ROYAL INSTITUTE
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technomedical visions

MAGNETIC RESONANCE IMAGING IN 1980s SWEDEN

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Akademisk avhandling

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ABSTRACT

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The medical imaging technology called MRI (magnetic resonance imaging) stems from a blind measurement technology which was further developed in research and practice to enable seeing into the inner body. Vision with MRI was open-ended, and it was developed and tamed in a context of fragmented medical perspectives on the body and on technology. *Technomedical Visions* addresses the formation of MRI's specific visualities in the first decade of its introduction in Sweden.

The purpose of this dissertation is to explore how vision with MRI has been constructed in practice in relation to existing ways of knowing the body within medicine. Dussauge investigates first the early decisions that led to a national evaluation of MRI technology in the mid-1980s in Sweden. Then she addresses the shaping of MRI's quantitative visuality in the practices of radiology, psychiatry and the laboratory, with focus on microhistories at St. Göran's Hospital, Karolinska Institutet, Uppsala University Hospital, and Lund University.

Dussauge shows that whereas authorities' early decisions momentarily defined MRI as a radiological tool for immediate clinical use and evaluation, a crucial part of MRI's introduction was the work conducted by MRI-users. These researchers from a range of scientific and medical disciplines performed, over time, a multitude of shapings of MRI's vision. This studies shows how MRI was made congruent with existing technomedical gazes. The novel MRI gaze was made intelligible within cross-referential networks, and researchers reproduced technomedicine's existing gazes both in the production, optimization and interpretation of MRI representations.

Technomedical time frames, epistemologies and definitions of the normal and the pathological were reproduced and sometimes, re-cast, in the shaping of MRI in practice. This study also demonstrates that anatomy recurrently worked as an underlying frame for the exploration and production of MRI visions. Anatomy's material visuality provided a site for the production of novel facts at the intersection of existing gazes. Through the practices of shaping MRI gazes, anatomy was systematically remediated, reproduced and reconfigured.

Keywords: anatomy, body, history of medicine, history of technology, laboratory science, magnetic resonance, mediation, medical gaze, medical imaging, MRI, NMR, psychiatry, radiology, representations, Sweden, visual studies.

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