

# Book Reviews

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**K.C. BOWEN**

**Research Games: An Approach to the Study of Decision Processes**

Taylor and Francis, London, 1978, xi + 126 pages,  
£ 6.—.

The title to this document was very promising, so I approached the task of review with enthusiasm. My interest in gaming/simulation as a predecision aid extends over a quarter of a century. It includes a wide variety of experiences in the design, construction and playing of many games, as well as a more or less continuous effort to keep up with the literature. In fairness, it has become increasingly clear that the literature now available is not easily to be mastered, partly because of its sheer volume and partly because of the many subfields now evident in the gaming area.

Perhaps the magnitude of this difficulty is best illustrated by a quick comparison of the references cited by Bowen with the references cited in a recent book of approximately the same vintage by Greenblat and Duke published by Halsted Press in the United States (C.S. Greenblat and R.D. Duke, *Gaming-Simulation: Rationale, Design and Applications* (Halsted Press, New York-London, 1975) 435 pp.). The American book cites 200 authors and the monograph by Bowen cites 43 authors, for a total of 243 citations. Only three are identical (one from 1957, one from 1963, and one from 1972).

The extraordinary thing is that the jargon employed in the Bowen document is essentially the same as the jargon covered in the other literature. A careful review of the table of contents of the Bowen book gives no clue that the phenomenon being presented differs substantially from material reviewed in the American book.

But details behind the titles of the table of content reveal a gamer's 'time warp'; two worlds of gaming so

vastly different as to put them on opposite ends of a continuum. For example, the table of contents of the Bowen book presents 'communication' as a major subsection of one of the book chapters. But the content of the book reveals this to be a very limited, hypothetical, and constrained type of communication; the only possible value of this approach might be in experimentation, for the method would have no value in the real world of public decision-making.

The difference between these two worlds of gaming flows from the perception on the one side that decision is a gestalt event, not a logical process. One world of researchers believes that decisions can only be viewed in their complex context as opposed to the view represented by Bowen that complex decision-making can be reconstructed bit by bit through a logical experimentation with the myriad actors and processes extracted piecemeal from the system.

This dichotomy leads to the very curious circumstance wherein the American literature puts forth the ideal construct for a gaming situation to exclude the experimenter in the hopes of improving communication among the players or roles of the game, while in Bowen's ideal construct the experimenter controls all communication in the game and human beings are excluded on the grounds that "it may well be that a real human being in a game would lend spurious realism to decision-process simulation."

Clearly, what we have here are two worlds of gaming which, unfortunately, use the same name for the phenomenon, the same jargon to describe it, the same objectives stated as the purpose of the activity. This dichotomy leads to many problems: For example, to quote R.C. Tomlinson in the introduction to Bowen's work, "From the earliest days of military O.R., however, gaming has been seen as an O.R. activity, and has remained so since. Yet, despite its long history, gaming has not developed as a subject in the way that one might have expected, and its transfer into civilian life has been most disappointing." This is clearly true of operational gaming of the sterile form presented by Bowen, but decidedly untrue of the kinds of gaming/simulation that are now to be found in abundance on both sides of the Atlantic as well as in developing countries around the world.

The value of the document, therefore, will depend on the reader's own philosophy.

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**C. DAVIES, A. DEMB and R. ESPEJO**  
**Organization for Program Management**  
 Wiley, Chichester, 1980, xi + 240 pages.

A regional development program involves a number of subsidiary projects and is based upon the utilization of physical resources and management capability as well. *Organization for Program Management* by C. Davies, A. Demb and R. Espejo presents an excellent manner in which the analysis of the organizational dimension of development programs can be carried out; it includes integrated perspectives from operations research, organization behavior, cybernetics, and control systems into a framework of studying the organizational dimension of the management of development programs. A method for deriving the organizational implications of program objectives and assessing the capacity of resources in terms of those implications is provided in the conceptual framework.

The book is addressed to readers aware of approaches to project management and especially to decision makers, researchers and policy analysts concerned with program system design. Little scientific background in organization theory is needed to appreciate the introduction, conceptual language, case material and summary chapters. Practitioners at upper management levels can benefit from these sections. By contrast, the researcher and analyst with a more specialized background in the field will profit from the discussion of effectiveness and the detailed elaboration of the framework. Of course, it is believed that both groups of people will find the entire book interesting and helpful.

Evidence of the authors' gains from Poland, USA, UK, USSR and Venezuela are found throughout the book, in addition to an analytic approach based on the combination of their experiences from three diverse national environments and three different but complementary research viewpoints on organization and management, successfully presented for the manager and scientist as well.

The book consists of eleven chapters and they can

be generally outlined as follows:

Chapters 1 and 2 introduce the problem and basic concepts used in the framework. The elements of the analytic process and the role of this type of research are described and also examined in these chapters. In addition to this, Chapter 2 introduces the systemic concepts which form the basis of the conceptual framework and the model.

An elaboration of the conceptual framework and the criteria for effectiveness which underlie this approach are presented in Chapters 3, 4, and 5. Chapter 3 also provides an explanation of the process of constructing a program management model. Chapter 4 develops the concept of effectiveness which can be used as a basis for analyzing the appropriateness of program management organization. A review of all of these concepts is presented in Chapter 5 which is written in the more formal language of cybernetics.

Chapters 6, 7, 8, and 9 are concerned with two case studies of regional development which exemplify the utilization of the analytic approach. The Scottish case examines the organization dimensions of the reaction to the North Sea oil resources development. The authors themselves commenced and carried out research for this case. Chapters 6 and 7 provide a more complete description of the region, oil activity, nature of the impacts, in addition to an examination of the organizational response. Chapter 6 also contains the background of some of the data used in the main analytic sections of Chapter 7. The research process of the Scottish case is discussed, in addition to the illustration of the construction of the model from the data. The Soviet case examines the organizational dimension of the management of a region development strategy called the "Territorial Production Complex (TPC)". The development was carried out in Siberia, in the region surrounding Bratsk, north of Irkutsk. The authors carried out research for this case in the context of a larger field study which was undertaken by twenty scientists from eleven countries. More than twenty-five years of planning and managerial attention have been spent on the Bratsk-Ilimsk project. Bratsk was one of a series of TPC's conceived as a strategy for exploiting the vast hydro-power and mineral resources of this area of Siberia. Chapters 8 and 9 describe in detail the program strategy, TPC, the challenges and the institutional factors. Chapter 8 gives background information and provides the data base for the systematic analysis of the BITPC organization and management presented in