

2 On technology, intelligence and the social

Key points

After reading this chapter, you will be able to:

- describe the Turing machine as an abstract model of computer machinery, and describe actual information and communication technologies in terms of basic and functional characteristics
- explain the notion of computer intelligence using the Turing test and sum up objections against the Turing test
- explain how 'computer intelligence' relates to organizational and democratic intelligence.

Introduction

In Chapter 1, the focus was on the relation between information and communication technologies and public administration. One of the obstacles to any meaningful discussion of this intricate relation is the often rather abstract notion of information and communication technologies. Therefore, in this chapter, I will discuss relevant properties of ICTs, and focus on avenues for 'smart machines'. As will be made clear in this chapter, the label 'smart machines' is more than a fashionable term: the possibility of machine intelligence has also given rise to much academic, philosophical debate and even to the emergence of specific branches in the disciplines of law, computer science, cognitive sciences and philosophy, such as *artificial intelligence*. Moreover, machine intelligence and smart machines raise interesting questions for public administrations. For example, if smart machines actually existed, they would perhaps be able to enhance policy making and policy implementation. For the sake of discussion, you might think of a highly interactive municipal website (the non-existing site <http://www.utopia.gov>) to which citizens can turn to if they have questions regarding local government's services. Suppose it is possible for citizens to interact with the website using natural language, and that the website responds in a very adequate way: it answers questions satisfactorily, it explains why specific measures have been taken and what is required to apply for specific benefits or