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Book Review

Voices from the Field: An Introduction to Human Systems Dynamics, edited by: Glenda Eoyang. Circle Pines, MN: Human Systems Dynamics Institute. ISBN 0-9740498-0-8.

In this book, Glenda Eoyang has collected a series of articles by members and associates of the Human Systems Dynamics Institute and practitioners of the Eoyang CDE model. The book is published by the Human Systems Dynamics Institute. Glenda Eoyang, who is the founder and executive director of the Institute, states in her preface that the contributions were selected to achieve four aims: (a) Demonstrate applications of Human Systems Dynamics and individual, group, and institutional levels; (b) represent a wide range of interpretations of complexity and human systems; (c) incorporate emerging theoretical frames, research paradigms, and practices; (d) generate questions in conversation to move the field forward.

These are laudable and worthy aims and a strength of this book is that a number of the papers certainly demonstrate applications of Human Systems Dynamics. The other aims are less well met. The book would have been strengthened with a concluding chapter that outlined how the book had achieved these.

In her introduction, Eoyang outlines the central problems faced by social scientists working in the fields of nonlinear dynamics and Complex Systems, citing well-established and well-known writers such as Dooley, Goldstein and Stacey as examples. She argues that the development of theory will be an interaction between that theory and practice of professionals working in these areas. In doing this, she highlights the problem of social science models being specific, accurate, or simple. She goes on to argue that descriptions of Complex Systems can be "simultaneously specific and general, accurate and approximate, and simple and incredibly complicated." Her argument continues that the distinction between complicated and simple systems is not necessary in the study of Complex Systems because it is possible to describe Complex Systems using local rules. This is a good argument based on good scholarship and augurs well for the rest of the book. Practitioners and

scholars involved in soft systems methodologies will agree with the approach that "the most influential practice draws from simplified models incorporating multiple perspectives possibilities". However, practitioners and scholars working solely in the field of Complex Adaptive Systems may not be so comfortable with the concept of multiple perspectives in the analysis and understanding of the Systems.

This highlights a challenge that practitioners and scholars will recognise. On one hand, there is the rigorous mathematical and model building analysis of Complex Systems that one sees in this Journal and on the other there is a very real need to help stakeholders understand and work within their systems. These stakeholders hold widely differing perspectives and mental models, which we now understand as being 'Complex'. Working in this world requires a combining of scientific rigour with compromise, accommodation and imperfect information. This book addresses is challenge and in doing this indicates the great difficulty in bridging the gap between the rigorous and generalisable theory and the effective and specific practice.

The first chapter, "Using Human Systems Dynamics in supervisor relationships" by Royce Holladay provides a very useful explanation of the Eoyang CDE model, which consists of the container, the significant differences and the exchanges in the system under study. Each of these conditions is influenced by the factors of relationship, efficacy and accountability. Holladay shows how he used this particular consulting model to deal with a situation she faced at work with an employee named George. This is a particular useful chapter in helping to understand the model that is being used in this book. The chapter also highlights one of the difficulties in the reporting of field case studies: there is no validation of the effectiveness of this approach and there is nothing about George’s perspective and how he felt in undergoing this process. Nonetheless, this chapter promises well for the rest of the book as lays out a theoretical model and demonstrated in action. Dennis Cheesebrow's chapter provides another detailed and helpful example of the application of the CDE model in organisation leadership.

The next chapter "Applications for the sole practitioner" by Gwen Kennedy, who describes herself as a 'scholarly practitioner', set out to show that theories of Complex Systems should be applicable at an individual level. She provides a great insight into the way in which Eoyang and Olson's Decision-making Model can be applied for

managing day-to-day decisions. The three very useful tables provided this chapter outlining the methodology that she used. This is another very useful chapter.

Another useful chapter is that by Leslie Patterson and Carol Wickstrom who demonstrate applications of the CDE model in the development of a reading programme. The chapter concludes with two sections on the ongoing learning of the practitioners involved in this process. This highlights the importance of having learning structures associated with work in this area.

The chapter by Gayle Byock advocates of the use of nursery rhymes, such as Old Mother Other and stories such as The Three Bears as the methodology for encouraging emergence and self-organisation in groups. This certainly makes a significant contribution to the idea of providing diverse perspectives. In his chapter, Neal Kauffman outlines his F*R*I*E*N*D*S model and describes an application in the health area. This model has a series of guidelines for action that include: Have friends - and lots of them, network with everyone, give credit, learned to say no - gently and keep things simple. This is undoubtedly good advice however its connection to that theories and practice of complexity sciences is tenuous.

In the interests of diverse perspectives of the editor has included a chapter entitled "Purposeful self-organisation and meaningful emergence: A voice from Islam" by Fouad Minoumi. Minoumi sets out to introduce "two fundamental Islamic concepts relevant to the topic, namely *Tawhid* or the Unity of the Creator and causality … and explore their implications on another major concepts: intentionality and purposefulness." This is the longest chapter in the book and extracts and quotes ran the risk of simplifying the argument. However, some important and fundamental assumptions emerge. For example, "the theory of knowledge … does not separate scientific pursuits from the purpose of religion". In relation to causation Minoumi explains, "there is no necessary connection between external events. Only God causes everything. Consequently. there is no room for *secondary* causes" (His emphasis).

In addition, "this view is not in anyway consistent with the mechanistic, causal and Newtonian world view ... where ends are known and predetermined. (It) sets out simple rules for human systems and leaves the complexity dynamics, i.e. self organisation and emergence, for

each person to design."

Ultimately, there is a dilemma that books such as this face. How do we provide a workable but theoretically rigorous framework for practitioners to make a difference at the local level and still address the larger and ultimately important questions of the nature of scientific endeavour?

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