

Ethical Discussions About A Fascinating Exhibition of Anatomy Art by Prof.Gunther Von Hagens in Mannheim, Germany

ALMANYA'DA MANNHEIM'DA PROF.GUNTHER VON HAGENS'İN HAYRETLER UYANDIRAN ANATOMİ SAN'ATI SERGİSİ HAKKINDAKİ ETİK

Hanzade DOĞAN*

*Uz.Dr., Cerrahpaşa Tıp Fakültesi, Deontoloji ve Tıp Tarihi AD, İSTANBUL

Summary

The Mannheim exhibition 'Anatomy Art', held for the second time between August-November 2000, which presented plastinated anatomical specimens with a new technique, has provoked a public resonance beyond Germany.

As a novel outcome of the exhibition, specimens of the entire body can be inherently stabilized and posed in a way that they become actually capable of standing and preserved eternally, which was formerly restricted to skeletons. In addition, with this new technique, education of anatomy began to have new horizons for the new generation. In addition, this would permit the viewers not schooled in medicine to free themselves of a taboo.

The exhibition of anatomical specimens, in terms of prevention of odor and skillful dissection of details, has changed radically with the new technique of plastinated specimens.

On the other hand, this inventive process, which might be considered as a wonder of science, desperately required for its own products the donation of bodies.

Beginning with the questions of human dignity, self-determination, and informed consent, this exhibition brings various ethical discussion points on to the stage.

Because of the amazing progresses in science, different values will be discussed and socially agreed on by the help of ethical justification and deliberation.

Key Words: Anatomy, Plastinated, Invention, Ethics, Value, Human dignity

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Yazışma Adresi: Dr.Hanzade DOĞAN
Cerrahpaşa Tıp Fakültesi
Deontoloji ve Tıp Tarihi AD
İSTANBUL

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Özet

2000 yılının Ağustos ile Kasım ayları arasında Almanya'nın Mannheim kentinde düzenlenen ve 'Anatomi Sanatı' olarak adlandırılan sergi Almanya'nın sınırları dışına uzanan büyük yankılar uyandırdı. Bu sergide kullanılan yeni teknik sayesinde, artık insan vücudu ölümden sonra sonsuza dek saklanabilecek şekilde muhafaza edilebilecekti. Ayrıca, bedenın yumuşak uzuvları da belli bir şekli koruyabilecek şekilde katılaştırılabilecekti. Bu şekilde, anatomi eğitimi gelecek nesiller için yeni ufuklar belirlerken, tıp eğitimi almamış kişilerin de insan vücudunun gizemi üzerine yoğunlaşmış tabuları kırmalarına yardımcı olacaktı.

Bu sergide, daha önceleri problem olan kötü kokulardan kurtulmaya yardımcı ve vücudun çok detaylı kesitlerini sunabilen, plastik maddelerle şekillendirilmiş gerçek vücutlar kullanıldı.

Diğer taraftan, bir bilim harikası olarak nitelendirilen bu yeni keşif, mutlak şekilde insan vücutlarının bilime bağışlanmasını gerektiriyordu. Bu sergi, insan onurunun korunması, özerk karar hakkı ve aydınlatılmış onam gibi konuları gündeme getirerek, çeşitli etik tartışma noktaları başlattı.

Bilimin insanlığa sunduğu harika keşifler, toplumda değerlerin yeniden gözden geçirilmesine sebep olur ve etik muhakeme usullerinin sağlıklı kullanılabilmesi sayesinde, kısa sürede değerler üzerinde tartışabilmek ve kabul olunabilir görüşlere varmak mümkün olabilir.

Anahtar Kelimeler: Anatomi, Plastikle şekillendirilmiş, İcat,

Etik, Değer, İnsan onuru

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The Mannheim Exhibition 'Anatomy Art' about which I have learned through the TV was announced to be a magnet for the public and a media happening. The exhibition that was held for the first time between October 30, 1997 and March 1, 1998,

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Figure 1.

within a space of only four months, was visited by nearly 780,000 people at the Mannheim Museum of Technology and Labor. It was held for the second time in Mannheim between August and November, 2000 and in different places in the world during the time in-between. Such a presentation of plastinated anatomical specimens seemed to be a singular undertaking and that there seemed to be just as singular a public and published resonance far beyond Germany.

After I watched this attractive news, I decided to investigate about the details of this scientific event through Internet in detail, because it flashed ethical issues to be discussed (Figure 1).

This exhibition displays something unusual: anatomical specimens are produced and preserved according to a new process (Figure 2) developed by Gunther von Hagens, an anatomist at the Institute for Anatomy and Cellular Biology at the University

of Heidelberg. The process that is called plastination even makes it possible to lend rigidity to soft body parts like organs such as liver, lungs, and a single nerve. As a new consequence, even specimens of the entire body can be inherently stabilized and posed in a way that they become actually capable of standing and preserved eternally, which was formerly restricted to skeletons. In addition, with this new technique, education of anatomy began to have new horizons for the new generations. Another resonance among the public was that exhibiting the products of this new technique would permit the viewers not schooled in medicine to free themselves of a taboo.

Some Historical Facts

The fact which was revealed of the exhibits was that it showed things never seen before (New Vistas). Through the historical excursion, it is

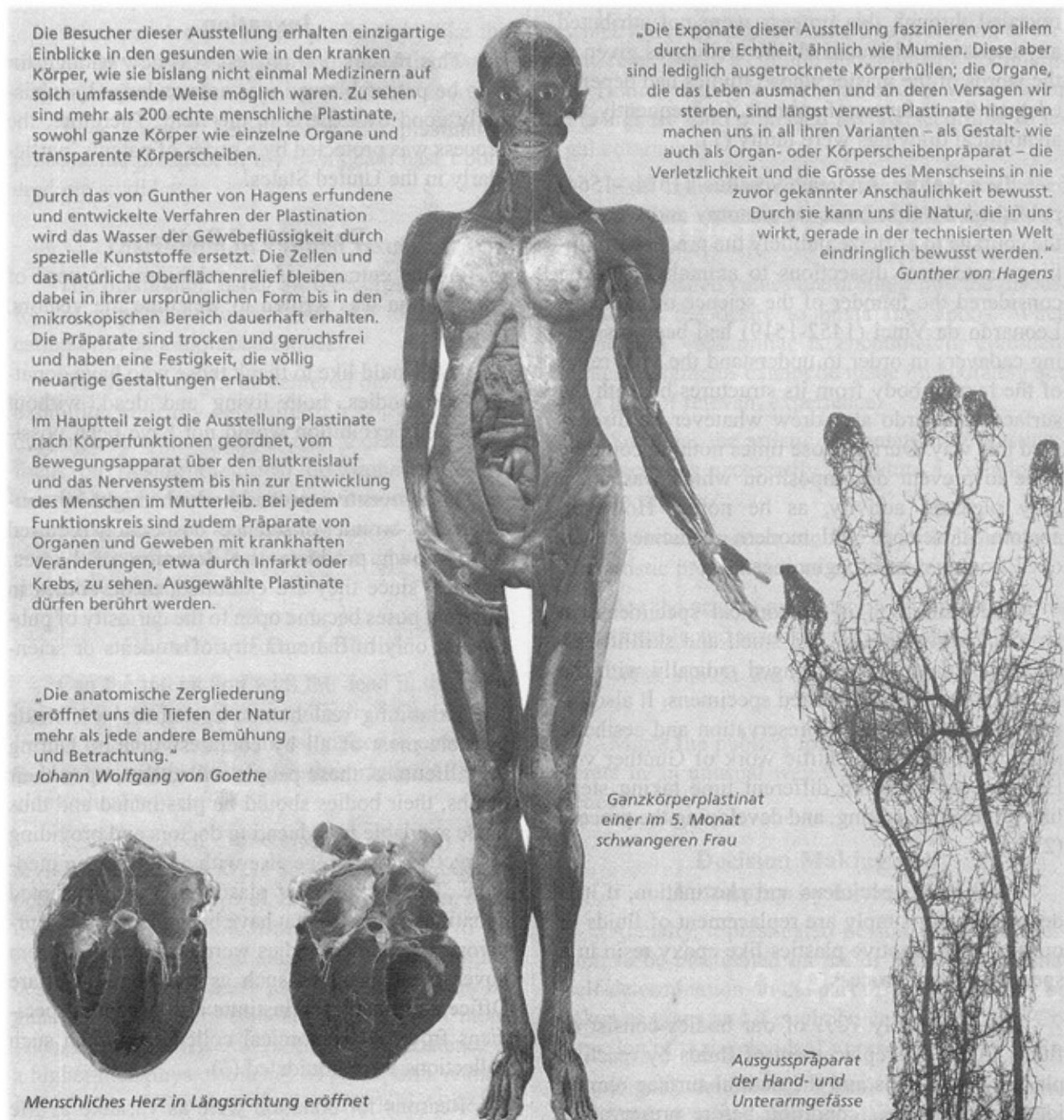


Figure 2.

known that, the teachings of Galen of Pergamon (131-201 AD), a doctor whose conclusions were based on the study of animals, had dominated the field. Having studied in Alexandria, Galen had settled in Rome and produced some 150 medical writings. It was assumed that he never dissected human bodies, but instead studied monkeys and other ani-

mals-his anatomical works were flawed accordingly. Galen did, in fact, enjoy an excellent reputation as a doctor. Over the course of time, Galen published 200 books and influenced anatomical thought and medicine for the next 1300 years. A professor would read from Galen's books while his assistants dissected a cadaver. Anatomical findings

revealed through this process were not attributed any importance because all the credit was given to the words of the master whose studies had depended upon the cadavers of animals. Consequently, the anatomical drawings were faulty (1).

Even before Andreas Vesalius (1514 -1564) published the first book on anatomy and who had the courage to criticize publicly the practice of limiting anatomical dissections to animals (1) being considered the founder of the science of anatomy, Leonardo da Vinci (1452-1519) had been dissecting cadavers in order to understand the vital relief of the human body from its structures beneath the surface. Leonardo also drew whatever he discovered this way. During those times nothing could be done to prevent decomposition which was not a very pleasant activity, as he noted. However, anatomical science and modern medicine developed from just such beginnings.

The exhibition of anatomical specimens, in terms of prevention of bad smell and skillful dissection of details, has changed radically with the new technique of plastinated specimens. It also introduces the innovative preservation and aesthetic presentation. This scientific work of Gunther von Hagens was based on different time taking steps like originating, testing, and developing the process (2).

Plastinated specimens and plastination, if it is described very simply are replacement of fluids in our tissue by reactive plastics like epoxy resin in a special vacuum process.

Approximately 70% of our bodies consist of fluids. After the replacement of fluids by reactive plastics, body cells and the natural surface remain identical with their condition before preservation down to the microscopic level (2).

The specimens are odorless, dry, and susceptible to any pose of humankind. They are durable, realistic, and aesthetic.

Anatomical variations are significant from one individual to another, which is really a difficult problem to overcome with artificial anatomical models. For this reason, practical anatomical education for medical students using dead, human bodies has been laid down by law in most of today's societies.

Invention

This plastination process was new enough for it to be patentable and was acknowledged surprisingly good by experts in the field. Therefore, the process was protected by a series of patents, particularly in the United States.

Donation of Bodies

At the entrance of the exhibition, A word of appreciation was written to welcome the visitors. (2)

'We would like to thank those who have donated their bodies, both living and dead, without whom this exhibition would not have been possible.'

This inventive process, which might be considered as -wonder of science- desperately required for its own products the donation of bodies. Besides, since they are exhibited, those bodies in different poses became open to the curiosity of public- not only to the curiosity of students or scientists.

Exhibiting real human specimens was made possible most of all by countless donors. During their lifetimes, these people willed that, upon their deaths, their bodies should be plastinated and thus made available for educating doctors and providing instruction for anyone else with an interest in medicine. The Institute for plastination also accepted donations of bodies that have been provided by survivors. Unclaimed bodies were also accepted from government agencies such as the Social Welfare Office and finally the institute also accepted specimens from old anatomical collections when such collections were liquidated (3).

Reasons for donation were as variable as life itself. However, the desire for donation of one's body as a way of reaching a good aim was the common motivation point. A simple wish for plastination, rejection of decomposition after death or sometimes even saving burial expenses was the common mentioned reasons. Some comments of donors were as follows (3):

'Because the medical arts have saved me from death several times, I feel a need to show at least a small token of my appreciation to medicine by donating my body.'

'After my death I would prefer to be like this than to be consumed and metabolized by worms and tiny organisms'

'Ever since I heard about the plastination process, the prospect of my own death hasn't bothered me at all.'

Discussion of Ethical Issues

The plastinator, using all the corpses donated, for the purposes of science caused a moral provocation or even a moral earthquake.

The debate might be centered on: Is the entire exhibition ethically defensible? A fair way of conducting a theoretical and bioethical discourse might focus on raising rhetorical questions on ethical standpoints because bioethical issues about sciences like anatomy are usually bound to its time and other contextual features and might depend on subjective moral values.

Donation of Dead Bodies

Can the interaction with the dead in this exhibition violate basic human dignity? Can it contribute to the decline of moral values in our society? Do we require values for the practice of medicine or healing arts? (4,5).

In the world of metaethics, the diversity of individual approaches to the above mentioned details depend on three groups of ideas: cognitivism, emotivism, and institutionalism.(3) According to the cognitivist view, ethical statements express logical conclusions. Since man's physiological sensory organs are unsuited for standard perception of moral facts, the cognitivist must admit to the existence of a higher metaphysical means of perception, namely intuition.i.e.: 'The dignity of man is inviolable.'

The followers of emotivism do not accept objective moral statements. 'The dignity of man is inviolable's not a statement which describes any external reality ascertainable with reason but it is a literary document of an emotion which is a subjective feeling.

Institutionalism do not describe moral facts as objective physical or metaphysical realities or purely subjective psychic phenomena which can stimulate other persons to empathy. Moral facts are social institutions created by people through history,

which are stabilized and modified according to certain rules within a cultural and linguistic community. Human dignity which is an ethical value means the highest good protected by law according to legal community.

Each individual citizen has a certain influence on all future values and standards through his actions or inactions.

Established values are brought into the discussion with the desire to break the taboos. When something unfamiliar is encountered, confident ethical judgments cannot be made immediately due to a lack of relevant experience.

So: Does the artistic presentation of plastinated specimens necessarily constitute a violation of human dignity?

By which criteria can one objectively evaluate the artistic presentation of a plastination?

Are the artistic presentation of human corpses questionable and insensitive to human feelings?

What should the bounds of human curiosity be?

Might the public's longing for immortality interact in an unusual way with the artist's omniscience?

Decision Making and Autonomy by Living Will

Actually, a plastinated person made the decision to be plastinated on his or her own, and that self-determination on the part of the person may be taken as given and it might be considered as an expression of that individual's personal dignity (6,8).

Dignity denotes an ethical ideal and the concrete task of preventing and eliminating intellectual oppression, material need and social injustice. The basic idea underlying this is the mutual respect of humans as vulnerable beings concerned for themselves and for others.

When it comes to the dead, the body is a lifeless object in appearance, but the deceased is a living subject in memory. Because the idea of decaying flesh and disintegrating bones is difficult to bear, more people are thought to allow their bodies to be used after death for the living for anatomical purposes and for plastination.

THEN, Does the individual infringe his own dignity if he makes his dead body available for plastination?

Does the aesthetic form of a plastinated body, and possibly its conversion into a work of art infringe the dignity of the dead?

The fact in major natural disasters and epidemics, and in wars which create numerous anonymous graves also lack special respect for the dignity of the corpses. Autopsies without any consent of the deceased or relatives, in order to solve a crime, are questionable for the dignity of the corpse.

Actually, from the ethical point of view, the dignity of a corpse seems to arise only when living persons are handling it, this also includes the respect for the last wishes of the deceased with regard to his mortal remains, as long as public order and health would not be affected by this decision. Maybe, his right to self-determination when he was alive, should be valued over the dignity of his dead body.

During plastination, a corpse first becomes anonymous, then is turned into a durable specimen which no longer be identified with the former person and then becomes an object of scientific information.

Plastination looks to have turned out to be a cultural technology to fulfill the aim of presenting the unity of embodiment as a real virtuality in as permanent and authentic way as possible that seems to justify some ethical principles like self-determinism by living wills, truthfulness and respect for identity.

Conclusion

The activity of such an exhibition cannot be judged without deliberation and justification (7), to infringe human dignity. The private sphere of the people should not be generalized as a general cognitivist ethical value. The statement of touching upon human dignity can only be the result of careful, deliberate evaluation of the issue.

Viewed in another way, protecting the body against the will of the deceased would also mean imposing the values of others onto the donor that might be considered quite questionable in terms of ethical point of view.

Through the process of informed consent (8,9), which is receiving information on plastination and on the uses of plastinated bodies, the donor uses his/her right to self-determination.

One of the freedoms of mankind is to be able to make arrangements about his estate for the time after death and it is often simply maintained that the dignity of a person continues after death and even extends to the dead person. On the other hand, is this common argument problematic? Can the dignity of a person outlive the person himself? Does the dignity of someone who has died represent the dignity that he had when he was alive? Does the dignity for the dead have binding points with the dignity of the survivors after his death? The answers to the above questions by the rational philosophical thinking might differ from those of religious opinion.

Despite the right of self-determination, the discussion and description of dignity of the dead seems to be mainly a social agreement that can be justified by the wish of the public to take decisions about 'beyond death.'

As a final word, by the spectacular progresses in science and sometimes by different economical and religious perspectives accompanying those progresses, besides the rights of individuals and the outcomes of self-determination, social agreements about some values will play important roles for the process of ethical decision making.

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