

# Personalisation Services

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## Abstract

**BACKGROUND:** My research is concerned with the possible negative impact new ICT inventions may have on the quality of human life. Quality of life is a difficult thing to measure because many people disagree about what constitutes a good life. The debate over what constitutes a “good life” is one of the oldest in philosophy, going back at least 3,000 years in Europe, with no sign of any agreement. The situation is further complicated if we include religious opinions, which can themselves radically disagree. However, since the 17<sup>th</sup> century, Western thought has been dominated by one agreement regarding an essential aspect of quality of life; that of individual autonomy. While there are disagreements about what actually constitutes autonomy, it is generally agreed it exists, and it is now a key foundation in most democratic political, legal and moral systems. Autonomy provides the basis for justifying democracy, Western legal systems, human rights and the concept of individual competency, which in turn provides the grounds as to why people can be held responsible for their actions. Most people today would accept that a life dictated to them by another would be intolerable, so highly do they value their own right to live as they choose - their autonomy. My research therefore focuses on the threats to human autonomy raised by emerging ICT systems. This means my research is negative. I am not interested in the benefits such system may bring, but in forewarning us about negative side-effects, which are typically not considered when designing new systems. This research applies philosophy, psychology, sociology and future studies to computer science.

**THE PRESENTATION:** My presentation will discuss a key aspect of this research – reductions to personal privacy by personalised systems. An important element of emerging ICT’s which can impinge upon autonomy is personalisation. Personalisation refers to the adaption of ICT processes, most especially output, to unique characteristics of the individual user. The most widespread example of personalisation is Google’s personal search, in which the search results are adapted to previous user behaviour, not just in search, but also in terms what people write in email, their YouTube viewing patterns, social network activity, web surfing and online purchase patterns. Most people are unaware of the degree to which their online activity is monitored by commercial organisations (van der Hof and Prins 2008), the number of such organisations, the cross-transfer of information between them, and the usages to which information about them is put. However, many of those who are aware are concerned that the current manner in which personalisation is achieved constitutes a harmful reduction in personal privacy. For example, it has been shown that personalisation in the USA results in higher prices being charged to African-Americans (Sweeney 2013). Other research has shown that Google’s personalisation is not designed to provide information of most likely value to the user but to group them into demographics sets according to their value to advertisers (Feuz, Fuller, and Stalder 2011). The most common response from personalisation developers is that the current architectural model is the only viable one and that therefore the only way to offer personalised services is to reduce individual privacy.

The presentation will briefly summarise my findings regarding the scale and methodologies of commercial surveillance, then consider alternative ways of achieving personalisation without impacting privacy. Here I will summarise Langheinrich’s six Principles for Privacy-Aware Ubiquitous Systems (Langheinrich 2001) and the architecture of Rykowski’s Agent Personalisation Environment (Rykowski 2006) as examples of viable routes to privacy-preserving personalisation systems.

This work expands on one aspect of my paper “*Key Dialectics in Cloud Computing*”, presented at ETHICOMP 2015 and published in *Computers and Society* (Dainow 2015).

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