 11, 2005). Even more often, informants spoke of their personal medical experiences, as in the emotional case of a woman twenty-four weeks into her pregnancy:

I definitely [think] this was worthwhile....It was interesting to see how a baby that little was giving me such hard kicks...[I felt both] wonder and melancholy...Melancholy that these people are dead. [She thinks a moment.] I also had a miscarriage at 6 weeks—to see a baby at that age..." [interview with author, May 9, 2005]

Even medical specialists, who may be prone to treating the bodies with a Urry-like "medic's gaze" nevertheless were not exempt from mixing personal memories with their professional understandings, as this discourse between a registered nutritionist (M) and her daughter, a medical doctor (D), reveals. Remembering the plastinated fat exhibit and reacting to the bodies, the doctor recalled her revulsion of overweight cadavers she had to dissect in medical school:

D: The fat was gross... I'm amazed that it resonated with my [medical school experiences]... I hated all that fat."

M: The diseased organs were [particularly] interesting... You can personalize it. Sciatic nerves... you can get a better diagnosis than a doctor can give you.

D: It's more valuable for the lay public—I even did it; I looked at a skeleton to self-diagnose in a very efficient manner. ... [It's like an] overview of *Gray's Anatomy*. [interview with author, May 5, 2005]²⁰

Not only were visitors constantly aware of the donors' concretized mortality, but it also triggered a process of grappling with their own inevitable demise. It was "creepy to think that they are dead—that went through my mind" (anonymous, guest book entry, May 11, 2005), wrote one guest. "Jose" writes in the guest book, "Simply outstanding, from life of a human to nothingness. Simply a exhibit on a frame. Full of thoughts and dreams that once were" (Jose, guest book entry, May 3, 2005). The importance of these inscriptions once again centers on memory, that which makes all humans individual yet also provides a fleeting link to *sui generis* society. Though death erases one's consciousness and causes the physical body to decay, hidden from sight under the ground—or plastinated, stripped of its very identity and recontextualized within the walls of a museum exhibition—his or her memories can live on into the future. These plastinates embody and convey the very notion of the inexorable transience of life. Just as life is

transient, so too is one's consciousness; in this way, Man creates the objects that are of such importance to museums in order to embody, preserve and convey his or her memories to future viewers. Interviews indicate that most visitors make this connection; they seem to realize that plastination is an illustration of humanity's constructive nature. Humans are constructive so as to directly oppose time, which is destructive. As Sigmund Freud states, such action is "a demand of immortality [which] is a product of our wishes too unmistakable to lay claim to reality" (1957:305). It is in this way that a visit to *Body Worlds* is, as "TJM" writes, "simultaneously a lesson about life and a *memento mori*" (TJM, guest book entry, May 3, 2005).

As TJM realized, *Body Worlds* in design and function embodies this humanistic Catholic narrative claim, "remember thy death" (Meinwald 1990:1), which became popular particularly among German and Flemish artists during the mid-fifteenth century's humanistic turn. The plastinated objects in *Body Worlds* quite literally resemble "*memento mori*." images themselves, which personified Death as skeletons or bodies in advanced states of decay (cf. Ariès 1985). While some were "vanity" sketches depicting Death coming to characters taken to vice and sin—a typical motif in Medieval Catholic art—what truly set *memento mori* images apart from their theologically moralizing predecessors was that the majority concentrated on the indiscriminate nature of death. Death attacks all, whether they are young or old, rich or poor, nubile singles or lovers in mid-embrace (Janson 1940); gazing upon these images, were urged to be conscious of both the transience of life, as well as the omnipresence of death in life itself (Meinwald 1990:1). Like the plastinates in *Body Worlds* seem to do, these images were created to stir one's memories of remembered instances of death and suffering, in order to instruct the Catholic to proper action. Calling the Late Middle Ages and early Renaissance a "memorial culture," Mary Carruthers underscores the importance of memory in Medieval learning (1990:8). As the exhibit's humanist quotes and medieval anatomical drawings suggest, von Hagens clearly has intended for his specimens to instruct in the same way. Suggesting *memento mori*, he begins an interview by saying, "*Remember that you are mortal*. This is suggested to everyone that attends this exhibition, especially by the plastinates themselves. I was what you are; you can be what I am" (Institute for Plastination 2004, emphasis added).

Moving Forward, Looking Back: Inspiring Action in a Constructivist Exhibition

One security guard stated that the MSI's exhibit is uniquely successful because it "thinks outside of the box" (interview with author, May 9, 2005)—or, rather, because it induces others to think beyond a singular narrative frame. *Body Worlds*' instructive efficacy lies in its successful manipulation of individual and collective memory to create meaning that extends "outside of the box" that is the museum's walls. Visitors must negotiate a complex series of narrative frames, which serve to actively contextualize and re-contextualize the objects on display much like an individual's memory does. As one progresses through the exhibit, an iterative memorializing process will occur, where memories will be called forth, contextualized by one narrative frame, utilized to make further meaning, and then re-framed once again. Through this dialectic, von Hagens' message, "*Remember that you are mortal*" (Institute for Plastination 2004), or rather, *remember that you are Man*, becomes clearly understood and concretely manifested in the plastinates. *Communitas* becomes a physical truth.

In its exhibition design, *Body Worlds* seeks to embody the plastinates with this memento mori narrative claim as a means of promoting *communitas*. Even in this age of scientific advancement, where interior bodily functions can be preserved in life-like color and texture, mortality is still one of the only biological truths about which all can be fully certain. Universal mortality of the physical is also one phenomenon that binds together disparate cultures—with often extraordinarily diverse belief systems and worldviews about the body’s interior and exterior truths.²¹ This claim is also pertinent when considering a comment by von Hagens’ wife, Angelina Whalley: “Every person is unique. This is expressed not only in their visible outward appearance but also inside, no two bodies are exactly alike. The position, size, forms and attributes...determine the features of our ‘inner face’” (Institute for Plastination 2004). Despite their interior and exterior differences, on this earth all mortals are, in the end, mortal.

As Lantermann’s follow-up survey (*Body Worlds* 2004) quantitatively demonstrates, committing to memory a narrative claim such as memento mori can also inspire very concrete actions in the future (Connerton 1989:6). Yet while the physical processes in the brain might build upon each other, memory is not simply a cumulative, concretized thing but “a process in which a new experience is first perceived, evaluated and then made meaningful within a preexisting context” (Geary 1994:160). Essential to this iterative process is its active selectivity, whereby previous understandings frame the way in which the individual makes meaning and remembers new events. Despite the unique nature of each discrete *Body Worlds* specimen, ensuring the anonymity of its identity allows von Hagens to easily reframe it as a teaching tool with a specific narrative to be imparted and understood for the viewer. “Each specimen demonstrates different aspects of bodily structures. Each specimen permits different insights into the ramifications, *raises or answers* new questions,” the video’s narrator states (Institute for Plastination 2004). With this statement, it is clear that the anonymized corpses are key to von Hagens’ Constructivist ethos. Taking a diversity of gazes in an audience for granted, a Constructivist theory of education posits that “the interpreter(s) construct(s) a view of the site but from the perspective of a wider maturity of experience” (Brooks and Brooks 1993 quoted in Copeland 2006:83). Yet in “mediating the interpretation to a public, that maturity of experience is often hidden and a more didactic account is presented” (Brooks and Brooks 1993 quoted in Copeland 2006:83).

Indeed, *Body Worlds* attempts to put forth a cohesive narrative, all the while understanding that the variety of experiences individual tourists take to the exhibit could potentially refract a multiplicity of interpretations. Von Hagens therefore emphasizes his role in creating *communitas* by revealing the complete universe below the surface of one’s body. Von Hagens continues, “I do not display people as incomplete specimens. I do not use dissection to remove organs; instead, I provide insights into bodily interiors” (Institute for Plastination 2004). These insights can only be achieved through the manipulation of not only the physical cadaver during the plastination process, but also the manipulation of its life history. While often the cadaver’s bodily structure is conducive to a particular pose, as in the case of the Muscleman, the most muscular specimen on display, physical examples of this narrative recontextualization are evident. A number of visitors, for example, comment on the presence of blackened lungs on those plastinates idealized as athletes; in the American mentality, athleticism and heavy smoking usually do not coincide.²² Yet precisely because this habit—this aspect of the authentic person’s life history—has been erased, visitors tend to look beyond it, understanding the specimen as a material manifestation of the narrative that it is made to embody within the exhibition’s context.

Such selectivity is intended to underscore the exhibition's expressed revelatory nature, by unearthing secrets that would normally be covered to the naked eye, or to the common mores of contemporary society. Von Hagens and the *Body Worlds*' staff reiterate the official *Body Worlds* video's claims that the manipulated specimens are opened as "doors or drawers" (Whalley) so that we can "look inside" (von Hagens), to "unlock the innermost secrets of the body" (Narrator) (Institute for Plastination 2004). This dynamic "lifts the veils" of life, as one enthusiastic volunteer stated (interview with author, May 11, 2005). He explained, "We go through life with a series of veils. These are [social] veils of pregnancy and sex. These are [personal] veils of death. When you [finally] pass through it, you experience it [alone] and don't pass it on...[These plastinates] lift those veils" (interview with author, May 11, 2005).

This dialectical and iterative process is specifically achieved through the *Body Worlds*' exhibition design. Visitors negotiate a complex series of frames that draws on individual and collective memories to make sense of their surroundings. Each text banner that hangs from the wall, each reproduction of anatomical sketches, each plastinate itself is decidedly a signpost, a relatively open-ended cue that serves to guide the visitor's mind to call forth coinciding, yet individually understood, remembered narratives. Indeed, like the memory of its visitors, the *Body Worlds* exhibit is itself processual in setting—one moves forward yet is constantly cued to look back, to delve deeper into personal and collective memories to draw meaning from the exhibit in its totality. Just as each individual body system—each "body world"—combines to create a whole that is greater than simply the sum of its parts, so too is this exhibit predicated on the basis that it is greater than simply the anonymous specimens contained within.

Although the exhibit at Chicago's MSI was housed in two large adjoining spaces that, when empty, most likely resemble an airline hangar in size and shape, the first *Body Worlds* is designed to evoke a sensation of natural intimacy by interspersing full plastinates across a landscape of white paving stones, imitation plants, and relatively narrow pathways—all of which combine to resemble an English garden (figures 4 and 5). Display cases housing selected plastinated body organs can be found interspersed within the path itself. Nature, coupled with Man's "natural" state, is a central framing device for *Body Worlds*' instructive mission. The "naturalness" of these nude bodies—which produced many a squeal from schoolchildren but was quite permissible in the minds of even the seemingly most self-defined conservative visitors—is underscored when framed in this context. It is as if the visitor, upon entering the space, is entering the Garden of Eden—the mythological origin of all human existence. Man and woman, uncovered, are the sinless Adam and Eve—not yet fallen, imbued with immense potential to greatness. Yet in the Christian consciousness, Man did fall, a point subtly underscored once again by both the ethos of memento mori and the pre-Enlightenment quotes. Nature was the realm of the "primitive," the base of humanity's progress in both the biological and social realms (Herder 1963:89, 98-101). Culminating in Darwinian evolutionary notions utilized not only in biology but in nascent social science as well, the era viewed nature as at once destructive and continuous; it revealed both the transience of ancient civilization as well as the continuity of life itself.

Von Hagens has claimed numerous times that plastination represents the apex of "civilization's" technological advancement, and the very process symbolizes this nature-to-culture progression. Water—the life-giving gift of nature, of which the body is 70 percent composed—must be

sucked out of the cadaver entirely, only to be “impregnated” with plastic. Plastic, a man-made substance, is often regarded as a defining feature of today’s society. It is found everywhere, and utilized in such a wide variety of applications, which have been so commonplace in contemporary daily life, that it goes relatively unnoticed. It is also permanent; according to Vince Calder at the United States Department of Energy, some types, such as Teflon, are “virtually indestructible” (2005). The use of plastic in the bodies and faux plants is, as Van Dijck asserts, a “statement on the contemporary living body” (2001:9); the plastinated cadavers “celebrate the power of humankind to interfere with life and death” (2001:7), and reveal, as Freud has contended, a seemingly universal inclination in the human mind to resist the transience of one’s own body (1957:305).

Plastic plants are not the only things that serve as dividers conducting the flow of visitors through the space; there are also large hanging banners emblazoned with readily identifiable images and quotes. Though they provide little anatomical information themselves, these barriers are vitally important to the overall contextualization of the specimens on display, for they clearly articulate the humanist framework in which these bodies are to be understood.²³ Notably absent are the words of contemporary philosophers, scientists, theologians, or “lay people,” save those aforementioned notes written by the *Body Worlds* staff itself. Rather, the quotes mostly hail from early modern philosophers such as William Shakespeare, René Descartes, Johann Wolfgang von Goethe, and Friederich Nietzsche; or from the Biblical, classical and early Christian sources from which these philosophers often drew their knowledge. Though relatively diffuse in their temporal origins, each quote shares a common conceptual thread; they grapple with what it is to be “Man” from the Western perspective. This ontological mystery is suggested at the very entrance, where the visitor is met with two perspectively competing but conceptually comparable quotes, which appear in the exhibition as follows:

“What, then, did I formerly believe myself to be? Undoubtedly I believed myself to be a man. But what is man?”—Descartes

“What is man that thou shouldst remember him, mortal man that though shouldst care for him Yet thou hast made him little less than God, crowing him with glory and honor. Thou makest him master over all thy creatures; thou has put everything under his feet.”—Psalms 8

With these quotes, it is as if the exhibition designers begin their visitors’ memorializing process by holding their hands; guiding their gaze towards the plastinates while simultaneously urging them to delve deep into their minds to contemplate the essence of being Man. As one progresses through the exhibit, this will be grappled with, deepened, and built upon. For example, the words of Nietzsche frame the second half of the exhibit, posing this difficult question:

I consist of body and soul—in the words of a child. And why shouldn’t we speak like children? But the enlightened, the knowledgeable will say: I am body, through and through, nothing is mine, and the soul is just a word for something in the body. —Friederich Nietzsche (1844-1900)

Interspersed amongst the plastinates, quotes dealing with dissection, mortality, Man's transient nature, and *memento mori*, emerge in full force. This is perhaps the most suggestive of the exhibit's focus on "looking back" even as one moves forward. One visitor, in noting the predominance of Germans quoted, asked where Heidegger was represented (interview with author, May 25, 2005). Perhaps Heidegger is left out not only because he is too modern (there are no other 20th century philosophers represented), but also because his notion that human existence is defined by active participation in "being" (*Dasein*) in the everyday world (Heidegger 1962), is opposed to the exhibition's embracing of the past to "become" something different, or someone more aware, in the future. The "present" is not represented in this exhibit, neither in the background or in the bodies themselves; all are decidedly embodiments of remembered narrative claims, which instruct by educating or inspiring.

Perhaps more subtly effective in stirring the collective memories of educated Western visitors are the copies of readily identifiable anatomical drawings, mostly from the Early Modern period. They contribute to the visual background, framing the elegantly sculpted specimens in medieval imagery. Once again, absent are images that date after this period of initial anatomical exploration; no photographs, x-rays, ultrasounds, computer imaging, or videos are located in the space itself. The lack of modern scientific imaging most likely contributes to informants' questions concerning the scientific nature of the entire exhibition, as one guest book comment illustrates: "I look at it more as art than science, but it does take an artistic mentality to appreciate it. I work in medical school" (anonymous, guest book entry, April 17, 2005). The presence of these historicized background images are not incidental, rather, even contemporary theorists such as Erwin Panofsky (1953) and Ludmilla Jordanova (1995) claim that one cannot understand the rise of anatomy without considering its Renaissance artistic context. Panofsky also states that in order to determine the scientific value of anatomical art, it should be evaluated from the perspective of the art historian (Van Dijck 2001:10)—an invocation once again for the recalling of memory. Visitors such as 17-year-old Amelia noted this instructive connection:

This exhibit is pure genius. As an artist, I found it inspiring. It motivates me to further study medicine and the human anatomy...I like how Gunther was able to combine science and art in order to present an awesome look into the human physical existence. This is also a great way to provide people with something they otherwise would not have an opportunity to experience. [Amelia, guest book entry, February 19, 2005]

Like the initial two quotes, which serve to provide both a philosophical and theological context in a readily identifiable way in the minds of the audience, the first two images one notices upon entering the exhibition space are also of significance. Thanks to the forward movement forced by the pathway and the linear display cases in the middle, one's eye extends to the back wall, where it is greeted by a drawing by Andreas Vesalius, considered the father of anatomy and whose sketches are ubiquitous in the Western consciousness even today. Its placement next to the aforementioned banner discussing the Body Donors is not by accident, for von Hagens himself remarks that "Vesalius was the first to assemble a skeleton; he literally took it from the grave and returned it to society. I see myself in this tradition, and I am continuing it through the possibilities of plastination" (Institute for Plastination 2004). Indeed, throughout the exhibit von Hagens impresses upon the tourist that he is continuing the long line of presenting anatomy to a

mass audience. His plastinates often mimic famous anatomical drawings. For example, his “Skin Man” plastinate is juxtaposed alongside Juan Valverde’s “Muscle Man” (1556) in *Body Worlds*, and in *Body Worlds 3*, visitors are first greeted with “The Praying Skeleton” plastinate kneeling in prayer, its eyes looking upward to the heavens while his semi-clasped hands holds his brain—a clear referent to plate 36 of William Cheselden’s anatomical monograph, *Osteographia, or Anatomy of the Bones* (1733); the only difference is Cheselden’s skeleton does not balance his own brain.

To the right hangs Leonardo da Vinci’s famed physiological drawing of Man circumvented by a triangle and circle. The selection of these images immediately draws forth remembered narratives of illumination, of the birth of scientific discovery, and of perfection in the representation of the human body. Indeed, the presences of these two figures are ubiquitous in form and spirit throughout the exhibit for this reason. Alongside da Vinci’s image, and juxtaposed with that of Vesalius’ sketch, an authentic human skeleton is the first object that greets the visitor upon entry (figures 6 and 7). In his video, von Hagens notes that Vesalius was the first to assemble a skeleton for educational purposes, followed by da Vinci. Like these humanist scholars, von Hagens and his team recognize the importance of utilizing authentic human cadavers for educational purposes, for, as Angelina Whalley’s aforementioned citation reveals, each human is as unique internally as externally:

This anatomical individuality could never be conveyed by using models. Models are only an interpretation and one model looks like any other. With plastination, the authenticity of these specimens serve to fascinate viewers, while allowing them to experience Man as a marvel of nature. This exhibition is devoted to the individual, inner face, of Man.” [Institute for Plastination 2004]

Yet as the skeleton so concretely illustrates, each specimen’s anatomical individuality is tempered by its narrative anonymity. This allows for its universal application as a trigger for individually remembered narratives; one is able to look at the specimen and think, as von Hagens notes, “I am you, you are me” (Institute for Plastination 2004). The skeleton, therefore, starts as a point of departure; as not a person but an object—an anonymous and idealized specimen—it is a readily recognizable structure, one that is embedded in the memory of anyone who has been in a high school biology lab or celebrates Halloween. “Acclimat[ing] the audience gradually to the dissections,” (Moore and Brown 2007:234), the skeleton serves as a primary signpost for easing the audience into the remembering process of the exhibit—a process that will deepen as skin, muscles and organs are added in the subsequent plastinated forms encountered as the visitor progresses down the exhibit’s winding path towards final enlightenment.

While the skeleton’s presence at the beginning of the exhibition is intended to serve as a message for raising awareness in the viewer of the importance of utilizing his or her memory to make meaning of the *Body Worlds* experience, the subsequent two specimens build upon this notion while adding another. The visitor first encounters, to his or her left, a healthy plastinate. This is the initial interaction he or she has with a fully plastinated body, where the muscles and internal organs are exposed. It is the hope of the exhibition designers that it is not too shocking a visual sight, that the skeleton was able to effectively ease especially the layperson into this new experience, something that seems to have worked, as one woman recalled:

I am squeamish. I was very afraid to approach this exhibit with my fear of death and dead bodies. I decided to face these things...I was quite surprised and fascinated but I was never scared. I did learn a lot and want to come again. [anonymous, guest book entry, February 8, 2005]

Yet meaning is made of this first full plastinate when juxtaposed with the second specimen nearby, the Smoker (figure 8). This plastinate resembles the first specimen in style and anatomical inclusions; the only real difference is its pose—it is holding a cigarette, which prompts the visitor to view its lungs, blackened from years of practicing this habit.²⁴ Utilizing the memory of that which one just observed, the first plastinate changes in meaning—it is now an ideal representation of a “healthy” body, which this second becomes a representation for what it is to be unhealthy. Indeed, many people physically walked back to the first specimen to look again, no doubt to compare the color of its lungs, which they may not have taken into account the first time around. This juxtaposition, occurring so near the beginning when, for example, lung cancer and emphysema are discussed further along in the exhibit, serves to single out this remembering and comparing process when walking through the exhibit.

The form of the next plastinate brings visual immediacy to this process by juxtaposing the cadaver’s skeleton with the rest of his body (figure 9). The skeleton is recognizable from the very first specimen, while the other part of its body calls forth recently acquired memories of the last two. The skeleton’s outstretched arm, which rests on his body’s muscular shoulder, symbolically emphasizes the comparison process. Finally, a quote by Goethe underscores this point textually, linking the practice of dissection—to which plastination is likened—with active mental comparison. From this, the philosopher says, one can understand not only the human body, but life and death, permanence and transience, nature’s profoundness and cultural evolution:

Anatomical dissection gives the human mind an opportunity to compare the dead with the living, things severed with things intact, things destroyed with things evolving, and opens up the profoundness of nature to us more than any other endeavor or consideration.—Johanne Wolfgang von Goethe (1749-1834)

Future orientation, which is integral to any instructive process, is introduced by the next plastinate, the Runner. In discussing this model, Whalley says that “an essential vital function of the body is movement” (Institute for Plastination 2004). This plastinate embodies pure movement—both externally and mentally. It illustrates action, and thus future-orientation, in a very aesthetically concrete way; it is in motion, its flayed muscles flapping behind it. Pointed forward down the path, and not backwards to the skeleton, it serves to complement the messages given by the initial plastinates and their surroundings—urging the viewer to physically move on in space and time, while still occasionally looking back in the mind for a better understanding of the experiences awaiting him around every corner (figure 10). Further complementing this appeal to external movement are the next two specimens—the Teacher and the Chess Player (figure 11). These clearly emphasize thinking—of using the mind and its memory—as the basis of all action. Whalley specifically mentions this when she states that the Chess Player was designed to illustrate:

how the human organism has been innovated...The brain processes sensory impulses and allows us to have consciousness, feelings, memory and language. ... [This plastinate reveals its] anatomical identity; its aesthetic impression we get is indeed intentional. The results of plastination should at the same time appeal to the mind and the emotions—that is, it should impart knowledge and awaken in us an awareness of nature.” [Institute for Plastination 2004]

The next specimen appeals to remembered identity in a more subtle manner, through emphasizing gender in a historicized fashion. It is the first and one of the only female specimens, and as such, is intended to reveal the reproductive organs (figures 13 and 14). Juxtaposed against this structure is a Renaissance-era depiction of a female anatomical specimen (figure 12). Typical for female nude drawings of that period, she is modestly covering her genitals, and the view of her inner reproductive organs is partially blocked by her arm. Interestingly enough for a specimen specifically intended to educate in this contemporary age, when science can trump modesty with ease, the plastinate is a mirror image of this modest drawing. Having observed this area for many hours, I can attest to the difficulty some people experienced in identifying these small organs. People often moved closer to the specimen, approaching it slightly from the side, in order to look behind the hand and arm covering the section in question. While the effectiveness of this specimen in imparting actual anatomical information to the viewer may be questioned, its overt juxtaposition with a particular image underscores both the centrality that aesthetic poses will henceforth take in the exhibit, as well as the relatively open interpretation one’s memory can furnish in making meaning of these stylizations. From this point forth, visitors will encounter plastinates sculpted in a variety of intriguing and innovative forms—flayed open, cut into slices, and juxtaposed, elongated one and a half times their original size, wearing hats and riding horses—each one less overt in the bodily function they represent.

While the first section of the exhibit establishes the method by which meaning must be made of the plastinates, guiding the viewer towards an increasingly more processual use of his or her memory, the final section symbolically articulates the exhibit’s instructive quality, urging the viewer to utilize the memory of the exhibit itself to condition his or her future actions.²⁵ The plastinates contained within this final section are characterized by a high level of stylization. Their striking aestheticism may very well stir the mind more so than their anatomical revelations—a fact suggested by the informants’ confusion concerning the instructive content of *Body Worlds*. All of these critiques, however, illustrate the power of these objects to interact on a personal level with the viewer, to stir his or her memory and imagine the future. The action that is suggested at the conclusion of this tour solidifies the instructive, future-oriented message of *Body Worlds*.

Like the Runner in the beginning of the exhibit, these action-oriented plastinates underscore forward movement, the Constructivist nature of *Body Worlds*’ instructive method. It no longer recalls the past, but impels one towards the future—beyond the experience of *Body Worlds* itself. This important dynamic is signaled as one rounds the corner from the narrow winding path of the first room and the beginning of the second room. The pathway gradually dissolves, eventually fading into a larger, more open space (figure 15). This openness, this unstructured nature of the exhibit’s final leg, seems to symbolize the viewer’s individual freedom to decide where next to move. Unlike the earlier parts of the exhibit, whose confining pathways allows one to focus on

only the plastinates in his or her immediate vicinity, here one can literally “see ahead” to the plastinates that await; he or she can actively plan out his or her own future path through the exhibit.

At the mouth of this newly unstructured pathway, two unique objects also greet the visitor: a set of internal organs and a striking, flayed man with a hat (officially named “The Winged Man”) (figure 16). While neither is particularly new in aesthetic terms, these plastinates are significant for two reasons. First, it becomes immediately apparent here that von Hagens does not merely consider himself to be following in the same trajectory as these anatomists, but rather that he embodies their philosophy and continues their practice. The flayed man is a quintessential sculptural example of the Renaissance practice of *écorché*, or flayed anatomical illustrations posed in active positions (Stephens 2007:314). This is not insignificant. Citing Claudia Benthien (2002:37), Stephens argues that:

A product of the rise of practical anatomy (i.e. anatomy based on actual dissection), which displaced the then-dominant tradition of speculative Galenic anatomy, *écorché* figures begin to proliferate in anatomical art just as an earlier, medieval “perception of the body as porous, open and at the same time interwoven with the world” came to be replaced “with one that viewed it as an individuated, monadic, and bourgeois vessel that the subject was considered to inhabit.” [2007:317]

Indeed, *écorché* also implicitly posited that the skin, while certainly a protective shield, was also deceptive and obscuring (Benthien 2002:17). As Stephens states, “the work of the anatomical artist was thus to expose and examine the ‘forms concealed beneath an occluding matter’” (Stephens 2007:320, her citation is from Stafford 1991:84). Von Hagens’ democratizing endeavor to “lift the veil”—in the words of one informant (interview with author, May 11, 2005)—so that the layperson can look “beneath the skin” (cf. Institute for Plastination 2004; Wegenstein 2002:227-228; Stephens 2007:315) certainly follows in the vein. Y. Michael Barilan comments on the symbolic power of portraying skinless specimens:

The separation of the skin from the body marked the removal of personal and social status and also the opening of a seal covering the mysteries of the human body. The flayed corpse stands for the non-personal example of human nature, either ‘normal’ or ‘pathological’. By shedding the skin, the body steps away from its particular life and stands for human nature as such. [2005:194]

Indeed, as Moore and Brown state, the “positive aspect to this depersonalization” of plastinates’ biographies is that it is “deeply humanizing” (2007:246), that it affords the tourist to look beyond the exterior markers of individuality and imagine their commonality with the human race. It creates a sensation of *communitas*.

Second, and perhaps more importantly for the tourist, these are the only two plastinates actually moving; both are rotating on metal pegs. Movement, or at least the illusion of it, was also a common trope in *écorché* drawings; they often portrayed the anatomical model in an active state, as if it is “willingly participating in his/her own dissection” (Stephens 2007:317) for the benefit

of the gazer. Slowly rotating, these two plastinates provided the tourist the opportunity to view themselves from all sides, and juxtaposed against each other, from both inside and outside.

This movement can also be read semiotically as another signpost, signaling the mind to undertake one last task—to actively move into the future. From this point on, a vivaciousness is apparent. As one wanders through the open space, new, aesthetically active structures will more subtly reiterate this message. After the rotating man, a larger-than-life, rearing horse and rider imposes itself on the viewer; it is the very embodiment of movement and action. Juxtaposed next to this is the Cyclist, also elongated one and a half times its actual size through the use of metal pegs (figure 17). Its muscles, like those of the horse and rider's, is flapping in the wind behind him as he pedals in the same direction as the horse is running. Interestingly enough, they are not moving forward down the path, but pointing directly to a hidden space at the far end of the room.

This space is what one colleague dubbed “The Womb Room,” for it explores prenatal anatomy by arranging plastinated embryos and fetuses within an intimate, dark, and self-contained setting. No doubt the font of much controversy—as indicated by a number of protestations and references to abortion clinics in the guest books—it is separated, almost hidden, by dark hanging sheets. One must actively follow the visual instructions of these two plastinates with both the eyes and the mind in order to understand that the “womb” is even there. Once inside, movement is underscored by the processual arrangement of the embryos and fetuses in chronological order of its development. However, the focal point, and the main source of controversies according to Eric Weiner of NPR News (2004), is a mother pregnant with an eight-month-old fetus. The striking quality of the specimen begs the visitor to question its origins; indeed, informants and the medical information booth report that this plastinate receives the most inquiries regarding its life history, the reasons for its death, and why the baby could not be saved. Much more has been written on this plastinate and the mini-exhibit in general, but for the purposes of this essay, its stylistic appearance should also be noted. Reclining lengthwise, one arm seductively raised behind her head, the pregnant mother's pose resonates in the memory with common Renaissance and Mannerist presentations of Venus, the classical Goddess of Love. Comparisons can be specifically made to Titian's *Venus of Urbino* or Giorgione's *Sleeping Venus* in Leipzig. The use of a readily remembered classical image within the context of development underscores once again the mechanics of memory to fulfill *Body Worlds*' instructive, future-oriented mission.

After the prenatal exhibit, these larger-than-life Riders, and a number of other plastinates posed in sports activities, comes an interlude before the exhibit's final culmination. Interspersed amongst these very active plastinates is an intriguing exhibit entitled “Obesity Revealed.” Frozen in plastic, cut lengthwise into body-length paper-thin strips, and laid out upon a table covered in black cloth, the 350-pound overweight specimen exists in striking opposition to the upright, full and seemingly live figures representing action (figure 18). The selectivity in its flat presentation seems to render unto the previously overweight and over-bodied donor a Dantesque *contrapposto*. Gazing at them, the mind calls forth recent memories of the previous idealized, active specimens, once again stimulating the mind to make comparisons. In addition to the prohibitive disgust felt by Chicago informants, Lantermann's follow-up survey (Body Worlds 2004) also indicates the instructive nature of this remembered juxtaposition. Six months after viewing the exhibit in Vienna, 33 percent of those surveyed attested that they were following a healthier diet, and 25 percent indicated that they were exercising more.

Following the obesity display, the exhibit culminates in what I call the “Circle of Action” (figure 19). The choice specimens are here, all presented in exceedingly active poses. A delicate dancer is suspended in air (figure 20), a hurdler in mid-jump, a lithe female archer poised to shoot an arrow (figure 21), and a basketball player palming an orange ball with his mouth open (figure 22). Instead of facing outward, they all face inwards, pointing at each other in a circular form that is underscored by the round-cut carpeting underfoot. It is also interesting to note that only here and in the “Womb” are carpets utilized, further underscoring its uniquely delimited space. The very shape of this area is significant, for in Western art historical tradition (as in many “Eastern” traditions as well) the circle is considered a symbol of perfection and of action. Harkening to the early Christian era, it is regarded as a sign of sacredness—evoking connotations of perfection (Janson and Janson 2003:429), of *Cristus Pantocreator*, or of the unity that is the earth (cf. Jung and von Franz 1968:240-249; Lawlor 1982:31-35; Calter 2009:1). Specifically in Catholic iconography, the circle is the “main symbol of faith” (Janson and Janson 2003:231), symbolic of both the sacred unity of the Trinity and of the Church; it also indexes the Covenant between God and Man, a sacred promise of future salvation (cf. Gen. 9:9-13). Yet it simultaneously symbolizes movement, of future action—as illustrated by the various manifestations of religious and secular imagery in both the West and the East. In secular Western mythology, the wheel is known as Man’s first technological invention; it not only allowed humanity to physically move forward with velocity, but also to progress from the mires of natural “primitivity” to cultural innovation.

Unified in position at equal points within this circular sacred space, each plastinate also individually embodies the dual messages of the circular layout in a strikingly visual way. They are sublime and mentally stimulating in presentation; many informants, stunned, have asked how von Hagens was able to present these figures in mid-jump without any suspension implements, for example. They are also seemingly the most perfected of bodily specimens. At least they are presented as such, but in reality one can often notice blackened lungs on some of the specimens. Nevertheless, they are intended to be “the highlights” of the exhibit, the final inspirational elements the visitor experiences, according to Whalley (Institute for Plastination 2004). The basketball player, who is located closest to the exit and thus the final specimen one is to see, is understood as the most perfect, for not only is it physically the most muscular specimen *Body Worlds* has utilized according to *Body Worlds* sources (interviews with the author, May 9, 2005 and May 27, 2005), but because it fuses the variety of actions dealt with only selectively in the diverse plastinates throughout the exhibit. Its arms are outstretched and one leg is up; he is clearly portrayed as moving forward. His mouth is open as well—as if he is in mid-breath or possibly mid-speech—another indication of action. And, finally, his skull is opened like an egg, revealing a full and reddened brain, symbolizing the mental action that he—as all of the visitors—must employ for the future. Fusing mind and body, movement and perfection, memory of the past and a sacred promise for the future—the “Circle of Action” serves as the culmination of *Body Worlds*’ instructive mission. And as one departs past body donation sign-up sheets, perhaps inspired to action by the memories of the exhibit, he or she sees a text banner with one last message of summation, courtesy of Jean-Paul Sartre: “Man is nothing more than what he makes of himself.”

Body Worlds 2* in Dialogue with *Body Worlds

Thanks to the tremendous success of the first *Body Worlds* exhibition, which brought nearly eight hundred thousand visitors to Chicago's MSI, for a brief time in early spring 2007, the museum hosted *Body Worlds 2* in the same two-room space. While the overall theme, style and general layout remained largely consistent, this was not simply a reprise, but rather another version of von Hagens' concept. In addition to including a completely new repertoire of full-body plastinates, there were a number of subtle, yet remarkable differences which, when analyzed together, seem to address some of the concerns raised by the first *Body Worlds* program. In particular, three issues immediately come to the fore—namely, the employment and representation of human and animal plastinates, the instructive and social mission of the exhibition, and the relationship between art and anatomy.

The first installation of *Body Worlds* elicited a number of reactions concerning the use of bodies themselves. Because the MSI was initially concerned with potential controversies, its first exhibition did not include either examples of “abnormal” human plastinates (specifically fetal malformations) or animals unaccompanied by human plastinates. Yet reflecting the controversy-free success of *Body Worlds*, MSI's second installment saw the display of both of these contestable features. First, tucked away in a corner was a polydactyl human plastinate with six fingers and toes; a number of visitors were seen curiously observing the display with the same reverence as they did any other plastinate, and I came across no visitor commentary from the three guest books from that week that criticized the inclusion. Second, four animals were featured in the second room: a rabbit and a bird complemented the stunning circulatory system exhibit (many guest comments praised this section of the exhibition), and two camels graced the center of the space. In the first exhibition, the only animal featured was the larger-than-life Horse and Rider, which provided an awe-inspiring focal point for the second room. An animal display again served in this capacity, but this time it featured a camel and its baby in tow. While in some cultures the use-value of a camel is akin to that of a horse, notably absent was a human in this mix. Additionally, unlike the Horse and Rider, which were expanded one and a half times their actual size, these camels were presented as life-size cutaways like the other human plastinates. Such a bold presentation reflects the relaxation of concerns surrounding the display of animals, and even does so in a manner that restores dignity to the creatures; no longer was nature superseded by culture—neither symbolically by the inclusion of an accompanying rider, nor materially by technologically manipulating the size of the creatures.

In 2005, many visitor comments concerned the general theme of “authenticity” in the representation of human plastinates. With the exception of those in the aesthetically pleasing yet dubiously anatomical Circle of Action, only two females were featured in the first exhibition, and not only were they both specifically employed in female reproductive exhibits, they were also posed to mimic famous works of art. Blackened lungs could be found in many of the specimens intended to portray healthy athletes. And some guests found the rotating figures, larger-than-life sized plastinates, and the use of props—such as the hat—“offensive.” These aspects contributed to a feeling among some medical professionals that there was an excess of plastinates, which rendered the exhibition more artistic and less serious about anatomical

education. Qualitatively, the types of plastinates employed in *Body Worlds 2* seemed to directly address these issues. In addition to including more female plastinates for non-sexual representations, overt aestheticization of the female body was absent; in particular, the pregnant woman in the prenatal room was standing behind glass, rather than reclining like a Titian painting. Plastinates adorned with garish props, moving objects or excessive size manipulation were not featured. Possibly in response to the critique of aesthetic overkill, the exhibition was notably leaner; there were quantitatively fewer plastinates in this second exhibition than in the first—and visitors registered this observation in the guest books.²⁶

The smaller number of full-body plastinates contributed to a consciously implemented change in the overall exhibition environment. While nevertheless maintaining most of the familiar design elements—display cases, text banners, even faux plants—the layout of *Body Worlds 2* was more open than the first, fostering, as one MSI representative commented, a feeling of greater “freedom” to the visitor (interview with author, April 18, 2007). Citing MSI’s “luxury in the space factor,” as well as a close working relationship with the *Body Worlds* staff, a different administrator stated that the MSI collaborated in a more hands-on manner with von Hagens to give *Body Worlds 2* “a little bit of a free flow, from both the logistical standpoint and the conceptual,” in order to provide more “flexibility” to visitors “to follow their interests. We did not want to direct them from case to case” (interview with author, May 25, 2007). Indeed, if the design of MSI’s first *Body Worlds* created the sensation of an intimate and introspective guided tour through a landscape of memento mori, the notably open layout of *Body Worlds 2* highlighted the sociality of von Hagens’ democratizing endeavor. The narrow, meandering garden pathways that were the hallmark of the first *Body Worlds* were largely eschewed in favor of wider walking areas that were less constrictive of visitors’ movements. In addition to reducing the overt garden atmosphere, many of the black barriers that divided the rooms were absent. This created longer lines of sight across the total space that afforded visitors the ability to look across the room, to survey all of the specimens, and to more easily pinpoint in advance the areas he or she would like to see; a higher percentage of guests were immediately observed moving in unstructured patterns throughout the site than in the first *Body Worlds*.

Another innovation that contributed to a heightened sense of social responsibility was the inclusion of a dedicated anti-smoking section, which was located in the second room next to the medical information desk. Unlike the first *Body Worlds*, where visitors encountered the Smoker plastinate near the entrance and the display cases featuring cancer-laden lungs later in the exhibition, this time all of these were placed together (figure 23). The positioning of this exhibit was intended to be intentional, dramatic, and cathartic, giving greater coherency to the socially conscious message of smoking cessation. While a black-lunged full body plastinate was still featured, he was not holding a prop cigarette. Rather, he was standing in front of a full-fledged anti-smoking campaign booth, complete with smoking cessation literature, anti-smoking stickers, an American Cancer Society video, and a clear Plexiglas box where guests, vowing to quit the habit, could deposit their cigarette packs. According to an MSI administrator, this was an “innovation” that von Hagens “recently started doing” at *Body Worlds 2* in Vancouver during the winter of 2006-2007 (interview with author, May 25, 2007). Although the MSI did not originally plan for this booth, since it was met with such acclaim in Vancouver, the museum added it halfway through the exhibition. “Here was a way to engage visitors,” the administrator said. Calling it a “provocative opportunity to stop and think about the decision they [visitors] make,”

the administrator continued, “It’s one thing to say, ‘smoking is bad for you.’ But to say ‘smoking is bad for you,’ and seeing the blackened lungs and then making the decision brings it back to them. It’s a decision they make” (interview with author, May 25, 2007).

The transparency of the box further underscored the intensified social nature of the exhibit, for by depositing one’s pack, the visitor is conscious of not only his or her personal decision, but that he or she is joining many others in the vow. Previously, the only sanctioned form of interaction with a design element occurred at the medical information desk, where visitors were allowed to handle a plastinated organ. The most dramatic aspect of this exhibit, however, was the juxtaposition of the “smoker” plastinate with a multimedia presentation. On a video loop was a well-known American Cancer Society public service announcement featuring “the late Yul Brynner” who tersely remarks on-camera, “Now that I’m gone, I tell you, don’t smoke. Whatever you do, just don’t smoke” (American Cancer Society 1986).

The employment of multimedia technology here, and again near the exit of the exhibition, is a noteworthy innovation that significantly transformed the space from reverently silent and intensely personal, to one that was both animated and social. In addition to the flashes of imagery and color provided by the videos, the presence of prerecorded sound particularly changed the entire environment of the second room, as the audio from both DVDs emanated throughout the space, mixing together and creating a low, underlying din that disrupted an otherwise silent atmosphere. Visitors could be heard near the second video—a recently produced documentary on the process of plastination that was stationed at the exit—talking freely about the exhibition or about their future plans at the MSI. This was in marked contrast to the first *Body Worlds*, where visitors continued to speak in hushed tones (even to me) until after they crossed the exit’s turnstiles into the gift shop. Additionally, the use of current multimedia technology injected a more “modern” form of representation into what had otherwise been a very “traditional” type of museum presentation. Coupled with the increased interactive elements, such as the cigarette-pack depository and less confined walkways, the videos also contributed to a marked temporal departure from the original *Body Worlds* by returning the social “present” to what had otherwise been an exhibit heavily indexing the past and the future. (Here, perhaps, Heidegger would be better welcomed). While there was no specially delimited “Circle of Action” as in the first *Body Worlds* exhibition, these elements created a real-time sea of sensory activity.

If *Body Worlds 2* granted more freedom of interaction to the visitor, it more pointedly restricted the visitor’s interpretation of the exhibition’s overall nature. An increased number of text-and-image banners more precisely contextualized the social value of von Hagens’ endeavor. Although there still remained many of the original banners sparsely adorned with short quotes from the canon of Western humanism, a new text-heavy series lined the long, initial walkway immediately after the entrance. Tracing a linear narrative of the history of public anatomical dissection—from the Classical period, through the Middle Ages and the Renaissance, to the modern era of plastination—this set of banners was “very much in response to the kinds of reactions *Body Worlds* has been getting throughout its travels,” stated an MSI staff member (interview with author, May 25, 2007). Each banner addressed the issue of how public anatomy and the conservation of perishable bodily specimens were accomplished through the ages. Its positioning immediately at the entrance served the dual purpose of explaining plastination and framing visitors’ meaning-making process from the onset of their experience in the exhibition,

and was intended to complement the new video on plastination at the exit. According to a source at the MSI, the plastination video was created recently “in response to a lot of questions [in the guest books] about ‘how do they do this?’” (interview with author, May 25, 2005). It also brings *Body Worlds 2*’s overarching narrative full circle: “So you have this personalized experience and you understand about the complexity of the human body and the decisions you make that affect it, and [the video] ties it all together by answering how do they do that” (interview with author, May 25, 2007). The video’s specific placement was not accidental. Accompanying the multimedia presentation revealing the fascination of plastination was a booth with sheets that visitors could complete to donate their own bodies—a final entreaty to continue the interactive experience by literally being a part of the *Body Worlds*’ franchise upon expiration. A text banner featured an enlarged version of a completed form (with the donor’s last name blacked out) as an instructive invitation to visitors to do the same. With this final innovation, von Hagens attempts to clarify the social value of plastination and the instructive nature of the experience by inserting his *Body Worlds* exhibitions—and the visitor himself or herself—clearly into the long historical trajectory of Man’s creative and unending search to look inside of himself or herself.

Instructively drawing on individual and collective memories, of past events and future promises, the *Body Worlds* exhibitions can be considered a traveling Museum of Man, for they not only index, but constitute, a sensation of humanly *communitas*. The use of authentic bodies, rather than models, illustrates both the uniqueness of the human body, as Whalley points out, yet also allows one to imagine the inner commonality they share with their fellow Man, as von Hagens argues (cf. Institute for Plastination 2004). And through both resonance and wonder, they inspire action at the very core of one’s being, individually and collectively. This action can only come from a total identification with the plastinates in a state of *communitas* not unlike that which St. Paul urges in 1 Corinthians: “Do you not know that your bodies are members of Christ?...Do you not know that your body is a temple...and that you are not your own?” (1 Corinthians 6:17-19).²⁷ One remark from a Toronto tourist, quoted in Moore and Brown, perfectly sums up the sentiment of a secular *communitas*: “I’m grateful for the experience of being able to see *myself* in *our* truest form” (2007:245; emphasis added). As this informant reveals, an interaction with *Body Worlds* creates a sensation of unity in diversity, of the simultaneous recognition of the self and of non-duality. And in the end, indeed, this essay is not, and cannot be, only about von Hagens or his *Body Worlds* endeavor. It is the visitor, the tourist who, armed with a contemplative gaze and his or her particular memories behind it, co-constructs this Museum of Man in conjunction with the particularities of the exhibition, giving it depth and meaning. Together they illustrate that Man is not simply the sum of its parts—it is action, culture, beliefs; it is heart and soul. It is sickness and health. It is born and it dies. Man by its very nature is social; it extends beyond the temple of one’s body, through space and time. It is constantly evolving, not stagnant. It is not simply “being,” as Heidegger suggests, but rather it is looking forward, even as it looks back. Indeed, Man builds upon the work of individuals and collectives; it remembers, innovates, and passes on those innovations into the future. It is life—even in death.

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Notes

1. "The Universe Within" is the title of a competing exhibition of plastinated bodies that is also traveling around the United States. In 2009, one exhibition is being held at the Mary Brogan Museum of Art and Science, in conjunction with the Smithsonian Institution.

2. Ethnographic fieldwork was conducted during a one-month period between late April and late May 2005 at the Museum of Science and Industry's (MSI) *Body Worlds* exhibition with the approval of *Body Worlds* staff and the MSI's Education Department. I visited multiple times a week at various hours of operation, often spending three or more hours at one time. Data from this fieldwork consists of two types: participant observation and open-ended surveying. I particularly observed the practices by which people interacted with the objects and amongst themselves. While observations were conducted throughout the exhibit, they were most often centered in three areas which I determined were most representative: at the entrance; between the female reproductive specimen and the lung/heart disease display case; and at what this paper dubs the "Circle of Action" immediately before the exit. At this third site, interviews were also conducted after visitors had completed their personal tours. The randomly sampled groups of informants ranged from families to schoolchildren on field trips; from couples to individuals. Objectivity was a large concern, especially for an exhibit that has been noticeably met with a range of ethical, religious, artistic, and scientific concerns throughout the world. Although I believe objectivity can never be completely realized in social scientific research, I wished to keep interviews as "open-ended" as possible, allowing for true thoughts and feelings to naturally be conveyed. After introducing myself, I asked, "What did you think about the exhibit?" Usually this question sufficed, stirring informants' minds adequately enough to produce emotional and often quite thoughtful responses. In addition, I found that many almost immediately spoke of their motivations for visiting the exhibit, their concerns with its informative qualities, and, most importantly for this study, what they learned from it. For those whose responses did not

automatically touch on the latter, I asked if they thought they “got anything out of the exhibit” or, for school children, if they “learned” anything. In addition, during the initial period of interviews, I purposely avoided reading the press packet produced by *Body Worlds*, as well as often-critical newspaper articles, in an effort to ensure undue biases did not color the process.

A shorter period of ethnographic research was further undertaken at the MSI’s *Body Worlds 2* exhibition in May 2007, and included follow-up interviews with MSI administration.

3. Sources at the MSI informed me that very little variation occurs as a specific *Body Worlds* exhibition moves from museum to museum. In 2005, the *Body Worlds* staff granted MSI’s request to eliminate specimens with congenital defects in the prenatal exhibit, reasoning that it was “not consistent with our message,” according to one MSI source (interview with author, May 25, 2007). While in 2005 no specimens that visitors could construe as anatomical abnormalities were on display, polydactyly was included in the MSI’s *Body Worlds 2* exhibit, though congenital birth defects were still not featured.

4. One MSI administrator commented that, while each exhibition depends in part on the physical and thematic “context of that museum,” the three *Body Worlds* exhibits maintain a high level of consistency. “A lot of it was taking it as it was coming...They have their package, set it up and cut the ribbon. Not that it is a turn-key operation, because it is not, but for efficiency” (interview with author, May 25, 2007). Another administration comment was:

The institution would have to do a lot of negotiating to make any significant changes, and I don’t blame them. They [*Body Worlds*] want to make sure they are as consistent as they can be because it [any changes] would open them up to new questions and possibly new controversies. Keeping it the same allows them to use the same support to show [the value of the exhibition]...Especially with “copycat” exhibitions—that’s their word not mine—they want to maintain their distinctiveness. If they were to change from place to place, they’d blur the boundaries between them and the others. They have worked very hard on their brand, and the quality of their work is exceptional. [interview with author, May 25, 2007]

5. Attendance figures for these exhibitions can be found on the *Body Worlds*’ website (*Body Worlds* 2007b), which proclaims there are “more than 20 million visitors.” The figure 16 million was provided by a MSI internal FAQ document for staff, which was compiled prior to the 2007 exhibition at the MSI.

6. Unless otherwise noted, all guest book entries presented in this essay pertain to the MSI’s 2005 exhibition of *Body Worlds*. Guest books were found at the end of the exhibition, on the wall immediately adjacent to the “Circle of Action,” before the turnstiled exit. There were also body donor forms available on the same table. Completed guest books were then stored in the *Body Worlds*’ staff’s temporary offices at the MSI. *Body Worlds* staff granted me permission to read through and copy guest book comments from the MSI exhibition, inside the office.

7. Moore and Brown include a lengthy discussion of the ethics of *Body Worlds*, and point out that Georgetown University's prestigious Kennedy Institute of Bioethics—a Jesuit institution—was retained by the California Science Center (CSC) to review the Institut für Plastination's body donation system prior to bringing it to the United States. Georgetown ethicists praised the Institut's detailed documentation and asserted that all bodies had been legally and ethically obtained (Moore and Brown 2007:232-233).
8. Connor states that "Von Hagens's traveling exhibit, entitled *Body Worlds* or *Körperwelten*, is probably the first "blockbuster" exhibition that the non-art-museum world is likely to encounter" (2007:850).
9. Though I am privileging the gaze over movement, it should be noted that Urry nevertheless defines tourism as "a leisure activity" whose "relationships arise from a movement of people to, and their stay in, various destinations" (2002:2-3). I do not negate that movement is often integral in a touristic experience—indeed, I will argue that movement is an important facet in *Body Worlds*—but I do not presuppose it as a necessary component.
10. Here Turner is partially quoting (but not citing) Robert Merton's definition of "social structure."
11. At the time of this research, "intelligent design" was not the buzzword that it presumably was during Moore and Brown's data collection.
12. This appears to be a self-help method of exercise and stretching for older adults. Information can be found at www.feldenkrais.com (accessed June 2, 2005).
13. Incidentally, sciatica is not specifically documented in the exhibition; because the information booth was closed one day, a woman futilely approached me for an explanation.
14. This study was publicly available on the German version of *Body Worlds*' website (but not the American version) at www.koerperwelten.de/Downloads/Lanter_Toro_all_BW.pdf.
15. Benjamin 1968, quoted in Mazarella 2003:53.
16. It was, however, requested of this team to conduct interviews outside of the main space, so as to maintain the reverent atmosphere and to otherwise not impact the personal experience of the exhibit. Guided tours are also not given for this same reason, though personal audio guides can be rented.
17. Vom Lehn notes that Hirschauer (2002) identified this practice in his research at the Munich *Body Worlds* exhibition. While he agrees with Hirschauer, vom Lehn suggests that the act of speaking suggests "the production of a [mediatory] relationship between the exhibits and the bodies of real people" that constitute "a very important resource when making sense of the exhibits" (2006:241).

18. Several informants have stated that other members of the family chose not to visit the exhibit, mostly because they “could not stomach it” (interview with author, May 9, 2005). One retired man with a cane, seated in the museum café, said that he did not want to see the exhibit because “I like to live outside of my skin...I pay the doctor to tell me what is happening inside, I don't need to see it” (interview with author, April 24, 2005). Guest book entries sometimes expressed the disappointment with the price of admission as well as the sometimes long wait times (cf. guest book entry, February 12, 2005).

19. *Body Worlds 3* couples a similar message with a plastinated skeleton posed as if it were praying, mimicking an 18th-century anatomical drawing by William Cheselden. While *Body Worlds 3* is not discussed at length here, it significantly diverges from the two staged at the MSI for its more overt religiosity, which von Hagens justifies in his labels as more historically authentic. While a religious ethos certainly permeated Renaissance and early modern anatomy, von Hagens also illustrates “popular” superstitions (instead of the Skin Man, a plastinate holding his skin is portrayed emerging from a tomb stone) and Tibetan Buddhism (a text-and-photo essay describes the Tibetan funerary practice of “air burial,” where a corpse is left on a mountaintop to be devoured by vultures [Martin 1994:278; Wylie 1964:232-233]).

20. Commonly known as *Gray's Anatomy* and well into its 40th edition, *Henry Gray's Anatomy of the Human Body* is an English-language textbook that is not only considered one of the most authoritative sources on the subject of human anatomy, but, as standard reading for medical students, can be considered a ritual element of professional anatomical instruction.

21. Moore and Brown provide a few quotes from Singapore's exhibition, which reveal that *Body Worlds* evoked religious sentiments even in Buddhists, who feel that the physical body is but clothing for the *atman*, or soul:

Before I came, I thought it would be ghoulish but I enjoyed it tremendously. Well done. May all beings who have contributed to this exhibition have a good rebirth!
Amitabha [Buddha of Infinite Light]! [quoted in Moore and Brown 2007:249]

I was caught by surprise how the human body could be ‘reincarnated’ with plastination. [quoted in Moore and Brown 2007:249]

It's a rare opportunity. We didn't bring it [the body with us] when we were born, and we will not take it with us when we die” (translated from Chinese). [quoted in Moore and Brown 2007:249]

22. By noting the degree of blackened lungs, one can also determine whether the body donor was an urban or rural dweller (as differentiated from a smoker), though these plastinates were often considered by interviewed visitors as smokers.

23. Although, it should be noted, that one banner per delineated section is devoted to introducing the particular body system on display. However, I have specifically noted that a great majority of visitors did not stop and read the textually dense (though clearly written) material.

24. Incidentally, MSI staff members said the cigarette is the one thing that seems to be stolen from the exhibit, and must be replaced from time to time.
25. The first section comprised the entire first room and a strip of the second room, which was cordoned off with black-cloth dividers to explicitly delineate a second section.
26. Contending that “the exact number of plastinates...would sometimes change during the course of the exhibit—some would move out, others in,” one MSI publicist would only say that both featured “over twenty full-bodied plastinates,” though I would estimate that *Body Worlds 2* may have included slightly under twenty (personal e-mail communication, June 12, 2007).
27. By “Christ,” Saint Paul is speaking of the Christian *communitas* of the Church. For a Catholic theological application of Turner’s notion of *communitas*, see Starkloff 1997.

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Michael A. Di Giovine is the author of The Heritage-scape: UNESCO, World Heritage, and Tourism (Lanham, MD: Lexington Books 2009), a Lecturer in the Graham School for General Education at the University of Chicago, and a Research Associate for an audience research firm specializing in museum visitor analysis. Di Giovine is currently conducting research on the adoption of pilgrimage for material and cultural revitalization in the small Italian town of Pietrelcina, the birthplace of popular 20th century stigmatist St. Padre Pio of Pietrelcina.

Figures

All figures referenced in this article (1-23) are presented below. Two additional figures (24-25) are also provided for the interest of readers.

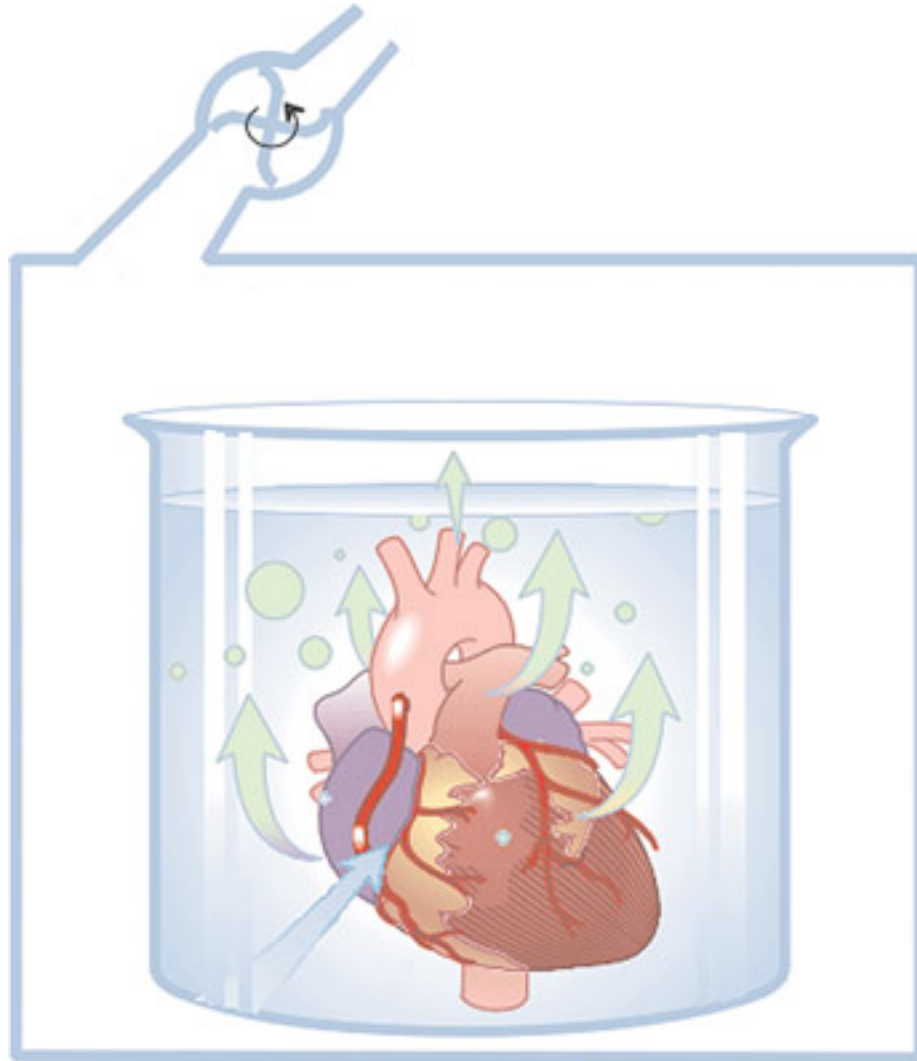


Figure 1. “Forced Impregnation.” The centerpiece of the plastination procedure, human tissue is placed in a vacuum, allowing acetone to trickle out. This creates a volume deficit in the specimen, which can then be replaced by plastic. Courtesy of Gunther von Hagens, Institute für Plastination, Heidelberg, Germany.



Figure 2. Body Slice Plastination. Body slices dehydrated with acetone are then placed in a polymer solution. Courtesy of Gunther von Hagens, Institute für Plastination, Heidelberg, Germany.



Figure 3. Touching the plastinates. Informants often spoke of the urge to physically touch the plastinates on display, and visitors were most often observed reaching out and touching The Teacher's beckoning hand. Photograph by the author, 2005.



Figures 4 and 5. A Garden of Eden. MSI's Body Worlds environment evokes an Eden-like garden, complete with plastic plants, white pebbles, and stone pavers leading the way around nude plastinates. Photographs by the author, 2005.

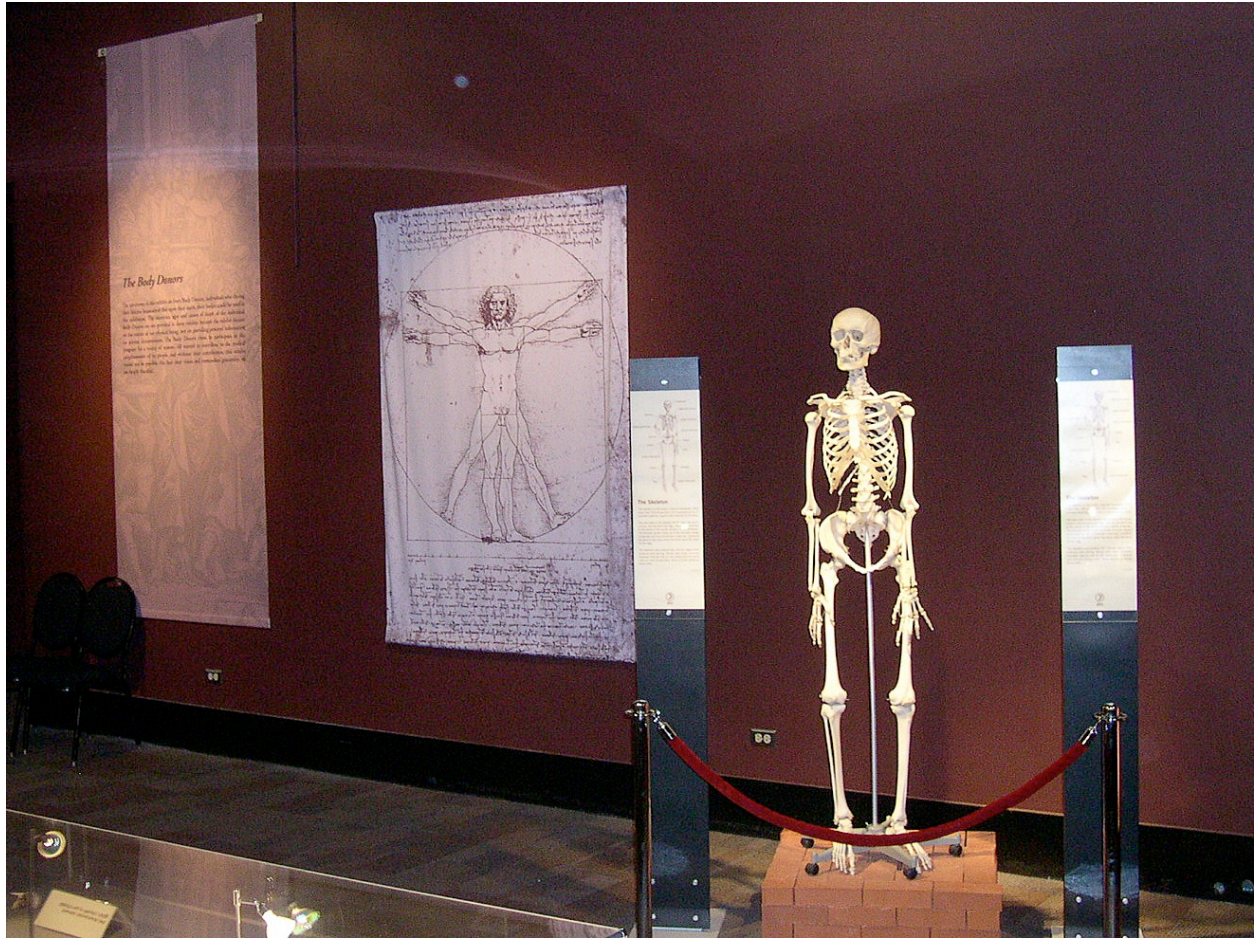


Figure 6. Entering *Body Worlds*. Immediately next to the entrance, the visitor is greeted by the “familiar” sight of a skeleton and Leonardo da Vinci’s physiological drawing of Man circumvented by a circle and triangle. To orient the reader, the skeleton depicted in this photograph appears at the extreme right of this image. Photograph by the author, 2005.



Figure 7. Entering *Body Worlds*. View from the entrance, where one's eye is directed towards a reproduction of an anatomical drawing by Andreas Vesalius, considered the father of modern anatomical presentation.



Figure 8. Juxtapositionality. Healthy specimen (foreground) and The Smoker (background). Photograph by the author, 2005.



Figure 9. Juxtapositionality. "The Skin Man." Photograph by the author, 2005.



Figure 10. Foreword Movement. The runner physically points the way around the plastinates in the exhibit cases to the Teacher. Photograph by the author, 2005.



Figure 11. Foreword Movement. The Teacher (foreground) and the Chess Player (background) likewise encourage mental movement. Photograph by the author, 2005.

Figures 12, 13, and 14. The problem of the female specimen. Figure 12: A female anatomical drawing greets the visitor as he or she turns the corner. Figure 13: To the visitor's right, perpendicularly juxtaposed against this drawing is one of the only female plastinates in the exhibit. Note her pose mirrors that of the drawing. Figure 14: Her hand poses a certain difficulty in viewing her female-specific anatomy, which complicates even the explanatory drawing. Photographs by the author, 2005. [Figures 12, 12, and 14 follow this caption]



Figure 12 (see caption above).

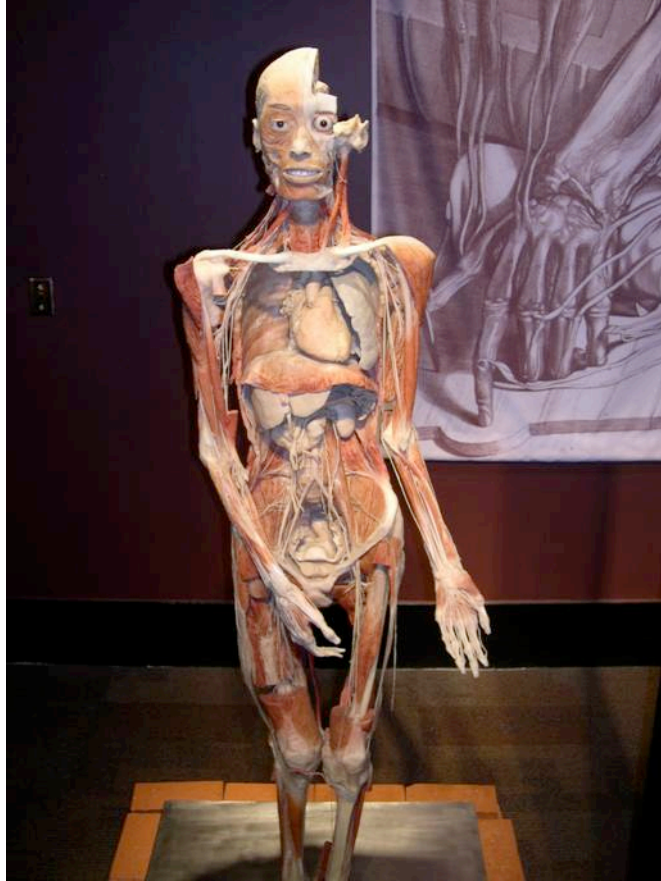


Figure 13 (see caption above).

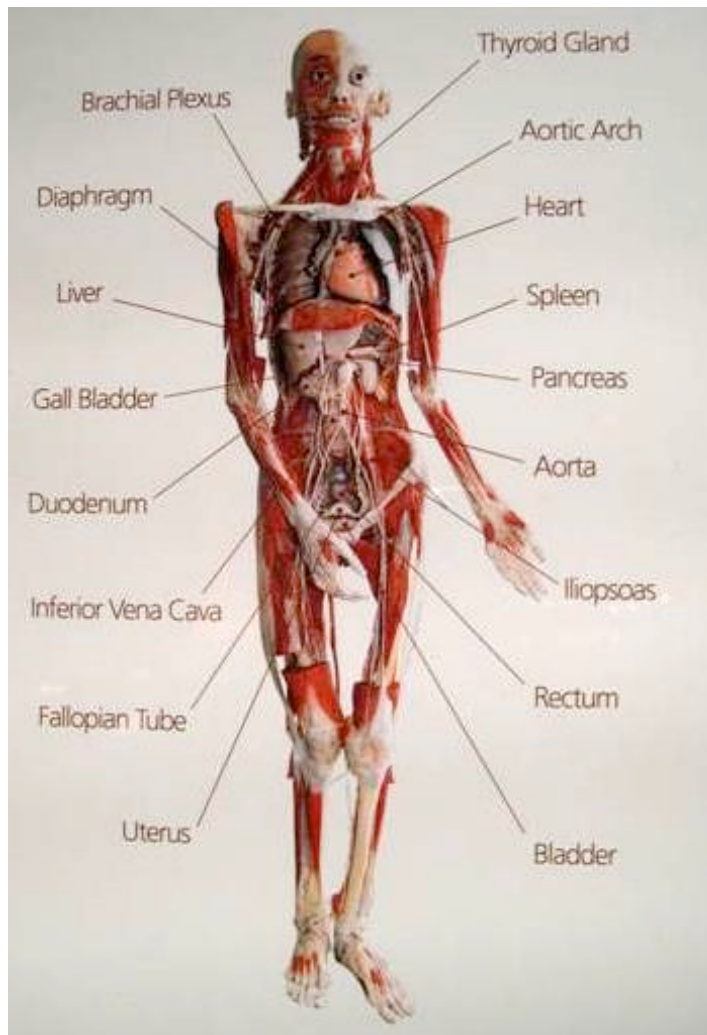


Figure 14 (see caption above).



Figure 15. The second room. The narrow, winding pathway open up to a larger room freer of obstructions. Photograph by the author, 2005.



Figure 16. The second room. Movement is physically underscored with rotating plastinates, such as The Winged Man. Photograph by the author, 2005.



Figure 17. Activity is represented on a larger-than-life scale through the Horse and River (background) and the Bicycle Rider (foreground). Photograph by the author, 2005.

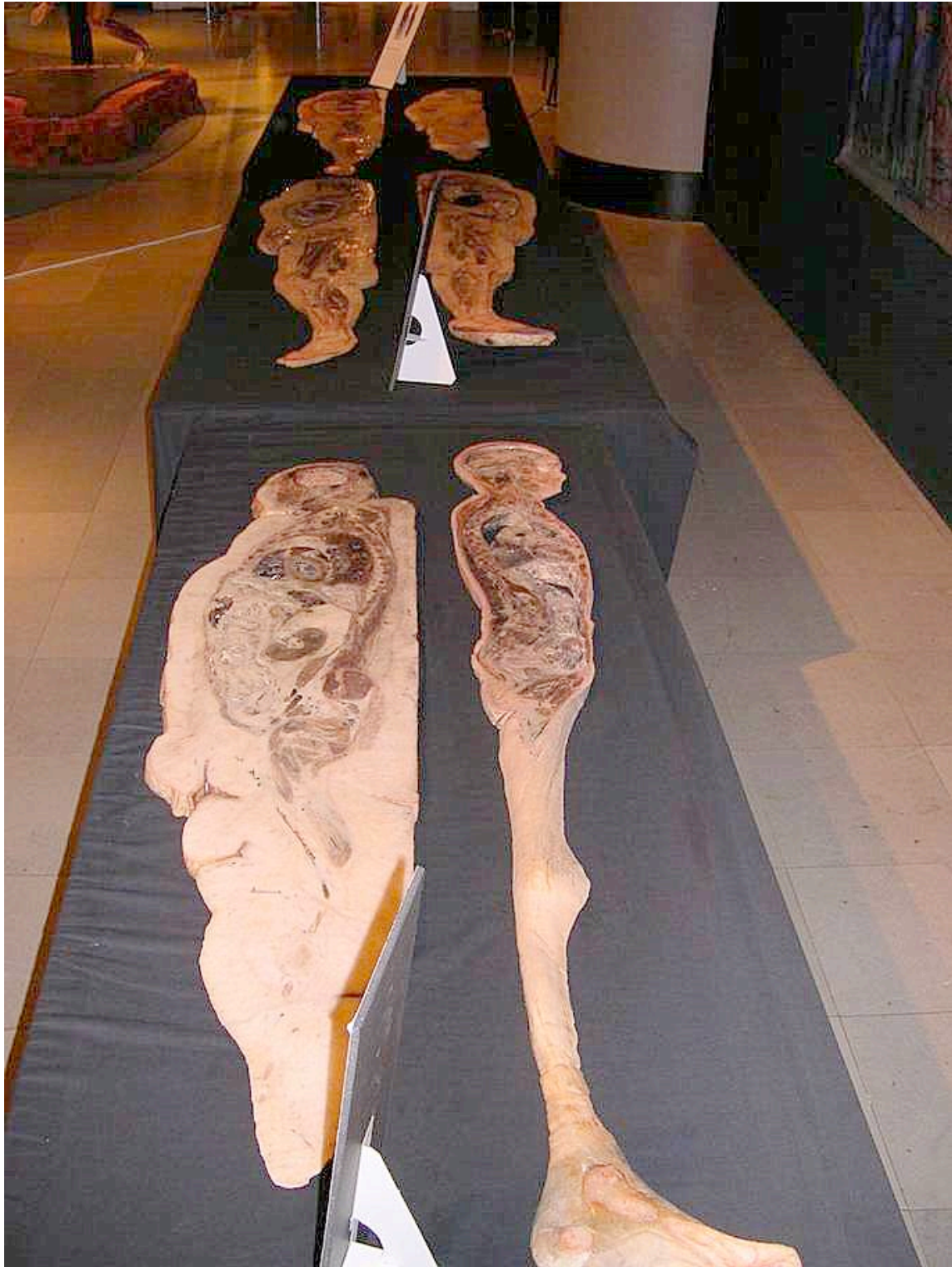


Figure 18. Obesity revealed. Obesity is re-presented through body slices. Photograph by the author, 2005.



Figure 19. The Circle of Action. Note the obesity exhibit to the extreme right. Photograph by the author, 2005.



Figure 20. The Circle of Action. The Dancer. Photograph by the author, 2005.



Figure 21. The Circle of Action. The Archer. Photograph by the author, 2005.



Figure 22. The Circle of Action. The Basketball Player. Photograph by the author, 2005.



Figure 23. Plastinated heart and lung specimen of a nonsmoker (left) and of a smoker (right). Courtesy of Gunther von Hagens, Institute für Plastination, Heidelberg, Germany.



Figure 24. Configuration of blood vessels in a “family,” *Body Worlds*, 2005. Photograph by the author, 2005.



Figure 25. The Chess Player. Other Body Worlds exhibitions feature similar chess-playing plastinates, perhaps an indication of the semiotic importance of this marker. *Body Worlds*, 2005. Photograph by the author, 2005.