DOES LOGICAL EMPIRICISM IMPRISON MARKETING?

Shelby D. Hunt and Paul S. Speck

ABSTRACT

Arndt's preceding essay entitled "The Tyranny of Paradigms: The Case for Paradigmatic Pluralism in Marketing" purports to show that many of the serious problems in marketing academe can be traced to the "tyranny" of the philosophical school known as logical empiricism. The purpose of this comment is to analyze Arndt's argument by (1) formalizing the imprisonment argument, (2) clarifying the nature of logical empiricism, and (3) examining specific key statements in the imprisonment argument in light of this clarification.

I. INTRODUCTION

One sign of a healthy academic discipline is the willingness of its members to engage in constructive self-criticism. Many of the papers delivered at the Workshop

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ISBN: 0-89232-627-1
on Alternative Paradigms in Marketing were dedicated to exposing some current problems in that field and recommending changes. Such is the case with the paper by Amdt entitled "The Tyranny of Paradigms: The Case for Paradigmatic Pluralism in Marketing," in this volume.

As the word *tyranny* in the title of the Amdt paper suggests, the author is deeply concerned with the current state of affairs in the marketing academic discipline. The paper presents a carefully constructed, meticulously crafted argument purporting to show that many of the serious problems in marketing academia can be traced to the "tyranny" of the philosophical school known as logical empiricism. The paper concludes that "marketing thought has been imprisoned by the dominant logical empirical metaphors." Further, in order for marketing to progress "it will be necessary to break free from the conceptual colonization of empiricism."

The purpose of this comment is to analyze the argument that the philosophical school of thought known as logical empiricism has "imprisoned" marketing. To analyze any argument requires a specification of its premises and conclusions. The next section will attempt to outline the "imprisoned" argument in a succinct, rigorous fashion. Although it is impossible to completely capture the entire richness of an argument through succinct reconstruction, the reconstruction attempts to faithfully reproduce the essential features of the argument. After reconstructing the argument, some observations will be offered on its soundness.

II. AN OUTLINE OF THE ARGUMENT THAT LOGICAL EMPIRICISM IMPRISONS MARKETING

A. Science is a "sequence of partly cumulative and partly noncumulative transformations of knowledge (K), problems (P), and instruments (I)."
   1. Knowledge is "generalized, certified information relating to an aspect of reality."
   2. Problems "arise from the discrepancies between what is known and what unknown" about some aspect of reality.
   3. Instruments refer to the methods and techniques used to generate knowledge.

B. The scientific orientation of a researcher "prescribes the relationship between the data, the theories, and the values of the researcher." Following Galtung (1972), the paper proposes three alternative scientific orientations:
   1. Empiricism, which compares "data-sentences with theory-sentences."
   2. Criticism, which compares "data-sentences with value-sentences."
   3. Constructivism, which compares "theory-sentences with value-sentences."

C. In marketing, "the by far dominant orientation has been and still is empiricism."

1. A key element of empiricism is "the belief that only objective, detached observation ensures intersubjective certification."
2. A second key element is "like phenomena in nature, human behavior is believed to be governed by invariant laws."

D. There are "four main world views," or paradigms, based on "different metatheoretical assumptions about the nature of science."
   1. Logical empiricism, which assumes that—
      a. "marketing relations have a concrete, real existence and systemic character producing regularities in marketing behavior";
      b. "marketing systems are viewed as being equilibrium seeking";
      c. "the real world is considered essentially as conflict free."
   2. The sociopolitical paradigm, which differs from logical empiricism "in recognizing the conflicts among marketing actors caused by the scarce resources and the interdependencies in marketing systems."
   3. The subjective world paradigm, which assumes that—
      a. "social reality does not exist in any concrete sense but is the product of subjective and intersubjective experience of individuals";
      b. understanding marketing behavior "can only be attained by direct, give-and-take interaction with the members of the population in question."
   4. The liberating paradigm, which assumes that—
      a. "what passes for reality is really socially created and socially maintained";
      b. the role of science "is to identify the actors in the systems, their goals, interests and power bases in order to describe the conflicts and contradictions of the system and show the way to emancipation."

E. The paradigm of logical empiricism has reached dominant status in marketing, as "even cursory perusal of marketing journals and textbooks is bound to confirm."

F. The dominant status of logical empiricism is maintained through a network of socialization agents, since "scientific activity is a social process and essentially a subjective enterprise."
   1. "An important socializing role is served by the burgeoning Ph.D. programs in marketing emphasizing model construction, hypothesis testing, data collection, and data analysis rather than a critical orientation."
   2. Also serving as socialization agents are "journal editors and referees and editors of publishing houses who may function as guardians of the faith."
   3. Professional conferences "also serve more to preserve the status quo than to disseminate new knowledge."
G. The consequences of marketing thought being “imprisoned by the dominant logical empirical metaphors” are as follows:
1. The “prevalence of marginalism and the cumulation of trivial findings.”
2. The development of marketing into “an applied discipline concerned with the improvement of management practice and research methodology,” thus remaining “essentially a one-dimensional science.”
3. The “creative, hypothesis formation stages” of scientific activity have been excluded from science, and “marketing scientists have come to regard as scientific only the model building and hypothesis testing parts of research.”

H. Marketing can break free from being “imprisoned” by logical empiricism by:
1. “Allowing for metaphors outside the logical empirist paradigm.”
2. Recognizing that “the managerial technology in marketing is culture-bound rather than universalistic.”
3. Placing “more emphasis on comparative studies.”
4. Adopting “different goals and purposes, perhaps making the exchange structures and exchange processes the focus of attention,” i.e., “spinning off a basic science from a problem solving discipline.”
5. Bringing “criticism, values, and creativity into marketing science.”

We hope that the preceding reconstruction accurately characterizes the essence of the argument that logical empiricism imprisons marketing. To analyze the argument requires a clear understanding of the basic nature of logical empiricism. The next section provides a primer on the subject. Readers should recognize that logical empiricism is not a monolithic school of thought; there is no “manifesto” to which all logical empiricists adhere. What follows is a summary of some fundamental concepts that are shared by many philosophers who would generally be referred to as logical empiricists.

III. FUNDAMENTAL CONCEPTS OF LOGICAL EMPIRICISM

Logical empiricists believe the world is real. There are real phenomena which have an existence independent of the observer. There are such things as people. People do in fact purchase goods and services. People do in fact sell goods and services. This does not mean that all of the concepts and constructs used in marketing science are necessarily “real.” The claim is much more epistemologically modest. The claim that there are real marketing phenomena means that logical empiricists reject the notion that the entire world is make-believe.

Given that there are real phenomena, logical empiricism stresses that the purpose of science is to increase our understanding of these phenomena. Science does so through the processes observing, measuring, describing, classifying, explaining, and predicting phenomena. A valuable norm of the scientific process is objectivity. Observations, measurements, and descriptions of phenomena are to be carried out in an objective fashion. This does not imply that all scientific work is completely objective; scientists are only human. Nevertheless, when such things as political beliefs are found to have “tainted” a piece of research, the research is discredited. To repeat, logical empiricism does not claim that all scientific activity is completely objective. Rather, objectivity as a goal for science is (and ought to be) a valuable norm.

Logical empiricism holds that explanation is central to science. Explanations of phenomena are scientific answers to “why” questions; Why does one phenomenon occur and not another? Why do some consumers shop in discount and other stores in conventional department stores? The occurrence of a phenomenon is explained by showing that the phenomenon was somehow expected to occur as a result of some regularity or “lawlike generalization.” These lawlike generalizations may be either universal or statistical in form. Roughly speaking, universal lawlike generalizations state that “every time phenomenon X occurs then phenomenon Y will occur.” Similarly, statistical lawlike generalizations state that “the occurrence of phenomenon X is associated with the occurrence of phenomenon Y.” When several lawlike generalizations are brought together in a systematic fashion, theories emerge. Finally, scientific prediction has the same logical structure as scientific explanation. The major difference is the time frame: theories and lawlike generalizations are used to explain past events and to predict future events. Thus, all satisfactory explanations are potentially predictive.

Four dichotomies play central roles in logical empiricism: (1) discovery/justification, (2) analytic/synthetic, (3) observation terms/theoretical terms, and (4) positive/normative. Each of these will be briefly discussed, in turn.

The discovery/justification dichotomy reminds us that it is useful to distinguish between procedures that scientists use to create or discover hypotheses, lawlike generalizations, and theories from the procedures that are used to evaluate the truth-content of these same theories, lawlike generalizations, and hypotheses. This does not mean that science involves only the testing of theories. Nor does it mean that the justification of theories is “more important” than the creation of theories. Such assertions fall in the same logical class as arguing about whether males and females are “more important” for procreation. Obviously, science and scientific activity involves both discovery and justification.

Salmon (1963) has observed that treating issues appropriately belonging in the context of discovery as if they belonged in the context of justification often leads one to commit the “genetic fallacy.” He offers the following statement as an extreme illustration of the genetic fallacy: “The Nazis condemned the theory of relativity because Einstein, its originator, was a Jew” (1963, p. 12).

The analytic/synthetic dichotomy proposes that truth-content of different kinds of sentences is ascertained in different ways. Some statements (analytical statements)
are true or false depending solely on how certain terms in the statements are defined. For example, consider the statement “all department stores that have 81,000 square feet of floor space have 900 square yards of floor space.” This statement is true by virtue of our definitions of “square feet” and “square yards.” It is analytically true. On the other hand, the truth-content of other statements can be determined only by comparing them with certain aspects of the real world. For example, “all department stores that have 81,000 square feet of floor space will have at least ten separate departments” is synthetic and its truth content must be determined by examining the actual characteristics of department stores.

The observational/theoretical dichotomy points out that some of the terms in science (observables) have relatively direct empirical referents whereas other terms (theoretical) seem “far removed” from the empirical world. For example, the direct act of a consumer purchasing a product is “more” observable than the construct usually referred to as “brand loyalty.”

Early logical positivists and “operationalsists” believed that theories should contain only “directly observable” concepts. Modern empiricism rejects this view. Logical empiricism holds that theories must be empirically testable and that this criterion is satisfied when a theory is capable (at least in principle) of generating predictive-type statements (hypotheses) whose descriptive terms have empirical referents. Thus, only hypotheses derived from theories need be amenable to direct confrontation with real-world phenomena. Nothing in the preceding statements implies that “observable” should be treated as synonymous with “zero measurement error.” Again, scientific activity is a kind of human activity and humanness. The points that should be emphasized are that some concepts and constructs are more “observable” than others and that hypotheses must be testable.

The final dichotomy is the positive/normative dichotomy. Brodbeck (1982, p. 2) discusses this dichotomy:

One further essential distinction is emphasized by logical empiricists, and not only by them. Among sentences, logical empiricists also distinguish the normative or prescriptive statements from descriptive statements. (In ordinary speech, of course, there are also questions, exclamations, and so on, but these do not concern an analysis of science.) Normative sentences contain words like “ought,” “better,” or “good” in their noninstrumental senses. They are statements about ends or goods-in-themselves, not about means. Descriptive statements do not contain any normative words. In ordinary speech and the context of discovery, the normative and descriptive are not always easy to separate. Analysis is required to determine that a statement is descriptive or, perhaps implicitly, normative. If it is descriptive, then its contingent truth or falsity can be determined by observation or inference from observation. If the sentence is normative, then other considerations about our ideals and ends enter, and the sentence is not, in the same sense, either true or false.

Obviously the preceding discussion of the basic elements of logical empiricism is pathetically brief. Further, not all logical empiricists would agree with every part of the description. Also, many philosophers who would not consider themselves to be logical empiricists would agree with many of the previously stated positions.

The preceding description of the fundamental tenets of logical empiricism provides us with a means for investigating the argument that logical empiricism imprisons marketing.

IV. ANALYSIS

Statements D1a, D1b, and D1c in the imprisonment argument outlined in Section II all imply characteristics of logical empiricism. To what extent are these characteristics consistent or inconsistent with the fundamental tenets of logical empiricism? The first statement (D1a) indicates that logical empiricism assumes “marketing relations have a concrete, real existence and systemic character producing regularities in marketing behavior.” Although the concept marketing relations is not defined by Arndt, it is possible to conceive of a definition which would make the statement consistent with the actual tenets of logical empiricism. That is, if “marketing relations” were replaced with “there exist some marketing phenomena,” then the statement would be consistent with the actual concepts of logical empiricism. However, the other two statements mischaracterize the nature of logical empiricism. There is nothing in logical empiricism which implies that marketing systems are necessarily “equilibrium seeking” (D1b). Similarly, there is nothing in logical empiricism which implies that the world must be considered “essentially as conflict free” (D1c). It is true that some researchers choose to treat marketing systems as equilibrium seeking, and it is true that some researchers choose to treat the real world as conflict free. However, there is nothing in the nature of logical empiricism which suggests, implies, demands, or impels researchers to do so.

Although the imprisonment argument significantly mischaracterizes the nature of logical empiricism, this does not necessarily imply that the argument is incorrect. The structure of an argument may be correct even though some of its terms may be poorly defined or misrepresented. Nevertheless, any argument of the “A causes B” variety is suspect when “A” is shown to be misspecified.

Continuing our analysis, statement E in Section II indicates that logical empiricism has reached dominant status in marketing, as “even a cursory review of marketing journals and textbooks is bound to confirm.” Does logical empiricism dominate marketing journals and textbooks? Answering this question requires first answering: What would textbooks and journals look like that were dominated by logical empiricism? Reviewing our discussion of the fundamental characteristics of logical empiricism, one is forced to conclude that any journal or textbook “dominated” by logical empiricism would have to be primarily concerned with the development and testing of theories, lawlike generalizations, and hypotheses. Are marketing textbooks primarily concerned with theories, lawlike generalizations, and empirical testing? Clearly not. Even a casual perusal of marketing textbooks will shown them to be overwhelmingly managerial in nature. Almost all marketing textbooks
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two groups. However, there might be some horrendous measurement problems.
For example, objective definitions of "trivial" may be difficult. Nevertheless,
the hypotheses that "logical empiricism causes triviality" and "the liberating
paradigm causes great discoveries" might warrant exploration.

In conclusion, the argument that marketing is imprisoned by logical empiricism
simply does not stand up to rigorous analysis. The argument is certainly provocative.
And provocative arguments (even when fallacious) often serve useful purposes.
In the 1960s many people defended fallacious arguments on the grounds that
such arguments were necessary for "conscioussness-raising" purposes. Arndt is
obviously very upset with many aspects of the marketing discipline and laments
the overwhelmingly managerial orientation of marketing journals and textbooks.
Other thoughtful marketing academicians share his views. Nevertheless, logical
empiricism has not "caused" marketing to be a "one-dimensional science"
stressing managerialism. In fact, adopting logical empiricism just might be the
"solution" to his concerns.

NOTES

1. All quotations in this outline are from the Arndt paper in this volume.

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paradigms for widening marketing theory. Greenwich, CT: JAI Press.

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