ABSTRACT

The aim of this article is to outline some of the key themes that I believe are important, first, in applying the systems approach to produce high quality IS research in general and, second, to consider more specifically some of the questions and debates that are of interest within the philosophy of IS and of the systems approach. Four themes are identified: being systemic; being critical and realist; being pluralist in approach, and having a concern for truth and knowledge.

Keywords: critical realism; knowledge; multimethodology; pluralism; systems approach; truth

INTRODUCTION

It gives me great pleasure to welcome a new journal devoted to the systems approach, in this case applied in the domain of information systems and information technology. I have been appointed as Senior Associate Editor for the area of Information Systems Philosophy and the Systems Approach, and I have been asked to contribute a short position article for this, the inaugural issue of the International Journal of Information Technologies and the Systems Approach (IJITSA).

The aim of this article is to outline some of the key themes that I believe are important, first, in applying the systems approach to produce high quality IS research in general and, second, to consider more specifically some of the questions and debates that are of interest within the philosophy of IS and of the systems approach. This article explores my own personal position and particularly themes such as pluralism, critical realism, and multimethodology, so I need to state that these are not necessarily those of the journal as a whole. The official Call for Papers makes it clear that IJITSA is interested in a wide range of research areas and methodological approaches, so potential authors should not feel circumscribed by what I say, but nevertheless I believe these themes are very much in accord with the thinking of the founders of the journal.
and do not get aired as much as they should in other IS journals. Papers along these lines would therefore be very much welcomed.

**PHILOSOPHY AND SYSTEMS**

I would like to begin by giving a brief review of the role of philosophy with respect to systems research with the help of Figure 1, which draws in part on the ideas of both Bhaskar (1978) and Checkland (1999).

We can begin in the bottom of Figure 1 with the ongoing flux of events and ideas. Following Bhaskar, we can term this the domain of the Actual, the actual occurrences and non-occurrences of the everyday world. We can then see that these events are the manifestations of underlying mechanisms or systems, often unobservable, which through the interactions of their properties and powers, generate the events. We should note two things: that the events are part of the causal dance in that they can be triggers of the underlying mechanisms and that human beings are also part of this picture as powerful generative mechanisms.

Moving up Figure 1, we can see that science emerges as a domain of reflective action in which people try to understand and explain the workings of the everyday world. This involves observation and interrogation of the Actual and the Real, as well as attempts to test and validate theories and, in the case of action research, explicitly to bring about change. In Bhaskar’s terms, this is the domain of the Empirical in which a small subset of all the actual events that occur is captured for scientific activity.

We can now move to another metalevel and consider the emergence of philosophy, more specifically the philosophy of science, as a domain of reflective action that considers the nature of science and research and, in particular, tries to offer guidance about how science can and/or should be carried out. The main philosophical questions that arise can be classified in terms of (Mingers, 2003a):

![Figure 1. The domains of science and philosophy with respect to the Real, the Actual and the Empirical](image)

Note that in fact the Empirical is a subset of the Actual and Philosophy of Science is a subset of the Empirical but they have been drawn apart for clarity. The whole constitutes the Real.
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