

Chapter 14

From Intermediary to Mediator and Vice Versa: On Agency and Intentionality of a Mundane Sociotechnical System

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ABSTRACT

Assuming symmetry between human and nonhuman actors is a tenet of actor-network theory (ANT), i.e., an actor, anyone or anything that modifies a state of affairs. This symmetric perspective entails granting agency attributes to both human and nonhuman actors, an approach that has been often criticised. By means of a combination of research observation and participation, the use of electronic mail systems, especially the automatically generated “Out of Office” message, is examined in this article to emphasise the distinction between agency and intentionality. The fundamental assumption is that work practices are nothing less than technology mediated activities and the use of electronic mail and its multiple tools is an inherently sociotechnical practice. The notions of intermediaries and mediators are introduced not only to corroborate that the division between the social and the technical is artificial but also to reveal the difference between nonhuman agency and human intentionality.

INTRODUCTION

Social interactions take place in the social space. The social space does not necessarily mean activities taking place in contiguity; coordinated social activities can be performed at a distance too. The availability of ubiquitous connectivity redefines the space where social interactions

take place (Castells, Fernández Ardèvol, Qiu, & Sey, 2007). In nowadays organisations most of the communications are conducted through electronic mail system. It is hard to imagine an organisation, regardless of its size (e.g., small, medium or large), its purpose (e.g., for profit, non for profit or government department) or its sector (e.g., mining, hospitality or banking, just to mention a few) running their operations without

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an electronic mail system at the present time. This is not only true for the communication across different organisations but also between employees sitting at contiguous offices and even for workers sitting close to each other in an open floor space. The messages transmitted are utterances, which the recipients are expected to act upon. Being electronic mail a system that essentially modifies a state of affairs, this study – through the theoretical lens of actor-network theory (ANT) – will stress the distinction between agency attributes and intentionality.

This article is structured as follows. In the next section, I present the foundations of ANT and the constitution of sociotechnical systems, with emphasis on the notions of intermediaries and mediators. Then, electronic mail is conceptualised as a sociotechnical system. Following this, the agency attributes and human intentionality of electronic mail systems are analysed through the lens of ANT, stressing the passage between intermediary and mediator. Finally, I conclude by discussing the implications of the analysis and suggest future research avenues.

SOCIOTECHNICAL SYSTEMS

Heidegger's (1977) forceful statement "the essence of technology is by no means anything technological" (p. 4) emphasises the intricate nature between the social and the technical. Science and technology and their interaction with the social context constitute a "seamless web" and their study should take a systemic approach (Hughes, 1986).

Callon (1986) and Latour (1986) put forward ANT as a framework theorising on the symmetry existing between human and nonhuman actors. ANT stresses the need of including both the social and the technical when studying sociotechnical – sociotechnical, without the hyphen – systems: "To insist on symmetry is to assert that *everything*

deserves explanation and, more particularly, that *everything* that you seek to explain or describe should be approached in the same way" (Law, 1994, pp. 9-10, emphasis in the original). ANT perceives the border between people, technology and their context as a negotiation process (Hanseth, Aanestad, & Berg, 2004), which can be revealed by unpacking the "black box" constituted by the sociotechnical system (Latour, 1999b). ANT can assist researchers in circulating the tension between agency and structure (Latour, 1999a) and has demonstrated its value in researching the social and technical assembly (cf., Akrich, 1992; Latour, 1992; Law & Callon, 1992).

As Latour (1999b) convincingly argues, "we are sociotechnical animals, and each human interaction is sociotechnical. We are never limited to social ties. We are never faced only with objects" (p. 214). Although the assumption of symmetry has been criticised because power structures might hide behind objects designed by humans (Whittle & Spicer, 2008), ANT does recognise agency attributes of nonhumans, but not intentionality at all. Attributing causal agency – i.e., intentionality – to objects is merely technical determinism (Latour, 2005). Humans are empowered with intentionality, while nonhumans are not; Durkheim affirms that the latter lack "motivating power" and do not "release social energy" (cited by Latour, 2005, p. 73). The purpose of studying the interaction between human and nonhuman actors in a symmetric fashion is to avoid imposing "a priori some spurious asymmetry among human intentional action and a material world of causal relations" (Latour, 2005, p. 76).

ANT challenges the generalised assumption that humans and technology tend to constitute a stable and predictable system (Latour, 1987). To be sure, humans and technology do constitute a sociotechnical arrangement; however, this arrangement is neither stable nor predictable. In ANT, the word social designates an association, an association of both humans and nonhumans; if

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