Klára BENDA

A theoretical framework for institutions in networked education

The focus of the paper is the problem of social institutions in the networked setting, which I approach through the example of networked education. I rely on Anthony Giddens' structuration theory and the structurational interpretation of technology by Wanda Orlikowski to formulate a social theoretical framework for the conceptualization of networked education.

Networked education is also referred to as the virtual school (i.e. the virtual university), a term I find misleading from the perspective of contemporary social theory, which points out that social practices as such are essentially virtual, and face-to-face education is no exception from this. In contrast to virtual, the term 'networked' as in 'networked learning' emphasises the relational character of online learning, where information and communication technologies are promoting connections between the learner and other learners, learners and tutors, or between a learning community and learning resources. Networked education is education available over the digital network rather than in face-to-face settings, and it is distinguished from networked learning by its institutional, though not necessarily formal character, as it is typically delivered by educational institutions. Networked education is neither exclusively distance or blended education, nor is it the informal, extracurricular extension of regular schools; it is understood to incorporate any kind of networked educational practices irrespective of the primary profile of the educational institution behind them.

Despite the hype of discourse about educational technology and the opportunities of learning over the Internet, networked education is today neither widespread nor sufficiently understood or accepted. I attribute this state of affairs to the incapacity of current discourses to give an account of institutions in the social use of technology. I argue that education over the network is possible as well as desirable, mainly in those cases when access to education is otherwise hindered, and the goal of my paper is to initiate a socially informed shift in perspective concerning our thinking about networked technology in education. I understand this shift as aimed at giving an account of the institutional aspects inherent in education.

In the paper, I discuss three pervasive trends in the approaches to networked learning, each representing its own perspective from the respective vantage points of technology, pedagogical psychologies and emergent communities. These discourses are capable of fashioning the development and conceptualisations of networked technologies for the purposes of learning, but fail to give a reflexive account of the institutional aspects of education. Socially situated uses of technology ensuing from these approaches may become routinised in institutions, but the discourses as such do not allow planning reflexively for these institutional uses, which are thus ad hoc or unpredictable. I claim that a socially informed theoretical framework of networked institutions would allow planning the institutional uses of networked technology in view of the desired educational processes.

In social theory, institution refers to those standardised modes of behaviour which are necessary for the constitution of a social system. In the sociology of knowledge, for example, institutions are described as reciprocal typifications of habitualized actions, which control human

conduct by setting up predefined patterns, and allow the coordination of the actions of social actors.

Thus, in thinking about the opportunities of networked institutions, we are actually faced with one of the central questions of social theory: What is society? In a different formulation, we are interested in what makes possible the coordination of social actors in the here and now or over larger spans of space and time within the complex whole that appears to us as an integrated social system. We may look for the answer to the question in the works of Durkheim, Weber or Parsons, but here I suggest a more contemporary account by Giddens as the framework for an analysis of networked educational institutions. While there will be no space for a thorough justification of this choice in the paper, the social constructionist starting point as well as its common sense nature and clear formulation may be pointed out in favour of Giddens' theory.

In my paper, I present the outlines of the theory of structuration which I find necessary for a description of educational institutions in the networked context. In his attempt to connect action (the human agent, the subject) and social structure, Giddens draws attention to several dualisms inherent in the big theories, biased in favour of one or other of the pairs of subject vs. object, voluntarism vs. determinism or synchrony vs. diachrony. Giddens attempts to overcome these dualisms by what he calls the duality of the structure, which is described as both the medium and the outcome of the reproduction of social practices. Recurrent social practices constitute social systems.

Structure, according to Giddens is not available to actors as such; it is only properties of structure which are available in the instantiations of structure in interactions. Human actions are both constrained and enabled by these properties of the structure, which is in turn reproduced in the repetition of the acts of individual agents in a continuous flow of conduct. These properties of structure are rules and resources, which from the point of view of strategic action appear as stocks of knowledge and resources employed in the constitution of interaction, and from the institutional point of view, represent rules and resources as institutional features of social systems. While rules are patterns of social interactions, which appear as stocks of knowledge from the perspective of the actors, resources are whatever is created by human action.

Orlikowski starts off from Giddens' theory of structuration and investigates the use of technology in organizations. While she does this, she also fills up the discursive space of an important shortcoming of the original theory related to artefacts, to which there is no specific reference in Giddens' writing. Technology is conceptualised in relation to the properties of the structure, as pertaining to rules and resources. Following Giddens, she draws up the duality between technology as product of human action – an outcome of such human action as design and development and appropriation – and technology as a medium of human action, which conditions, i.e. facilitates and constrains human action through the provision of rules and resources.

In my own analysis, I draw heavily on Orlikowski's insights about technology as a structural property of social systems both enabling and constraining social interactions, but I propose that instead of technology, the social context of technology use should be placed at the centre of our attention. This I claim is useful for several reasons:

Firstly, this allows avoiding the pitfall of treating technology as unitary, which hides from us the various forms technology may appear in, from technological artefacts to complex technological infrastructures. I interpret networked applications as infrastructure from the point of view of institutional analysis and as environment from the point of view of the analysis of strategic conduct by human actors.

Second, this allows us to keep in our focus the recurrent social practices responsible for the process of structuration.

In my own analysis I argue that institutional features transcend technology in important ways and thus our focus of interest should not be the use of (networked) technology and technology use, but the social systems of networked education, which are relying on diverse networked applications for their existence. I illustrate this point with examples of institutional moments that may enter into the constitution of education and their possible embedding in the networked infrastructure.

In final conclusion I argue that rules and resources entering into structuration processes in networked education are far from exclusively technological in nature; written rules and regulations – including national legislation – and the related arsenal of very real sanctions, will often have precedence over technologies in the constitution of the system of networked education.

Klára BENDA, sociologist, PhD student in Sociology at ELTE University. Responsible for methodology at the Digital Secondary School. Research interests: social psychology, networked education, social psychology of the Internet. Some main publications: *Szociálpszichológiai gyakorlókönyv* [Testbook in social psychology], Budapest: Osiris, 2001; "Minerva a kompjúterbe költözik" [Minerva moves to the computer], *Médiakutató* 7, Summer 2002; with Breinerné Varga Ildikó: "A Digitális Középiskola" [The Digital Secondary School], in: *TANÁRI LÉTkérdések*, 2005; with Csepeli, György: "Mediated Communication and Conformity. A Replication of the Asch Conformity Experiment in an Online Environment", in: Kristóf Nyíri (ed.), *Mobile Democracy. Essays on Society, Self and Politics*, Vienna: Passagen Verlag, 2003; "Online oktatás" [Online education], in: Enyedi Nagy et al. (eds.), *Magyarország Médiakönyve* [Mediabook of Hungary], 2003, 2nd vol., Budapest: Enamiké, 2003. E-mail: bendaklara@mail.datanet.hu.