Abstract

Advanced Imaging Technology (AIT) represents a screening method that displaces the use of metal detectors as a standard for passenger controls at airports. The scanners emit electromagnetic waves that bounce off the body surface and create a detailed picture of the skin surface of a passenger. While in test use since 2007, AIT saw a boost in December 2009 when Umar Farouk Abdulmutallab bypassed security controls on Northwest Airlines Flight 253 and managed to smuggle plastic explosives on the plane.

While politicians embraced security of the technology as a means against future terrorist attacks, the public heavily criticized the scanners for invading the privacy of individual travellers. In an effort to refute accusations of AIT as "naked scanners", the Transportation Security Agency (TSA) released an Automated Target Recognition (ATR) software update in 2011. While the update brings several functional alterations to the screening process, ATR is also discursively restored by efforts to regain confidence in the scanners.

From a STS perspective AIT holds particular interest. ATR software independently takes over the detection process that formerly has been realized by a human operator.   While AIT refers to the human body as a means of identification, the scanners also autonomously decide what appears to be a "normal" body and also whose bodies pose a threat to airport security. Using the concept of mechanical objectivity helps to address the core capability of ATR software to make autonomous decisions. Additionally theoretical concepts of Human-Machine-Interaction, and Visual Sociology inform the examination of stakeholder documents on ATR software.

In utilizing a qualitative discourse analysis it is my goal to follow the discursive traces in documents that can be observed through words and patterns of talk. This thesis features US stakeholder documents, among them newspapers articles, official documents by the TSA and (EPIC) Electronic Privacy Information Center, as well as public commentaries from regulations.gov. It is the aim of this work to depict the multilayered conceptions of how security and privacy are perceived and discursively realized by various stakeholders in the debate on ATR software.