Periodic cycles apply to topics in the social sciences as they do in fashion. In the 1960s, there was considerable interest in the building of social science theory when the accent was on the word science. A proliferation of books on the logic of theory or techniques for theory construction was its direct manifestation. Then, in a very short time, by the 1970s, the focus had shifted to the opposite extreme, namely a distrust of theory and even an ideological opposition to the word science. The word social, as in social construction, has now become operative.

So when I received an e-mail from Jim Tankard that the book How to Build Social Science Theories (hereafter HBSST) was about to be published, I was excited and for several reasons. First, I had been thinking of returning to the topic of theory construction myself. Now, the publication of this excellent book frees me to move on to some of my other concerns. Here is a book in which the most important ideas in my own effort have been retained, elaborated, and improved upon in a number of interesting ways. Second, and more critically, HBSST is a hopeful sign of a renewed interest in building social science theories and in science as a way to make this world a better world to live, a raison d’être that postmodernists have failed to appreciate.

After receiving a copy of the manuscript and reading the preface, I must also admit that I was deeply touched. I had had a very strong commitment to teaching theory construction because I had always believed that many more individuals could be creative if they were provided with the right language and the right tools. This was the objective of Techniques and Problems of Theory Construction (hereafter TPTC): to deconstruct the problem of constructing good, solid, and valid theory that would withstand empirical tests into a series of manageable steps such as finding continuous variables and specifying their definitions and linkages. So I rejoiced when I discovered that Shoemaker, Tankard, and Lasorsa had had these same concerns for a number of years.
As I have suggested above, *HBSST* has improved upon my effort by

1. Providing a number of examples and in enough detail so that readers can more easily grasp quite difficult and abstract ideas involved in such notions as continuous variables, theoretical definitions, and operational linkages

2. Integrating the discussion of theoretical and operational linkages with statistics and research methodology more generally

3. Adding three- and four-variable sets of hypotheses and linkages

4. Including a whole chapter on models and their use in theory building, which can be a wonderful source of new ideas about variables

Each of these kinds of elaborations requires a few comments.

My original effort included too many new terms for the typical graduate student. Shoemaker, Tankard, and Lasorsa have rightly concentrated on the analytical importance of continuous versus categorical concepts, theoretical and operational definitions, and theoretical and operational linkages. These are the core ideas, which they have carefully explained with numerous examples. The richness of the examples, I am sure, will make these abstract ideas concrete enough so that they are comprehensible. Indeed, it is clear from the preface that the authors have spent some time teaching these ideas and learning how best to communicate them to their students.

A truly important contribution is the integration of the theoretical ideas of operational definitions and linkages with statistics. In particular, Chapter 4 has a rich variety of examples that make apparent the connection between theory and research. I do not know if graduate departments of mass communication resemble those in sociology, but I do know that in the latter there has been a wide separation between those interested in theory and those interested in research. This chapter, like other parts of the book, narrows the distance between these alternative ways of thinking.

At the time I was writing *TPTC* (in 1968, while I was living in Birmingham, England, and teaching at the University of Aston), path analysis did not exist, and it was difficult to get students to think in terms of independent and dependent variables, let alone anything more complex than this. But today three- and four-variable analyses are commonplace. *HBSST* has a separate chapter devoted to each of these
issues, which is wise indeed. The three-variable case is a paradigm that is well integrated with the analytical strategies of Columbia University (taught by Paul Lazarsfeld and Herbert Hyman, by whom I was trained as a graduate student) and is another illustration of how theory and research can be usefully combined. The next chapter examines the set of concerns involved in analyses of four and more variables.

What could also be added to the latter discussion is the importance of combining alternative paradigms as a fruitful theoretical and research strategy. Sociology, like many of the social sciences, has been riddled with controversies over the past few decades. It seems to me that rather than debating opposing viewpoints it is much more fruitful and appropriate to include them within the same research study. Of course, one might question whether it is possible to represent another perspective accurately when one is committed to a specific viewpoint. Each of us has to provide his or her own answer to that question. But without a doubt, the field advances more assuredly when opposing paradigms are combined in the same theoretical framework and data analysis.

A special chapter on the use of models constitutes a wonderful addition to the armamentarium of theoretical thinking. Indeed, models can be a useful source for generating hypotheses or theoretical linkages. Again, ideally, one would like to combine several of them relative to a single subject.

Now, who does this book address? All its examples involve the field of mass communications, yet the book is entitled *How to Build Social Science Theories*. Though it would seem to have a very specific audience in mind, I would argue that it should be read by anyone preparing for a career in social science research, whether in an academic, governmental, or private sector setting. Researchers—and this necessarily includes PhD candidates—are required to frame their subject matter theoretically, indicating what is missing and suggesting what might be helpful in filling the gaps in knowledge. The separate chapters as well as the discussion of evaluation provide a framework to do just that—determine the missing parts—and provide ideas about how to eliminate knowledge gaps. Increasingly, people hired with either MSs or PhDs are asked to demonstrate that they have this capacity to generate new theoretical concepts and hypotheses. Certainly, this is the gist of questions I have been asked to answer when writing references for students who have used my name. This book can help them in this endeavor and ensure a more successful career for them.
Finally, and because the last chapter touches on the problem of creativity, let me make a few comments about this issue. Without the same labels, many of these ideas were buried in the examples in my own book *TPTC* in specific discussions of how to think about a new concept, operational definition, or theoretical linkage. Creativity in thinking is also affected by the variety and sources of information that we monitor, as any student of mass communication would probably agree with. Here are some the ways in which the variety can be increased:

1. Cultivating a diverse set of friends in terms of age as well as culture, politics, and religion
2. Knowing multiple languages well enough to be able think in them
3. Living in another country and adapting successfully to its culture rather than remaining in an American ghetto
4. Reading books and newspapers or listening to television or radio programs, especially when foreign, that disagree with our cherished perspectives and attempting to understand their criticisms of our own ways
5. Taking double majors in college or shifting disciplines between college and graduate school, especially if they represent disparate ways of thinking
6. Studying and working in teams, learning how to read the other team members’ feelings and hidden ideas

The list could be extended, but one can easily see that the general theme is learning how to live with diversity, embracing it and understanding it. This leads to much more complex cognitive structure, which in turn will facilitate creativity in our own minds and lead to our developing new continuous variables, theoretical and operational definitions, and theoretical and operational linkages.

Let me close by saying once again how delighted I am that so much careful thought has been given to how to communicate with students so that they can grasp the importance of thinking theoretically.

— Jerald Hage

*Arrigas, France*

*June 2002*