

Controversy and the Human Body: Science and Spectacle in *Body Worlds*

Body Worlds, Gunther von Hagens' exhibit of "plastinates," bodies which have been preserved via von Hagens' patented silicone-impregnation process, presents the human body in extreme and explicit detail. The exhibit places these plastinates in active real-life positions and in so doing "blurs the line between art, science, and circus freak show."¹ While presented as mainly educational and is shown in science museums, the exhibit has been described as having an undeniable entertainment and artistic feel. Von Hagens presents his *Body Worlds* exhibit as a "living anatomy" that contrasts with what he calls the "anatomy of the dead" found in the formaldehyde-soaked specimens used in medical schools. He writes, "Anatomical cadavers have retained a bloodcurdling aura, and thus give rise to an emotional revulsion.... As they monopolize anatomical instruction, they are "too little in the living." Cadavers "accustom students not to expect any expression of feelings from patients." They are gradually viewed not as human beings but only as problems."² Far from an affront of human dignity, von Hagens believes that the plastinated forms are a better reflection of the soul than any other means of preserving the human body.³

¹ Penny Herscovitch, "Rest in plastic: Review of 'Body Worlds, The Anatomical Exhibition of Real Human Bodies' by Gunther von Hagens," *Science* 299 (Feb. 7, 2003): 828-829.

² G. von Hagens, "On Gruesome Corpses, Gestalt Plastinates and Mandatory Interment" in *Body Worlds: The Anatomical Exhibition of Real Human Bodies*, ed. Gunther von Hagens and Angelina Whalley, trans. Francis Kelly (Heidelberg: Institut für Plastination, 2004), 260.

³ G. von Hagens, "Plastinated Specimens and Plastination" in *Body Worlds: The Anatomical Exhibition of Real Human Bodies*, ed. Gunther von Hagens and Angelina Whalley, trans. Francis

The study of the inner workings of the human body dates back to antiquity. The dissection of human bodies was performed from as early as 330 BCE when the early anatomists Herophilus and Erasistratus “cut open people who were alive...[and] inspected those parts which nature previously had concealed, also their position, color, shape, size, arrangement, hardness, softness, smoothness, connection, and the projections and depressions of each...”⁴ Subsequent anatomists such as Galen of Pergamon (circa 129-217 CE) and Andreas Vesalius (mid 16th century) built on the body of anatomical knowledge.⁵ Though *Body Worlds* is a technologically modern exhibit it shares many of the same motivations as the work of the founding figures of human anatomy, especially Andreas Vesalius who stressed the need for human over animal dissection.

The widespread success of work of both von Hagens and Vesalius is rooted in their awareness of our collective fascination with the body—a fascination both from admiring the body aesthetically (as Leonardo da Vinci famously did) and from our desire to learn the details of the body’s often hidden and intricate inner mechanisms and functions. Though *Body Worlds* is often seen as blurring the lines between spectacle and science in its treatment of the human body, in reality these lines have been blurred since the Renaissance.

Von Hagens argues that the exhibit is valuable as an educational tool for both the public and those in the medical field. He stresses the importance of the authenticity of his plastinates,

Kelly (Heidelberg: Institut für Plastination, 2004), 20-37.

⁴ Professor David Jones, class lecture in STS.003, MIT, 15 September 2010.

⁵ Ibid.

writing that “Even the best pictures or models cannot replace the original just as viewing a picture of a landscape or a computer animation cannot give a realistic idea of a forest. Authentic anatomical specimens make bodily interiors “graspable” in both senses of the word.”⁶

Despite these arguments, *Body Worlds* has had its fair share of critics who believe that the exhibit does not present enough of an educational benefit to deserve to exist. Professor of bioethics Anita Allen writes that the whole project of *Body Worlds* is “a mistake and lacks more than dignity.” She believes the show has no educational merit and includes a list of quotes from what she calls a “silent minority” that finds the exhibit offensive. A particularly interesting quote comes from a person who claimed that for the bodies to hold any educational merit the bodies should be solely in medical schools or strictly “teaching situations”—as if a public exhibition could have no educational benefit.⁷ Professor of medical history, J.T.H. Connor asks “If *Body Worlds* is not an art show but rather is a scientific and educational experience, as von Hagens claims, then where are the accompanying in-depth educational programming, demonstrations, and truly informative educational explanations?”⁸ Von Hagens and Vesalius hold that the public

⁶ G. von Hagens, “On Gruesome Corpses, Gestalt Plastinates and Mandatory Interment” in *Body Worlds: The Anatomical Exhibition of Real Human Bodies*, ed. Gunther von Hagens and Angelina Whalley, trans. Francis Kelly (Heidelberg: Institut für Plastination, 2004), 260.

⁷ Anita L. Allan, “No dignity in Body Worlds: A silent minority speaks” *The American Journal of Bioethics* 7:4 (2007): 24-25.

⁸ J. T. H. Connor, “Exhibit Essay Review: ‘Faux Reality’ show? The *Body Worlds* phenomenon and its reinvention of anatomical spectacle,” *Bulletin of the History of Medicine* 81 (2007): 858.

is indeed a forum for true education and they use this kind of ‘justification through education’ in defending their work.

Von Hagens also defends the *Body Worlds* exhibit with the argument that he is taking the human body back from what von Hagen terms “the keepers of the body” such as the church, medical professionals, and undertakers. According to von Hagens, *Body Worlds* gives the human body back to the public. He states, “Modern medicine has hidden bodies in hospitals and universities, and I give them back.”⁹ This suggests that rather than seeing his work as merely ‘spectacle,’ von Hagens considers his methods as a way of connecting to the public.

A common theme in questioning the intent behind von Hagens’ exhibit is the accusation that sees himself as an artist—profiting off of dead human bodies for his own fame. One author writes, “...the transformation of corpses into signed artworks violates human dignity by effacing the subject’s identity and basic worth as a unique human being.... *Body Worlds* teaches us that human dignity is a coherent and moral concept that should guide our relationships with the living as well as the dead.”¹⁰ Von Hagens writes in his defense, “From my perspective, however, plastinated specimens are not works of art, because they have been created for the sole purpose

⁹ Debashis Singh, “Scientist or Showman?,” *British Medical Journal* 326 (2003): 468.

¹⁰ Lawrence Burns, “Gunther von Hagens’ BODY WORLDS: Selling beautiful education” *The American Journal of Bioethics* 7:4 (2007): 22.

of sharing insight into human anatomy.... A plastinator is at most a skilled laborer in the field of art, but not an artist as such.”¹¹

It can also be argued that von Hagens nurtures his own controversy. He states in a 2007 article that he is not afraid of sensationalism, saying “...I need and enjoy sensationalism, because sensationalism means curiosity ... And this curiosity brings people to museums and to sports places.”¹² From this quote we can gather that von Hagens finds controversy as a useful means of bringing more people to see the exhibit, but beyond this immediate benefit it also indicates that controversy challenges people to reflect about the topic at hand (a good, educational thing in the end). The article also includes von Hagens’ plans for a new exhibit about portraying the dead bodies in acts of sex in order to warn against the dangers of sexually transmitted diseases.¹³

As mentioned previously above, Andreas Vesalius was a prominent early anatomist in the sixteenth century Renaissance.¹⁴ In the time when Vesalius was studying anatomy, Galen anatomy was considered the forefront way of studying the human body. The anatomy of Galen dated back to circa 129-217 CE and was based off of the dissection of animals and focused little on the research applications of dissection. Before the anatomical renaissance, “...there was little

¹¹ G. von Hagens, “Plastinated Specimens and Plastination” in *Body Worlds: The Anatomical Exhibition of Real Human Bodies*, ed. Gunther von Hagens and Angelina Whalley, trans. Francis Kelly (Heidelberg: Institut für Plastination, 2004), 31.

¹² Lawrence Burns, “Gunther von Hagens’ BODY WORLDS: Selling beautiful education” *The American Journal of Bioethics* 7:4 (2007): 16.

¹³ Debashis Singh, “Scientist or Showman?,” *British Medical Journal* 326 (2003): 468.

¹⁴ A. Vesalius, “Title Page to the First Edition of ‘De Humani Corporis Fabrica’” in *Vesalius: The Illustrations from His Works* (New York: The World Publishing Company, 1950), 43-45.

sense of anatomy as an arena for research. In this sense, dissections functioned rather like an extension of anatomical illustration. Their goal was not to add to the existing body of knowledge concerning human anatomy and physiology but to help students and doctors understand and remember the texts in which that knowledge was enclosed.”¹⁵ Vesalius is considered the father of modern anatomy as he broke away from this way of studying human anatomy, stressing the need to perform detailed dissections of human bodies. The publication of his masterwork *De Humani Corporis Fabrica* (Concerning the Construction of the Human Body) in 1543 is considered the “turning-point” of anatomy. In his book he provided “accurate descriptions and illustrations of the skeleton and muscles, the nervous system, viscera and blood vessels.”¹⁶

¹⁵ Katharine Park, “The criminal and the saintly body: Autopsy and dissection in Renaissance Italy,” in *The Renaissance: Italy and Abroad, Rewriting Histories*, ed. J. J. Martin (New York: Routledge, 2002), 224-252.

¹⁶ Roy Porter, “The body,” in Roy Porter, *Blood and Guts: A Short History* (New York: Norton, 2003), 57.



Image 1: Plate 2: Title Page to the First Edition of 'De Humani Corporis Fabrica'¹⁷



Image 2: Gunther von Hagens in 2002 performing the first public autopsy in England in 170 years to a sell-out audience of 500 people in a London theatre.¹⁸

In Image 1 above from *De Humani Corporis Fabrica*, Vesalius is clearly in the center of attention in the process of dissecting a human body, with a large crowd of people gathered around to observe him at work. This public dissection was obviously something that captured the interest of many people, even those who were not anatomists themselves. In many respects this public dissection can be considered a ‘spectacle’ as this picture is not a classroom setting and includes a somewhat chaotic crowd of onlookers. By the early sixteenth century the “enthusiasm for anatomy was not confined to doctors, but swept up contemporary artists and other laymen... prominent citizens became a fixture at university anatomies, which later in the sixteenth century

¹⁷ A. Vesalius, “Title Page to the First Edition of ‘De Humani Corporis Fabrica’” in *Vesalius: The Illustrations from His Works* (New York: The World Publishing Company, 1950), 43.

¹⁸ “Slab Show Alley,” available at <http://www.smh.com.au/articles/2002/11/21/1037697806161.html> (accessed 9 Dec 2010).

developed into theatrical events attracting an enthusiastic and often raucous crowd.”¹⁹ It is also notable that Vesalius is not standing on a podium lecturing to the crowd but is rather at the dissecting table along with the public. It is interesting to compare the image of Vesalius (Image 1) with Image 2, which is a photograph of von Hagen in 2002 performing the first public autopsy in England in over 170 years. Anatomy as spectacle was interlaced with anatomy as science in the Renaissance; one historian writes “...as we move into the sixteenth century the increasing availability of printed and illustrated works of anatomy designed as ‘coffee-table’ books for a general audience interested in medicine and the secrets of the natural world.”²⁰

Today, we still experience the same fascinations and controversies over the human body that were present in Renaissance times—we still want to know how our bodies work and we still do not know where the line between ‘acceptable spectacle’ and ‘immoral spectacle’ lies in terms of what we do in terms of displaying the human body. To argue that anatomy should not be spectacle, though, is to argue that the public does not deserve to have a deep knowledge of the human body. As von Hagens believes, the public sphere deserves a certain ownership of the human body and public dissection is a means of imparting this knowledge to the public. Spectacle draws in the attention of the public and often results in the public coming away with a deeper appreciation, if not knowledge, of the subject matter behind the spectacle.

¹⁹ Katharine Park, “The criminal and the saintly body: Autopsy and dissection in Renaissance Italy,” in *The Renaissance: Italy and Abroad, Rewriting Histories*, ed. J. J. Martin (New York: Routledge, 2002), 234-235.

²⁰ Ibid.

At a deeper level, the recurring social phenomena of the public's fascination with looking the human body tells us that we still do not fully understand the meaning of the human body. The human body is loaded with meaning—beauty, mystery, and revulsion all at once. We struggle over questions of whether the human body is merely a machine or if it indeed encapsulates the soul. Scientists are both explorers and showmen who in the end need to explain their discoveries to a broader public and spectacle mixed with an explanation of their data makes this possible. The one caveat is that fulfilling our natural curiosity is like an itch we cannot scratch. This leads us to a “slippery slope argument,” where if we allow one questionable action or practice, then we may have little control over what come next because we have already begun travelling down the path of fulfilling our curiosity. The controversies surrounding *Body Worlds* is a reflection of the remaining differences in the way we think about human bodies and is a normal expression of this “slippery slope” mentality.

Bibliography

- A. Vesalius, "Title Page to the First Edition of 'De Humani Corporis Fabrica'" in *Vesalius: The Illustrations from His Works* (New York: The World Publishing Company, 1950), 43-45.
- Anita L. Allan, "No dignity in Body Worlds: A silent minority speaks" *The American Journal of Bioethics* 7:4 (2007): 24-25.
- Debashis Singh, "Scientist or Showman?," *British Medical Journal* 326 (2003): 468.
- G. von Hagens, "On Gruesome Corpses, Gestalt Plastinates and Mandatory Interment" in *Body Worlds: The Anatomical Exhibition of Real Human Bodies*, ed. Gunther von Hagens and Angelina Whalley, trans. Francis Kelly (Heidelberg: Institut für Plastination, 2004), 260.
- G. von Hagens, "Plastinated Specimens and Plastination" in *Body Worlds: The Anatomical Exhibition of Real Human Bodies*, ed. Gunther von Hagens and Angelina Whalley, trans. Francis Kelly (Heidelberg: Institut für Plastination, 2004), 31.
- J. T. H. Connor, "Exhibit Essay Review: 'Faux Reality' show? The *Body Worlds* phenomenon and its reinvention of anatomical spectacle," *Bulletin of the History of Medicine* 81 (2007): 858.
- Katharine Park, "The criminal and the saintly body: Autopsy and dissection in Renaissance Italy," in *The Renaissance: Italy and Abroad, Rewriting Histories*, ed. J. J. Martin (New York: Routledge, 2002), 234-235.
- Lawrence Burns, "Gunther von Hagens' BODY WORLDS: Selling beautiful education" *The American Journal of Bioethics* 7:4 (2007): 16.
- Penny Herscovitch, "Rest in plastic: Review of 'Body Worlds, The Anatomical Exhibition of Real Human Bodies' by Gunther von Hagens," *Science* 299 (Feb. 7, 2003): 828-829.
- Professor David Jones, class lecture in STS.003, MIT, 15 September 2010.
- Roy Porter, "The body," in Roy Porter, *Blood and Guts: A Short History* (New York: Norton, 2003), 57.

MIT OpenCourseWare
<http://ocw.mit.edu>

STS.003 The Rise of Modern Science
Fall 2010

For information about citing these materials or our Terms of Use, visit: <http://ocw.mit.edu/terms>.