

# Editorial

## *Ageing and Technology*

Demographic changes and the advancement of technological systems are transformations of great importance in western societies in our time. Sociologists have responded with an increased interest in this interlinked development and the related concepts of ageing and technology. As such these concepts go right to the heart of core issues in sociology, such as social integration and social solidarity. The use of technological systems to manage and survey the growing number of old persons in need of care transforms both the distribution of welfare and the way work is performed in the care sector. Its importance for building the information society and the integration of all, addresses issues on citizenship, social roles of elderly people and the construction of identities. It challenges our concepts and metaphors on old people and ageing, the exchange of knowledge between social scientists and engineers and our understanding of technology.

The production of knowledge on ageing and technology deals with research on several levels. Basically it is a social and technological interplay manifested in the implementation of social policies (for example IT-strategies), scientific collaboration, design and implementation activities between various professionals and the use of technology among groups or individuals of old people. This is understood as a socio-technical system between actors involved in defining needs of old people and configurations of technological artefacts, or based on actor-network theory in which the technological artefact is also becoming an active part in the interplay between technology and social change. Consequently a social constructivist approach of science and technology is at hand. Opposing an obsolete deterministic view of technology makes it possible for social scientists to describe successes and failures of new technologies, as well as the process of negotiations.

The understanding of ageing and technology is at the heart of the exchange and cooperation between social scientists and technologically oriented researchers. Apart from being addressed or not, epistemological interests are at stake. Consequently, research on ageing and technology is a renewed call for an interdisciplinary approach and addresses the lack of communication between the natural sciences and engineering on the one hand, and the humanities and social science on the other hand. Dressed in terms of power it is a struggle of who will have the privilege to interpret the needs of old people and the origin of technology.

The construction of ageing and the elderly person are the result of socio-technical systems to the same extent as technological artefacts. The distribution of resources between generations and the protection of old people was historically an issue of

poverty and exclusion. Sociologists have described the notion of old people in our time as a construction of an economy excluding old people from the labour market and the creation of welfare, health care and retirement. Today the increase in the number of older people is mainly considered as an economic problem, not as a result of a successful welfare state. Another assumption is that their knowledge is obsolete. In addition the individual differences tend to increase with age, which makes the definition of old people's needs difficult. A social constructivist approach can make a difference. For this reason empirical studies on the use of technology in old people's everyday lives are important to understand the differences between the images of ageing among professionals and among the old people themselves. It is also important in order to understand technological artefacts in their social context.

On a daily basis the socio-technical system is considered in terms of the organisation of daily activities and its routines, the interpretation of technology and the identity of the user. Drawing upon the concept of domestication, this process reveals the way technology is consumed, objectified, incorporated and transformed in a social context. In other words, this is where technology gets its practical and symbolic meanings. Consequently technology, being the objective for evaluation, can be accepted as well as rejected by the users. Considering the fact that old people are dependent on help and support, their own possibilities to make technological decisions can be expected to be limited. In this context, rejection of technology can be considered as an incredibly active way of resistance.

Learning is another trajectory of the socio-technical interplay and describes the social construction of knowledge and technology. Theories of learning suggest that users, designers and engineers are interlinked in this process. When knowledge is acquired, users are incorporated in the culture of the socio-technical system, at the same time as they contribute to shape technology. For designers and engineers who are involved, the utilisation of technology embraces possibilities to pick up knowledge on user needs and understand the user point of view.

In her article, Birgit Jæger describes the Danish attempt to prevent a digital trap by incorporating old people into the information society. The background of the paper relates to the marginalisation of this group which is significantly behind in the use of internet. She describes their integration as a learning process in which they learn computer jargon and in which teachers develop their understanding of old users.

Sampsa Hyysalo focuses on the meeting between high-tech professionals and old people in elderly care. He describes the move from design to use as interplay between technologies, organisations and groups of people. He concludes that the effects of the implementation of new devices at nursing homes and alarm transmission centres are the result of an alignment process between these actors and artefacts. Britt Östlund presents an overview of published articles in the field of ageing and technology. She analyses the theoretical and conceptual content of the publications, drawing conclusions for the epistemological challenges and the development of the field.

Britt Östlund  
Guest Editor