

# Chapter 6.6

## Grounding Business Interaction Models: Socio-Instrumental Pragmatism as a Theoretical Foundation

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### ABSTRACT

*In the information systems field there exist several theories for guiding the evaluation and design of information systems. These theories need to be transparent and harmonious. In this chapter, business action theory (BAT) as a domain ontology for business interaction and business processes is clarified by elaborating on socio-instrumental pragmatism (SIP) as a base ontology. SIP is an eclectic theory synthesizing several pragmatic theories from reference disciplines outside the IS area. One purpose of SIP is to enable seamless theorizing in the IS area. In this chapter we put forward the foundations of BAT and SIP which are then followed by grounding BAT in SIP. This grounding means that there will be an ontological clarification of BAT by specifying the social*

*action and interaction character of business interaction.*

### INTRODUCTION

Business action theory (BAT) is an ontology and a practical theory for business interaction and business processes. During the last 10 years we have been working actively to continually improve business action theory. This knowledge evolution process can be characterized as empirically-driven theory development. The goal has been to create an empirically, internally, and theoretically grounded theory for business interaction. Today, BAT has the epistemological status of a multi-grounded theory (Goldkuhl & Cronholm, 2003; Lind & Goldkuhl, 2006). In this chapter we will

further ground BAT as a business domain ontology in a higher level domain ontology (Guarino, 1998) for the distinction between different types of ontologies.

The basic characteristics of a practical theory have earlier been elaborated by Cronen (1995, 2001) and Craig and Tracy (1995). Cronen (1995, p. 231) describes practical theories in the following way:

*They are developed in order to make human life better. They provide ways of joining in social action so as to promote (a) socially useful description, explanation, critique, and change in situated human action; and (b) emergence of new abilities for all parties involved.*

Practical theories should help us to see things, aspects, properties, and relations which otherwise would be missed (Cronen, 2001). The constituents of a practical theory have lately been elaborated by Goldkuhl (2006). Goldkuhl emphasizes conceptualizations, patterns, normative criteria, design principles, and models as (partially overlapping) such constituents of a practical theory. BAT is today regarded as a practical theory since all these constituents have been elaborated. For further elaboration, see Goldkuhl (1996), Lind and Goldkuhl (2003), and Goldkuhl and Lind (2004). The choice for us focusing on BAT is based on our good experiences in adopting BAT in practical situations and due to shortcomings in other theories for business interaction (Goldkuhl, 2006).

The notion of ontology in this chapter was conceived as a particular system of categories accounting for a certain vision of the world (Guarino, 1998). Essential in the conception of ontology is conceptualization, which can be made on more or less formal foundations. According to Gruber (1993), an ontology is to be conceived as a specification of a representational vocabulary for a shared domain of discourse—definitions of classes, relations, functions, and other objects.

Guarino (1998) claims that an ontology is a logical theory accounting for the intended meaning of a formal vocabulary, but not necessarily that the formal vocabulary is to be a part of a logical language, as, for example, it may be a protocol of communication between agents. Different conceptualizations of the world thus need to be included in the ontology. BAT as a practical theory is based on a pragmatic paradigm that sees scientific knowledge as means to improve human practices (Dewey, 1938). This also means a special interest in social actions constituting the world. See, for example, Goldkuhl (2005a), building on Mead (1938). The characteristics of a practical theory and requirements to put upon the domain-dependent ontology as BAT thus strongly overlap.

The starting point for the development of BAT was when Goldkuhl (1996), at the first language action perspective for communication modeling (LAP) conference, criticized the action workflow model of Medina-Mora, Winograd, Flores, and Flores (1992) for being asymmetric. See Goldkuhl (1996) for the complete criticism. An alternative to the action workflow model was presented which was the first version of the BAT model. This model emphasized business interaction as an exchange process with mutual commitments, fulfilments, and satisfaction. Both action workflow and BAT were founded in the language-action perspective (Winograd & Flores, 1986). This means that there were many theoretical affinities between the two models. There were, however, also substantial differences.

The BAT-model has since then been applied in many action research projects concerning design of business processes and IT (e.g., Axelsson, Goldkuhl, & Melin, 2000; Goldkuhl & Melin, 2001). Due to experiences from these applications of the model, it was continually redeveloped (Goldkuhl, 1998; Goldkuhl & Lind, 2004). Some essential characteristics of the BAT-model are that (see the section on BAT for a more thorough description) it emphasizes:

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