Human body exhibits: A guide to understanding the differences

by Ann Zumwalt

We have all seen the advertisements – on billboards and buses, in newspapers and magazines. The ads publicize “body exhibits” in which elaborate and often beautiful dissections of human cadavers are displayed for the paying public. These exhibits stir mixed reactions, eliciting in some awe and appreciation for the beauty and complexity of the human body, and in others shock and even repugnance at the use of real human cadavers. Controversy aside, these exhibits have been wildly successful since the first one opened in Japan in 1995, and they continue to be extremely popular in cities across the globe.

For most laypeople, these anatomy exhibits are the most tangible experience of gross anatomy they will ever have. Our friends, families, and students attend the exhibits and are introduced to anatomy as most have never had the opportunity before. As anatomists, we are often consulted by members of our community to discuss, interpret, and occasionally even act as guides through these exhibits. Because of this, it is important that we fully understand the differences among these exhibits so that we are fully informed in our conversations about them.

Currently there are at least three different companies staging body exhibits in cities across the United States, with still more exhibiting in other countries. The exhibits have similar names and display similar full-body preparations in their advertisements, leading many to mistakenly believe they are all different versions of the same exhibit. The primary distinction seems to be the degree of transparency in the process by which the companies obtain and prepare the specimens on display.

The two biggest exhibitions are the Body Worlds series and Premier Exhibitions’ Bodies… The Exhibition. A third display, Our Body: The Universe Within, is also showing in a smaller number of cities in the U.S. The Body Worlds series includes the original Body Worlds, Body Worlds 2 & The Brain, Body Worlds 3 & The Story of the Heart, and Body Worlds and the Mirror of Time. The Body Worlds exhibits are produced by Gunter von Hagens, the inventor of the method of plastination that is used to prepare and preserve the bodies in all of these exhibits. Premier Exhibitions produces Bodies… The Exhibition and Bodies Revealed, as well as a number of other non-anatomy exhibits (e.g., Titanic: The Artifact Exhibition and Star Trek: The Exhibition).

Most observers of these exhibits want to be reassured that the bodies were obtained in a reputable manner. Because of this, a controversy that follows all of these exhibits is the question of source and consent. First, can the source of each body be documented? Second, did the individuals on display consent to having their bodies used for purposes of anatomical education and/or display? Both of these questions stem ultimately from the human concern that the dead not be violated or exploited by the living.

The major difference between the various exhibition companies is the degree to which they address these concerns. Currently, the only company that claims to be...
able to fully document the source of each body used in their exhibits is von Hagens’ Institute for Plastination (IfP), which provides the bodies used in the Body Worlds exhibits. The other companies make no such assertion. Lack of such documentation, though not evidence of disreputable practice, leaves those companies open to suspicion.

Body Worlds

Body Worlds uses cadavers from von Hagens’ private body donation program, which was established in 1982 and currently has a donor list of approximately 9,000 individuals, with at least 546 deceased and accepted by the IfP. The IfP categorically states the following:

With the exception of a small number of specimens in the Body Worlds exhibitions (specifically organs, body parts, and foetuses) that were acquired from established morphological institutes such as anatomy and pathology programmes, and historical anatomical collections, all of the specimens in Body Worlds are donated bodies, willed by donors, for the express purpose of serving Body Worlds’ mission to educate the public about health and anatomy. (www.BodyWorlds.com/en/media/releases_statements/releases_statements_2008.html?edit)

The IfP maintains a firewall of anonymity between the donors’ documentation and the finished plastinated specimens. As a result, it is impossible to ascertain that the bodies on display are indeed those of the documented donors. An independent ethical review of the IfP body donor documentation set up by the California Science Center in 2004 matched 206 IfP donor forms with the death certificates of the donors. Though the firewall prevented them from matching the donor forms to the plastinated specimens, the review committee was satisfied with von Hagens’ commitment to ethical practices. (Detailed results of the review are found at <www.bodyworlds.com/Downloads/englisch/Media/Press%20Kit/BW_LA_SummaryofEthicalReview.pdf>.)

Publicly available information about the IfP body donation program indicates that the program meets established informed consent standards. The IfP consent form is extensive and detailed, allowing individuals to specify how they would or would not like their bodies to be used by the institute (www.bodymobil.de/Downloads/Englisch/BD_Consent_US200807.pdf). Donors may opt to allow their bodies to be displayed in exhibitions, or opt not to, in which case they will be used for other educational purposes. The IfP will accept bodies from relatives or from the authorities without written consent from the deceased, but only if neither the deceased nor any relatives have voiced any objections (www.koerperspende.de/en/body_donation/faq.html).
In addition to his body donation program, von Hagens accepts bodies from other sources to prepare for academic study. In the past, he has been accused of accepting and storing bodies from questionable sources. In 2004, the German magazine Der Spiegel accused von Hagens of accepting the bodies of executed Chinese prisoners. Ultimately, von Hagens acknowledged that he could not prove that the bodies in question, which he had accepted from Chinese officials but says he never intended for display, had not been executed. The bodies were returned to China for burial. Since then, von Hagens says he has stopped using any Chinese bodies in his exhibits and has converted his Chinese plastination site (one of a number around the world) to one that prepares only animal specimens.

**Premier Exhibitions**

The other major body exhibition company is Premier Exhibitions, which produces the highly publicized *Bodies… The Exhibition* and also *Bodies Revealed.* In early 2008, an ABC News investigation into the purported black market trade of human bodies in China drew attention to Premier’s connection to a Chinese plastination company (http://abcnews.go.com/Blotter/Story?id=4296982&page=1). At the time, Premier insisted that it obtained its bodies from China’s Dalian Medical University Plastination Laboratory, but the university denied any relationship with Premier Exhibitions. ABC News claimed that Premier actually obtained its bodies from a private company, Dalian Medi-Uni Plastination Co., Ltd., and raised suspicion that the Chinese company was purchasing the bodies of executed prisoners.

The controversy led to an investigation by the New York Attorney General Andrew Cuomo. The investigation ended in a settlement with Premier, which stated:

Advocacy groups and media reports have alleged that some of the bodies on exhibit were Chinese prisoners who were executed. Although Premier previously maintained that the allegations were without basis, an investigation by Attorney General Cuomo showed that the company was unable to demonstrate the cause of death or the origin of the decedents… Despite repeated denials, we now know that Premier itself cannot demonstrate the circumstances that led to the death of the individuals. Nor is Premier able to establish that these people consented to their remains being used in this manner. (Cuomo Settlement Statement, May 29, 2008; www.oag.state.ny.us/media_center/2008/may/may29a_08.html)

As a result of this settlement, before displaying a body in New York, Premier must document the source of each body and body part, the cause of death, and the decedent’s consent to the use of his or her body. If they continue to display specimens obtained before the settlement, they must clearly state that they are “not able to confirm that the bodies and parts being displayed were not, or did not belong to, Chinese prisoners who may have been victims of torture and execution.” Currently, such a statement appears on a link from the website for the New York exhibit (www.prxi.com/nycrefund/).

On the main website for *Bodies… The Exhibition*, Premier makes no claim to be able to document the source of each individual in its exhibits. The only related information on the *Bodies… The Exhibition* website is:

All of the bodies were obtained through the Dalian Medical University Plastination Laboratories in the People’s Republic of China. Asia possesses the largest and most highly competent group of dissectors in the world, and they are highly skilled in preparing the bodies for educational and scientific purposes. Currently, human specimens in medical schools in China, the United States and other countries throughout the world are donated or unidentified bodies. (www.bodies-theexhibition.com/bodies.html; FAQ #8)

[Author’s note: Unidentified bodies are infrequently, if ever, used for teaching in United States medical schools.]

Premier’s inability to document the identity or cause of death of any of its cadavers does not necessarily mean that the bodies they display were obtained through questionable channels. It simply means that Premier is not able to identify the source of the bodies, and is therefore not able to demonstrate consent on the part of the individuals.

Premiere is not the only company that lacks such documentation. The website for *Our Body: The Universe Within* states: “All of the anatomical specimens contained in *Our Body: The Universe Within* originate from China and have been provided for the exhibit consistent with the laws of China … While we do not have the specific identity of each anatomical specimen, they have been donated through medical schools and other research facilities in China to promote education, science and medical research of the human body.” (www.ourbodytheuniversewithin.com)

As anatomists, many of us view these exhibits with admiration for the quality of the dissections and appreciation for the fact that they inspire laypeople to learn about anatomy. Equally important is the understanding that the origins of the displayed bodies are not always clear. We may be asked by laypeople about these exhibits and perhaps about the origins of the cadavers used in them. Certainly, many non-anatomists will not know or understand that the exhibits represent different companies with different procurement practices. This article is intended to educate the anatomy community about these exhibits so that we can respond in an informed and knowledgeable manner. 

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