URING the past few years one of the ways in which the increased interest in marketing subjects has expressed itself is in the rather intense exploration of the field with a view to determining the exact significance of its subject matter. More explicitly, several scholars have either attempted to demonstrate that marketing should be admitted into the category of a science, or have discussed the subject as though it already were included. Interest in the project first became apparent through the appearance of an exploratory survey made by P. D. Converse in the Journal of Marketing.1 However, since this particular essay had the merit of not attempting any demonstration of the thesis that marketing is a science, one can not be sure that the article really served as the foundation of future discussions on the problem.

At the time that Professor Converse wrote, regard for the application of scientific methodology to marketing problems was an increasing force, and the momentum of this interest carries on today. Three years later, Lyndon O. Brown discussed the need for the development of professional standards among marketing men in an essay which tended in the main not to regard the subject as a science, except possibly in one cloudy passage.2 The question of the status of marketing appeared to be developing some urgency in the minds of numerous marketing scholars because in the next issue of the Journal there appeared a very thoughtful and searching article exploring the notion of developing a theory of marketing.3 The authors were quite circumspect in writing this essay, omitting any direct reference to marketing as a science. Little doubt was left in the minds of the readers, however, that the authors considered marketing to be a unified body of thought; and from this one can infer that they suspect that it is a science.

At least one marketing scholar received this impression from that essay for, in the Journal the following spring, Roland S. Vaile wrote a communication4 commenting on that point of view. If anyone held illusions as to the character of marketing, Professor Vaile’s article should have removed them; but marketing men apparently have great tenacity and refuse to give up easily. Although the conclusion of this essay was that marketing did not have the earmarks of a science, the question of whether this was true was to be raised again on later occasions. In 1951 a new essay was presented on the question by Robert Bartels,5 who concluded that marketing was indeed a science and entitled to respect as such.

2 Lyndon O. Brown, “Toward a Profession of Marketing,” Journal of Marketing, Vol. XIII, No. 1, July, 1948, p. 27. Brown states that there is a need for “precise raw materials which are the foundation of any science, and in turn the art of the practitioner in any field.”
It would be misleading to consider this latter essay as an isolated instance; the ferment which had been started in the minds of students of marketing was working steadily and other evidences of this conclusion (that marketing is a science) can be found. The Cox and Alderson article, to which reference has been made, led to a book of essays on marketing theory, in some of these are further references to the science of marketing. This compilation of essays affords a rather varied fare for the scholar seeking enlightenment on the true nature of marketing. Points of view differed and there were some who indicated their conviction that there was no such thing as a theory of marketing, and hence also, no science of marketing.

**Reasons for Confusion**

This disagreement, or confusion, in the minds of marketing students over the nature of their field arises in no small part from the comprehensive character and variety of activities embraced by the term marketing. Three distinct types of activity are discernible. First, there is a group of activities which center around the day-to-day distribution of goods and services. Second, there are those activities which center around the interpretation of the subject in schools and colleges. Third, there is a group of activities which arises out of the explorations by market research men working on specific problems, some of which have rather broad implications. With these three different approaches to the field there would naturally arise some differences in viewpoints.

Of the first group, those whose job it is to distribute goods, almost no one would contend seriously that they are engaged in some form of scientific endeavor; wholesalers and retailers hardly fit the mold of scientists. Neither the second group, the teachers, nor the third group, the market research men, are so easily disposed of, particularly since some of them are concerned with systematizing the subject. All are interested in employing scientific methodology in the field. Members of these two groups have pressed the case most earnestly for the inclusion of marketing among the fields of science. We have seen, however, that there has been no unanimity of opinion among them. Their work with the scientific method has induced many of them to broaden their scopes, and it is to those who have attempted to demonstrate that marketing is a science that this essay is directed.

In appraising the progress which has been made in developing a science of marketing, one is tempted to make allowances for the relatively short period of time in which the issues have been under discussion. But after making whatever allowances are called for, one is likely to be somewhat disappointed over the lack of progress to date. One should expect far more in the way of results if the venture is to prove successful, and the dearth of progress to date lends the suspicion that the project is ill-advised. There seems to be little evidence to support the claim that all that is needed is time and patience until there will emerge

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7 In *Theory in Marketing*, C. West Churchman, in the essay "Basic Research in Marketing," discusses market research as though the field were a science. W. Alderson, in "Survival and Adjustment in Organized Behavior," refers to "the science of marketing." E. R. Hawkins, "Vertical Price Relationships," after making some penetrating analyses of economic theory, leaves the impression that marketing is a part of the science of economics.
8 In the same work, G. L. Mehren, in the essay "The Theory of the Firm and Marketing," says that "there is no theory of marketing." E. T. Grether, in "A Theoretical Approach to the Analysis of Marketing," takes a cautious view of theorizing in the field, as does Oswald Knauth, in "Marketing and Managerial Enterprise."
the new and shining science of marketing.

Two Approaches to Demonstrating That Marketing Is a Science

In attempting to demonstrate that marketing is a science, two lines of approach to the problem are discernible. The first of these might pass under the name of the semantic approach according to which the various essayists wrestle with dictionary meanings, warping them and twisting them, until at last marketing is seen to have fulfilled many, though not all, of the requisite characteristics of a science. The pseudo-precision of this method may be highly admirable even though it lacks some perspective. A somewhat fairer interpretation of such semantic exercises might reasonably lead to the conclusion merely that marketing has now become a field for human study. Since there are many fields of study, and since not all of them are sciences, such a conclusion should not be looked upon as any great step forward.9

To be more explicit, a homely example might be drawn; the field of carpentry could conceivably turn out to be such a field of study. There are books written on the subject; it is taught in schools; and it concerns itself with human experience. Furthermore it has empirical laws of a sort (those of gravity and leverage, for example) and perhaps some theoretical ones (whether screws or nails are preferable in certain jobs). Now all this pedantry does not create a science out of the trade of carpentry; but it illustrates how pseudo-scientific word juggling might be used to convert many humble human activities into recognized sciences. Something of this sort is now appearing in marketing literature. The function of business, however, is the economic production and marketing of goods and services; if we insist, therefore, that marketing is a science, we must be prepared to admit manufacturing and finance. Unless one wants to broaden his conception of science so as to include nearly all human activity, he is not likely to achieve success in making marketing a science through this process of distorting the meaning of words.

The second approach to the task of demonstrating the scientific character of marketing might be called the economic. Students of marketing interested in "practical" as well as academic matters seem to find the time-worn theories of neo-classical economics to be unsatisfying or downright inapplicable. This has led to a wholesale onslaught on many of the time honored concepts in which, curiously enough, they find many economists sympathetic. For some years economists themselves have been trying to free their subject from the fetters placed there by the static assumptions inherited from the classical school traditions. Some progress is being made in modernizing economic doctrines but there still remain numerous concepts which lack realism. It has been this factor which has encouraged students of marketing to pursue further the task of clarification; in fact—such work was essential.10

9 Dr. Bartels recognizes this widespread characteristic of marketing in the article referred to above. After discussing the characteristics of an art, a discipline, and a science, he concludes that there is much in favor of accepting the subject of marketing as a science.

The result of such interest in economic theory is that considerable study by marketing theorists has been devoted to developing more refreshing viewpoints and more workable concepts. A review of progress to date indicates that much of it has stemmed from the practice of holding economic theories up to a critical light for re-examination. One might naturally wonder whether all this analysis is serving only to enrich current economic doctrines rather than to further the development of an independent set of marketing theories. From the standpoint of over-all human understanding, such efforts of marketing men are probably not in vain. In the long run it may well turn out that theoretical economists have derived benefits from having their concepts held up to this different type of scrutiny. Marketing students will also benefit through the possession of a better tool of analysis which this criticism may produce.

In looking over the work of marketing theorists it appears that considerable effort has been expended in attacking the generally accepted, or “orthodox,” if you will, doctrines which relate to price setting. It is apparently true that much of this body of thought has been erected upon a foundation which contains some rather unrealistic assumptions, and certainly some which appear foreign to a marketer. Thus far, however, the contributions of marketing theorists to economic theory of pricing remain restricted to the field of criticism. If one were to seek evidence of constructive scholarship along these lines he would discover that no notable body of new theory has been brought forth to replace the seemingly discredited notions. An even harsher observation could be made: the probing of marketers into economic theory has tended more to becloud than to clarify the issues. In casting the light of realism upon this field such a result may well have been unavoidable. It should be interesting to inspect a few of the concepts which have had their clarity dimmed.

To the neo-classical economist the concept of price was reasonably clear, whereas to the new marketing theorists there is no great certainty as to what is meant by the term. To them price represents a wide composite of characteristics which are subject to notable variances which can conceivably differ with each transaction. Another concept which seemed to give the economist little trouble was that of a commodity. Under the new scrutiny, this also turns out to possess less clarity, varying to some extent from transaction to transaction, a fact which accounts for the varying prices. Although some attention has been directed by marketing theorists to such other concepts as competition, monopoly, market controls, and freedom of entry, it can be said with fair reliability that human comprehension of these subjects has been very little advanced. Whether one is inclined to agree with these immediate conclusions is of no great importance; what does seem to be important is the fact that marketing scholars can never expect to develop their own body of theory merely by critical appraisal of the shortcomings of another one. In time, some positive contributions must be forthcoming if the desired goal is to be achieved.

**Marketing Not a Science**

There is a real reason, however, why the field of marketing has been slow to develop an unique body of theory. It is a simple one: marketing is not a science. It is rather an art or a practice, and as such much more closely resembles engineering, medicine, and architecture than it does physics, chemistry, or biology. The medical profession sets us an excellent
example, if we would but follow it; its members are called “practitioners” and not scientists. It is the work of physicians, as it is of any practitioner, to apply the findings of many sciences to the solution of problems. Among the sciences which the medical man employs are biology, physiology, chemistry, physics, psychology, and many more. Engineers and architects are also practitioners who make use of chemistry, physics, psychology and other sciences. It is a characteristic of a practice that the solution of each problem faced calls for a different and distinct combination of techniques and approaches. The fact that each problem is different, however, does not deter practitioners from approaching them in the scientific manner and spirit.\[1\]

What constitutes a science is a question which has been settled in general for centuries, but from time to time the issues arise again as new subjects are held up for scrutiny. Within modern times the areas of social study, the socio-economic fields, have caused considerable debate over the character of science itself. The trouble with attacking this problem from a semantic point of view is that words have multiple meanings and one is enabled to prove almost anything, and almost nothing, by careful selection of the definition which seems to fit his case. Since we are using words in this essay, we are in danger of falling into the same trap in trying to show that marketing is not a science that others have fallen into by trying to show that it is one, particularly when their demonstration has depended heavily upon the twist of word meanings. A much sounder approach to the problem would seem to be upon the ground of human experience, contrasting the place of science in human affairs with that of the arts.

Science is a word we apply to a multitude of varying activities carried on by man in his effort to understand his environment. For centuries man has attempted to comprehend the planetary processes which are all parts of the great universe of knowledge. It should be unnecessary in this age and with this group of readers to labor this particular concept; it might be more profitable to return to it after we have discussed the field of the arts.

The arts is also a comprehensive term covering human activities of a wide scope. To satisfy his wants, mankind has engaged in various practices over the centuries; as time has gone on, these practices have tended to become more complex. The various arts are those related to obtaining food, preparing clothing, and obtaining shelter, along with others which are related to aesthetic satisfactions. Man found early that he could thrive much better if he did not attempt to produce all of his commodities but instead would exchange some of his output with a neighbor who had a surplus of some other product. Early barter and later market transactions are the true predecessors of modern marketing. The forbears of modern marketing men were great merchants, not great scientists. It is the drollest travesty to relate the scientist’s search for knowledge to the market research man’s seeking after customers.

Relationship Between Marketing and the Sciences

What then is the relationship existing between the sciences and marketing if indeed there be one? The answer to this query has already been indicated but perhaps should be restated. Men of science have come to develop a systematic

\[1\] This point of view was expressed somewhat differently by R. S. Vaile in THE JOURNAL OF MARKETING article cited above.
approach to their problems which is known as the scientific method. Hypotheses are developed, facts are gathered to support or confute the hypotheses, and then tests are conducted to see if hypotheses are sound. In actual research work, the techniques employed vary with the problem at hand but the spirit of careful analysis and testing is not relaxed. Engineers and physicians are trained to approach their problems in this spirit of scientific inquiry; marketing men are learning rapidly to follow their examples. What must be realized is that the method is open for all to use and that the employment of it does not necessarily make the user a scientist nor his subject a science. A physician who studies all of his patient’s symptoms before prescribing, and who keeps checking up on the progress of his treatments, is still a practitioner and not a scientist.

Such a conclusion must be inevitable or else the gates will be opened to include almost all types of human activity under the heading of sciences. Dry cleaners often approach a problem in a scientific manner but dry cleaning is not a science, nor are road building, paint mixing, poultry raising and countless other human arts. The processes which culminate in getting goods from mines, fields, and factories into the hands of consumers with the least expenditure of time, effort and money are not those that will fit into the mold of a science. That many marketing problems call for extensive computations and calculations can not be denied nor can the fact that the best approach to them is through some variant of the scientific method of investigation, trial and test. In actual practice, however, many, and probably most, of the decisions in the field resemble the scientific method hardly any more closely than what is involved in reading a road map or a time table. If one remains un-

convinced, he must be prepared to admit into the brotherhood of new sciences the fields of retailing, wholesaling and presumably salesmanship.

The arts and practices seem to differ from the sciences in still another respect. When problems present themselves to practitioners there is almost without exception rather serious urgency to have them solved. An engineering project must be put through immediately; a sick patient must be helped now; and a sales manager wants his analysis of the market from his research man as soon as (and usually sooner than) is possible. Any market research man who is working on a problem the answer to which may not be found for another generation, or perhaps a century, would be an exception whereas such a circumstance tends to be rather commonplace among the sciences where immediacy tends more to be the exception. At best this point of difference between the arts and the sciences is probably only a symptomatic effect rather than an underlying force separating the two.

Thinking along these lines has become confused in the minds of some individuals because of the tendency of scientists to desert their fields of research to attack some current practical problem. When a scientist leaves his field of scientific investigation to solve a difficult problem, he drops the role of a scientist seeking to expand man’s grasp over the universe; he is no longer engaged in pushing out the frontiers of knowledge. At that point he becomes a practitioner in a role similar to the engineer, the physician and the architect. A physicist who leaves his pursuit of science to construct a machine (except one to further an experiment) becomes an engineer, even though one with a superior training in physics. The point being made here is not a new one, having been well settled in other fields of learn-
ing; but the truth of it seems to have been overlooked by numerous marketing men.

We do not intend to deny here that scientists should turn their attention to the solution of human problems, nor are we attempting to indicate that scientific endeavor should lack applicability. No claim is being presented here for the advantages of pure research, that form of activity which seems to do little more than satisfy the curiosity of some investigator. Science has a purpose; its function is to help mankind to understand his universe. Whether men will use the knowledge or will even misuse it is not the particular concern of the scientist. At present writing the problem of cancer is one of great concern to several fields of science and each one is developing an attack upon it. Some investigators are approaching the problem from the standpoint of the effect of behavior patterns upon its cause. Others study the structure of human cells, still others the effects of drugs, and still others the effects of radiation, and so on. This is a practical problem which science is trying to solve; but how any given patient suffering from the disease is to be treated is a problem for the practitioner.

The real dilemma of the marketing research man is not that his own field of learning is inadequate to permit proper diagnoses and prescriptions, but that the other fields upon which he should be able to lean are themselves still in somewhat beginning stages. It may seem unfair to a one hundred seventy-five year old science such as economics to classify it as "beginning," but one has only to examine the protests of marketing men over many economic concepts to learn the tenuous nature of economic principles. Sociology and psychology are also just beginning to build up a body of reliable doctrine and are far from complete tools for analysis. The market research man needs knowledge of population trends, consumer preferences, price trends, and purchasing power, merely to name a few of the concepts on which exact information is lacking. It happens to be unfortunate that marketing research has to depend upon the numerous and inexact social sciences. 12

While we are examining the place of marketing among the various fields of learning and activity, one further point should be made. Marketing men not infrequently contribute to one of the several sciences upon which they depend. In trying to find information to solve his immediate problem he may strike upon some principle which actually enlarges the science involved. Market problems vary widely in scope. Some are of almost no social consequence, being chiefly competitive in nature; others are broader in character and depend for solution upon a wide understanding of social forces and of human behavior. It is in the pursuit of these solutions that contributions to the fields of science result. Such additions to the universal body of knowledge must be looked upon as by-products of market research, and not its chief purpose.

Beyond such small contributions, however, there is an area in which marketing scholars can produce profound results in the sciences. There is evidence that already some of this work is being done. By focusing the attention of scientists upon those concepts which are inadequately developed, the inquiring minds of marketing men can do much to give useful direction to scientific investigation. Already students of economics, sociology, and psychology are feeling the impact of this curiosity and are tending to advance knowledge along the lines de-

12 We are accepting for present purposes the idea that economics and sociology are sciences, being fully aware that controversies exist over this point.
manded. Engineers and physicians have in their turn exerted powerful influences over the direction which scientific research should take. This aspect should not be overlooked in our quest for progress in the field.

CONCLUSION

An examination of the factors involved indicates that marketing is not a science, since it does not conform to the basic characteristics of a science. A much more realistic view shows it to be an art, in the practice of which reliance must be placed upon the findings of many sciences. Marketing research men, like engineers and physicians, have to adopt a scientific approach to their problems, but their relation to the fields of science are even closer than this. Although at times they may make a contribution to some field of science, their chief contribution should be that of directing the course of scientific investigation along the lines most needed.