ANT, Phenomenography and a Research Question in Information Systems

Bill Davey, RMIT University, Melbourne, VIC, Australia

ABSTRACT

This paper describes the research Approach of Phenomenography. A research question that has been addressed by this method is used to allow comparison between Phenomenography and Actor-Network Theory as approaches to questions involving the adoption of new techniques in information systems projects.

Keywords: Actor-Network Theory, Information Systems, Methods, Phenomenography, Research

1. INTRODUCTION

This article aims to draw comparisons between Actor-Network Theory (ANT) and Phenomenography as research approaches by discussing them in the light of a specific study originally conducted using Phenomenography. As a frequent writer of research reports based on an ANT approach I would like to document my reasoning in choosing an alternative approach in one specific case. This reasoning may be of use to other researchers trying to choose a suitable method for addressing a new question. In this case the problem was that of the apparent failure of many professionals in involved in requirements elicitation (RE) stages of information systems projects to incorporate proven techniques in their professional practice. Broadly speaking this can be seen as a failure of those proposing the new techniques to create a stable network, and hence be a topic for an ANT analysis. This paper first describes Phenomenography as practiced by a range of researchers, and then discusses the value of Phenomenography in the light of a possible ANT approach to the same research questions.

DOI: 10.4018/ijantti.2014040101
2. PHENOMENOGRAPHY

Phenomenography is a research approach rather than a method (much in the same way that ANT is not a method). This section describes common aspects of the approach from the viewpoint of the object of study, the type of data gathered, an approach to analysis of the data, the form of the research outcome and some examples of domains where the approach has been used.

2.1. Object of Study

Many researchers trace the beginnings of phenomenography to an article by Ference Marton in 1981 in which he identifies “a relatively distinct field of inquiry which we would like to label phenomenography” (Marton, 1981a, p. 180). The aim of a phenomenographic study is to identify and describe the various ways in which people experience certain phenomena in the world around them (Marton, 1981b, 1986; Marton & Pong, 2005). The outcome of a phenomenographic study is a finite set of qualitatively different categories of description of the ways of experiencing a phenomenon (Marton & Booth, 1997). Each of these categories is a description of a ‘conception’ of the phenomenon. Marton argues that the categories as a set are “stable and generalizable between situations” even if individuals move between conceptions on different occasions or in different contexts (Marton, 1981a). Those using phenomenography as their basis for investigation use a number of terms to refer to that which is being described because the ordinary English words available do not tightly define the object of study. Marton and Booth point to a number of alternatives for what the word ‘conception’ might mean:

A ‘conception’, the basic unit of description in phenomenographic research, has been called various names, such as ‘ways of conceptualizing’, ‘ways of experiencing’, ‘ways of seeing’, ‘ways of apprehending’, ‘ways of understanding’, and so on (Marton & Pong, 2005, p. 336)

Sandberg sees a conception as representing a “meaning structure of lived experience.” (Sandberg, 2000) Despite this problem with language, we can see that a phenomenographic study looks at expressions of lived experience of a phenomenon and the analysis seeks to find a finite number of conceptions of the phenomenon of study.

2.2. Obtaining Data

In phenomenography, the usual source of data is a set of transcripts of interviews. The interview starts with some structured questions. The interview then proceeds to explore the interviewee’s experience without prejudicing their answers. Phenomenographers do this by only using terms introduced by the interviewee. The purpose of follow up, open questions is to allow the interviewee to reveal as much meaning as possible about their experience.

2.3. Analysing the Data

The focus of analysis is conceptions of a phenomenon. A conception of a phenomenon exists if a person can discern the phenomenon from its context. This discernment depends on variation. This discernment depends on variation. Marton and other use examples to illustrate this need to find
Related Content

Actor-Network Theory (ANT): An Assemblage of Perceptions, Understandings, and Critiques of this ‘Sensibility’ and how its Relatively Under-Utilized Conceptual Framework in Education Studies can aid Researchers in the Exploration of Networks and Power Relations
www.igi-global.com/article/actor-network-theory-ant/110193?camid=4v1a

On Actors, Networks, Hybrids, Black Boxse and Contesting Programming Languages
www.igi-global.com/article/actors-networks-hybrids-black-boxes/47530?camid=4v1a
RAD and Other Innovative Approaches to Facilitate Superior Project Management
www.igi-global.com/chapter/rad-other-innovative-approaches-facilitate/65891?camid=4v1a

Active Learning in Discrete-Time Stochastic Systems
www.igi-global.com/chapter/active-learning-discrete-time-stochastic/46462?camid=4v1a