

## **Research Approaches in Philosophy of Marketing Science Debate: “Something about Me without Me, or Nothing about Me without Me?”**

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### **Abstract**

This paper aims at reviewing the philosophy of science debates in the marketing literature and to describe the current situation in marketing with respect to philosophy of science issues. As a view-point, it is a conceptual paper. The approach is largely a review of literature with interspersed personal commentary. The paper summarized the key contentions of opposing academics and attempted to convey the futility and pointlessness of such argumentations. It further described a novel to marketing attitude in conducting marketing research. Rather than argue one particular perspective, it is this paper's central thesis that no one philosophical perspective does or should have a monopoly on what constitutes making a useful contributions to our understanding of marketing phenomena.

**Keyword:** *Quantitative Research, Qualitative Research, Mixed Research, Triangulation and Paradigms*

### **Background to the Study**

“Compositely-organized madness” you may say. No one agrees to what another is saying, except from the same school of thought, so much so that in some cases the students are confused, and from the author's perspective, the development of innate personal capacity to wriggle out of this confusion and take a stand among the myriads of views and opinions that exist in extant literature, seminars and conferences, brings a Doctoral student closer to the PhD “club”. Never before have

the question of articulation of views on the nature of “truth,” “knowledge”, “science”, and “reality” or to defend an allegiance to any particular philosophical perspective by one of the erudite professors in a PhD, class debate aroused so much interest. It has been philosophy for those studying Theology; Sciences for those doing Medicine or related courses, and their superiority claims and debates over other disciplines. If one chooses to conduct a research in medicine there was consensus among researchers performing this activity that incorporated a positivist/empiricist view of the world with its accompanying methodological agenda in which a hypothetic-deductive approach ensured that there would be strict adherence to the scientific method, (Davis & Fitchett, 2005; Bryman, 2006). Thus, it was quite a shock to learn of the schism in many of the social sciences with respect to what constitutes truth and genuine knowledge about phenomena as well as how this fits with reality as a knowledgeable, objective, reducible entity versus a socially constructed, subjective realm that one cannot stand outside of and analyze without influencing in some manner, (Bryman, 1984, 2006).

With the personal attitude that the researcher wanted to engage in marketing research that was both practical and applied, his initial thoughts on this schism were “who cares and why does it matter?” Upon becoming more immersed in the subject matter over numerous doctoral seminars, however, the researcher began to realize that his own perspective was more in alignment with the socially constructed, subjective, “everything's relative” camp and that this perspective would probably play a significant role in determining which methodological approach would guide his doctoral research. Not done with the quest for knowledge the author delved into rigorous study to understand the positivist profession of eternal truth and objective predisposition. The researcher personal belief is that subscribing to a particular philosophical perspective ultimately determines three factors:

1. The type of question or problem that one attempts to answer or solve in the research work,
2. The manner in which these questions or problems are posed,
3. The best methodological approach to shed some light on the particular question(s) being posed or the phenomenon of interest being investigated.

When academics (Creswell, 2003; Bryman, 1984, 2006; Fine, 1986, 1991a, 1991b, 2001; Deshpande, 1983; Cahill, 1993; Davis & Fitchett, 2005; Dawson, 1971), debate the validity and utility of their favoured philosophical perspectives with their accompanying paradigms, the arguments tend to be circular and each group relies on their respective paradigm to identify the problems worthy of investigation and how this particular perspective will result in better providing solutions to these

problems. For this paper, the petty bickering between these opposing philosophical perspectives is analogous to the problems between competing religions or the conflict between Israel and Palestine and we are quite sure that there have been as many good pieces of marketing research conducted by atheists and agnostics as there have been conducted by Catholics, Muslims, or Buddhists.

### **Statement of the Problem**

#### **Philosophy of Science in Marketing-The Debates**

Thus far, the paper has illustrated the contention of the philosophy of science in marketing in terms of which perspective(s) dominates, but there have been ongoing debates and animated discussion in marketing literature often referred to as the “crisis literature in marketing”, (Hunt, 1990), “the epistobabble warfare”, (Davies & Fitchett, 2005; Bryman, 1984, 2006) in which four main issues are addressed:

1. The scientific status of marketing: is marketing a science?
2. The most appropriate philosophy of science to guide the study of marketing
3. The role of “scientific method” in marketing research
4. The role of “truth” in marketing research

These four issues, very clearly, illustrate the distribution between the roles of positive versus normative marketing inquiring. It is in this crisis literature where mere description and explanation do not suffice. Rather, the polemic contentions of either side are displayed in an effort to influence how marketing researchers ought to conduct their inquiries, and to argue what actually constitutes making a real contribution to the current state of knowledge about marketing.

#### **Objectives of the Study**

This paper will briefly illustrate the nature of philosophy of science issues in marketing before concluding with a reiteration of the researcher's position. It will not be my objective to exhaustively review in detail the philosophy of science debates that play out in the marketing literature. It will also not be this paper's objective to criticize one particular philosophical perspective in order to justify another. Rather, it will only touch on a few key pieces that illustrate these debates or what some have referred to as “epistobabble warfare” (Davies and Fitchett, 2005) in order to meet two objectives:

- a. To illustrate assertion that the debate is a no-win situation in which constructive progress can only be made by acknowledging that basic philosophical differences are never going to be reconciled but that these differences need not preclude harmonious, complimentary marketing research being conducted (in other words superiority disposition is absolute nonsense).

b. To illustrate one particular postmodern approach to the philosophy of science that could serve the academic marketing community and by extension, marketing managers well, in other words mixed approach whose function is to triangulate the two approaches and covers any short-comings of a single pattern.

### **Literature Review/Conceptual Frame Work**

In the marketing literature the exhortations about whether marketing is a science, and what is the nature of truth, knowledge, and reality not only irresolvable, but also counter-productive to marketing inquiry. Who can resolve the Israeli and the Palestine conflict? It is with this thought the paper now turns to in an effort to illustrate how marketing is dealing with these issues. As to whether marketing has achieved the status of being considered a science; in an editorial comment celebrating the 30<sup>th</sup> anniversary of the *Journal of Marketing Research*, Frank Bass, (1993), concluded that basics in marketing has fulfilled the three required elements of what constitutes science:

1. Empirical generalizations
2. Generalized explanation
3. A process of extension, revision and updating (Bass, 1993)

He states:

*"Gains in fundamental knowledge have been substantial, but, more importantly, what has transpired has been the development of a system for further development of science in marketing. The system involves methodologies, databases, and most important of all-models-that have captured the fundamental character of what we have learned (Bass, 1993, p.2)".*

On this note, the paper now turns to the philosophical perspective that challenges the positivist notions previously described. Probably the most animated and well-documented debate in marketing's crisis literature is that which transpired between the scientific realist/logical empiricist (R/E), and relativist/constructionist (R/C) academics regarding the most appropriate philosophy of science to guide marketing theory and research (Hunt, 1990, Cahill, 1993; Krathwohl, 1998, Chung & Alagaratnan, 2003).

Although the distinctions between empiricism and realism have been discussed, they are similar enough to be grouped alongside one another as examples of a positivist-like perspective at odds with the relativist/constructionist perspective. Hunt, (1991) notes that on the philosophical continuum with naive realism on one end and R/C on the other, L/E and S/R lie somewhere in the middle with empiricism lying somewhat closer to the relativist end (due to its acceptance of Humean skepticism i.e. the view that causal relations cannot become truths since they cannot be known with certainty due to the problem of induction) and scientific

realism lying somewhat closer to the naïve realism end (due to its rejection of Humean skepticism and the optimistic view that genuine knowledge about reality can be obtained).

Hunt, (1991), has been academic marketing's keenest and most prolific advocate of the positivist philosophical approach to marketing science, with the majority of his work having been in defense of this perspective against the relentless attacks of his relativist opponents. In two of his papers, he has advocated his modified empiricist view as defending human reason, its use in academic discourse, its application to evidence and its potential for helping to understand the world (Hunt, 1992), as well as illustrating the case that objectivity is both desirable and possible in marketing science (Hunt, 1993). Counter-arguments to this view are now presented.

In their 1983 *Journal of Marketing (JM)* paper, Bernstein, (1983) and Bass, (1993) expanding on ideas introduced by Thomas Kuhn, Paul Feyerabend, and others, promote a relativist perspective towards marketing science that, unlike empiricism, includes such concepts as

1. Social interaction and influence among researchers,
2. The idiosyncratic beliefs and values of individual researchers,
3. Researchers' subjective interpretations of observational data as being inseparable from the conduct of research.

Although proponents of a relativist perspective delineate numerous limitations associated with positivist-oriented inquiry, the major issues are the need to acknowledge the social, value-laden, and context-dependent nature of marketing concepts and theory (Bryman, 1984). Anderson (1983), further the relativist cause in arguing that since science is unable to objectively produce knowledge; marketing researchers should adopt relativism as a philosophical foundation for marketing science. Detailing six types of cognitive relativism, Bryman, (1984); Fine, (1991a, 1991a) and Blair and Zinkham, (1984) observe that the central tenet of cognitive relativism is that the “truth” or the evaluation of “truth” is relative to the conceptual schema of an individual, a group of individuals, or some other situational aspect of the context within which the assertion was made.

Acknowledging the importance of situational context, subjectivity of perception, and the constructed nature of human reality, Shulman (1986), proposes a humanistic method of marketing inquiry that involves participation-based observation that results in interpretation of the observed phenomenon through the processes of intuition and empathy. Specifically, looking at advertising research, Anderson (1983), challenges the positivist criticisms of key informant models as being subjectively distorted, perceptually biased, and as having low cross-model

reliability, when she notes that the point of such research is to gain insight into the social and personal aspects of the advertising process and that the models generated reflect the role that key informants play in the advertising experience.

Using a philosophy of science conceptual framework, Calder (1977), describes the use of focus groups in qualitative advertising research; categorizing them according to the type of knowledge that they seek. A focus group is termed phenomenological when it seeks everyday knowledge, exploratory when it seeks pre-scientific knowledge and clinical when seeking quasi-scientific knowledge. He argues that common knowledge concepts, based on a social construction of reality, are the extent of everyday knowledge while abstract/theoretical knowledge concepts are based on scientific theory and are subject to scientific methods. Cahill (1993), in reviewing a book is basically a description of relativist research philosophies and methodologies that concludes with a plea to academic journals reviewers to be open to what researchers' intentions are in their work, and to recognize that truth is not a destination but rather, it is a process to a goal. Peter (1992, p.77) summarizes the debate between positivists and relativists in asserting:

*“The major disagreements between the two views pertain to nature of reality, the nature of truth and the value of the concept of incommensurability. Scientific realism suggests that the extent to which knowledge claims truly correspond to the real world can be determined, though not with certainty. The relativistic view suggests that science can create useful theory or interpretations of reality, but has no independent method for evaluating the closeness of theories to reality. Scientific realism argues that truth is an appropriate goal for marketing sciences, though absolute truth is unattainable. Relativists argue for the attainable goals of various forms of usefulness as determined by the scientific community. Scientific realism rejects incommensurability whereas the relativistic view accepts it as a useful concept”.*

His conclusion is that although support for both views can be found in the scientific literature, a realist perspective will result in traditional empirical research, whereas a relativist perspective will be better suited for research designed to ultimately develop, rather than test, theory (Peter, 1992). This perspective would suggest that the debate need not be an “either/or” situation, but that there might exist some complementarities between perspectives; at least from a methodological standpoint. The on-going qualitative/quantitative dichotomy and its underlying theory generation versus theory verification debate are addressed by Deshpande (1983, p. 102) in arguing that. It should be noted that in distinguishing between schools of thought, there is a tendency to categorize them in such a fashion that they seem independent and mutually exclusive. Nothing could be further from the truth, As with any epistemic community, some of its members share certain (but not

all) beliefs with members of a rival schools. Based solely upon the literature cited in this paper, the “crisis”/“debates” to which this paper have referred would appear to be on now for 25 years and the researcher is justified in questioning whether these issues have been resolved.

Recent research would seem to indicate “yes” and “no” because there have been more recent contributions to the debate. Chung and Alagaratnam (2001), illustrate the marginal progress that non-positivist, interpretive marketing research has made in top US journals like JM, Journal of Marketing Research, and Journal of Consumer Research. Addis and Podesta (2005), argue that the traditional pragmatic approach of marketing research with its strong managerial perspective has partly shifted researchers' attention away from theory, and focused it mainly on method, which has created in increasingly marked distinction between the marketing literature aimed at marketing practitioners, and that aimed at the academic community. Their call for a postmodern perspective on marketing entails rethinking the “scientific nature” of marketing as an investigative field by denying rationality and any kind of renationalization, but instead embracing fragmentation and multiplicity. Davies and Fitchett (2005, p. 286) lament the fact that:

*“Marketing and consumer research has been subject to what Giddens (1984) terms “opposing error” that has produced state of dis-unifying dualism. This “error” is manifest in theoretical and methodological oppositions and in terms of practice (experience). The need for paradigmatic consensus as a process of identity validation for our research traditions has been seen in our methods, procedures, modes of representation, and journal editorial decisions become the dominant sources of reason, which then serves to direct research practice”.*

This study applauds those academics who see value in diverse perspectives and who attempts to get beyond all the arguing and meaningless rhetoric even though it may be easier to isolate a common enemy rather than determine shared objectives (Bernstein, 1983). However, as marketing researchers, we should be able to go beyond objectivism and relativism and employ practical, rational, communal discourse in an effort to explain phenomena. Just as most of us dislike and resist the “hard sell” approach of salespeople and the fear-inducing attempts of missionaries or religious zealots to have us convert to their particular religion. Thus, marketing researchers subscribing to a particular philosophical perspective should appreciate the chastising and condemnations of rival academics to see if there is further knowledge left to acquire so as to help their positions.

Bass, (1993), sums up the thought of this paper perfectly when he pronounces:  
*“The scientific enterprise as actually practiced is a bewilderingly complex interaction between observations (never totally conception free) and intellection (never totally conception free); a priori assumptions and theoretical allegiances, observation, intuition, and imagination are all inextricably complicated interactions with one another”.*

### **Analytical Framework**

In order to gain a better understanding of these research perspectives, a discussion will be offered on the components on which these two approaches differ. These components include: philosophical perspectives and assumptions, methods/typology, purpose of research, question or hypotheses, the respondents, the researchers, data and data analysis. There are currently three major research paradigms in marketing and other social behavioral sciences. They are quantitative research, qualitative research and mixed research. Here are the definitions of each:

### **Quantitative Research**

This is the research that relies primarily on the collection of quantitative data. It professes seeing the world events and happenings objectively, assuming that the researcher should be independent of what he observes and that there is one eternal reality. It is the paradigm of the positivist school, (Bryman, 2006), or positivist/empiricism.

### **Qualitative Research**

Is the type that relies on the collection of qualitative data, following all the known qualitative characteristics. It professes looking at the world events and its happenings subjectively, assuming that the researcher cannot be independent of what he is studying as he is part and parcel of the entire system and so there are more than one eternal realities and as there are people. This is the position of the phenomenologist school, (Bryman, 2006; Creswell, 1994; Tashakkori & Teddlie, 2003), or post-positivist.

### **Mixed Research**

This is the research that involves the combination of quantitative and qualitative paradigm. Its functions or role is the triangulation of the quantitative and qualitative paradigms, covering whatever weak points that may exist in the single pattern, (Bryman, 2006). The table below is a good review of the various positions of these paradigms:

**Table: Characteristics of the three Paradigms**

<b>Characteristics Research</b>	<b>Quantitative Research</b>	<b>Mixed Research</b>	<b>Qualitative</b>
Scientific method	Deductive or “top-down” The researcher tests Hypotheses and theory with data	Deductive and inductive	Inductive or “bottom-the researcher generates new hypotheses and grounded theory from data collected during fieldwork
View of Human dynamic contextual	Behaviour is regular, and predictable	Behaviour is some-what predictable	Behaviour is fluid, situational, social, and personal.
Behaviours most Common and Objectives	Description, explanation, and prediction	Multiple Objective	Description, exploration and discovery
Focus angle” breadth to	Narrow angle lens, testing Specific hypothesis	Multilens focus	Wide-angle and “deep-lens, examining the and depth of phenomena learn more about them.
Nature of observation	Attempt to study behavior under controlled conditions	Study behavior in more than one environments, context or condition	Study behavior in natural state, study the context in which behavior occurs
Nature of Reality	Objectives, different observers agree on what is observed	Common-senses realism and pragmatic view of world (i.e. what works is What is “real” or true	Subjective, personal and constructed
data collected participant and the data	data based on precise measurement using structured and validated data collected instrument (e.g. closed-ended items, rating scales behavioural responses)	a	Qualitative data in-depth interview observation. Field notes open-ended questions). researcher is the primary collection instrument

Nature of data categories	Variables	Mixture of variables, words and images	Words, images,
Data Analysis themes and	Identify statistical relationships	Quantitative and qualitative	Search for patterns, holistic features
Results i.e “emic”) viewpoint Present multiple perspective	Generalization of findings	Corroborated of findings may generalize	Particularistic findings representation of insider
Form of final report with contextual	Statistical report (e.g. with correlation, comparisons of description and direct quotation means, and reporting of statistical significant of findings)	Eclectic and pragmatic	Narrative report from research participants

Source: Creswell, (2003)

### **Philosophical Perspectives**

Quantitative and qualitative research programs claim different philosophical perspectives, and correspondingly, work with different underlying assumptions. Quantitative research identifies with positivism, which was presented by Gall, Borg, Gall (1996), is the belief that physical and social reality is independent of those who observe it. Quantitative researchers are concerned with an objective reality that is out there to be discovered, and the researcher is independent of that which is being researched, (Creswell, 1994, Krathwohl, 1998).

Accordingly, in qualitative research, the researcher identifies with phenomenologist or post-positivism, which offers that social reality, is constructed and it is constructed differently by differently individuals, (Gall et al., 1996). They assume that social reality is constructed by the participations in it and that social reality is continuously constructed in local situations, (Gall, Gall & Borg, 1996). Qualitative researchers are concerned with how individuals perceive their world and these researchers interact with that which is being researched, (Creswell, 1994, Krathwohl, 1998). The mixed perspective is the combination of the two paradigms.

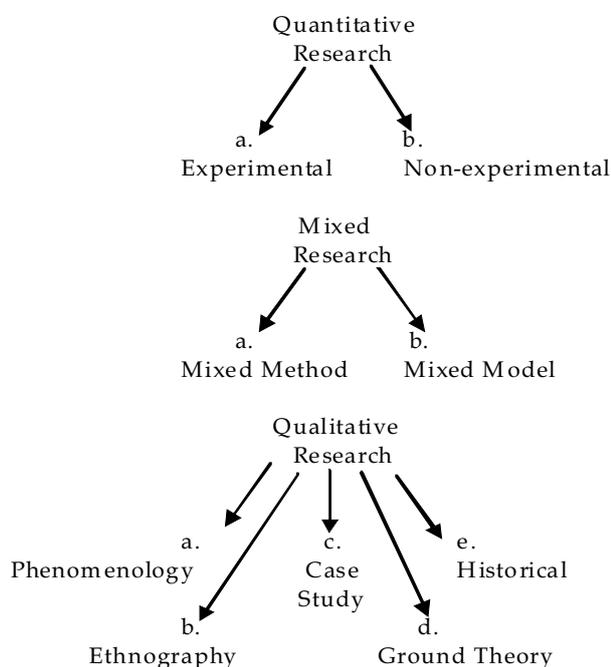
### **Methods/Typologies**

Until about the middle of the 1970's the majority of research in marketing were using a quantitative approach. More recently, qualitative research and hybrid studies have become more prevalent (McMillan, 2000). McMillan claims that quantitative and qualitative research each has its own research types or models. Quantitatively, a distinction is made between experimental and non-experimental research. In experimental research, researchers have control over one or more factors (variables). Three types of experimental research include: true experimental, random assignment of subjects; quasi-experimental, subjects not randomly assigned; and single-subject, focused on an individual or a few persons. Non-experimental research can be classified as: descriptive, simple information about frequency or amount; comparative, differences between groups on a variable; correlation relationships among two or more variables; and causal comparative, or ex-post facto, relationships between past and subsequent responses (McMillan, 2000).

In an attempt to address the understanding of quantitative, qualitative and mixed research paradigms, extant literature were reviewed and synthesized in a comparative study of the three perspectives. Contentious debates by notable marketing scholars are discussed enabling a conceptual clarity for better understanding. The study is a conceptual one with intersperse of personal commentary. Qualitative research paradigm is adopted, using content analysis for data analysis.

Qualitative research is referred to as interpretive research by Erickson (1986), and he suggests that the term “qualitative” essentially carries the distinction of being non-quantitative. Denzin and Lincoln (1994) seem to agree as they explain that qualitative research can be viewed as a set of interpretive practices where no single practice has privilege over any other. They claim that qualitative research includes constructivism, cultural studies, feminism, Marxism, and ethnic studies. A few more recognized qualitative practices will be examined here. A phenomenological study is an attempt to fully understand the essence of some phenomenon (McMillan, 2000), while a case study, according to Stake (1994), is not a methodological choice, but a choice of object to be studied.

The case studied can be simple or complex, a child, a classroom, or a group of professionals. It is one among others. He explains that case studies are of value in refining theory and suggesting complexities for further investigation. Ethnographic methods rely on participant observations to explore the nature of cultural or social phenomenon while working with unstructured data usually in a small number of cases involving explicit interpretation of the meanings of human actions (Atkinson & Hammersley, 1994; McMillan, 2000). Grounded theory is an inductive process of generating or discovering a theory or schema from coding and categorizing data (Strauss & Corbin, 1998; McMillan, 2000).



**Figure: Research typology:**

**Source: Creswell, et al., (2003)**

## **Purposes**

In trying to differentiate between these two research approaches, it may help to consider each program's goal for conducting research on marketing. From a quantitative aspect, the goal of research is "collecting facts" of human behavior, which when accumulated will provide verification and elaboration on a theory that will allow scientists to state causes and predict human behavior" (Bogdan & Biklen, 1998, p. 38). On the other hand, the goal of qualitative research is to "better understand human behavior and experience...grasp the processes by which people construct meaning and to describe what those meaning are" (Bogdan & Biklen, 1998, p. 38). In more succinct terms, the goal of quantitative research can be: to show relationships between variables, statistical description, establishing facts (Bogdan & Biklen, 1998), validation (Krathwohl, 1998), prediction and control (Bass, 1993), and testing hypotheses (Gall, et al., 1996). Conversely, the qualitative research, depending on the conceptual framework of the study (cultural studies, feminism, post modernism, and critical theory), can be to develop grounded theory (Bogdan & Biklen, 1998), description (Krathwohl, 1998), generation of insight (Gall, et al., 1993), and giving voice and empowerment to the marginalized in society. Krathwohl (1998) offers the perspective that all research falls along a continuum with quantitative research at one end and qualitative research at the other with survey research in the middle.

## **Questions/Hypotheses**

In many quantitative studies, the research question or hypothesis usually follows review of the literature. The researcher uses the theories, results and findings of other studies in order to form a hypothesis to test. A hypothesis is an informed guess or prediction that indicates what the researcher thinks the results will be before the study is carried out (McMillan, 2000). This type of inquiry usually produces a research design that is structured, formal, and specific, outlining a detailed plan of operation (Bogdan & Biklen, 1998). In qualitative studies there are two general positions on question/design matters depending on the researcher's view. The first is an emergent study where the design is somewhat open and loose and the researcher is immersed in the situations to see what emerges. This is an inductive process where the researcher relies on what is observed in the field to develop a ground theory rather than imposing a particular framework on the study by reviewing the literature first (Krathwohl, 1998). The second position could be one of preparation. The researcher reviews the literature prior to entering the field as a mark of respect to the participant hosts and as Krathwohl (1998) credits Fetterman, the researcher "enters the field with an open mind, not an empty head" (P. 239). Considering either position, the question and design will be evolving general, and flexible (Bogdan & Biklen, 1998).

### **Respondents**

In many quantitative research situations, it is not feasible to involve all members of the population being studied, so a subset of the population, a sample, is usually randomly selected (Jurs, 1998). The random selection is to ensure that the characteristics of the subjects in the study appear in the same proportion as they exist in the total population (Bogdan & Biklen, 1998). Those being researched in a qualitative study are selected in what Bogdan and Biklen refer to as a purposeful sampling. Particular participants are chosen for a qualitative study because they are believed to facilitate the expansion of the developing theory.

### **Researchers**

Looking at the quantitative approach, Shulman (1986) speaks of the positivistic or etic (own point of view) perspective of the researcher as, "an outside attempting to discover a law of relationships among observable features". McMillan (2000) explains that the researcher has a neutral role where he or she remains detached, uninvolved, and distant. Erickson (1986) refers to quantitative research as process/product research where the role of the researcher, for example, is to look at casual links between effectiveness, as measured on end of the year tests, and particular marketing practices.

From the qualitative, interpretive and emic (others' point of view) approach, according to Shulman (1986), the interpretive perspective focuses on "discovering the meanings constructed by the participants as they attempt to make sense of the circumstances they both encounter and create". The interpretive researcher's role is involved, trusting, intense and close to the participants (McMillan, 2000; Bogdan & Biklen, 1998). Erickson (1986) proposes that the task of the researcher is to "discover specific ways local and nonlocal social organizations and culture related to activities of specific purpose in making choices and conducting social action together.

### **Data and Data Analysis**

Data for a quantitative study are quantitative, quantifiable coding with counts and measures and operationalized variables (Bogdan & Biklen, 1998). Preconceived concepts and theories are used to determine what data will be collected. Numerical data are generated to represent the social environment, and statistical methods and deductive reasoning are utilized to analyze data. Statistical inference procedures are used to generalize findings from a sample to a defined population. Impersonal, objective reports usually summarize quantitative research findings (Gall, et al., 1996)

Typically, three kinds of data collection are utilized with qualitative research: interviews, observations, and written documents (Patton, 1990). Most data comes from fieldwork where the researcher spends time in the setting under study. The researcher makes first-hand observations of activities and interactions, sometimes engaging personally in those activities as a “participant observer” (Patton, 1990, p. 10). Data analysis is an ongoing, inductive process where data are sorted, sifted through, read and reread. With some methods (content analysis, thematic analysis, and grounded theory), codes are assigned to certain themes and patterns that emerge. Categories are formed and restructured until the relationships seem appropriately represented, and the story and interpretation can be written (Strauss & Corbin, 1998). The table below is a component comparison for a clearer understanding:

**This Table Illustrates the Differences between Selected Components of Quantitative and Qualitative Research Paradigms.**

**Table: Component comparison**

<b>Components of Research Approaches</b>	<b>Quantitative</b>	<b>Qualitative</b>
Philosophical Assumption	Positivist perspective, objective reality, researcher is independent of that which is researched	Post-positivist perspective, naturalistic, social, multiple and subjective reality where researcher interacts with that being researched
Method/Types of Research	Experimental, quasi-experimental, single subject and descriptive, comparative, correlation, ex-post facto	Phenomenology, case study, ethnography, grounded theory, cultural studies.
Purpose/Goal of Research	Generalizability, explanation, prediction	Understanding, insight, Contextualization and interpretation
Questions or Hypothesis	Hypothesis is informed guess or prediction	Question is evolving, general and flexible
Those Being Researched	Randomly selected sample, proportionally representative of population	Usually a small number of non-representative cases
Those Conducting the Research	Etic (outsider’s point of view), objective, neutral, detached and impartial	Emic (insider’s point of view); personal involvement and partiality
Data	Questionnaires, surveys, tests, etc. in the form of numbers and statistics	Written documents from field work, interviews, pictures, observations, objects, etc.
Data Analysis	Deductive process, statistical procedure.	Inductive process: codes, themes, patterns to theory

**Source: Castellan, (2010)**

### **Discussion and Implications**

This section will focus on discussing the different philosophies adopted in the field of marketing research in order to justify the methodology applied in this research. The following is a brief explanation of the characteristics of the two basic philosophical approaches used in research namely; the positivist and phenomenological paradigms (Bryman, 1984, 2006; 1991; Anderson, 1983; Morgan & Smircich, 1980). The ontology of the positivist paradigm is that reality is external and objective and that knowledge is only of significance if it is based on observation of this external reality. The epistemology of this paradigm is that the researcher should be independent of what is being observed in order to be objective in analyzing it. The methodology of research adopted by the positivist paradigm is based on deductive logic that is typically focused on testing hypothesis in a process of theory verification or testing. Large sample surveys are conducted and reliability of information is focused on rather than validity (Bryman, 1984, 2006).

On the other hand, the ontology of the phenomenological paradigm is that there is no single reality since the world is socially constructed and subjective. The epistemology of this paradigm is that the researcher is part of what is being observed actively participating in the life of the subject of observation and gaining insights by means of introspection. The methodology of research adopted by the phenomenological paradigm is based on an inductive logic typically through discussions in interviews and/or focus groups in a process of theory construction or generation. Small samples are targeted and validity of information through in-depth verification of data is focused on (Bryman, 1984, 2006).

In comparing these two philosophical paradigms it is important to evaluate them based on their relation to marketing research methods in order to justify the selection of the methodology of this research. The positivist view relies dominantly on quantitative methods but at the same time positivists can also use qualitative data in their research, while the phenomenological view uses qualitative data such as observations, case studies and interviews as tools in conducting research. Each paradigm has its own strengths and weaknesses. In case of the quantitative methods, the main strengths are: they can provide a wide coverage of the range of situations, they can be fast and economical, and especially when statistics are aggregated from large samples, they may be of considerable relevance to policy decisions.

The main weaknesses are: these methods tend to be inflexible and artificial, they are not effective in understanding the significance that people attach to actions and they are not helpful in generating theories. As for qualitative methods, the main strengths are: the ability to look at change processes over time, to understand

people's meanings, to contribute to the evolution to new theories and provide a way to gather data which is seen as more natural than artificial. The weaknesses are: they take a great deal of time and resources and the analysis and interpretation of data may be very difficult (Bryman, 1984, 2006). It is important to note that marketing science is dominated by the positivist paradigm as it is far more involved with hypothesis testing and theory verification rather than theory generation. However, there is a trend toward the use of a triangulation of procedures by using an appropriate mix of both quantitative and qualitative methods so that the weaknesses of one set of methodologies are compensated for by the strengths of the other and vice versa (Bryman, 1984, 2006; Deshpande, 1983).

If one were asked which philosophical paradigm dominates academic marketing inquiry, the simple answer would be to note the frequency with which academics with conflicting ontological and epistemological views, make these views public; both at academic marketing conferences and in the marketing literature. The clear, hands-down winner would be logical empiricism; a fact acknowledged by both adherents and opponents of this particular view (Anderson, 1983; Deshpande, 1983; Hunt, 1991). Rather than quibble over minor variations in “isms”, this paper further takes a look at logical empiricism, scientific realism and other “isms” that would safely fall under the rubric of positivist as opposed to relativist inquiry. This paper will first illustrate some of the themes relevant to “positivist” marketing inquiry. As the self-appointed champion of marketing's empiricist camp, Shelby Hunt, (1991), diplomatically notes that addressing the issues of “which philosophy dominates marketing?” requires recognizing that there are many schools of thought in marketing inquiry and that each of these schools has an underlying philosophical foundation. T

These schools include the commodity, functional, functionalist, regional, institutional, managerial, buyer-behaviour, activist, macro-marketing, organizational dynamics, systems and social exchange paradigms in which marketing has evolved and been evaluated (Anderson, 1983; Deshpande, 1983). As such, no single philosophy dominates marketing, but Hunt contradicts himself by stating that most research in marketing relies on the reflective measures of a realist approach. He further states that his own approach to research is guided by “modern empiricism”, which he describes as being a combination of logical empiricism, falsifications, pragmatism, and scientific realism. This approach, he states, is fallibilistic (but not cynical, skeptical or relativistic) and absolutist (but not dogmatic or “Absolutist”). My feeling is that Hunt, while attempting to appeal to the academic marketing masses, assumes the role of a philosophical chameleon in attempting to cover his bases.

A historical review of logical empiricism and scientific realism are warranted at this point. Logical Empiricism (LE) descends from Logical Positivism (LP) and both share the view that the purpose of the philosophy of science is to explain the language of science using a method that combines critical discussion and formal logic. Where they differ is in their respective explanations of the core concepts of scientific language; namely, the concepts of laws, explanations, theories and verification. Whereas LP claims to be capable of determining the truth through analysis of theories using formal logic and unbiased observations, LE avoids the problem of induction (or Humean skepticism-the motion that nothing can be confirmed by accumulation of observations since at any time the next observation can be disconfirming) by replacing the verifiability principle with testability criteria. Thus, LE acknowledges that scientific propositions cannot be conclusively verified. Instead, they can be increasingly confirmed through observation (experimentation) and formal logic. This results in LE emphasizing:

1. Theory development based upon deductive hypotheses using formal logic
2. Objective empirical observation designed to test these hypotheses (Anderson, 1983; Deshpande, 1983)

Anderson, (1983) summarizes the basics tenets of LE in stating:

*“The scientific process begins with the untrained observation of reality. This provides the researcher with his/her image of the real world structure from which he/she cognitively generates a priori model of the process to be investigated. Hypotheses are derived from the model and are subjected to empirical test. If data are in accord with the hypotheses, a confirming instance has been identified. Thus, science progresses through the accumulation of multiple confirming instances obtained under a wide variety of circumstances and conditions”, (Anderson, 1983, P. 19).*

The Scientific Realist (SR) perspective as to the aim of science is that it simply attempts to understand how the world really is; to produce knowledge that is independent of cognizing experiences and that this knowledge is both a social and historical product (Blair & Zinkhan, 1984; Hunt, 1991; ). Hunt notes that: *“having been derived from the classical realism of Russell, Moore, and early Wittgenstein, who argued that it did not attempt to describe a general theory of science, SR basically claims that as long as a theory survives, its exponents have reason to believe that something like whatever it describes does actually exist” (Hunt, 1991).*

Similar to the concept of “mass customization” as a modern marketing ideal, Hunt appears to want to appropriate bits and pieces of numerous philosophical perspectives in order to custom-design his own philosophical approach. As previously stated, he sees his approach as combining empiricist and realist perspectives, thus, a comparison of their similarities and dissimilarities will next be presented. Although both LE and SR share the belief that science makes progress, there are two instances in which they differ dramatically. In the first instance, although SR utilizes formal logic as a tool, it (unlike LE) does not attribute great confidence in logic's ability to reconstruct science (Hunt, 1991). Second, there is the problem of the theory/observation dichotomy.

As described by Blair and Zinkhan (1984); and Bass, (1993), this dichotomy exists and is problematic from a LE perspective. This is because LE presupposes a distinction between observational terms and theoretical terms in scientific theory. All terms that do not directly refer to some aspect of the observable world are deemed “theoretical” terms and in order to have meaning, scientific theories require theoretical terms to be defined through “correspondence rules” with observational terms. Thus, there is the problem of theoretical terms being unnecessary if they can all be defined through these correspondence rules or meaningless if they can't. For the realist, however, this is a false dichotomy as theoretical terms can be real yet unobservable.

### **Conclusions/Recommendations**

This paper has presented an examination of the differences between quantitative, qualitative and mixed research paradigms. Three perspectives of approaches to research, (or, either/or, & both) were discussed along with different components of a research study: philosophical assumptions, purpose/goal, methods/types, respondents, researchers, data and data analysis.

Anderson, (1983); and Deshpande, (1983) assert that no single approach can capture the full set of marketing events and implies that the insufficiencies of particular programs can be overcome through proper blending with the insufficiencies of other programs. It seems that maybe the results from a qualitative study can lead to the quantification of certain components in order to conduct a quantitative study for a better understanding and evaluation, or a small component of a cause and effect quantitative study can be qualitatively studied to result in a better understanding of the cause and effect results of a quantitative study. A quantitative study can be conducted along with a qualitative study, or qualitative with quantitative, but each approach should not be analyzed and judged by the criteria associated with the other approach. There can be basketball or football, or football and basketball, but not football on a basket court, nor basketball on a football field. The essence of the

game would be lost just like the essence of a research study would be compromised if it were to be conducted outside its own context.

I will further conclude by briefly examining a movement in the philosophy of science literature that attempts to avoid the frustrating dialectic between competing philosophical camps by both:

1. Accepting the postmodern rejection of attempts to globally legitimate science in terms of rationality or truth
2. Making no concessions to the relativist consequences of doing so.

Thus, the contention is that science is not in need of philosophical legitimization, and that this failure to legitimate it does not have any profound cultured or political consequences. This “natural ontological attitude” (NOA), proposed by Arthur Fine, (1986) is not another point on the positivist/relativist continuum, but an attitude towards science. Focusing mainly on the realist/ instrumentalist/ constructivist divide, Fine, (1991) states that:

“The different philosophical approaches that underlie “science” and the ambiguity over what constitutes acceptable or reasonable science is actually ambiguity that we can well live with and that NOA does not push “the issue of the specific character of scientific acceptance farther than the reach of ordinary scientific procedures and common reflective thought allow” (p. 94).

NOA is an open attitude toward science that refrains from reconfiguring scientific practice to serve the needs of any pre-set epistemological or ontological agendas. The NOA removes any felt need for a unified philosophical interpretation of science. It has no specific ontological commitments since it is an attitude-an attitude that doesn't prejudge the makeup of science, i.e. whether the scientific facts and objects are essentially social or essentially objective. The NOA is to simply let the ontological chips fall where they may. The NOA removes any felt need a unified philosophical interpretation of science. It has no specific ontological chips fall where they may, (Fine, 1996).

Fine, (1996), if a natural ontological attitude is embraced, a five-step methodological constructivist programme can guide inquiry as follows:

1. “Bracket truth as an explanatory concept.
2. Recognize the openness of science at every level especially the pervasive activities of choice and judgment.
3. Concentrate on local practices without any presupposition as to how they fit together globally, or even as to whether they fit together (i.e. embrace conceptuality not necessarily generalisability- these are my words not

- Fine's).
4. Remember that science is human activity, so that its understanding involves frameworks and modalities for social action.
  5. On the basis of the previous four points, try to understand the phenomena of opinion formation and dissolution in science in all its particularity”.

What we have attempted to do is to briefly summarize the key arguments of these marketing academics whose allegiances to a particular guiding philosophy are proposed as being the only appropriate philosophy for marketing science to adopt. Given the incommensurable nature of these competing philosophies, we have attempted to convey our own perspective- which is more of an attitude much like Arthur Fine's natural ontological attitude. The central thesis of this critical review of the philosophy of marketing science literature is simply that marketing academics should be free to subscribe to whatever guiding epistemological and ontological philosophy they choose, because all that subscribing to a particular philosophy should do, is to determine the How's, Why's, When's, Where's, What's and Who's of a piece of research; not it's “value”. Actual market behavior should determine its value.

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