

2 NETWORKS: THE NERVOUS SYSTEM OF SOCIETY

About this chapter

- How can the network society be defined? What is the difference between this concept and the concepts of the information society and the mass society? Why do we need these concepts anyway? Are traditional classifications such as capitalist society, (post)modern society or (un)sustainable society no longer adequate?
- It is told that social networks are as old as mankind. A short history of networks in past human societies as compared to their role in contemporary society is presented.
- How can the exceptional rise of networks in contemporary society be explained? Evolution theory, systems theory and adaptive structuration theory will come forward as explanations.
- Networks currently appear at every level (individual, organizational and societal). A multilevel theory of the network society will explain why this happens and why these levels are more and more linked.
- How can the network society and the mass society be compared?
- According to network theory, networks operate according to particular scientific laws. Social science is able to apply some of these laws in seven so-called 'laws of the Web'. Formulating these 'laws' is one of the most important objectives of this book – they will return as explanations for things happening on the Internet in almost every chapter.

WHAT IS A NETWORK SOCIETY?

Definitions of the information society, network society and mass society

Several concepts are available to indicate the type of society that evolves under the influence of information and communication technology. The most popular

concept is the 'information society', which is used in this book in combination with the concept 'network society' to typify contemporary developed and modern societies marked by a high level of information exchange and use of information and communication technologies (ICTs). In the concept of an information society, the changing *substance* of activities and processes in these societies is emphasized. In the concept of a network society, attention shifts to the changing organizational *forms* and (infra)structures of these societies.

I start with my own complete definitions of these types of society and continue with a number of qualifications of these definitions and their relationships with other classifications such as capitalist society and (post)modern society. My definition of the information society is listed in Box 2.1.

It is the intensity of information processing in all these spheres that allows us to describe it as a new type of society. The common denominator of the changes produced by the increasing information intensity of all activities is the semi-autonomous character of information processing. Most activities in contemporary society are dedicated to *means*, in this case means of processing and producing information. These activities tend to keep a distance from their ultimate aims and to gather their own momentum and reason to exist. Manuel Castells (1996) even claims that information has become an independent source of productivity and power.

BOX 2.1

Definition of the information society

A modern type of society in which the information intensity of all activities has become so high that this creates:

- an organization of society based on science, rationality and reflexivity;
- an economy with all values and sectors, even the agrarian and industrial sectors, increasingly characterized by information production;
- a labour market with a majority of functions largely or completely based on tasks of information processing requiring knowledge and higher education (hence, the alternative term *knowledge society*);
- a culture dominated by media and information products with their signs, symbols and meanings.

While the information society points to the content, the network society concept emphasizes the form and organization of modern society. An infrastructure of social and media networks takes care of this. The definition is given in Box 2.2.

BOX 2.2

Definition of the network society

A modern type of society with an infrastructure of social and media networks that characterizes its mode of organization at every level: individual, group/organizational and societal. Increasingly, these networks link every unit or part of this society (individuals, group and organizations). In western societies, the individual linked by networks is becoming the basic unit of the network society. In eastern societies, this might still be the group (family, community, work team) linked by networks.

This book compares the network society with the so-called mass society preceding it. The definition of this type of society is given in Box 2.3.

BOX 2.3

Definition of the mass society

A modern type of society with an infrastructure of *groups, organizations and communities* (called 'masses'), that shape its prime mode of organization at every level (individual, group/organizational and societal). The basic units of this society are all kinds of relatively large collectivities (masses) organizing individuals.

Other classifications

Later in this chapter, in the section 'From Mass Society to Network Society', and in the remaining chapters of this book, I will elaborate the network and mass society concepts. Here I want to draw attention to a number of qualifications of the information and network society concepts. With good reasons, both concepts are contested. Webster (2001) concludes that all definitions of the information society refer to more *quantity* of information, information products, information occupations, communication means and so on, but are unable to identify the *qualitatively* new (system) character of this type of society. Manuel Castells (1996) also rejects the concept of information society as all societies in the past have been based on information. Instead, he proposes the concept of 'informational society': 'a specific form of social organization in which information generation, processing and transmission become the fundamental sources of productivity and power' (Castells, 1996: 21).

In the next section we see that all human societies since the invention of speech have been partly organized in networks. The idea of the network society as