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## Practice in Theory

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*This article is a brief account of the different kinds of games and game-like exercises that the author has been working with since the mid-1960s at the University of Michigan. It sketches the evolution of his way of thinking about what it is that games purport to do, with an emphasis on the relationship between theory and practice as these words bear on education. It also offers a brief description of why the author believes it is useful to think of some games as metaphorical games rather than as simulation games.*

KEYWORDS: *design; game; metaphor; literal; practice; puzzle; simulation; theory.*

Anyone advocating the use of games for purposes of learning is likely to say that learning takes place because participants have to make decisions and live with the consequences thereof. This kind of behavior fits nicely with one of the several definitions of the word *practice* offered in the third edition of *The American Heritage Dictionary of the English Language*: "To carry out in action; observe." When the outcome of a play of a game is an end unto itself, as is the case with regular, as opposed to instructional or academic games, it does not make any difference whether the actions taken and the results observed during plays of a game can be related to events that take place outside the framework of the game. However, when games are used for educational purposes, the relationship between what goes on during a play of a game and what goes on outside the framework of the game clearly deserves attention.

As an educator who has worked with games in educational settings for over a quarter of a century, I have frequently wondered and worried about this matter. Recently, while participating as a last-minute substitute in the oral examination of a doctoral student at the University of Michigan's School of Education, this issue was raised by a question asked by one of the candidate's colleagues who was attending the exam: "Are you sure that the actions taken by your principals in training would lead to the same results in 'the real world' as they led to in your simulation?" She questioned the relationship between the alleged consequences of actions taken in the simulated world and the results that would be observed in actual practice. What I heard when she raised this question was the assertion that the candidate had asked people to *practice* making decisions in a *theoretical* environment. In short, this was a matter of *practice in theory*—and as she and her colleague, the doctoral candidate, discussed the issue, the name of this article took shape in my mind.

Of course, those words have a very familiar ring to them. Usually, however, we hear them the other way around. The familiar phrase is *theory in practice*. For example, the name of the book that Don Schon wrote with Chris Argyris, prior to the three very influential books dealing with the notion of reflective practitioners, was *Theory in Practice: Increasing Professional Effectiveness* (Argyris & Schon, 1974). Indeed, there are very few topics in education that generate as much heat (and, perhaps, as little light) as does the topic of the relationship between theory and practice.

With the exception of the games I used as a junior-high teacher (which were mostly what I would now call tests in disguise) or the games I had built in my youth to alleviate boredom (and to try to get around Philadelphia's *blue laws*, which not only restricted Philadelphia's baseball teams from starting an inning after 7:00 p.m. on Sundays but also restricted me from playing most conventional games on Sundays), my first venture into gaming began with a major worry about getting people to practice helping others when we, who were constructing the exercise, had grave doubts about what passed for theory in the area under consideration. The game that grew out of this concern came to be called THE HELPING HAND STRIKES AGAIN (Goodman, 1970a). I think it is an apt name for many reasons, not the least of which is that all serious gamers should consider how that phrase might apply to them when they put their theories into practice.

### **The Helping Hand Strikes Again**

In the mid-1960s I was working as a consultant to the US Office of Education (forerunner of the present US Department of Education), having

been hired to help design the Educational Resources Information Center (ERIC). Garry Walz (a professor of guidance and counseling at the University of Michigan who had just established an ERIC Clearing House at Michigan) and I decided that we would design an exercise aimed at calling attention to the strategic but limited role that information could play in the solution of problems associated with helping people. From the start we took the position that we did *not* really understand how to help people, at least at a theoretical level. We did not even want people to use the vocabulary associated with the guidance and counseling domain (terms such as IQ) because we felt that such terms would frequently do as much harm as good, given their usage by many educational practitioners and lay people. To this end we built a very abstract exercise, actually a game within a game, on the basis of the notion that we would set one group of participants to playing a little strategy game, both the two-player and a solitaire variant of the game TAC-TICKLE, which is one of Layman Allen's WFF 'N PROOF games, and then surround those players with other participants charged with improving the players' performance by providing them with information. Of course, it often turned out that improving one player's performance was done at the expense of another player; that attempts to provide assistance, based on the helpers' perception of the problem, frequently had less-than-desired consequences for the person helped; and so forth. Hence the name of the game, THE HELPING HAND STRIKES AGAIN.

Although what we built was soon termed a *simulation game* by almost everyone, we had been, from the outset, extremely anxious to avoid the notion that we knew how our game was like what we were dealing with out there in the "real world," meaning the world outside the temporal and spatial confines of the game. (Note the relationship between the words *simulation* and *simile*, a simile being an analogy that explicitly uses either the word *like* or the word *as*.) Having been asked to write the chapter on "Gaming and Simulation" for the American Educational Research Association's *Second Handbook of Research on Teaching* that appeared in 1973 (Goodman, 1973), I undertook a number of discussions with Layman Allen on the subject of the relationship between simulation and non-simulation games. Clearly Layman's WFF 'N PROOF, EQUATIONS, and ON-SETS fell into a very different category from the games with which I was working at that time, THE HELPING HAND STRIKES AGAIN, as well as POLICY NEGOTIATIONS (Goodman, 1979a) and THEY SHOOT MARBLES, DON'T THEY? (Goodman, 1979b). But why?

The gaming world made this distinction rather routinely, but, as just noted, I was quite wary of games that purported to simulate some reference system in an explicit manner. Layman and I decided that the key to making this

distinction lay in what he called “the rules incorporated by reference” in the rules of the game. For example, the rule book for playing his EQUATIONS game did not actually include all the rules of algebra. The rules of the game called EQUATIONS simply specified that players were to follow all the rules of algebra. That is, the rules of the subject matter to be learned were “incorporated by reference” in the rules of the game. If, we decided, the rules of the subject matter that were incorporated by reference in the game rules were characterized by a high degree of *clarity* as well as a high degree of *consensus* (within the community of experts that defined the standards for that subject matter), people would think of such games as *non-simulation* games. If not, they would likely be termed *simulation* games.

The upshot of this approach was to recognize that in many, perhaps most, subject matter areas in which simulation games were being used, it would be quite unusual to find a high degree of consensus on detailed, clear, non-vague, non-ambiguous formulations of the way that subject area worked. The state of the art of politics, economics and sociology, for example, just did not supply game designers with such formulations. As a result, clarity of rules was frequently attained at the expense of consensus and vice versa. What would get taught in many a simulation game, if it worked, was somebody’s theory of the way that slice of the world worked. Players could indeed carry out their plans and observe the consequences of their actions; that is, they could practice their skills in a particular arena, but they could only practice in theory.

There is certainly nothing wrong with developing a practical feel for someone’s theory, as long as the situation is described that way. My concern was, and is, that participants be alerted to this fact and not be asked to believe that by playing a particular game they will be developing a practical understanding of the way the world actually is, in practice.

### **They Shoot Marbles, Don’t They?**

Although I was not present at an early play of my THEY SHOOT MARBLES, DON’T THEY? attended by Bill Gamson, then a Professor of Sociology at Michigan and the designer of the highly acclaimed and extensively played game SIMSOC, it is my understanding that Bill faulted the game rather seriously for not having a theory behind it. My response, when I heard of his reaction, was, “I certainly hope that was clear not only to someone as astute as Bill, but to *all* the participants,” because this game was very self-consciously designed to avoid promoting consensus about my theory of social interaction or any theory with which I was familiar.

This was the case because MARBLES (as THEY SHOOT MARBLES, DON'T THEY? was frequently nicknamed) was designed in response to a request to get young African American students in Detroit thinking about police-community relations after the Detroit riots of 1968. It was clear to me that any message that I might try to deliver by having these Detroit secondary school students play my game would be an instant candidate for dismissal, given that I was White and over 30 even then, these attributes being sufficient grounds for dismissing my ideas completely or for believing just the opposite of any position I took!

The inspiration for MARBLES was basketball, a game that I consider to be characterized by weak rules that require constant interpretation and reformulation. Why not just let the students, with whom I had been asked to work, referee a game they could play in their classroom, a marble game, rewriting the rules as desired on the basis of their own perceptions of what was fair, what made it worth playing, and so on? I provided them with some rules that they could not change, like how many marbles I would give out for hitting a certain kind of target. These were analogous to the Rules of Nature (which I would illustrate by giving examples such as the law of gravity or the temperature at which water freezes). But all the rest of the rules they could change. These would involve such things as what became of the marbles that I gave out. Would they stay with the person to whom I gave them (e.g., the owner of the target), or would the target owner give some to the person who made the shot, some to the player who owned the land on which the target stood, and so on? With what may have been a sexist phrase that was not questioned at the time, rules governing matters like these came to be called the Rules of Man. The former set of rules, that is, the unchangeable rules, soon came to be called the rules of GOD, which stood for Game Overall Director. In subsequent variations of this line of games, I have tried to avoid that language to encourage players to speculate about the nature of theological rules rather than formulate such rules in a way that may not be questioned. I refer to the Game Director as Mother Nature, or just Nature.

My concern for the relationship between what goes on in a play of a game and what such activity refers to deepened with each successive play of MARBLES. In play after play, participants would compliment me for building in things that I knew I knew little or nothing about. Many plays had absolutely nothing to do with police-community relations, yet raised all kinds of questions about power, equity, rational behavior and even the purpose of life. I was not just teaching through the game; I was learning through the game. It became obvious to me at least that the word *simulation* was increasingly inappropriate for what I was doing with this kind of game.

Eventually, it struck me that the word *metaphor* was a much more apt word to describe the nature of the analogy involved.

It is probably noteworthy at this point that the idea that gaming had as much or more in common with the world of literature (a world in which metaphor plays a very prominent role) than it had with the world of social science was not brand-new to me at that stage in my work with games. When Michael Inbar asked if I would join in the effort to launch a new journal to be called *Simulation & Games*, I agreed to do so on the condition that it would contain a Simulation Review section that would be analogous to the Book Review section of literary periodicals. In the Simulation Review section of the first issue of this journal I made as strong a plea as I could for including the traditions of scholarship associated with the humanities in efforts to understand and evaluate the role of games in learning and teaching (Goodman, 1970b). I was the editor of that section for a few issues but it very soon became clear that neither I nor the field was quite ready to pull that idea off in a really meaningful way. The Simulation Review section evolved into a Game Review section and finally simply a Review section. It probably serves a useful purpose, but I doubt if it is the proper arena for pursuing the basic idea of raising fundamentally different kinds of questions about simulations, games, research and scholarship.

Much has happened in the field of educational research since the late 1960s, some of it quite relevant to questions about the relationship between the humanities and the sciences. The behavioristic, quantitative paradigms that were so strong and so prominent at the time *Simulation & Games* was launched have moved over to make room for qualitative research in the pages of many journals devoted to behavioral and social matters. In some schools, debates between quantitative and qualitative research rage; in others the groups simply ignore one another; in still others there are efforts to build bridges between the two.

To sum up, I found that, to make sense out of the notion of metaphor and its possible relationship to games, I had to come up with categories other than simulation and non-simulation games. Any discussion of metaphor is almost inevitably going to use the word *literal* to describe language that is not metaphoric. I have found people who say that all language is metaphoric. I have found people, most notably Donald Davidson, who say that all language is literal. Much of what is said about such subjects I cannot understand. As a result of this line of thinking, however, I began to think it would be useful to divide games up into three categories, not two as I had done in the American Educational Research Association's (AERA) *Second Handbook on Research in Teaching*. Therefore, in the "Instructional Gaming" entry in the AERA

*Encyclopedia of Educational Research*, I tried to establish three categories of games (and game-like exercises), namely, *simulation*, *metaphoric*, and *literal* (Goodman, 1992).

### Simulation Games

Those who deal with simulations continue to focus attention on the pressing question of *verisimilitude* (“the quality of appearing to be true or real” according to the *American Heritage Dictionary*). Consider the case of the University of Michigan’s Interactive Communications & Simulations (ICS) computer-conference-based Arab-Israeli Conflict simulation that has, for a decade, connected secondary school students around the world to play the roles of five major political leaders in each of a dozen or so countries involved in this struggle in the Middle East.

While a teaching assistant in 1974, Edgar Taylor initiated the Arab-Israeli Conflict exercise in a political science course at the University of Michigan. Leonard Suransky arrived at Michigan shortly thereafter and worked closely with Edgar on the development of the university version of the game. Edgar also worked with Bob Parnes, who in the latter half of the 1970s was designing CONFER, the computer-conferencing system that allowed us to extend the Arab-Israeli Conflict simulation to secondary schools around the world. Bob by then was also a veteran gamer, having worked very closely with me on the development of MARBLES.

In the ICS, college students serve as mentors to the younger students to see to it that they, while playing their characters, stay in role with as much integrity as possible. No single economic or political theory lies at the heart of the exercise; there is no model that drives the game and determines the consequences of the players’ actions. The college student mentors meet in weekly seminars to hammer out the advice they might give to the participants to keep their performance in line with anything that they know about that age-old conflict. It is, of course, still practice in theory because no one can be sure that what the students are doing would actually match with the world outside the game. However, because the actions taken and the consequences of those actions within the exercise are actively negotiated between the players and the mentors, the tentative and theoretical nature of the entire undertaking is conspicuous to the participants—whereas the action is detailed, exciting and absorbing. That, I submit, is an important step in the right direction.

If one is going to build a simulation game around a model, in other words, around a specific theory, then the burden falls squarely on the designer to

vouch for the validity of the theory. As economists and political scientists get better and better at modeling slices of their worlds, we may expect better and better games based on these models to appear. In the meantime, another approach may be taken.

Simulation games can be turned around in the sense that participants can be switched from the role of players to the role of designers. This was the approach used in the line of the POLICY NEGOTIATIONS games that were developed at Michigan and elsewhere and in the extension of POLICY NEGOTIATIONS known as THE FLOATING CRAP GAME (Goodman, 1981). When this is done, the connections that the participants claim to see between various parts of the world that they themselves are modeling are rendered explicit for review, discussion, and revision. There is little reason to believe that actions that people take while playing such games would be the ones they would take or recommend taking in the real world. Nevertheless, if people are designing a game with an eye to expressing their best generalizations about something, formulating rules that purport to capture the essence of some phenomenon as they have come to understand it, there are good reasons to believe they are behaving in a way that they would behave outside the context of the game. Put another way, they are practicing making theoretical statements; they are engaging in practice in theory. This twist on the meaning of the phrase "practice in theory" is discussed further in the next section.

### Metaphoric Games

As for metaphoric games, gone is the claim that the system expressed by the game rules, the artifacts, and the performance of the players within this framework is explicitly like something. A metaphor makes the audacious claim that the metaphoric system *is* the system with which it is intended to interact; and, of course, it *is* not. Don Swanson (1979) suggested that

a simile is usually less potent than a metaphor simply because, as Davidson has observed, it is a *true* statement. It is not a provocation to correction, invention, and discovery. We hear a metaphor and we become a cat after a mouse. We pounce. A simile is more like a wheelbarrow - we are carried along. (p. 163)

The distinction between being instructive and being provocative lies at the heart of Cornell West's (1989) argument in *The American Evasion of Philosophy* in which he makes the claim that it is Ralph Waldo Emerson who ushers in that bastion of American philosophy known as pragmatism, the kind of thinking pursued by William James, John Dewey, and, of late, Richard Rorty. "The primary aim of Emerson's life and discourse is to provoke; the



principle means by which he lived, spoke, and wrote is provocation. At the 'center' of his project is activity, flux, movement, and energy" (West, 1989, p. 25). Nothing could be more important than making this distinction between instruction and provocation when it comes time to make claims about the instructional value of the kind of game under consideration here. In much the same way that a successful metaphor provokes new ways of thinking about familiar matters, the games that I have designed that I think of as being metaphoric in character are intended to provoke thought, not to instruct their participants to think in the way the designer thinks.

It may be said, then, that in metaphoric games (as in the case of participants designing simulation games), the phrase practice in theory is used as follows: Instead of implying that one is only practicing in theory rather than practicing in reality, the implication is that one is to practice theorizing. For example, if we offer someone practice in carpentry, it means that the person could practice doing carpentry. The person is simply practicing carpentry. It is in this sense that practice in theory can be seen as also meaning practice doing theory—practicing theory. I claim that metaphoric games are designed to provoke people into practicing doing something theoretical, namely reasoning about things, speculating. (Theory is defined as "abstract reasoning; speculation" in the *American Heritage Dictionary*.)

MARBLES is not designed to instruct in a particular way, but rather to provoke its participants to go back and forth between what they know about fair behavior on the part of the police and what they know about fair behavior on the part of the player who just claimed that the shooter's finger went over the line and the shooter is therefore subject to arrest. I want players to theorize, to reason, to speculate about their assumptions, their opinions and their beliefs—on the basis of their actions and their observations of the consequences thereof. My goal is the same goal that Richard Rorty has for poetry, the novel, journalism and ethnography, namely, to provide a stimulus that "might conceivably alter one's sense of what is possible and important" (Rorty, 1989).

### Literal Games

This leaves for consideration the category of games that I refer to as literal games. Here one hopes that the participants are not doing practice in theory in the sense of doing something that does not necessarily "hold" outside the game framework, but rather are literally practicing the very skills to be used when the game stops. This, for example, is the world of Layman Allen's math and logic games, especially his *QUERIES 'N THEORIES*. It is also the world

of games that require people to learn facts and relationships about geography, about history, about anything. This is the thinking that produced the line of games I call LOGIFAX, SWITCH, FACTRIX and MULTRIX (Goodman, 1984). Participants are asked to practice the very skills that we want them to have a practical grasp of. We might say this is a matter of practice in practice rather than practice in theory, even though the logical thinking that is required may be deemed by some participants and observers as quite theoretical.

As stressed in the section on simulation games, there is also much to be said for having students design literal games rather than just play them. Once a class has played LOGIFAX or any of the other games in this class, games that demonstrate that it is far better not to know something than to have an *erroneous* view of it, students can be assigned to build good game questions for play by others. Good design is not a matter of stumping players with trivial questions, the answers to which are known by very few people, but rather identifying facts and concepts that people will get wrong because conventional wisdom suggests one answer, but informed judgment demonstrates that another answer is the correct one. Indeed, designers can even be scored in terms of the quality of their design work, turning the act of game design into an act of play in much the same way that design and play are merged in a metaphorical game like MARBLES.

### **Puzzle-Based Games**

Recently, a still different category of games has come to my attention. Anyone who has heard me talk about games or who is familiar with things that I have written about games knows that I make a big point out of the distinction between puzzles and games. I shall close these reflections by both making my major point and then modifying it just a bit.

My main argument, put in its simplest form, is that a puzzle to be legitimate must have an answer; a game must not have an answer (e.g., TIC TAC TOE seems to be a game until the participants realize that there is an answer and then there is really no point in playing it). I argue that many, perhaps most, of the problems posed to students in schools tend to be puzzles and therefore are deemed to have right answers. But many, perhaps most, of the world's important problems outside school are like games in that they do not have right answers except, perhaps, within a particular culture. Therefore, it seems reasonable that we should use games and game-like exercises in schools to emphasize the relative, situation-sensitive nature of knowledge.

There are, however, many learning situations that work far better when people are not competing with one another; or, if they are competing, when

the players can tell in a convincing fashion that one person's (or team's) performance is objectively better than their rivals. In cases like this, puzzles, or perhaps what might be called puzzle-based games, become very useful.

The simplest example is the exercise I call GRAPHIX (Goodman, 1990). It involves cutting a picture into, typically, 16 pieces (four columns and four rows). Participants get subsets of these pieces and must assemble the picture without looking at one another's pieces. Obviously, this requires communication and cooperation, and just as obviously, there is one right way in which the pieces fit together to form the original picture. Each group of participants can in a sense be said to be competing against themselves or against some other real or imagined group to do their best at communicating and cooperating to come up with the demonstrably correct answer. I leave it to the readers' imaginations to think about all that might be done with this basic idea. I have used it as a core activity for games about managing complex systems, a game for sensitizing prison guards to what it is like to live in a confined space with little or no power, and as an exercise for introducing a new Rights and Responsibilities Policy for an entire school system. This last example is an exercise designed with major input from Will Purves and John Retzer, two graduate students at the University of Michigan who are representative of the seemingly never-ending stream of experienced gamers who somehow end up in Ann Arbor.

In every instance, the advantage of this approach lies in the fact that the participants are dealing with a puzzle; that is, there is a right way for the pieces to fit together. One group of players does not win because some game designer says that one kind of action is worth more points than another. If there is any winning at all, it is in the sense that one group of players feels like they won because they literally got their act (i.e., their picture) together better than did some other group, or they did better this time than they did before on a similar task. That is, the planning, problem solving, communication and cooperation that they did was not better in theory, it was better in practice. Here, then, theory can be tested in practice rather than have practice tested in theory.

### Summary

Clear thinking about the relationship between the words *theory* and *practice* is just as necessary among gamers as it is in other educational circles. Gamers love to claim that they promote learning by doing. But it is quite reasonable to ask, "Just what is it that the players are doing?" Are gamers

asking people to practice something in a theoretical fashion? Are they asking them to practice theorizing? Are they asking them to practice something that is, in fact, practical?

## References

- American heritage dictionary of the English language* (3rd ed.). Boston, New York, London: Houghton Mifflin.
- Argyris, C., & Schon, D. A. (1974). *Theory in practice; increasing professional effectiveness*. San Francisco: Jossey-Bass.
- EQUATIONS. Allen, L. E. (1964). Ann Arbor, MI: WFF 'N Proof Learning Games Association (1490 South Blvd., Ann Arbor, MI 48104, USA).
- Goodman, F. L. (1970a). THE COACHING GAME. In M. Inbar & C. S. Stoll (Eds.), *Simulation and gaming in social science* (pp. 93-109). New York: Free Press.
- Goodman, F. L. (1970b). Simulation review column. *Simulation & Games: An International Journal*, 1(1), 41-44.
- Goodman, F. L. (1973). Gaming and simulation. In R.M.W. Travers (Ed.), *Second handbook of research on teaching* (pp. 926-939). Chicago: Rand McNally.
- Goodman, F. L. (1979a). POLICY NEGOTIATIONS. In L. C. Coppard & F. L. Goodman (Eds.), *Urban gaming/simulation* (pp. 407-420). Ann Arbor: University of Michigan (c/o School of Education, Ann Arbor, MI 48109-1259).
- Goodman, F. L. (1979b). THEY SHOOT MARBLES, DON'T THEY? In L. C. Coppard & F. L. Goodman (Eds.), *Urban gaming/simulation* (pp. 508-520). Ann Arbor: University of Michigan (c/o School of Education, Ann Arbor, MI 48109-1259).
- Goodman, F. L. (1981). THE FLOATING CRAP GAME. *Journal of Experiential Learning and Simulation*, 1(3), 61-72.
- Goodman, F. L. (1984). LOGIFAX. *Simgames: The Canadian Journal of Simulations and Games*, 10(3-4), 99-104.
- Goodman, F. L. (1990). GRAPHIX. *Simulation & Gaming: An International Journal*, 21(4), 467-471.
- Goodman, F. L. (1992). Instructional gamir.g. In M. C. Alkin (Ed.), *Encyclopedia of educational research* (pp. 622-626). New York: Macmillan.
- ON-SETS. Allen, L. E. (1966). Ann Arbor, MI: WFF'N Proof Learning Games Association (1490 South Blvd., Ann Arbor, MI 48104, USA).
- QUERIES 'N THEORIES. Allen, L. E. (1969). Ann Arbor, MI: WFF'N Proof Learning Games Association (1490 South Blvd., Ann Arbor, MI 48104, USA).
- Rorty, R. (1989). *Contingency, irony, and solidarity*. Cambridge and New York: Cambridge University Press.
- SIMSOC. (2nd ed.). Gamson, W. A. (1972). New York: Free Press.
- Swanson, D. R. (1979). Toward a psychology of metaphor. In S. Sacks (Ed.), *On metaphor* (p. 163). Chicago and London: University of Chicago Press.
- TAC-TICKLE. Allen, L. E. (1967). Ann Arbor, MI: WFF'N Proof Learning Games Association (1490 South Blvd., Ann Arbor, MI 48104, USA).
- West, C. (1989). *The evasion of philosophy*. Madison: University of Wisconsin Press.
- WFF 'N PROOF. Allen L. E. (1961). Ann Arbor, MI: WFF'N Proof Learning Games Association (1490 South Blvd., Ann Arbor, MI 48104, USA).

*Having taught at the School of Education at the University of Michigan for over three decades, I think of myself as an educator who advocates the use of a variety of techniques to help people learn. I never self-consciously decided to use games for that purpose. People who used the techniques I had come up with called them games, and I had to agree, at least some of the time. Having been trained to think about the history and philosophy of education, I have tended to be self-conscious about the language I use and the way the use of language affects the way in which people go about educating people. This has led me to distinguish between the many things that go on in the name of gaming, and to do so in a way that might help people see the many different kinds of things that might indeed be done in the name of gaming.*

*It is probably also relevant to note that prior to my doctorate in history and philosophy of education at Michigan, I had been an economics major at Harvard and spent a term at Harvard Business School before switching to the MAT Program at the Harvard Graduate School of Education. The clearest impact of the Harvard experience was to focus my attention on the importance of entrepreneurship. Much of my work in gaming can be seen as an effort to get people to design systems that link available resources to the solution of whatever it is they see as a problem, whether they are playing a game or designing a game.*

*Along the way I have taught junior high school English, social studies and math; economics and psychology at the community college level; social studies methods, history and philosophy of education, as well as US intellectual history at the university level. A lengthy period of involvement with the Urban and Regional Planning PhD program at Michigan not only brought me into close contact with gamers like Allan Feldt and Dick Duke but also provided an additional challenge to thinking about public entrepreneurship, social entrepreneurship or both.*

*That I have been able to count Layman Allen as a close friend and colleague ever since he joined the Law School at Michigan in the late 1960s is probably the biggest single factor in keeping me focused on gaming as a serious endeavor. The elegance and power of his basic approach to resource allocation games has encouraged me to take the view of game play and game design as acts of entrepreneurial behavior as being, as he would put it, "worthy of my attention now."*

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## Getting Personal

**Ken Jones**  
London

*The author's profession was journalism and his involvement in designing and writing about simulations and games occurred by chance. Perhaps what mattered to him most was the interesting people he met along the way—Garry Shirts, Cathy Greenblat and many others. He does not start with an aim but with an idea that interests him. However, he feels he does not seem to get good ideas. Rather, he gets muddled or bad ideas and the design process is the attempt to clarify, simplify and improve. Perhaps the author's major contribution to theory is the concept*