Discussion Paper: Triangulation of Methodology to Solve the Practitioner – Academic Debate Concerning the Value of Research

by Seonghee Oak

In support of research in the debate concerning its relevance to hospitality academics and practitioners, the author presents a discussion of how the philosophy of science impacts approaches to research, including a brief summary of empiricism, and the importance of the triangulation of research orientations. Criticism of research in the hospitality literature often focuses on the lack of an apparent philosophy of science perspective and how this perspective impacts the way in which scholars conduct and interpret research. The Validity Network Schema (VNS) presents a triangulation model for evaluating research progress in a discipline by providing a mechanism for integrating academic and practitioner research studies.

Why Do Different Research Orientations Matter?

While academic research is related to abstracting from specific problems and contexts to develop applicable theories, practitioners' objectives are more concerned with immediate resolution of current problems in specific organizations. Due to these different perspectives, many previous studies point to the problem in utilizing hospitality academic research findings (Piccoli and Wagner, 2003; Cobanoglu and Moreo, 2001). To solve the problem, it is necessary to develop a partnership in which academics understand practitioners' issues, while practitioners must take some time to help set the research agenda and strengthen their relationship with academics.

This paper will address the distinction between academic and practitioner research and the outcomes obtainable from combining these two approaches. Further, the implications for developing scientific thought in the hospitality industry are discussed. This paper's aims are four-fold: 1) to discuss how philosophy of science assumptions impact research approaches; 2) to provide a brief summary on the historical development of empiricism; 3) to discuss the importance of the triangulation of research orientations; and 4) to present implications of the findings for hospitality research.

According to Kuhn (1996), a scientific community is composed of practitioners who share a scientific specialty. In the process of providing a similar education and through the professional socialization process, members of a research community rely on the same technical and professional literature. Members of a scientific community, consisting of scholars and practitioners in a specific professional discipline, share a common value with other members depending on their philosophical orientation. People outside the discipline see members of the hospitality community as the individuals uniquely responsible for the pursuit of a set of shared goals, including the training of their successors.

Although scholars and practitioners frequently appear to present a dichotomy of thought relative to the value of science, there is some evidence that a synergistic effect accrues when academic and practitioner research is combined. For example, practitioners use hotel real estate value as published by Hospitality Valuation Services (HVS) to understand hotel property value and determine the proper investment strategies depending on the business cycle. Practitioners also develop valuation techniques for hotel real estate such as sales, cost, and income approaches. Based on the same data, theorists can test market efficiency hypotheses, identifying which information in the hotel real estate market will most immediately impact hotel real estate value (Oak and Andrew, 2002). While practitioners bring the ability to ask the right or related questions to any study, academics bring a theoretical perspective to answering questions.

The research debate between theorists and management practitioners stems from misunderstanding of the other's viewpoint, often referred to incommensurability. Kuhn (1996) used the term to explain disagreement between scientific communities. Bernstein (1983) found that incommensurability is related to differing views of problems and standards among scientists—that is, those with competing allegiances who practice their tasks in different worlds see the same thing differently. Each scientific community supports a particular viewpoint over other viewpoints from other communities. As a scientific community absorbs the same technical literature and draws many of the same lessons, community members pursue shared goals on a specific subject. The notion of shared goals takes time to develop and often leads to newer disciplines such as consumer behavior that may not yet be represented as a single community. Yet, mathematics and philosophy are strong communities in which scientists share similar goals and approaches to problem solving.

The question is whether inter-disciplinary communication is possible between academics and practitioners who have different research orientations. Critics of incommensurability assume that theories in each community are mutually untranslatable. However, researchers have been known to translate another's work into their own language. Kuhn (1996) argued that the main focus of the process is not simply translating theory from different language communities but persuading others about the theory. By discovering more about the other's social and cultural contexts, the researcher finds that at some point in the translation that a transition has occurred—a conversion to other new ideas.

Transitions between communities or disciplines are helpful in contexts. For example, practitioners who are concerned about finding new solutions to new and existing problems certainly need to know the basis for academic research that presents new solutions. Academic or theoretical research is always incomplete since it deals with a subset of variables in the real world. Thus, the design process relies on assumptions about operationalizing both theoretical and non-theoretical variables (Calder, Phillips and Tybout, 1981). Advice from peers and scholars outside disciplines, using the translation process, aids in theory development. Theoretical studies are verified through falsification procedures that meet two sets of criteria. First, abstract scientific explanation should be rendered fully testable; second, concrete theory-based intervention is viable under conditions present in the real world.

The author does not intend to provide a resolution of the opposing views of academics and practitioners about hospitality research. Synergy might accrue, however, from combining the two approaches so that academics provide new concepts to problem solving and practitioners' research which significantly contributes to the formation of more relevant questions as well as practical applications (Brinberg and Hirschman, 1986).

How Philosophy of Science Assumptions Impact Research

In the context of practitioner research, the objective is to maximize benefits to clients within a given time frame and cost constraints. Such research increases the efficiency of the managerial decision process and minimizes time consumption (Calder, Phillips and Tybout, 1981; Brinberg and Hirschman, 1986). Academic research, on the other hand, is a scientific process aimed at developing theory or solving anomalies within an existing theoretical framework (Kuhn, 1996). Scotter and Culligan (2003) described the scientific method of academic research such that "Platt described science as a series of planned activities that are designed to test a theory ... researchers map out the essential parts of the theory as if they were branches on a tree, and systematically test each branch." Also, they stated that both academic and practitioner research begins by proposing a problem statement. Academics call this process hypotheses development while managers generally regard it as the process of problem-definition. While practitioners look for the solutions and information that may solve the problem,

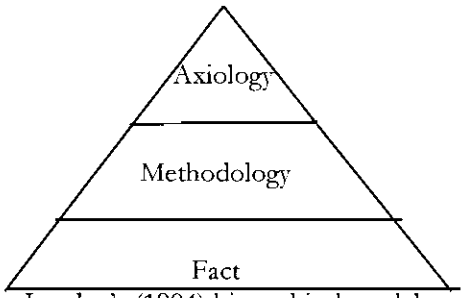
academics formulate critical elements related to important outcomes and devise tests (Scotter and Culligan, 2003).

How can hospitality community use philosophy of science assumptions to better understand the research approaches used by academics and practitioners? This question cannot be addressed without looking at the philosophical bases for each research orientation. An appreciation of the skill, art, and imagination required to conduct theoretically and socially responsive studies is a first step in building collaborative academic and practitioner models. In underscoring these features, this study is not suggesting that such comparisons are irrational but that they open up types and varieties of practical reason involved in such rational comparisons.

Focus on Scientific Consensus Building

How is it that scientists, who previously had different views about a particular subject, can eventually come to hold substantially identical views about that subject?

Figure 1. The hierarchical model of justification

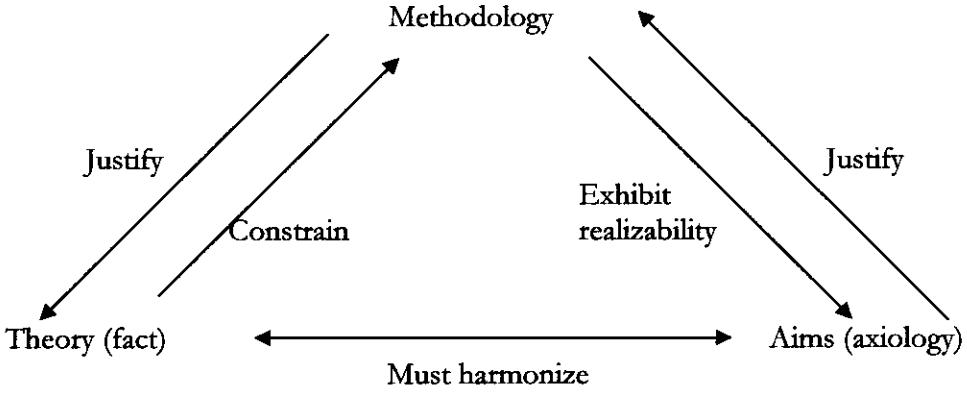


Source: Adopted from Laudan's (1984) hierarchical model

Laudan (1984) showed how the hierarchical model of justification (see Figure 1) helped the empiricist in scientific communities to understand the process of consensus building. Scientific consensus is forged at three interrelated levels. The hierarchy's lowest level has disputes about matters of fact. The matters of fact refer not only to assertions about directly observable events but also to all manner of claims about what there is in the world, such as theoretical claims. Factual disagreements can be resolved by moving one step up the hierarchy to the level of shared methodological rules. Some disagreement may exist about the rules of evidence or procedure, or about how those rules are to be applied to the case at hand. Methodological controversies are resolved at the axiological level, where basic cognitive aims are involved. However, empirical argument in the hierarchical model would be threefold: different goals among different scientists, no rational deliberation possible about the suitability of different goals, and covariant clusters of goals, methods, and factual claims (Laudan, 1984).

An alternative explanation for scientific rationality is the reticulated model. The model is characterized as a complex process of mutual adjustment and mutual justification that flows upward as well as downward in the hierarchy, linking aims, methods, and factual claims (see Figure 2).

Figure 2. The reticulated Model from Laudan (1984)

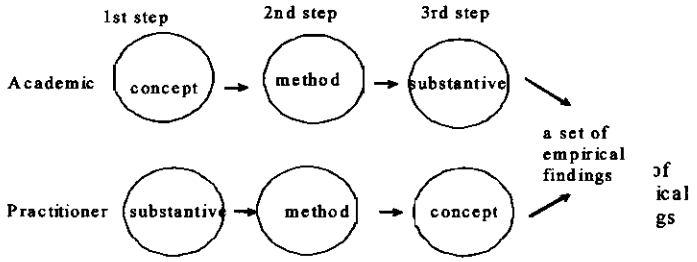


Source: Laudan (1984)

The reticulated model is similar to the triangulation of methodology that underlies much of the writing on methodology in the social and behavioral sciences. In the reticulated model, axiology, methodology, and factual claims are inevitably interlinked in relationships of mutual dependency. Similarly, the triangulation of research orientations holds that multiple perspectives are needed so that the weaknesses in one approach may be compensated for by the strengths of another (Brinberg and Hirschman, 1986).

Brinberg and McGrath (1985) developed the Validity Network Schema (VNS) framework based on a triangulation of methodology that analyzes the marketing research process and various validity issues within that process. As the reticulated model is a triadic network of justification that is mutually dependent on three components—axiology, methodology, and factual claims—the VNS framework involves a conceptual schema that includes three interrelated yet analytically distinct domains: conceptual, methodological, and substantive (see Figure 3).

Figure 3. Application of the VNS to Research Orientation



Source: Adopted model based on Brinberg and Hirschman (1986)

Each domain contains different elements, relationships, and embedding systems. Since a research path with three domains is limiting, each path is flawed in different ways. Thus, it is necessary to know the components of each domain in order to analyze the weaknesses and strengths of research. In the conceptual domain, elements are properties of subjects that behave in a context (e.g., the beliefs or attitudes of a guest in a hotel). There are the logical-causal-

temporal relationships between several properties (e.g., purchasing process in the hotel) in the embedding system, a set of paradigmatic assumptions, or the conceptual paradigm (e.g., consumer psychology). In the methodological domain, elements are modes of treatment of variables, or methods for gathering information (e.g., annual statistics from visitor's bureau), which relate to comparison techniques (e.g., cost-benefit analysis). The embedding system pertains to the research strategies within which the modes of treatment and the comparison techniques are executed (e.g., event studies for measuring the economic impact of an attraction). In the substantive domain, elements are subjects behaving in some context, such as when a customer purchases an admission ticket in a particular amusement park. Relations are patterns of events (e.g., the interaction between a guest and servers in a restaurant). The embedding system pertains to a higher level of organization within which the entities and events are embedded. For instance, the type of or geographic location of a hotel (urban vs. suburban) might be an embedding system for a customer's purchase decision.

While balancing three domains during the research stage results in a set of empirical findings, triangulation methodology has attracted very limited attention. Researchers have argued that one particular approach, or orientation, has sufficiently desirable features to investigate research questions. Brinberg and McGrath (1985) added that marketing traditionally has been a discipline in which the pragmatic investigation is the basis of determining worth. Thus, triangulation methodology in marketing is worthy of attention by both researchers and practitioners.

Triangulation Methodology for Academics and Practitioners

In the VNS framework, a research scientist works through three distinctive stages of development (Brinberg and Hirschman, 1986). First, a preparatory stage involves development, clarification, and evaluation of elements and relations within each of the three domains. Defining problem statements and conducting literature searches are completed in the preparatory stage. Second, a central or executive stage involves the combination and use of elements and relations from each of the three domains. An actual experiment or data collection is completed in a central stage. The third stage involves following up the findings from stage two by replication and a systematic analysis of the scope and limits of those findings. Analyzing, interpreting, and forming conclusions from data are done in the follow-up stage. The VNS system can be used to distinguish one research orientation from another.

The research pathway used by academics is characterized as a concept-driven design (see Figure 3). A researcher first selects elements and relations from a conceptual domain, then draws upon the methodological domain to construct a design, and finally implements that design on some substantive system. Zeithaml, Berry and Parasuraman (1996) used the academic path to test the behavioral consequences of service quality. Their study offered a conceptual model of the impact of service quality on particular behaviors that signals whether customers remain with or defect from a company. Results from an empirical study of relationships from a model of customers' behavior intentions show strong evidence of intentions influenced by service quality.

A practitioner orientation, on the other hand, leads to the development of studies from a system-driven design (see Figure 3). Practitioners first select elements and relations from some substantive system, then form the methodological design to develop a set of observations, and finishes in a conceptual domain that interprets the set of observations. Berry and Parasuraman (1997) discussed the concept of a service-quality information system. Initially, they presented diverse cases to be used in demonstrating research approaches for building service-quality information systems. Their conclusion was that companies must use multiple research approaches to ensure that customers are heard and that managers respond to their suggestions.

Both research approaches entail observations of some effects that relate to a theoretical framework and result in a set of empirical findings (Calder, Phillips and Tybout, 1981). The

distinction would be whether the researcher's primary goal is to apply the specific effect observed or to apply a more general theoretical understanding.

Depending on a given research orientation, scientists apply different sets of rules or standards to a study. In academic research, there is a belief that studies are based on methods of scientific inquiry. The theorist's quest is based on objectivism, or the search for an Archimedean point upon which to ground their knowledge 5 (p. 16). From a practitioner's point of view, there is no such basic structure except that which the researcher invents or temporally accepts.

Implications for Hospitality Research

Are researchers justified in continuing their philosophical orientation because it is the accepted paradigm within a given discipline or profession? Social science is the consequence of the researcher's own self-understanding. Practical wisdom begins when the researcher learns that intuitive, obvious, or universal constructs are not the sole answer to research problems. The perspectives in the social sciences are based on the researcher's own self-understanding of social possibility as reflected in an individual's scientific orientation or his personal knowledge, among several alternatives.

The significance of stating that a philosophy ought to be self-referential implies that its validity depends on the researcher, not to a fact or situation external to it. However, the possible resolution of argument between practitioners and academics is shown in the reticulated model. In the research, theory, methodology, and aim are interlinked. The VNS systems for academics and practitioners have the same components but the sequence for practicing the VNS system is different.

Hospitality research has taken both academic and practitioner pathways. Some academic researchers have selected theoretical frameworks before selecting a methodology for testing hypotheses. For instance, Oh (2000) introduced a customer value framework and then tested an extended value model with lodging products. Others have taken a more practitioner approach in their research orientation, relying on system concepts as the basis of their research. For example, Mattila (1999) conducted a survey of how business travelers evaluate luxury-hotel services.

These two differing approaches present outcomes that are substantially different, and thus add to the notion that both academic and practitioner perspectives are needed in hospitality research today. A closer examination of the Oh and Mattila research shows that their research protocols began with hypotheses and they both embraced similar methodologies toward research outcomes. Both appear to be equally rigorous and produce socially or theoretically significant results. The important determinant is the outcome of the research. A valuable research study will be achieved not only by theoretical speculation or accumulations of practical facts, but by iteration between theory and practice.

In hospitality research multiple orientations should be given special attention because the solution to industry problems must engage more complex problem solving. Special attention should be given to the use of multiple orientations as the nature of industry problems implies a need for much more complex problem solving. The training of new researchers requires an in-depth understanding of the philosophy of science, a new model and new approaches based on the integration of academic and practitioner research. In addition, training requires baseline data that may be used in evaluating published research, using the VNS framework, to understand where the hospitality discipline eventually will go and to support both industry and academic in developing more robust methodologies.

Since students in hospitality education are required to acquire a systematic body of knowledge, the development of a unique curriculum with a universally accepted professional core will give practitioners the opportunity to join with academics in making the profession of

hospitality much like other traditional professions such as law and medicine (Crocker, Schrock and Walker, 2001).

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