

Medical Science. Medical Practice. Medical Aesthetics.

Name: Martin Katharina D.

Email Address: k.d.martin@uni-muenster.de

Mailing Address:
Kerkhoflaan 103;
3034 TC Rotterdam,
The Netherlands

Institutional Affiliation and Position: PhD researcher in the Department of Aesthetic and Art Sciences, at Kunstakademie Münster Germany

This paper focuses on the specificity of augmented reality used in surgical procedures. I will argue that this digital and graphical technique functions not only as a membrane between internal and external, but also between scientific and aesthetic fields. I will provide information about the graphical technique used in surgical practice, to then analyze these new techniques by using the concept of the milieu as a methodological instrument. Significant for the Deleuzoguattarian concept of the milieu is Uexküll's Umwelt. As a part of the geographical environment it defines itself correlating to the signs 'selected' by the subject involved. Each living thing has a coded milieu, composed of diverse exterior and interior elements. For Deleuze and Guattari milieus have a rhythm-chaos in between them, and they are always communication and merging. The milieu is therefore a fruitful ecological concept and thus my chosen tool for this investigation. Most surgical invasions include the penetration of the protecting boundaries and a destabilization of the internal milieu. To lower the risk of the procedures, medical science developed digital technology which generates additional visual data, to then produce an overlaying image as helpful guidance. This augmented reality is a technique which helps actively to cross organic boundaries, and supports a secure navigation within the corporal space. The optical dimension is an important field of mixed realities, and it functions as membrane between the internal and external corporal space. But we do not only find permeability between different components within the Euclidian three dimensional space. One can also find interchanges between the digital milieu of the technical object and the aesthetic world of human codes. The projected images are based on the digital system and they are a hybrid between a digital and aesthetic form. By generating an image, which can be sensually experienced and spatially perceived, the digital information provides analogue stimuli. Thus, the sensual resp. optical field has the potential to overcome distances between the internal and external corporal space. Next to that, the optical interface of the digital technical object works as a membrane between different functional cycles or spaces of meaning, thus milieus. By focusing on the aesthetic aspect of computer generated images within medical practice, I try to uncover events of transcoding or transduction, a process in which "one milieu serves as the basis for another, or conversely is established atop another milieu".

Biographical Statement: Katharina D. Martin read Social Science, Media Art and Aesthetics. She is a PhD candidate in the Department of Aesthetic and Art Sciences at the Academy of Fine Arts, Münster in Germany. Martin is concerned with a new kind of trans-disciplinary philosophy and media studies. Her research, supervised by Prof. Dr. Marc Röllli and Prof. Dr. Claudia Blümle, gravitates around the milieu as methodological instrument for the analyses of digital technology and its aesthetic dimension. Forthcoming publications: K.D.Martin: "Ecologies of Corporeal Space", in Critical and Clinical Cartographies Conference Proceedings, Stavros Kousoulas, Andrej Radman, (eds.) 2015. K.D.Martin: "Gesicht, Kopf, Körper: Eine (micro-) politische Landschaft" in: Innen.Außen.Anders. Körper im Werk von Gilles Deleuze und Michel Foucault, Ann-Cathrin Drews, Katharina D. Martin. (eds.) Forthcoming 2015