

**Jose van Dijk. *The Transparent Body:*
A cultural analysis of medical imaging. Seattle and London: Uni-
versity of Washington Press, 2005, ISBN 0-295-98490-2.**

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Jose van Dijk's book is an exploration in two areas: the book is, according to the author, first about the cultural history of some medical imaging techniques, such as X-rays, and, second, about the role of media and art in dissemination of knowledge on medical imaging and shaping the viewers perception of body and ways in which it can be represented through medical imaging. The book consists of seven chapters and an epilogue. Each chapter analyses a certain medical technology and its history, considered from the point of view of cultural archaeology. In other words, medical imaging is discussed in terms of how it was established as a psychological and social event and influenced the way people experience their body and certain physical events, such as pregnancy, illness, death, physical anomalies. Medical imaging technologies discussed are X-rays, endoscopy, ultrasound, computed tomography (CT), magnetic resonance imaging (MRI), positron emission photography (PET) and electron microscopy (EM). Despite the fact that it still seems rather unusual to consider medical practices in general and, in particular, medical imaging as elements of a culture and their descriptions in literature and representations in the media as reflecting their place in a culture, this approach has its predecessors. As van Dijk indicates, Michel Foucault in his work *The Birth of the Clinic: The archaeology of Medical Perception* was the first cultural theorist to see medical practices as an element of culture. The other predecessors include Lisa Cartwright, who sees medical and media technologies as representational tools producing meanings at a particular historical moment, and the

sociologist Jackie Stacey analysing cultural meanings of medical practices.

However, the framework of the book and its approach seems at times exceedingly broad for a sufficiently deep analysis of cultural phenomena: Thomas Mann's famous *The Magic Mountain* in which Hans Castorp shows his X-ray picture to Clavdia Chauchat is discussed alongside television shows such as ER (Emergency Room). Similarly, it appears that sociological analysis of the cultural meanings of medical practices should be different from the analysis of their representation in texts, such as books and television series. The two can coexist, of course, and van Dijk claims that they should, because the media representation of medical practices constantly changes the way people react to them in real life, as well as, naturally, changing medical practices prompt ever-changing media representations. Thus, in this case (as, perhaps, in many others?) sociology and the analysis of diverse texts go hand in hand since one is constantly influenced by another.

Medical imaging, as van Dijk claims in chapter one, is based on the ideal of a transparent, wholly accessible and visible body, necessary for the purposes of medical diagnosis. However, medical imaging, objective as it may seem, like all representations, is open for interpretation, which may not be univocal. In addition, besides purely medical interpretations of a medical image, there may be psychologically and culturally salient interpretations of lay-people involved. The longer a certain practice (for example, pregnancy ultrasound) exists, the more new cultural traditions related to this practice emerge and develop.

Chapter two considers the cultural phenomenon of "freak show" and how it is related to today's media influenced medical practices. Watching a television program presenting a very fat man and a medical doctor explaining in great detail what operation he should undergo to become slimmer, van Dijk realised that the cultural roots of shows like this one can be traced as far back as exposing people who had any kind of physical anomalies at fairs and in circuses during the Middle Ages. Incidentally, the author traces the appearance of the term "Siamese twins" to one of such shows: the first Siamese twins were brothers Chang and Eng, born 1811 and brought from Thailand to America by an American trader who used them as an attraction at fairs. As van Dijk notes, public values noticeably changed in the twentieth century, and congenital deformities were increasingly looked upon as handicaps that should be cured and alleviated rather than made fun of. However, the medicalization (Foucault's term) of the society, according to van Dijk, did not totally erase the freak show, but changed its character. The medical profession's effort to save the freak, rather than the freak himself, became the centre of attention, projected on public screens.

To continue the investigation into how moral and other, perhaps, aesthetic values are connected to the interest in other persons' bodies which may be represented in various ways, van Dijk discusses the "anatomical art" in chapter three. In the 1950s, after the introduction of plastic materials, the German artist and anatomist Gunther von Hagens has developed a preservation technique that he had called "plastination." The technique, which an average perceiver will probably find appalling, since it involves dissecting of dead bodies, allowed von Hagens to create works which used modified organic material of dead bodies and which he saw as "postmodernist" art. His art was "postmodernist" in the sense that it was often visually related to earlier, for example, medieval, well known representations of human bodies. Van Dijk sees his work as "imitations of representations" (53) rather than representations of the body. It seems, however, that even an image which is not completely realistic (Hagens' works are not) may still be a representation, as well as an image which hints at another well-known image, or represents it, is still a representation. Hagens' touring exhibition called "Bodyworlds" attracted a lot of interest at the time, mostly, as van Dijk sees it, because of the moral debate it caused on the legitimacy of such a treatment of a dead body.

Chapter four, which is central to the book, is concerned with endoscopy, which is the ultimate realization of body transparency made possible by science, and its representation in the media. In the 1966 science-fiction movie *Fantastic Voyage*, three men and a woman enter a space capsule that is then shrunk to minuscule size before being injected into the vein of an anesthetized patient. The crew travel through the man's heart and lungs and marvel at the wonders of corporeal space, a journey which is seen by van Dijk as a metaphor for endoscopy – the main medical technology making it possible to look inside a human body without destroying its integrity. Due to the emergence of endoscopy, our perspective on the human body, according to van Dijk, has radically changed over the last fifty years: instead of looking from outside in and trying to speculate on what is going inside on the basis of the patient's account, we can actually look in by means of an endoscope. Even more importantly, perhaps, endoscopy is being videotaped for general public and medical television shows, such as the American show *Surgeon Work*. In shows like this one, the shift of the filming camera allows the transgression of boundaries between the patient's inside and outside, between the clinic and television studio, between one person's personal space and another's. The possibility of such transgression is a phenomenon the existence of which is caused by the new medical technology, such as endoscopy. Van Dijk clearly doubts the moral legitimacy and aesthetic value of shows attracting viewers by videotaped endo-

scopy, although she does not explicitly say so. What she does say explicitly, though, is that endoscopy images are open to multiple interpretations, and the way television shows present the process, in most cases, distorts the truth and is influenced by narrative conventions. However, what is the distorted truth and by what narrative conventions it is influenced, apart from the desire to make the medical scene look pleasant for the viewer, is not discussed in the text. It seems that the very fact that medical images, like all others, are open to multiple interpretations, which is mentioned by van Dijk many times, undermines the idea that television representation of endoscopy distorts some important truth. At the same time, it does seem convincing that medical television shows featuring videotaped endoscopy would be perceived as morally and aesthetically unattractive by many viewers. The same shows, to which most potential viewers are to some extent exposed, may be the cause of the continuous change in values.

In chapter five van Dijk sketches the history of X rays discovered by Wilhelm Rontgen in 1895 and describes the place of the new technology and, more broadly, new audio-visual culture, in Thomas Mann's famous novel *The Magic Mountain*, published in 1924. In a few decades following the discovery of X rays the social meaning of the new technology had been established as not entirely medical. Before it was found that X rays may be harmful, many women, beginning with Bertha Rontgen, had their hands X-rayed in order to give the pictures to their loved ones. A similar use of an X-ray picture is described in *The Magic Mountain*: Clavdia Chauchat's X-ray diapositive is cherished by Hans Castorp, who is in love with her, as a sign of intimacy and makes him feel that he knows her "under the skin," her hidden self. Hans Castorp is not alone in his perception of X-rays as not just medical, but human documents, full of emotional meaning. Doctor Behrens who is a practitioner in the Davos sanatorium where Castorp is a patient has a whole "picture gallery" of X-rays done by himself. Behrens, who is also an amateur painter, has made two portraits of Clavdia: an oil painting and an X ray. Castorp is fascinated by Behrens' gallery as he is by another technology, new at the time: the gramophone. He even sees a certain similarity between the two. Castorp's and Behrens' perception of X rays illustrates the friction between the medical and the artistic use of the technology, characteristic of the time. Yet in some details van Dijk's interpretation seems simplistic: she says, for example, that although an X-ray and a doctor's interpretation of it had initially made Castorp feel sick, a new X-ray, which shows that he is healthy enough to leave the sanatorium, does not make him feel so and cannot undo the effect of the first one. However, Castorp wants to stay on "the Magic Mountain" not because he does not believe that he is healthy, but simply because by the time he gets his last

X-ray most of his life interests have shifted to the sanatorium and no amount of medical imaging can change that.

In chapter six, van Dijk describes the meaning of ultrasound, mostly pregnancy ultrasound, which has become an important ritual, in our culture. Van Dijk's main idea in relation to the place of ultrasound in contemporary culture is that it is able, similarly to other medical imaging technologies, to make pregnancy a collective (familial and wider groups'), rather than strictly individual, experience. In this case, again, we are dealing here with the transgression of previously established boundaries and re-evaluation of values.

The consideration of the moral aspects of handling a dead body and using it for entertainment and education is continued in chapter seven, where van Dijk discusses the Visible Human Project (VHP) – a digital database of a human cadaver. This virtual body can be logged onto from a computer which allows students of anatomy to experience many visual characteristics of a dissected human body without handling an actual dead body and without leaving their home. Projects like this one, notes van Dijk, can definitely replace anatomical illustration and models, as well as (to a lesser extent?) dissecting bodies in educational purposes. In the Middle Ages, bodies dissected in anatomical theatres most often belonged to criminals, because there existed a strong link between consideration and dissecting of a naked dead body and public humiliation, and, accordingly, most people would not agree to anatomical use of their bodies after death. Although in later years there appeared a trend of donating bodies and organs for scientific use, the link between public exposure of a dead body and humiliation, as well as other unpleasant emotions, remained. The VHP project significantly decreases, if not eliminates, these emotions. It also re-establishes the link, as van Dijk observes, between contemplating the body and its possible anomalies and illnesses, and entertainment, since all digital resources are prone to be used so.

In conclusion, van Dijk notes that medical and media professionals have a shared responsibility in how patients are represented, especially those without a voice of their own, such as foetuses, babies, seriously disabled persons and the dead. Transgression of old visible accessibility boundaries should not mean transgression of moral and aesthetic boundaries.