

FOREWORD: MEDICAL IMAGING: CHALLENGES, REFLECTIONS AND ACTIONS

Rethy Chhem, Heiner Fangerau, Irmgard Müller, Shih-chang Wang

Medical Imaging plays a prominent role in contemporary medical research and practice. At the same time imaging in its broadest sense, including illustration, diagramming, model-making, photography and other forms of image rendering, has a long tradition in medicine.

Imaging has served different purposes ranging from depicting to backing concepts or creating convincing evidence. Thus, imaging the human body has different aspects not only related to techniques or current interpretations of visual representations through medical imaging technologies. Furthermore, the way the human body was and is displayed in images also reflects a range of cultural, historical, artistic and scientific concerns.

Therefore, the editors of this book organized an international interdisciplinary conference in 2010 to bring together perspectives on Medical Imaging from medicine, philosophy, history and arts. The aim of the conference was to discuss medical images as scientific representations, their inherent ontologies and ethical aspects related to representing the human body.

The topics that were discussed included the production of knowledge using imaging techniques and the commonality of that knowledge across imaging modalities, the role of data and data collection for medical diagnosis and communication, the role of formal ontologies in representation and communication with medical images, norms of health and disease and the understanding of body (and mind) as they are shaped by imaging technologies, and the interdependence of technology, medicine and information science.

Now we are proud to present with this book the proceedings of this interdisciplinary conference including representative examples of what was presented and discussed. We will start with two papers by Rethy Chhem and Shih-chang Wang reflecting on Medical Imaging from the perspective of medicine and radiology. We will then delve into questions of representing ontologies and “scientific truth” with the help of images. The papers by Irmgard Müller and Heiner Fangerau, James Overton and Cesare Romagnoli, Kirsten Brukamp, Frederick Gilbert and Heiner Fangerau and Robert Lindenberg examine the evidentiary status of images, ontological structures in radiology, processing procedures, brain reading metaphors and chains of representation in medical imaging. This more epistemologically oriented section is followed by a section focusing practices and media in imaging the body. Fabio Zampieri, Alberto Zanatta and Maurizio Rippa Bonati reflect upon Iconography and Wax models in the promotion of vaccination Katsiaryna Laryionava examines how contemporary art redefines the human body, Richard Hoppe-Sailer,

Rainer-M. E. Jacobi and Sarah Sandfort critically analyse the interconnections between the spheres of visual representations, the body and knowledge and Kathrin Friedrich displays how the practices of a “sight collective” influence diagnostic procedures in computed tomography. In a final section Santiago Sia is “looking behind the image” and is raising in an outlook philosophical and ethical issues in medical imaging that might be in the focus of a following conference.

We hope that these conference proceedings with their wide scope are stimulating to readers interested in the status of medical images and their interpretation by different disciplines and that this book fosters further discussions. We wish to express our gratefulness to all the authors for their participation and to the German Research Foundation and the Centre for Medicine & Society, Ulm University for generously funding the publication of these conference proceedings.

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