

## CAN MARKETING BE A SCIENCE?

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SCATTERED interests in marketing theory have in recent years become sufficiently coherent that professional discussions and published writings have dealt with the subject. There yet prevail, however, diverse opinions concerning not only the content of such a theory but also concerning the meaning of the terms "theory" and "science" as they pertain to marketing. The language of science and philosophy has varied connotations even to seasoned students, and, as a consequence, it is not uncommon to find informed thinkers expressing opposing views as to the prospects of science or theory in marketing. It is more common, in fact, to find that many students of marketing have not formulated an opinion concerning the matter.

That marketing is not more generally characterized as a science is the result of two factors. First, the objectives of science are not always achieved in marketing study. Second, while the goal of marketing inquiry has usually been to study marketing phenomena scientifically, it has not always been the intent of marketing men to evolve a science of marketing. At the present time, therefore, many students of marketing are considering the methodology of science and the body of marketing knowledge for a resolution of questions concerning their relationship. It is to the consideration of some of the problems involved in the development of marketing science and theory that this article is devoted.

### THE OBJECTIVES OF SCIENCE IN MARKETING

The presumption that marketing is, or ever could become, a science is one

which is questioned by some critics, partly on the grounds of doubts concerning the scientific status of the social studies in general and partly on the grounds that marketing is too narrow a field of investigation to be regarded as a science. This criticism opens for reconsideration an old question of whether the development of science is contingent primarily upon the nature of the subject studied, upon the method of analysis employed, or upon the definitive nature of the generalizations derived.

It is generally recognized that the object of scientific inquiry is the derivation of laws or principles<sup>1</sup> which may serve as a basis for prediction, decision, and action. Prediction in any field of study, however, is possible only because of and to the extent of the uniformity of the phenomena studied. Because the conditions and events of physical nature are found to have a relatively high degree of uniformity, predictions concerning them are regarded as comparatively reliable, and the methods by which such phenomena have been studied have become the standard for scientific research. On the other hand, social phenomena, of which marketing activities are a part,

<sup>1</sup> According to *Webster's Unabridged Dictionary*, law and principle are defined as follows:

*Law*—"A statement of an order or relation of phenomena which, so far as known, is invariable under the given conditions; as, the law of falling bodies; a law of heredity."

*Principle*—"A fundamental truth; a comprehensive law or doctrine, from which others are derived, or on which others are founded; a general truth; an elementary proposition or fundamental assumption; a maxim; an axiom; a postulate. . . . A settled rule of action; a governing law of conduct, . . . Principle emphasizes the idea of fundamental truth or general application; Rule, that of more specific direction or regulation."

are regarded as not possessing such a high degree of uniformity and, therefore, when studied by the so-called "objective" methods of the natural sciences, as not providing the highly reliable generalizations with which science has been identified. This claim, of course, is founded largely upon the belief that human behavior cannot be *predicted* because people independently "determine" their actions through reason and impulse. While this is true to some extent in individual cases, the stability of the behavior of *groups* and the tendency of individuals to conform to the group pattern constitute a uniformity sufficient for making valid and reliable predictions.

The laws of science upon which prediction is based are generally recognized to be of two types, distinguished by the methods by which they are derived: namely, empirical<sup>2</sup> laws and theoretical<sup>3</sup> laws. The former have been commonly associated with "pure" science and with the application of the scientific method as it is used in the natural sciences. Theoretical laws, on the other hand, have been the more closely associated with the social sciences.

Empirical laws are generalizations derived from an accumulated mass of evidence. Synthetic universal propositions—which are often stated in a mathematical expression or in a simple, positivistic form of law—when stated in a high order of generalization, they are regarded as voidable by a single negative instance.<sup>4</sup> Such generalizations are sup-

posed to possess "objective validity" and to be of the highest order of generality. Being the outgrowth of the logic of scientific procedure, they are regarded as "strict," physical, or causal laws.

Theoretical laws, on the other hand, are in contrast to empirical laws in several respects. In the first place, they are essentially interpretations based upon presupposed notions and not upon tangible, measurable evidence. Theoretical laws are rules of inference on the basis of which probability and prediction are *warranted*. In other words, the theoretical scheme of interpretation warrants or implies a relationship among phenomena which experience may not always confirm but which, if the theory is well framed, will generally be found to be plausible. The existence of a negative or contrary instance does not nullify or invalidate a theoretical law, for the law in the first place was not predicated upon any supposedly completely uniform aspect of the phenomena. Such a law is frequently taken as a standard of behavior or as a norm, rather than as an absolute explanation of behavior.

Because both types of laws serve for predicting, it is conceivable that a science could consist of either or both types. That is generally the case. The natural sciences have been mainly em-

<sup>4</sup> Examples of prominent empirical laws of natural science are such as the following:

*Law of Gravitation:* That the force of gravitation is proportional to the product of the masses of two bodies, and inversely proportional to the square of the distance between them.

*Law of Partial Pressures:* That in a mixture of gases each gas exerts the same pressure that it would exert if it alone occupied the space.

*Law of Superposition:* (Geology) That where there has been no subsequent disturbance, sedimentary strata were deposited in ascending order, younger beds successively overlying older beds.

*Snell's Law:* (Optics) That the ratio of the sines of the angles of incidence and refraction is constant for all incidences in any given pair of media for waves of a definite frequency.

<sup>2</sup> *Empirical*—"Depending on experience or observation alone, without due regard to science or theory. . . . Pertaining to, or founded upon, experiment or experience."

*Empirical law*—"A generalization from experience; specif., a law arrived at by observation of cases."

<sup>3</sup> *Theoretical*—"Pertaining to theory; depending on, or confined to, theory or speculation; speculative; terminating in theory or speculation."

pirical, but in recent years they have come to embrace also a number of theoretical laws.<sup>5</sup> Contrariwise, generalizations<sup>6</sup> in the social sciences have been typically theoretical, although with added evidence and refined methods generalizations of a more empirical nature are being made. By reason of the nature of generalizations which may be drawn concerning it, therefore, marketing is no less qualified for recognition as a science than are other areas of social study. Granting, moreover, that theo-

retical as well as empirical laws constitute a science, social sciences have as much claim to the name as have the physical sciences.

A science is judged, however, not only by the nature of its generalizations but by its subject matter and by the methods of investigation which it employs. Involving as marketing does many subjective influences determining overt behavior, both its material and its methods are at times questioned. Some critics believe that scientific inquiry must be confined to objective facts and that subjective factors do not yield objective knowledge. Another group holds an opposite viewpoint, contending that subjective factors can be reduced to scientific statement in law. The latter viewpoint, obviously, is the only one tenable if progress toward social science is expected, and it is in accord with a statement by Aristotle to the effect that every science assumes its subject matter and does not give account of it. Subjective factors as well as physical phenomena may be the subject of science.

It is a reasonable presumption, nevertheless, to expect the methods of a science to be adequate for dealing with its subject matter. Some of the methods of the physical sciences have not proved equally useful in the social sciences, but the latter are not the less scientific because of that. The effort of social scientists to plumb the depths of subjectivity and to understand other aspects of social behavior has led to the development of new methods, which, combined with older techniques adapted to the new needs, are gradually placing the study of marketing on a more scientific basis.

### THE MEANING OF "SCIENCE"

The object of inquiry into the meaning of "science" is to test the possible

<sup>5</sup> An example of a theoretical law in physics is the proposition presented by Einstein that mass times the square of the velocity of light equals energy. This has been confirmed, but the generalization is described as theoretical because the explanation of the origin of heat in the sun is theoretical—speculative.

<sup>6</sup> Although throughout this article the term "law" is applied to social generalizations in the social sciences rather than "principle" or "rule," this is done mainly to preserve consistency of the concept of generalization that is being developed. In marketing, so-called "theoretical laws" are commonly regarded as principles and rules of action, although the term law is in a few instances applied. Such marketing generalizations as the following may be cited:

That as income increases the percentage of income spent for food decreases; for rent, fuel, and light remains the same; for clothing remains the same; and for sundries increases (Engel's Law).

"That two cities attract retail trade from an intermediate city or town in the vicinity of the breaking point (the 50 per cent point), approximately in direct proportion to the populations of the two cities and in inverse proportion to the square of the distance from these two cities to the intermediate town" (Reilly's Law of Retail Gravitation).

Obviously, although these may be sound "laws" in that they generalize phenomena usefully, they are not like physical laws in that a single negative or contrary instance would destroy the reliability and validity of the generalization, as would be the case for laws such as those cited in Footnote 4.

Still other examples of types of marketing generalizations may be cited, the first illustrating a "principle" and the other two "rules of action":

That door-to-door selling by manufacturers' salesmen is most likely to be successful when either (1) the product is of high unit-value or (2) a variety of products is offered to the customer.

That the most valuable space in a retail store should be allocated to those departments with the highest sales possibilities.

That layout must combine utility with eye appeal.

breadth of marketing thought, thereby to invalidate the belief that marketing is solely a technique, or to sustain the contention that it has broad scientific and philosophic characteristics. Whatever it may be is not readily apparent in the mere evidence of marketing facts. Neither is it manifest in the common usage of scientific terms, for their several possible definitions are equivocal.

Something of the breadth of marketing thought can be determined by measuring marketing against such concepts as science, discipline, philosophy, and art, to ascertain whether marketing corresponds to any one or a combination of these classifications. According to definitions given in *Webster's Unabridged Dictionary*,

*Science* is "any branch or department of systematized knowledge considered as a distinct field of investigation or object of study, . . . A branch of study which is concerned with observation and classification of facts, especially with the establishment of verifiable general laws, chiefly by induction and hypotheses; . . . Specifically, accumulated and accepted knowledge which has been systematized and formulated with reference to the discovery of general truths or the operation of general laws; knowledge classified and made available in work, life, or the search for truth";

*Philosophy* is "the science which investigates the most general facts and principles of reality and of human nature and conduct; . . . The body of principles or general conceptions underlying a given branch of learning, or major discipline, a religious system, a human activity, or the like, and the application of it; as, the *philosophy* of history, Christianity, or of business";

A *Discipline* is "that which is taught to pupils: teachings; learnings; doctrine. . . . A subject that is taught; a branch of knowledge; also, a course of study";

*Art* is "a branch of learning; a science; especially, a science such as grammar, logic, or mathematics, serving chiefly as a disci-

pline or as an instrument of knowledge; . . . The general principles of any branch of learning or of any developed craft; a system of rules or of organized modes of operation serving to facilitate the performance of certain actions; . . . Systematic application of knowledge or skill in effecting a desired result."

In the light of these definitions, marketing may be a science, discipline, or art. It is rarely regarded as a philosophy because it is not of the order of generality of philosophy; nevertheless, the expression "a philosophy of marketing" is sometimes heard, signifying usually a theory colored by a particular viewpoint.

To regard marketing as an art emphasizes the *doing* rather than the *knowing*. The art of marketing is the technical, professional, applicative aspect of the subject. Of the several concepts, it is the narrowest and least suggestive of the scientific character of marketing.

The conception of marketing as a discipline emphasizes the academic side of the subject. A discipline embraces less than a science, for science is the generic name for a number of disciplines. Moreover, as a discipline, marketing like any "subject that is taught," may be taught in a variety of ways with widely differing emphasis and integration.

As a science, marketing consists of the body of knowledge of distribution, with its methodological concomitants of theories, laws, principles, and concepts.

If marketing is to be so regarded as a science, the study of it both in form and content must correspond to the standards of science in the social realm. First, the objective of observation and investigation must be the establishment of *general laws* or *broad principles*, not merely settled rules of action or operating procedures. Second, prediction made possible through the development of

laws should be of social import and not merely institutional application. Third, theory and hypotheses employed in prediction and in the drawing of further inferences should be useful for the extension of knowledge as well as for guiding administrative means toward profitable ends. Fourth, abstractions as well as concrete facts should be used in the explanation of marketing phenomena.

The fact that marketing is held not yet to have attained the status of a science raises a question of whether this is attributable to the relative newness of the study or to inherent characteristics of the subject matter. The progress which has been made in understanding marketing gives hope that continued scientific research would ultimately result in the development of a science. Such confidence is confirmed by the statement made by Karl Pearson that the unity of all science lies not in its materials but in its methods. Nevertheless, some characteristics of marketing need further consideration relative to this point.

Unlike other areas of the social sciences, marketing is in some respects not the "distinct field of investigation" which is by definition requisite for a science. It is true that the technical aspects of marketing are now a distinct field of study and application, but the scope of such technical knowledge is more characteristic of a trade or profession than of a science. On the other hand, when the broader aspects of marketing are considered, from which general principles, theory, and perhaps laws may be formulated, it is seen that marketing is in reality a combination of parts of a number of other disciplines and sciences. Marketing is particularly a phase of economic activity; its motives and means being economic, it is an integral part of the general science of

economics. Marketing knowledge, however, is also derived from psychology, sociology, accounting, law, production, engineering, and political science, in addition to being drawn from experience in the institutional and functional aspects of marketing. The scientific student or practitioner of marketing on a broad scale must know the fundamental principles of all of those areas of thought. The principles or laws of marketing must express the interrelationships of those areas.

Because of this amorphous nature of marketing, some students believe that the only scientific aspects of marketing are those broad aspects which, they claim, are indistinguishable from economics. Perhaps the same may also be said of monetary and labor theory and of other branches of economics as well. If that were the case, laws and principles of marketing would be essentially and only laws of economics. Notwithstanding this limiting view, when proper recognition is given to the prominent economic function performed in distribution and to the unique position, among the various branches of economic theory, which marketing holds in relation to other social disciplines, marketing may reasonably be regarded at least as a child in the family of social sciences.

This regard, however, is warranted only insofar as the knowledge of marketing becomes systematized and formulated with reference to the discovery of general truths of the operation of general laws. Like all sciences, its *raison d'être* should be not for the sake of knowledge alone, but that through the interrelated principles, laws, and theories of the system prediction, direction, and control of social import will be made possible.

#### SCIENCE IN MARKETING LITERATURE

If it is admitted that the subject of

marketing lends itself to scientific statement, one may reasonably inquire to what extent the marketing literature now presents the subject as a science. It will be remembered that the formal study of marketing is only about fifty years old and that during the past half century all that is known objectively as marketing has been evolved—on the one hand, from extensive observation of marketing phenomena, and on the other hand, from a small number of economic deductions concerning trade activity. The literature published during this period has expanded from a handful of books in two or three fields to a library of volumes in the institutional, functional, and policy aspects of marketing.

In any field of scientific study, it is obviously impossible for the entire body of scientific knowledge to be presented in any one volume or even in a set of volumes. Many of the newest scientific contributions are not quickly reduced to writing, and the rate of current reporting is so swift that many studies could at best be but briefly mentioned. Some areas of investigation are the subject of specialized literature. On the other hand, the fullest, and at the same time the most concise, statements of a science are usually found in the general texts in the subject. If they are well written, such works serve not only to acquaint the reader with the scope and general structure of the subject, but they present the essential laws and principles of the subject. Consequently, while no one book and perhaps no one part of the total literature may present an entire science, or even all of the important individual contributions, in the general works on the subject one may expect to find the best evidence of the scientific status of the study.

So in the field of marketing one may expect to find in the general writings the best evidence of the over-all development

of the subject as a science, notwithstanding the fact that many important individual contributions are not represented therein. Rarely is the work of any single individual indispensable to the whole field of a science. On the other hand, if the systematized body of knowledge has not been brought together in a general statement, that in itself is symptomatic of the stage of development of the study.

Throughout the marketing literature one may observe evidences both of the scientific methodology which has characterized the study and of the generalizations formulated through the study. There are numerous evidences of observation, definition of terms, classification of data, experimentation, and scientific analysis, all of which are essential to the development of science.

The marketing literature indicates that there has been very wide observation in the study of the subject. In fact, some of the earliest studies of marketing were based upon observation, for pioneer teachers in the field were insufficiently acquainted with distributive activities without resort to first-hand observation to speak or write intelligently of it. They actually accompanied commodities to the market in order to observe what became of them and how and by whom they were handled. They talked with merchants and observed the behavior of consumers as well as of distributors. Much-repeated practices became regarded as behavior patterns, and from such patterns of activity generalizations were made. So prevalent, in fact, has been research by observation in marketing studies that one might almost think that investigators looked for empirical laws of market behavior.

Along with observation, research in marketing has also been characterized by conscious definition of terms and

concepts. Choice of the term "marketing," identification and definition of functions, institutions, channels, and the like have been methodological problems to which much attention has been given by writers, both individually and collectively.

Classification of data, too, has been an important methodological function in the study of marketing. Among the numerous phenomena classified have been the following: types of consumers, markets, wholesale and retail establishments, marketing functions, buying motives, commodities and services, channels of distribution, policies, and practices. If the sorting of experiences by types and classes is an essential step in the formulation of scientific laws, the study of marketing has been properly distinguished by this activity.

Experimentation, as a method of scientific discovery, has also characterized the study of marketing, although the social nature of the subject does not lend itself to experimentation as a means of verifying definitively assumed hypotheses or of demonstrating with great exactitude the terms of marketing law. Social behavior does not lend itself well to experimentation, because the numerous variables cannot be closely controlled and social situations cannot be duplicated. Nevertheless, experimentation has had increasing application in some phases of marketing research.

There is little reason to doubt, therefore, that scientific methods have been employed in the formal and informal study of marketing. On the other hand, the employment of such methods does not necessarily evolve a science, although it may yield a body of operating principles. Judged from the character of generalizations produced—their narrowness, their simplicity of statement, and their variability—marketing study can

scarcely be said to have attained scientific status, at least as it is shown in the more general works in the field.

One criticism which may be made of marketing thought expressed in the general writings is that it is more descriptive than theoretical or even analytical. That is inevitable in the early stage of scientific investigation, for many facts and repeated narratives are necessary for establishing the uniformity of market behavior. Facts are always important, but theories or theoretical laws (explanations) are indispensable to the development of science. Inductive, experimental study may yield satisfying generalizations, but without theoretical speculation there is no answer to the question of science "Why"? nor is there a basis for prediction.

Theorizing has not been entirely absent from the marketing writings, but it has been subordinated to descriptive material. Undoubtedly this relative emphasis on facts betrays a lingering preoccupation among marketing writers with technical aspects of marketing and a neglect by them of its broader reaches. On the other hand, merely to aggregate unrelated theories does not advance a science, for the essence of science is system, order, and coherence in the body of knowledge.

The objective, and the inevitable result, of much of the past inquiry into marketing has been the development of rules of action rather than broad generalizations. The bulk of the marketing literature is of a technical nature dealing with retailing, wholesaling, advertising, credit, marketing research, and the like. Examination of books in any such field reveals traditional frameworks overlaid with a descriptive veneer designed to tell "how it is done and how it can be done better." Craftsmen rather than general marketing theorists are trained with

such works. Functions and institutions are sometimes introduced in their socioeconomic position, but the treatment of that aspect of the subject is usually brief.

General texts do not go so far in stating rules of action; they concern themselves usually with the statement of "principles." The statement of marketing principles has long been an objective of basic marketing inquiry. When general works on marketing were in their early years of development about 1920, the term "principles" found its way into text titles and it has prominently remained there ever since. In recent years, even those who have professed to write of marketing principles have been reappraising the concept, for it is recognized that what have passed for principles have often been but rules of action. In very few instances, however, were the so-called principles set forth even as boldly as the few in economics texts have been. Consequently, even this degree of scientific generalization has been more often implied than expressed.

There is little wonder that the concept of laws in marketing should be practically non-existent. It is true that the dignity of "law" has been associated with a few generalizations, such as those concerning retail trade gravitation, but they only serve to illustrate the fact that marketing scientists' concept of law relates it to the fact-gathering type of research which in the physical sciences has led to the statement of empirical laws. By reason of the nature of marketing phenomena, accumulated evidence can yield at best only very tentative generalizations. Inasmuch as real theorizing has been generally neglected by students of marketing, generalizations worthy of recognition as marketing laws are extremely rare in either the general or specialized marketing literature.

### A SCIENCE OF MARKETING

Interest in the development of a broader science of marketing is in part the result of the appearance of marketing problems which the present body of knowledge is incapable of solving. The present body of knowledge and known principles have served useful purposes and will continue to do so. But their usefulness has been primarily institutional, for the solution of private problems. Such problems continue to exist and require perhaps even better information than has theretofore been available. However, with the elevation of marketing practice above a level of strictly competitive interests, and with the emergence of social interests in marketing beyond its technical application, old principles no longer furnish the guidance needed in new situations. Consequently, for prediction and guidance on a broader scale, perhaps even in public policy determination, laws of such scope and integration are called for as would comprise a science of marketing.

What such a body of information would be like is not easy to foretell. Yet by analogy to existing sciences and by analysis of the subject matter of marketing itself, something of its constitution may be known. Possessing the characteristics of a science, it would be a systematized body of knowledge, broad and general in scope yet adaptable to the solution of varied problems. Possessing, however, as it does, the unique characteristics of a field overlapping the areas of other social sciences, a science of marketing would necessarily appropriate some of their pertinent laws. Arising out of empirical evidence as well as proceeding from theoretical assumptions, it would provide generalizations of both inductive and deductive origin and of both general and technical scope. The laws of marketing would be mainly



theoretical rather than empirical, because of the difficulty of duplicating social conditions experimentally or of reaching such conclusions that no negative instance would violate without destroying the usefulness of the law.

Every science has what may be regarded as its core and its periphery—in other words, the essential subject matter of its inquiry and the scope of its extension in different but related directions. For example:

Physics is the science of the world of inanimate matter, especially motion; it comprises the related sciences of mechanics, heat, electricity, light and sound, radiation, and atomic structure;

Chemistry is the science of the composition of substances and the transformations which they undergo; it comprises the fields of physical, organic, inorganic, analytical, biological, physiological, electro, pharmaceutical, and industrial chemistry;

Geology is the science of the earth; it comprises the sciences and disciplines of paleontology, petrology, physiography, and stratigraphy, as well as historical, physical, economic, glacial, structural, and dynamic geology;

Sociology is the science of the origin and evolution of society, or of the forms, institutions, and functions of human groups;

Economics is the science that investigates conditions and laws affecting the production, distribution, and consumption of wealth, or the material means of satisfying human desires.

Technically, marketing bears to economics a relation similar to that of mechanics to physics. Marketing is that field of study which investigates the conditions and laws affecting the distribution<sup>7</sup> of commodities and services. It is the institutionalized function of pro-

viding consumers with goods for their use. Its core or focal point lies in the area of its institutional framework and of its more or less technical aspects, including types of institutions, comparative competitive advantages, costs, pricing practices, functions, policies, channels, and the like. Its perimeter, however, embraces portions of such related sciences and disciplines as the following:

Economics: price theory, institutional influences, income distribution, theories of scale of operation, monopoly, competition, monetary factors, finance facilities;

Psychology: rationale of choice in purchasing, individual behavior, prejudices, motives, incentives, utility, and satisfaction;

Sociology: group behavior, expenditure patterns and habits, population and its shifts, group mores;

Law: legislative history, theory, and philosophy, fairness, competition, legal procedure;

Political science: forms of government as means to ends, administrative agencies, government intervention, taxation;

Production and engineering: materials, processes, and types of production;

Accounting: theories and techniques of accounting.

The science of marketing, accordingly, may comprise any number of theories,<sup>8</sup> each treating the explanation of some aspect of the science. Some theories may

<sup>8</sup> *Theory*—"The result of contemplation; hence, an analysis or explanation; . . . The general or abstract principles of any body of facts real or assumed; . . . A general principle, formula, or ideal construction, offered to explain phenomena and rendered more or less plausible by evidence in the facts or by the exactness and relevancy of the reasoning; . . . A plan or scheme theoretically constructed. A hypothesis offered as a basis of thought on a given subject; loosely, any idea, guess, etc., put forward to be accepted or rejected in seeking the explanation of some condition, occurrence, or the like. . . . In scientific usage, a *hypothesis* is a provisional conjecture regarding the causes or relations of certain phenomena; a *theory* is a hypothesis which has undergone verification, and which is applicable to a large number of related phenomena."

<sup>7</sup> Distribution is here used to mean the movement of goods and services from producers to consumers and not the apportionment of the fruits of production among the contributors thereto, as that term is employed in economic theory.

be narrow and simple, dealing with perhaps a technical phase of the subject. Others would be more comprehensive, relating to topics of broader scope and more general import. As theory, however, such expositions would possess a conceptual framework and be not merely a compilation of classified observations described as self-evident facts. Mental perception of related attributes of marketing phenomena precedes the classification and definition of evidence. To students of such thought, the classifications or conceptions are likely to appear obvious and tangible and be taken for granted. For example, "channels" of distribution, "convenience" goods, "agent" middlemen, "rational" buying motives, price "schedules," and the like originally were—and still are—conceptions,<sup>9</sup> ideas, and not material facts.

By relating pertinent aspects of several concepts one may arrive at a statement of marketing principles. Again for example, a principle of channel determination may be suggested as follows: the channel of distribution tends to be relatively longer for goods of low unit value, small size, general consumption, and staple nature, which are bought frequently and habitually by large numbers of people. Also: the distance which goods tend to travel to market is a direct function of the difference between price differentials in two markets and the costs of transportation between them. Study of any aspect of marketing proceeding from conceptual premises and

generalized in the form of basic principles, if carried to a stage of sufficient development would constitute a theory. The consistent integration of broad theories would constitute, in turn, the science of marketing.

The evolution of marketing science must be the joint contribution of men working not only in marketing itself but in the related social sciences. Those who are most intimately associated with marketing facts will formulate generalizations based upon their experiences; students of other social and economic conditions will in their own fields do likewise and will reach conclusions pertinent to marketing which marketing specialists may refute, challenge, or incorporate into their own thinking and body of knowledge. Marketing theorists, in contrast to marketing technicians, will endeavor to integrate and to balance in a systematic body the knowledge stemming from observation and investigation, on the one hand, and from theoretical deductions, on the other.

When such a development of thought takes place in the study of marketing, it may be expected to appear in writings as general works on marketing. Their difference from existing general texts on the subject would lie mainly in viewpoint and approach. The viewpoint would be characterized by interest in application of the knowledge mainly to problems of broader than technical or institutional scope. The approach would be admittedly from sound theory as well as from tested facts. The product would be an integrated statement of principles and laws which, while not incontrovertible as natural empirical laws are, would be sufficiently stable to explain marketing conditions and activities in a broad and long-run scale.

<sup>9</sup> *Conception*—"The act or process of forming the schematized idea or notion of a thing, or the idea or notion formed. . . . Any idea or notion, or thought-formation, whether accompanied with belief in the reality of its object or not. . . ." ("Conception is the act of grasping together two or more attributes into the unity of thought which we call a single concept." Bowen)