ORIGINAL ARTICLE

Towards empathy: a human-centred analysis of rationality, ethics and praxis in systems development

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Abstract Functionalism has long been the dominant paradigm in systems development practice. However, functionalism promotes an innate and immutable instrumental rationality that is indifferent to human values, rights, society, culture and international stability. It, in essence, lacks empathy. Although alternative paradigms have been promoted for decades in the systems development literature to help address this deficit, functionalism remains dominant. This paper reiterates the call for a fundamental paradigm shift away from myopic functionalism and towards a more empathic and human-centred philosophy. It argues that the human-centred tradition offers a philosophically compatible and mature approach that can be practically harnessed for promoting empathy in systems development. The paper investigates the potential of systems development to become truly human-centred using data originally collected as part of a multi-method critical-interpretive study of privacy in information systems development. Multiple methods are used for the data analysis presented, including principal components analysis, hierarchical clustering, Q methodology and descriptive statistics. The multi-method analysis demonstrates that a

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marked discreteness exists between human-centred sentiments and instrumentally rational ones in systems development praxis. The paper concludes by presenting recommendations on how human-centred values can be practically fostered and engaged to enable greater empathy in contemporary system development and strengthen international stability.

Keywords Hierarchical clustering · Empathy · Ethics · Human-centred · Principal components analysis · Q methodology · Rationality · Systems development

1 Introduction

Functionalism has long been the dominant paradigm for systems development (Stapleton 2006). Cognate approaches such as "scientific management"—or "Taylorism" (cf. Taylor 1911)—venerate raw efficiency, see nothing of value in the human aspect, and exemplify the "man as machine" myth that has long pervaded systems development (Hirschheim and Newman 1991). However, such Tayloristic drives for efficiency can lead to ineffectiveness, skimping and the unethical treatment of humans (Mintzberg 1989). Consequently, critical studies in systems development have sought to reveal, critique, and explain how the development and use of systems in the pursuit of efficiency, rationalisation and progress had wider—and potentially detrimental—implications for some stakeholders and society as a whole (Cecez-Kecmanovic et al. 2008).

Although functionalism is dominant, there are other paradigms or "schools of thought" that systems development can follow (Iivari 1991). These different paradigms essentially hold different philosophical assumptions and goals for systems development. Some of these goals are

