Chapter 6

Human-centred Methods of Social and Technical Design

Lauge Baungaard Rasmussen

Introduction

‘Design’ is a concept which occurs in many contexts: graphic design, engineering design, product design, corporate design, fashion design, architectural design, software design, design methods. It is not immediately obvious that a common essence underlies all these different usages. The word ‘design’ causes ambiguities because it has more than one common meaning. It can refer to a product (a sketch, a model, a plan, a designed good) or it can refer to a process (the act or practice of designing). This chapter is mainly devoted to the process of design and the paradigms underlying that process. As J. C. Jones points out:

The whole point of transformation, the central part of the design process, is to change what already exists, and this includes both theories and practices. Each should influence the other.

Jones, 1984

The main objective of this chapter is to present and reflect a particular paradigm: human-centred design, and the particular kinds of processes that such a paradigm may provoke.

In the first section general ideas of human-centredness are presented. Questioning the mechanistic paradigm so powerful in Western societies so far, the human-centred approach is defined as an individual and collective learning process including at least four interrelated perspectives:

- A dialectical development orientation focusing on how to experiment with alternatives generated by tensions or contradictions between interpretation and interaction of the actors of a living culture.
- A shaping perspective focusing on reuniting the separated ‘worlds’ of social and technical design.
- A dialogue perspective integrating ‘producer’ and ‘user’ viewpoints in the design process.
- A social sustainability perspective focusing on the interconnectedness between individuals, societies and nature.
The central point is that the design process should reflect all the four perspectives in common, if it is to be termed human-centred.

The second section deals with different kinds of human-centred design processes related mainly to Scandinavian research experiences, though many of the methods discussed are more universally approached. The aim is to show examples of the human-centred design process and thus provide the reader with an insight into how different human-centred design processes may reflect different design traditions and still be part of the same fundamental paradigm. Dialogue is considered as central to the human-centred design. The general condition of the dialogue process is defined as a symmetric process which supports mutual relations and human development. Different methods of creating dialogues, such as prototyping, metaphors, organisational plays and integrated interaction and interpretation models, are presented and discussed in the context of different Scandinavian design projects.

In the third section the relationships between the methods and the paradigm of human-centredness are reflected more explicitly. The process of dialogue is reflected in terms of human development as well as a scientific approach of a particular kind stressing different criteria for guiding the design process. The central point of the section is to stress that human-centred design dialogue is itself a development process and not just a method of development. Dialogue is developmental in the sense of a continuous learning process toward a more sustainable dynamic balance between nature, society and individuals. This dialogical perspective influences the design in a particular direction. It also influences the participants during the design process towards an individual and collective process of experimentation, providing alternatives of shaping human development. In the fourth section the concept of learning, as a very central part of human-centred design, is discussed more in detail. Different kinds of learning models are presented. The central point of the section is that learning of a human-centred process is not only a means to reach an end, but is also a continuous reflection of rationality towards that end. This is precisely the difference between single- and double-loop learning. The ‘double-loop’ comprehends reflections of the appropriateness of ‘means’ as well as of ‘ends’.

In the fifth section a model of technical and social design perspectives is presented. Several ways of integrating these perspectives are discussed and further elaboration of the human-centred design approach is suggested. Underlying all the sections in this chapter is the conviction that human-centred design presupposes cultural diversity as well as a continuous exchange of viewpoints and practices, reflecting different kinds of patterns of interpretation and interaction related to different cultures.

Thus human-centred design is fundamentally a process of instrumental, reflective and utopian processes confronting and reuniting the viewpoints and practices of different design professions and practitioners towards a