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Introduction

Marketing theorists of the 1950s and 1960s hailed Wroe Alderson as a leader in their field. Time has substantiated their judgment: Alderson's works are among the few writings of their period accorded anything more than historical esteem. However, marketing thought has been subject to enormous methodological improvement and to infusions of behavioral science theory since Alderson's death.

This paper will suggest that Wroe Alderson's writings no longer represent modern marketing theory. Alderson was the most powerful author immediately preceding what Kotler (1) has called marketing's shift from applied economics to applied behavioral science. Writers previous to this shift attempted comprehensive theories of marketing, while writers since have presented more specific theories. As a result, Alderson's writings offer perhaps the most recent general theory of marketing. Also, Alderson was an author of great insight. These facts contribute to Alderson's continued major significance in modern marketing thought. However, Alderson's theory was an applied economic theory with unreconciled behavioral elements. While Alderson's functionalism may prove useful for practical market analysis, his theory is not adequate for modern marketing.

Marketing as Applied Economics

Early marketing theory branched from economic theory. Economic theory of the time assumed that humans behave in a rational effort to maximize economic utility. Behaviors which failed to maximize utility were treated as errors of some sort; either the result of inadequate information, the result of temporally volatile utilities, signs of an incompletely specified model, or irrational behavior.

Given the typical variation among humans in possession of utility objects, maximization of utility involves an exchange of utility objects (an economic transaction) for the mutual benefit of all participants. Variation in ability to produce economic goods, called relative advantage, leads to sustained variation in possessions and thus to specialized producer roles and long-lasting relationships.

The existence of exchange relationships is crucial, because economic thought did not investigate the process of assigning utilities to objects. Utility assignment was taken as pre-existent. Without knowledge of the process of utility assignment, attention centered on the transaction: since behavior was mechanically directed toward optimal utility, examination of transactions would reveal the pre-existent, but unknown utilities of trading partners.

Marketing pioneers such as Arch W. Shaw (2) and Ralph Starr Butler (3) accepted the economic model, but noted that early 20th century producers and consumers usually were not directly linked in the commercial environment which had evolved through the Commercial and Industrial Revolutions. Goods were exchanged only after a typically long route from the point of production, and often after several intermediate transactions. The distribution channel drew marketers' attention as an economic phenomenon needing analysis. "Marketing is motion," declared Shaw, and marketing was introduced as a study of the process by which goods reached their final consumer.

These early authors believed that channels of distribution were organized through economic optimization. The distribution channel was an elongation of the transaction, and the activities involved in distribution were mechanically determined. However, the complexity of distribution channels inspired differing opinions about which aspect of the distribution process provided the economic basis for organizing the channel. Theories of marketing were developed around most of the who, what, where, when, why and how of distribution.

The institutional approach focused on who transacted, claiming that the marketing process was organized by the institutions participating in it. The peculiar structure and abilities of the group of institutions acting in a market would determine the economic advantages governing the market. Breyer (4) provides a brief example of this approach. Cox (5), Aspinwall (6) and others focused on what was transacted: this commodity approach held that attributes of the product being transacted would determine economies of transportation, storage, etc., and thus would organize the market. Grether (7) and Clewett (8) offered some argument for organizing the market through the where of transaction: the regional, or location approach considered markets as determined by the distances between materials, labor, consumption, etc. The when of transaction received little attention, and the why of transaction was not at issue (the economic model defined why transaction occurred). McGarry (9), Alderson (10) and other authors studied how transaction occurred: their functionalist approach claimed that certain functions had to be performed in any marketing process, and that the application of these functions to any specific market would define the economies which organized the market.

Marketing theorists argued over these approaches through the 1950s. The three most popular approaches, commodity, institutional and functional, all seemed reasonable given an assumption of mechanistic behavior by producers, distributors and consumers, but none individually provided an adequate explanation for the structure and operation of real markets. Alderson's writings on functionalism seemed to make this approach dominant by the early 1960s, possibly because of the greater dynamism of functionalism in explaining market changes, but more probably because of Alderson's personal power as a thinker and writer. Alderson's adoption of a systems approach, which recognized the interrelated nature of all marketing functions and of the marketing participants, spurred acceptance of his ideas. The systems approach forced consideration of the environment of mar-

keting through its focus upon input-output relations of the marketing system, and thus sharpened marketers' awareness of problems in defining an industry, defining and measuring effective competition, and measuring market efficiency. However, despite Lewis and Erickson's imputation of great significance to the systems approach (11), marketing theorists did not make significant applications of systems theory at this time.

Marketing as Applied Behavioral Science

All three process approaches lost favor in the 1960s. Advocates of these approaches implicitly accepted the economic model, but invariably buried some passage in their works acknowledging that model's shortcomings in explaining market behavior. Authors of the 1960s raised this acknowledgment to a central focus, and began to use alternatives to the economic model. These alternatives could assume that humans do not necessarily act to maximize output (the position of satisficing models). They could expand the set of motivating objects to include previously non-economic objects, as in examining the social aspects of economic relationships. They could treat behavior as willed, rather than as determined, and thus open the issue of how utilities are assigned. Finally, alternative models could make more than one of these changes.

Desertion of the economic model changed the direction of marketing thought. Economic motivation alone was no longer thought to organize markets. This realization de-emphasized the marketing process, and focused interest upon the now non-prescribed behavior of market participants. Kotler (12) refers to this shift as marketing changing from applied economics to applied behavioral science. The transfer of focus introduced three new potential bases for market organization; behavior of suppliers (producers and distributors), behavior of consumers and behavior of the market environment.

Howard's book (13) for the Ford Foundation incorporated behavior both of the producer and of the consumer as organizing determinants of the marketing process. This work remains the

only major marketing source to do so explicitly, and as such would be a classic but for Howard's overreliance on decision theory and unwillingness to abandon the economic model in the managerial behavior section. Other works, such as Howard (14) and Lazer and Kelley (15), emphasized the producer's role in organizing the marketing process. These managerially oriented authors did not belittle the importance of autonomous consumer and environmental behavior: in fact, they were unanimous in their support of the marketing concept, which credits ultimate power to the consumer. However, by omitting specific consideration of consumer and environment and by according prerogative of action to the producer, the managerial approach implicitly suggested that producer behavior molds the market. Commodity characteristics, existent institutions and necessary functions may flavor the firm's decisions, but are not fundamental bases of market organization. The managerial approach, by stating that conscious decisions by the firm organize markets, placed the commodity, institutional and functional approaches in the past.

Consumer behavior became another area of theoretical importance to marketing. Like the managerial approach, consumer behavior theory presented only a partial theory of marketing. Consumer behavior theorists such as Andreasen (16), Engel, Kollat and Blackwell (17), Howard and Sheth (18) and Nicosia (19) placed the consumer in a reactive position. They presupposed an organized market within which the consumer evaluated and bought products. This approach concedes importance to actions of the producer, but the various consumer behavior theories restrict themselves to consumers, and do not theorize about producer behavior.

Am environmental, or societal approach to marketing also became increasingly popular. Grether's (20) work on marketing and public policy, based in the author's legalistic approach to marketing, gained new significance. Consideration of the market system as a good citizen within the social system became popular (for example, Preston, 21). Probably the major author

to actually suggest societal goals as a fundamental basis for market organization was Kotler (22, 23, 24). The societal approach treated the market as a subsystem of the society which sanctioned it, and held that market values and market behavior are determined by the value structure of the social system. This approach offered the benefits mentioned earlier in connection with the systems approach, and was of indisputable significance if only because of the legal system's impact on market activities. However, a theory of marketing organized entirely through social factors would be prima-facie incomplete, and supporters of the societal approach did not claim it as a theory of marketing. The very existence of a societal sub-system called a market, whose boundaries can be delimited and whose specific properties are of interest, demands a marketing theory incorporating the special behaviors of that market's producers and consumers.

Modern marketing does not have a strong, binding theory. Future marketing theorists must unify theories of producer, consumer and environment behavior and provide links among these theories. This unification will produce a modern theory of marketing. Marketing thought almost certainly will not return to the economic model.

Wroe Alderson and Modern Marketing Thought

Knowing Wroe Alderson's place in marketing history facilitates evaluation of his thinking. Alderson's work presented the last major argument for organizing the marketing process without consideration of non-economic behavior. Alderson titled his final book <u>Dynamic Marketing Behavior</u> (25), and he always claimed organized behavior systems as his conceptual base, but the title and claim were misleading. The dynamism Alderson ascribed to marketing behavior was economically determined change which stemmed from recognition of market diseconomies or from changes in exogenous variables. Unsuccessful products introduced under an assumption of waiting demand might be dropped,

as producers recognized the information error. A growing human population could increase market volume, and alter producer's positions on their marginal cost curves enough to make them allocate some functions to other firms, as Stigler (26) prescribed. Product innovation occurred in response to Schumpeter's (27) economic model, rather than through unexplainable inspiration as suggested by Popper (28). Alderson's organized behavior systems were organized through economic advantage, as Barnard (29) prescribed. The behavioral dynamics in firms acknowledged by March and Simon (30) or by Thompson (31) were not incorporated in Alderson's thinking. Perhaps the best example of the rigidity of Alderson's economic approach is his suggestion (32) that households arise because of economic advantage, ignoring cultural values regarding marriage or family structure. Alderson's thinking was advanced for its era, and may prove useful in market analyses where participant behavior is stable enough to approach being constant, but Alderson's thinking will not serve present and future marketing theory, with its necessary emphasis on behavior.

A point by point analysis of Alderson's theory of marketing supports this general appraisal. Alderson defined marketing as economic exchange between organized behavior systems. Organized behavior systems were defined through Barnard's (33) model, as collectivities whose organizing glue is economic advantage, and whose members all act to maximize organizational achievement. March and Simon (34) and Thompson (35) have pointed out weaknesses in economic theories of organization, and have offered alternatives. Mancur Olson's (36) theory of collective action offers another alternative, and one which assumes that all behavior is economically motivated. Alderson's own writings on organizations struggling for survival despite economic adversity and on organizations in self-imposed extinction modes acknowledge that organizations do not always follow economically optimal paths (37); given this acknowledgment, it is surprising that Alderson clung to Barnard's model. Also, Alderson dis-

cussed producer behavior systems organized around productive efficiencies and consumer behavior systems organized around consumptive efficiencies, but Alderson did not discuss the marketing link as an organized behavior system. More recent work on topics such as price-quality relationships (38) and salesmen's role in establishing decision criteria for ambivalent consumers (39) correct this deficiency.

Having defined marketing, Alderson labeled sorting, transportation, storage, credit, display and promotion as functions which must be performed in any marketing process. This list approximately conformed with the lists of other functionalist writers (Lewis and Erickson, 40, are an exception). Other authors accorded about equal importance to all functions, though, while Alderson centered upon sorting to the virtual exclusion of other functions. Sorting was presented as the basic function of marketing.

Sorting takes four forms-- sorting out, or separating a homogeneous collection into sub-groups which are heterogeneous on some sub-attribute, assorting, or building up heterogeneous collections, allocating, or breaking a homogeneous collection into smaller, still homogeneous sub-groups, and accumulating, or building up homogeneous collections. Sorting is a physical operation which incurs unrecoverably costs: as a result, Alderson stated principles of postponement and speculation, where sorts either are delayed to minimize risk or are performed for an expected extra compensation for risk absorption. Alderson described searching as a non-physical, or mental analog to sorting. Searching incorporates all decision processes, and is performed with no cost.

The value of Alderson's focus upon sorting is open to question. Nicosia's useful review of Alderson's functionalism (41) might disagree with the contention that sorting was raised to a pre-eminent position, though Nicosia does not discuss any functions other than sorting in reviewing Alderson's conception of the marketing process. Even if Nicosia would agree to this

contention, his review finds no fault with Alderson's emphasis on sorting. This paper holds a more negative view. Functionalist writers have had difficulty in exhaustively listing marketing functions, and this difficulty greatly complicates writings which emphasize all functions. Alderson's focus on one function sidesteps this problem. However, the problem of listing functions seems due either to deficiencies in marketing knowledge or to the economic approach of functionalist authors. Grappling with these causes would seem more valuable than sidestepping the problem by artificially raising the status of one function, and Alderson gives little indication that such elevation of sorting is justified.

Alderson's discussion of sorting showed two inadequacies. Sorting was taken as strictly physical, and separate from searching. This restriction is not useful. Consumer decision processes leading to a purchase are searching, while the purchase is sorting under this definition. Alderson would have studied the purchase, rather than its determinants. His acceptance of the economic model justified this approach, but modern belief in behavioral theory repudiates it. Also, Alderson claimed that searching occurred without cost. This contention is absurd. Cost-free searching, searching separate from sorting, and focus upon sorting as the basic function of marketing all reflect Alderson's economic point of view; a point of view in which the transaction is of supreme importance.

Sorting is the function which economic exchange performs, and economic transactions are synonomous with sorts. Alderson coined the term transvection to describe the entire process bridging product creation with final sale. Transvection, which can span many transactions, was stated as the appropriate unit of marketing analysis. Alderson noted that activities at each stage of the marketing process are organized by economies at that level, so that discrepancies of assortment which may not be optimal across levels arise. Discrepancies of assortment refer to phenomena such as manufacturers' large production of one product and wholesalers' lesser need for several products,

which causes each manufacturer to deal with several wholesalers and each wholesaler to deal with several manufacturers. These discrepancies typically result in manufacturers pressing retailers or wholesalers to broaden their lines (to give the manufacturer maximum market coverage), and retailers or wholesalers pressing to reduce variety to a few profitable products. Resolution of these pressures can cause market diseconomies.

Alderson's statements about transvections revealed further unsatisfactory aspects of his theory. The organized behavior systems which participate in a transvection constitute the marketing channel. Alderson held that the channel, seemingly a system of systems, is an organized behavior system only when existence of the channel requires the existence and participation of all members. The weaknesses of this application of Barnard's organizational theory seem obvious. Channels in which weak members come and go would not be classified as systems, even if the channel's strong members formed a durable distribution structure. Also, Alderson claimed that the transvection was optimized by reducing its total cost to a minimum. This contention ignored Alderson's belief that transvections create time, place and sometimes form utility: if transvections create utility, then the optimum transvection would maximize the difference between value added and cost.

Within the general framework of economically motivated transvections, Alderson's thinking was a mixture of economic and non-economic concepts. Many of Alderson's non-economic ideas foreshadowed later applications of behavioral theory to marketing. Alderson felt that consumers multiplied the probability of using a product by its utility if used, and then chose products which yielded the highest expected value. He labeled consumer behavior as economically instrumental behavior, as opposed to socially congenial behavior or irrational, symptomatic behavior. However, Alderson proceeded to give examples of congenially determined consumer purchases and of symptomatically determined consumer purchases. Both examples contradicted the

prior assertion that consumer behavior is instrumental, and suggested a need for non-economic considerations in marketing theory. Alderson foreshadowed modern thinking on brand loyalty and product-customer spaces by noting that products occupy points in the continuously heterogeneous demand space, so that loyalty varies with preference distance, and core markets can be distinguished from fringe markets. Alderson also foreshadowed Howard and Sheth's (42) time pressure concept by claiming that consumers allocate shopping efforts to make optimal use of their time. Neither contention inherently contradicted the economic model, but both differed from traditional economic thought. Alderson's treatment of innovation clearly deviated from economic theory: he held that consumers will notice only threatening innovations, with threat being a function of social factors. Alderson assumed that consumers would apply value analysis to noticed innovations, but he again broke with economic tradition by suggesting that consumers buy in cycles in order to reconcile desires for repetition and variety (foreshadowing the Howard and Sheth psychologies of simplification and complication).

Perhaps Alderson's best contribution to marketing theory was his theory of the search for differential advantage. Because demand is heterogeneous, products which also are heterogeneous find monopolistic niches in the marketplace. Monopoly offers appealing securities to producers. They consequently attempt to differentiate their products, and to find maximally profitable niches in the market (shared large markets may be more profitable than monopolized small markets). Alderson termed the scramble for niches the search for differential advantage. Differential advantage has the corollary effects of capturing consumers whose preferences lie near the achieved position and of rebuffing other consumers.

Differential advantage can occur in six ways. Differentiation through market segmentation focuses servicing efforts upon specific consumer groups, thus permitting economies of service which allow price-cutting and subsequent market dominance. Differentiation by selection of appeals uses advertising

to situate products in market preference niches. Differentiation by transvection manipulates the distribution channel to gain price-beneficial cost reductions and to gain locational and display advantages. Differentiation by product improvement, differentiation by process improvement and differentiation by product innovation all are self-explanatory. This delineation of sources of differential advantage followed the economic model, but transcended previous economic thinking.

Alderson believed that firms could pursue differential advantage by changing the market structure of which they were part, and thus facilitate their functioning within that structure. Differentiation by transvection would be an example of such change. The free will implicit in this belief violated the economic model. Alderson also differed with traditional economists in using the concept of differential advantage to bring technological change within marketing theory. Traditional economics treats technology as an exogenous variable; a given which partially controls but does not enter the marketing process. Alderson stated that marketing by nature forces participants to seek technological advance, which often occurs in process or product improvement. Active search for technological advance makes it an endogenous variable (in fact, Alderson discussed the economics of proper timing for technological change). Alderson's attitude on this point is consistent with Schumpeterian theory (43).

As mentioned, Alderson's theory is an economic theory with unreconciled non-economic elements. These non-economic elements both damage and strengthen the theory. They weaken theory consistency, and must be purged to make Alderson's theory formally adequate. They also offer insights used in current marketing theory, and thus provide pragmatic justification for Alderson's theory. Alderson's theory of marketing would be consistent, but trivial if its non-economic elements were eliminated.

Alderson's Functionalism and Modern Marketing Theory

This paper has criticized the functionalist theory of mar-

keting associated with Alderson, McGarry and others because of its economic approach. Such criticism does not necessarily invalidate functionalism as an approach to marketing theory. Even disregarding the economic aspects of this theory, though, Alderson's functionalism does not seem satisfactory for modern marketing theory.

Modern authors about human organizations (such as Weick, 44) approach organized behavior systems with a type of functionalism. Humans act to gratify themselves. Behavior occurs because it somehow produces gratification for the actor. Organized behavior systems are built around interlocking behaviors which gratify interacting humans. These behaviors are the appropriate basis of organizational theory and marketing theory. Personality theory, life cycle or life style theory, and other theories which approach organized behavior systems through characteristics of participants or their environment may offer valuable insights into the bases for gratification, and thus for behavior, but these theories are not directed toward the proper organizing factor in organized behavior systems-- behavior. Theories focused on behavior can be termed functionalistic, because they accord functional utility to behavior and because they attempt to locate functional stabilities in organizations. Role theory, an example of behavior centered approaches to organization, is functionalistic.

The functionalism of these theories materially differs from Alderson's functionalism. Alderson's functionalism is prescriptive functionalism: functions which every marketing system must perform are stated. Prescriptive functionalism applies only to prescriptive behavior models. Alderson's functionalistic approach becomes untenable when the assumption of economically rational behavior is dropped. Prescriptive functionalism also applies only to functionally static behavior systems. More modern theories do not prescribe functions: normative functionalism exists to whatever extent laws of interpersonal behavior exist, but these theories' functionalism generally is a highly situation-specific approach. This functionalism

bases itself on motivation and cognition. Normative statements, when made, rely on an explanatory basis. Non-prescriptive functionalism acknowledges the arguments of Stevens (45), Kaplan (46) and Popper (47), which imply that the human environment is of human creation, and that behavioral prescription is tenuous. Non-prescriptive functionalism is the appropriate theory building approach for organized behavior systems.

Alderson's functionalism may prove useful in marketing application despite its deficiencies. The economic model may fairly characterize many marketing relationships, and the sorting function may be sufficiently important determine the organization of those relationships. Alderson's approach offers a short-cut in analysis of such marketing relationships. Unfortunately, Alderson offers no remedies should the analysis find problems: he apparently considered description enough. Where the economic model explains most market behavior, but sorting alone does not organize the market, Alderson's thinking in conjunction with Edmund McGarry's thinking may prove useful. Complete behavioral modeling is unnecessary and unreasonably expensive in such situations, and prescriptive functionalism becomes a good alternative. However, Alderson's functionalism will not characterize enlightened efforts in future marketing theory construction.

References

(1) Philip Kotler, "A Generic Concept of Marketing," Journal of Marketing, Vol. 36 (April, 1972), pp. 46-54.

(2) Arch W. Shaw, Some Problems in Market Distribution, (Cambridge, MA: Harvard University Press, 1915).

(3) Ralph Starr Butler, Marketing and Merchandising, (New York: Alexander Hamilton Institute, 1923).

(4) Ralph Breyer, "Some Observations on Structural Formation and the Growth of Marketing Channels," in Theory in Marketing, 2nd series, Reavis Cox, Wroe Alderson and Stanley Shapiro, eds., (Homewood, IL, Richard D. Irwin, 1964).

(5) Reavis Cox and Charles Goodman, "Marketing of Housebuilding Materials," Journal of Marketing, Vol. 21 (July, 1956), pp. 36-61.

(6) Leo Aspinwall, Four Marketing Theories, (Boulder, CO: University of Colorado Bureau of Business Research, 1961).

(7) Ewald Grether, "A Theoretical Approach to the Analysis of Marketing," in Theory in Marketing, Reavis Cox and Wroe Alderson, eds., (Chicago, IL: Richard D. Irwin, 1950).

(8) Richard Clewett, "The Clustering of Firms in a Wholesale Fruit and Vegetable Market," in Theory in Marketing, Reavis Cox and Wroe Alderson, eds., (Chicago, IL: Richard D. Irwin, 1950).

(9) Edmund McGarry, "Some Functions of Marketing Reconsidered," in Theory in Marketing, Reavis Cox and Wroe Alderson, eds., (Chicago, IL: Richard D. Irwin, 1950).

(10) Wroe Alderson, Marketing Behavior and Executive Action, (Homewood, IL: Richard D. Irwin, 1957).

(11) Richard Lewis and Leo Erickson, "Marketing Functions and Marketing Systems," Journal of Marketing, Vol. 33 (July, 1969), pp. 10-14.

(12) Same as Reference 1.

(13) John Howard, Marketing: Executive and Buyer Behavior, (New York: Columbia University Press, 1963).

(14) John Howard, Marketing Management: Analysis and Planning, rev. ed., (Homewood, IL: Richard D. Irwin, 1963).

(15) William Lazer and Eugene Kelley, eds., Managerial Marketing: Perspectives and Viewpoints, (Homewood, IL: Richard D. Irwin, 1962).

(16) Alan Andreason, "Attitudes and Consumer Behavior: A Decision Model," in Lee Preston, ed., New Research in Marketing, (Berkeley, CA: University of California Institute of Business and Economic Research, 1965).

(17) James Engel, David Kollat and Richard Blackwell, Consumer Behavior, (New York: Holt, Rinehart and Winston, 1968).

(18) John Howard and Jagdish Sheth, The Theory of Buyer Behavior, (New York, NY: John Wiley, 1969).

(19) Francesco Nicosia, Consumer Decision Processes: Marketing and Advertising Implications, (Englewood Cliffs, NJ: Prentice-Hall, 1966).

(20) Ewald Grether, Marketing and Public Policy, (Englewood Cliffs, NJ: Prentice-Hall, 1966).

(21) Lee Preston,ed., Social Issues in Marketing, (Glenview, IL: Scott, Foresman and Co., 1968).

(22) Same as Reference 1.

(23) Philip Kotler, "The Major Tasks of Marketing Management," Journal of Marketing, Vol. 37 (October, 1973), pp. 42-49.

(24) Philip Kotler and Sidney Levy, "Broadening the Concept of Marketing," Journal of Marketing, Vol. 33 (January, 1969), pp. 10-15.

(25) Wroe Alderson, Dynamic Marketing Behavior, (Homewood, IL: Richard Irwin, 1965).

(26) George Stigler. "The Division of Labor Is Limited by the Extent of the Market," Journal of Political Economy, (June, 1951), pp. 185-193

(27) J.A. Schumpeter, The Theory of Economic Development (trans. by R. Opie), (Cambridge, MA: Harvard University Press, 1951).

(28) Karl Popper, The Logic of Scientific Discovery, (New York, Harper Torchbooks, 1965).

(29) Chester, Barnard, The Functions of the Executive, (Cambridge, MA: Harvard University Press, 1938).

(30) James March and Herbert Simon, Organizations, (New York, NY: John Wiley, 1958).

(31) James Thompson, Organizations in Action, (New York, NY: McGraw-Hill, 1967).

(32) Same as Reference 25.

(33) Same as Reference 29.

(34) Same as Reference 30.

(35) Same as Reference 31.

(36) Mancur Olson, Jr., The Logic of Collective Action, (Cambridge, MA: Harvard University Press, 1965).

(37) Wroe Alderson, "Survival and Adjustment in Organized Behavior Systems," in Reavis Cox and Wroe Alderson, eds., Theory in Marketing, (Chicago, IL: Richard Irwin, 1950).

(38) David Gardner, "Is the price-quality relationship important?", (Urbana, IL: University of Illinois, College of Commerce, Faculty Working Paper #186, 1974).

(39) John O'Shaughnessy, "The Influence of Personal Communication on a Buyer's Choice Criteria in the Salesman/Buyer Dyad," in Jagdish Sheth, ed., Models of Buyer Behavior, (New York, NY: Harper and Row, 1974).

(40) Same as Reference 11.

(41) Francesco Nicosia, "Marketing and Alderson's Functionalism," Journal of Business, (October, 1962), pp. 403-413.

(42) Same as Reference 18.

(43) Same as Reference 27.

(44) Karl Weick, The Social Psychology of Organizing, (Reading, MA: Addison-Wesley, 1969).

(45) S.S. Stevens, "Psychology: The Propadeutic Science," Philosophy of Science, 3 (1936), 90-103.

(46) Abraham Kaplan, The Conduct of Inquiry, (Scranton, PA: Chandler Publishing, 1964).

(47) Karl Popper, Conjectures and Refutations: The Growth of Scientific Knowledge, (New York, Harper and Row, 1965).