

**Abstract** The currently developing fields of Ambient Intelligence and Persuasive Technology bring about a convergence of information technology and cognitive science. Smart environments that are able to respond intelligently to what we do and that even aim to influence our behaviour challenge the basic frameworks we commonly use for understanding the relations and role divisions between human beings and technological artifacts. After discussing the promises and threats of these technologies, this article develops alternative conceptions of agency, freedom, and responsibility that make it possible to better understand and assess the social roles of Ambient Intelligence and Persuasive Technology. The central claim of the article is that these new technologies urge us to blur the boundaries between humans and technologies also at the level of our conceptual and moral frameworks