

## Gunther von Hagens The Designed Body



Thanks to plastination, it is possible to produce new types of specimens such as thin, transparent slices of body tissue or shaped, full-body plastinates, so-called *Gestaltplastinate*.

Photo: Prof. Dr. med. Gunther von Hagens

The second millennium approaches its end with a reevaluation of the human bodily form. Not until we abandon generally-accepted, preconceived notions and open ourselves up to the adventure of new designs can we overcome the limitations of our quotidian existence.

*Gestaltplastinate* (plastinates resembling cyberspace figures) are the shapes of a new age. They are the modern, real/fantastic resurrection of our bodies that correspond to the young generation's awareness of life.

Our relationship with our physical form—our body—is not inborn; rather, it is culturally conditioned by means of tradition. The veiling of women in Islamic states and the permissiveness and nudity at the Carnival in Rio define a range including all the nuances of publicly dealing with the body. Public representations of the naked body must, as a rule, be oriented upon the lowest common denominator of audience sensitivity. Solely because *Gestaltplastinate* serve the cause of enlightenment are they permitted to be naked and skinless—that is, nuder than nude—since only in art and medicine is nakedness acceptable in all cultures.

When, during the Renaissance, the beauty of the human form stood at the center of an entire artistic epoch, the beauty within the body was discovered as well. This was the consequence of artists like Leonardo da Vinci, Michelangelo and Dürer themselves beginning to anatomically investigate the muscles shaping the body's surface. They documented the results of their studies in anatomical drawings. Only a very few stuffed specimens are still in existence, most in pitiful condition.

Following the work of Renaissance artists, the French anatomist Honoré Fragonard (1732—1799) advanced the study of anatomy in relation to art. With the means available at that time,

he preserved what remains to this day the only piece of large-scale anatomical statuary, a young boy riding a horse.

What can be said of Fragonard's work is the same that applies to the anatomical specimens of the Renaissance: in their beauty, colorful splendor and radiance, the copies surpass the originals. Nor did this change following the introduction of Formalin, which is still the best fluid preservative. Indeed, since then, anatomical museums are populated by entire batteries of jars filled with specimens preserved in fluid. Nevertheless, even medical school students have to learn to get over the revulsion they feel when they gaze upon these gray-colored specimens.

In addition to the external face inseparably linked to one's personality and the qualities making up one's essence, every person has an internal face which is, on account of the complex anatomy of the body's interior, of more highly pronounced individuality than the exterior—inimitably distinctive all the way down to the genetic-molecular level.

The internal face is the anatomical individuality of the body's interior. It is made visible by means of preservation (e.g. with forceps and scalpel) and plastination (e.g. the transparency of thinly-sliced tissue samples through their impregnation with epoxy resin). In other words, the type and quality of preservation and plastination determine how we relate to the internal face, whether we catch sight of the body's individual interior in the form of a preserved muscle specimen or a thin slice of tissue.

Plastination allows the body's interior to be depicted in a way that does not induce queasiness. Plastinates are the most aesthetic and most instructive permanent anatomical specimens in the history of anatomy. Another reason why plastination constitutes a revolution in anatomical representation is because it also makes it possible to produce new types of specimens such as thin, transparent slices of body tissue or shaped, full-body plastinates, so-called *Gestaltplastinate*.

The cultural significance of plastination is threefold:

1 For the first time, human beings are intentionally forgoing internment in favor of enlightenment. Thus, the *Gestaltplastinat* is emerging as a new—and this time, self-determined—form of postmortem physical existence.

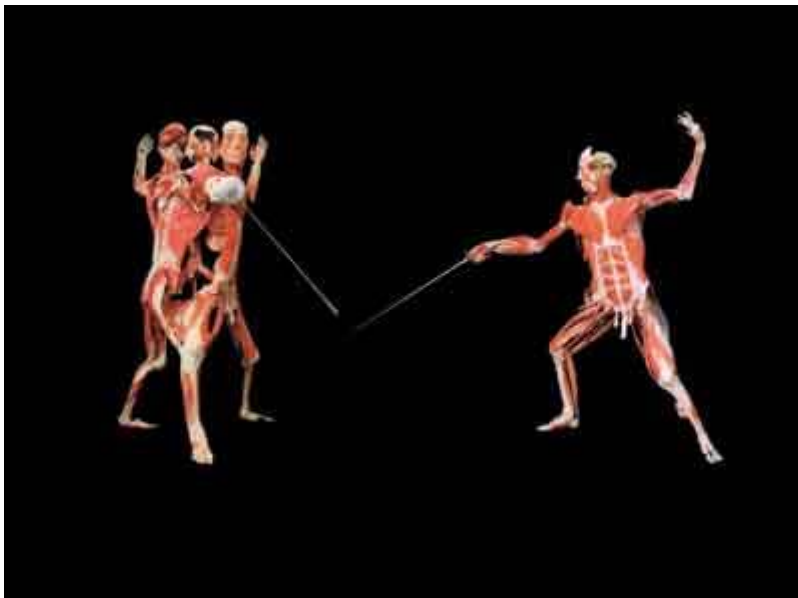
2 The representation of the body's beautiful interior makes physical emancipation possible. The body's interior is no longer repressed, with the resulting consequences for an individual's physical and mental self-confidence. Numerous comments by visitors to the exhibit *Körperwelten* (bodily worlds) attest to this.

3 With *Gestaltplastinaten*, a new face is bestowed upon death. It takes on an aesthetic-instructive liveliness, which endows the conception of death with a certain conciliatory nature.

Our sensitivity to the beauty of the body's exterior has been inculcated in us by evolution. Therefore, we have only direct aesthetic perceptions of the body's exterior, and of the body's interior that can be experienced with the senses. The young, well-proportioned woman and the powerful, healthy man with sparkling white teeth provide their own genes with enhanced reproductive chances. One's physical condition is appraised in a matter of seconds.

Unpleasant physical attributes give rise to revulsion and provoke a flight response. These include unpleasant odors, infectious exudations or signs of injury.

The aesthetics of the body's interior, on the other hand, do not correspond with those of its exterior. Here, evolution has given rise to no preferences. The heart exhibiting cardiac disease, the cirrhotic liver are no less attractive than healthy organs. The pathologist can even wax rapturous in describing wonderful metastases of a cancerous liver. In the case of aesthetic representation, we must differentiate between individual anatomy on one hand, and the technique of preservation and plastination on the other. It is up to the plastinator to decide "how" an individual's anatomy is to be depicted. The straightforward, ingenuous way that children interact with plastinates shows that "ugh, gross!" feelings are not inborn, but rather that these are molded by depictions of the body's interior in horror films or carnival attractions. This, however, has been done away with in the case of plastinates, which do not cause revulsion; on the contrary, they enable laymen to satisfy their deep-seated curiosity about the interior of the human body. Nothing is closer to us than our body, but there is nothing that is so close to us about which we know so little.



Full-body plastinate "The Fencer" from the exhibition "Körperwelten"  
Photo: Prof. Dr. med. Gunther von Hagens