

## Letters to the Editors

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It is always useful to an author to have his book [1] reviewed. Richard Duke's treatment [2] of my book is far from complimentary and I must accept some blame for not making my message clearer to him. But I must also protest (not too much!) that his interpretation of that message will lead readers astray: I have not said what he implies, nor did I set out to do what Greenblat and Duke [3] did in a much larger book. I make five points below.

(1) Richard Duke's reference to "operational gaming, of the sterile form represented by Bowen" is illuminating, since it was not operational gaming that I discussed. Nor, vide his opening statement of his own interests, was the book concerned with games as pre-decision aids. My stated intention was to say what I could about research games, defined as controlled experiments for the study of decision-processes. I do discuss briefly what I have called learning games, for which I have a high regard, but which did not meet the purpose I had in mind.

(2) Since I was dealing with a different aspect of games, it is not surprising that my references and those in Greenblat and Duke have little overlap. I also covered only UK research: Shubik's writings (my appendix) seemed to cover US work adequately, and they gave voluminous references.

(3) I did not present 'communication' as a major subsection of a chapter. I referred clearly to *communication in a research game*, the construction of which is the subject of the chapter. I am glad that my critic says that the type of communication mentioned might have value in a research game: I can assure him that it does.

(4) I did not say that "complex decision-making can be reconstructed bit by bit" by logical experimentation. Indeed, I drew attention to the fact that, as yet, there is a severe limitation in the sort of decision-making activities that research games can study. However, since my book was written, another step forward has been made [4].

(5) To say that "in my ideal construct the experimenter controls all communication in the

games and human beings are excluded" is a nonsense. I discussed a range of possible games and what they could and could not be used for. The passage quoted from my book is taken out of context and misunderstood: it refers in fact that game structures can be so restrictive that human players add nothing which can be called person-like.

I am aware that others' language can be difficult to understand. I also appreciate that a reader's prior assumptions, what he expects to find, can further affect this understanding. It is with this in mind that I say, with conviction, that Richard Duke has not reviewed the book which I (still) believe I have written.

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### References

- [1] K.C. Bowen, *Research Games: An Approach to the Study of Decision Processes* (Taylor and Francis, London, 1978)
- [2] R.D. Duke, Review of [1], *European J. Operational Res.* 5 (1980) 210-211.
- [3] C.S. Greenblat and R.D. Duke, *Gaming-Simulation, Rationale, Design and Application* (Halsted Press, New York, 1975).
- [4] D.F. Cooper, The Superior Commander: a methodology for the control of crisis games, *J. Operational Res. Soc.* 30 (1979) 529-537.

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K.C. Bowen begins his monograph (page 1, first sentence), "This monograph gives a personal view of what uses can be made of games and of how games should be developed." My review tried to present the case for another (personal) view that sees the world of gaming to be vastly different in purpose, character and theory.

For the record, Bowen's *Research Games: An Approach to the Study of Decision Processes* is carefully crafted and well presented; nowhere did

my review use uncomplimentary language about it. My point was clear and remains valid: There are many worlds of gaming and any attempt to carve out a new niche demands responsible treatment of jargon—if new meanings are intended, new words and/or new definitions must be presented. (For a working glossary, see the appendix of Duke, *Gaming: The Future's Language*, Halsted Press, New York, 1974).

In response to Bowen's five points of rebuttal:

(1) R.C. Tomlinson's introduction as well as the foreword by Bowen clearly set the stage for this work as a contribution to operational gaming. Am I now to understand that "Research Games" is not intended as a contribution to operational gaming? Is the category 'learning games' to cover all else, the vast array of material before us?

(2) The work of Shubik is excellent; published in 1971, it leaves a six-year gap in the literature before *Research Games* was published. My personal collection has over a thousand new references during this period.

(3) The copy of *Research Games* supplied to me did (and still does) have Chapter Five (5): The Construction of a Game; subsection 5.7 Communication.

(4) Decision is a gestalt event *or* a logical process; there are two schools of thought. Two distinctly different gaming instruments will result in our research into this phenomenon.

(5) The book is replete with language defining games as constructs without human beings. This concept does violence to the literature. "The real-world decision-makers may *or* may not participate in a game."... "Games in which representations of decision-processes are used, even though human players are not involved, will be included."... "It will be suggested therefore that both computer simulation and analytic models may have sufficient direct relevance to research into decision-making for them to be regarded as games."... and so forth. The work of two British scientists, Hobson and Armstrong<sup>1</sup>, which predates Bowen by a decade, clearly establishes ground rules for games.

A construct, of whatever nature, without live human players freely interacting is *not* a game.

Yes, I have read and reviewed the book, but against a background of international literature. In my judgment, *Research Games* is on the far end of the continuum of activity; the gist of the argument, presented over the past decade, is as follows:

*If decision is a logical process*, then Bowen's approach is valid and useful as a means of replicating the process and thereby clarifying which inputs have what effect; alternate timing of inputs; etc. Presumably this knowledge could then be applied to assist those burdened with significant public decisions.

But, *if decision is a gestalt event*, and not a logical process, research must focus on pre-decision phenomena. It is during this time that the decision-maker can truly benefit from careful ordering of complex input—a role for which operational gaming (if conducted as a disciplined activity) is uniquely suited.

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

Richard D. DUKE  
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<sup>1</sup> "but in all the applications of gaming certain common elements can be found. These are: (i) people roles..., (ii) a scenario..., (iii) an accounting system..."—Robert H.R. Armstrong and Margaret Hobson, *Intersum*, Institute of Local Government Studies, University of Birmingham, Feb. 1971. See also Robert H.R. Armstrong and Margaret Hob-

son, "The use of gaming/simulation techniques in the decision-making process", United Nations Interregional Seminar on the Use of Modern Management Techniques in the Public Administration of Developing Countries, Washington, DC, October 1970.