# Flemming Hansen's "Consumer choice behavior" - a review article 1)

## By Folke Ölander<sup>2)</sup>

Flemming Hansen's recent book (N.Y.: Free Press, 1972) is a voluminous work and has a very varied content. Most of this article will be devoted to a summary of Hansen's theoretical standpoint as it is divulged in the book and to a critical scrutiny of his model-building. Space considerations force me to ornit in the review a detailed commentary on the design and statistical methodology used in Hansen's experimental studies.

The author states the purposes of his study in more than one place. In the Preface, we are told that the book serves three purposes: to present a general model of consumer behavior, to relate existing evidence to this model, and to present findings from a number of experiments especially designed to test crucial aspects of the model. A little later, on p. 15, the aim is said to be "to explore the possibility of improved models of markets". In my opinion, however, the book mainly deals with the first set of three (although the author is sometimes influenced by the fourth aim). There are sections dealing with what the author terms "integrated models of markets" both at the beginning and towards the end of the book, where attempts are made to explain how one could go from models of individuals to those of markets. Nevertheless, the bulk of the book is devoted to outlining a model of individual behavior in very simple choice situations, and to an exposition of the author's own and a large number of other empirical studies on the individual level. At least to the reviewer - biased as though he may be, he himself a psychologist - these parts are also the central and most interesting ones.

In the first part of the review, a summary of the book's content is attempted. Most of the appraisal follows in the later part of the article.

<sup>1)</sup> This article is based on remarks delivered as the faculty's opponent at Hansen's "doktorsdisputation" (public defense of his thesis) at the University of Lund, April 29, 1972.

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## 1. A summary of the book's content

## 1.1. Basic concepts

In the introductory chapter, a number of reflections are made on the marketing system as it is functioning in capitalist societies and on how it should be changed – if changes are deemed necessary. From the point of view of disposition, these passages are quite disconnected with the remainder of the chapter; as to the content of the author's conclusions on this point, I will return to them in my assessment of the book. Then follows an insightful discussion and comparison of the formal structure of models used in economics and psychology. Among other things, the author makes some illuminating remarks on the role of so-called intervening variables within psychological models. In the final part of the chapter, some elementary models of markets are sketched.

In the second part of the book, the author outlines what I would call a taxonomy of the behaviors and the environmental conditions that are of importance if the aim is to develop models of consumer behavior, models which in turn will serve in the development of models of markets. In Ch. 2, various response variables are classified. The author makes a distinction between behavioral responses and internal responses. Behavioral responses are in their turn divided into a) purchase, b) consumption, and c) communication behavior, a classification which is essential throughout the book. The internal responses are divided into a) exposure responses, which the author characterizes with reference to such changes in the individual's beliefs, values, and intentions as follow upon exposure to marketing communication, and b) deliberation responses, reactions which have other proximate causes than exposure to marketing communication but which also lead to internal changes in beliefs etc.

In this chapter, the concepts conflict situation and choice process are also introduced for the first time, terms which are central in the author's conceptual scheme. When a response (reaction) ends, either because it is completed or because it is interrupted for some reason, the individual must make a choice between several alternatives; he must choose a new behavioral response or an internal response. When the individual is confronted with several alternative actions, he finds himself in a conflict situation, and the behavior (the term behavior is then used in a very liberal way, but I am following the author's own usage) displayed in such a conflict situation is labelled a choice process. The author asserts that the more aggregated behavior which is of primary interest in the study of consumers (like purchasing, consumption etc.) can – and must – be traced back to choices in these very simple, molecular conflict situations.

Hansen makes a very definite distinction between choice processes and

decision processes. A decision process which leads to a certain purchase of a certain product is thus thought to be composed of a chain of choice processes, where certain choices lead e.g. to the procuration of information, others to cognitive restructuring, others again to the choice of a store within which to make the purchase etc. (The reader is left a bit uncertain as to whether an internal response of the cognitive restructuring kind would be sufficient, according to the author's theory, to end a choice process.) Most of the theoretical discussion in the book is, however, dealing with choice processes rather than decision processes.

In the following chapters, the choice process is dealt with in more detail. A choice process, it is maintained, consists partly of the selection of a certain response, partly of activities just before and just after this selection. These activities can be devided into exploration and deliberation.

In Ch. 4, the reticular arousal system is brought into the picture. Consumers-probably other human beings as well – spend different amounts of energy on various choices, and these differences must be explained in terms of varying levels of motivation at the various occasions. The development within physiological psychology has pointed to the existence of a motivational centre in the brain, the reticular arousal system (RAS). One of the most important functions of this system is to determine the individual's arousal level. One of the main features of Hansen's model is that both the initiation and the extensiveness of a choice process is governed by the RAS, i.e. the amount of deliberation and exploration that precedes the choice, the way the response is selected etc. are all depending on the amount of arousal at the time. Hansen describes the reticular system and the conditions - within the environment as well as within the individual's physiological and cognitive make-up – which regulate the level of arousal (activation). When the system is activated, a number of cognitive events take place; the extent of them depends on the degree of perceived uncertainty about what to do in the situation and on the perceived *importance* of the problem, i.e. the individual's involvement in the situation. Uncertainty and importance together determine the amount of cognitive conflict which prevails; the more conflict, the more stimulation of the RAS and thus the more arousal. Now findings from several areas of research - from physiology to social psychology - indicate that man is best off if he stays on an intermediate level of readiness/arousal/activation. If you are constantly too activated, "the bodily equipment wears out very soon", as Hansen puts it. However, not at all to be activated or alert is also bad if you want to adapt to a constantly changing environment; therefore there exists an optimal arousal level (the height of which may, however, vary from one occasion to another). Optimal arousal level thus corresponds to tolerable (preferred) level of conflict.

In Ch. 5 the author interprets a number of research results in terms of the notion of optimal arousal. In a broad and interesting sweep he covers a wide variety of research, e.g. level of aspiration theory, studies of "perceived risk" particularly associated with the Harvard group of consumer researchers, and dissonance theory. One of the consequences for the study of choice processes is the idea that individuals who have a low level of arousal will try to discover new alternatives or in other ways complicate their choice processes (through exploration, search of information etc.). An individual who is highly activated and already in a state of strong conflict will attempt to relieve himself from it by making a final decision or by reducing the incertainty or importance of the decision in other ways (again by some kind of exploration).

The response chosen in a given situation depends on which cognitive elements are activated, *salient*, in the choice situation. Many factors determine which cognitive elements and concepts are activated, and this is discussed in Ch. 6. For the first time, the author here advances his thesis that the relevant cognitive structure in studying consumer behavior consists of a) the perceived choice alternatives, b) the evaluations associated with various concepts, and c) the relationships between the choice alternatives and the positively or negatively evaluated concepts. The strength of the latter relationships can be referred to as the perceived instrumentality of the alternatives.

#### 1.2. A model of individual consumer choice behavior

In Part Three, "the model" is outlined. The model is aimed at explaning – at least on the theoretical level – how and when consumers enter into situations where they make choices, which alternatives are considered, which factors influence the evaluation of the alternatives, and how various factors interact in the final choice of an alternative. During the course of a choice process, response alternatives are compared. The consumer asks himself, as it were, how much conflict will remain if choosing one or the other of the existing alternatives. If he finds no alternative which sufficiently reduces the experienced conflict, the probability is high that he devotes himself to exploration and deliberation, involving the search for new alternatives or perhaps the reassessment of the perceived qualities of the existing alternatives. (It should be noted that high conflict can come about for two reasons, either because several choice alternatives are attractive, but very similar in attractiveness, or because no alternative is sufficiently attractive.)

Even if a person first seeks refuge in exploration and/or deliberation, gradually the attractiveness of such activities will decrease, and a choice finally be made. Sometimes, the response chosen will only be a commitment, an inner or outer obligation to take action at a later point in

time. Choices made among alternatives that all are unattractive will probably lead to the conflict remaining even after the choice.

Later, another taxonomy is introduced. The author wants to make a division of choice processes into three types: rational, semi-complex and clue-guided choices. The author conceives of a hierarchy, from more complex to less complex choice processes. The more conflictladen a choice situation, the more important it becomes, and normally this leads to a more thorough choice process (although one can conceive of cases of extreme conflict, where defensive reactions rather than careful problem-solving take place). Various models for very thorough decision-making - models frequently based on normative decision schemes – are described in the chapter in a knowledgeable way. However, Hansen assumes that consumer choices are seldom of such a complexity that the consumer has to make "rational" decisions. It is enough with semi-complex choice processes, which are characterized by the fact that they do not contain a large number of steps when it comes to the evaluation of the attractiveness of choice alternatives; the alternatives become directly associated with the individual's values without the assistance of intermediate concepts like outcome structure, subjective probabilities, belief and maintenance matrices etc. When very little conflict is involved, it is possible to conceive of very uncomplicated processes: clue-guided choices. Only a few concepts are then salient in the choice situation, no explicit reference to values is made, and the consumer acts on the basis of some single clue. Frequently, of course, this is due to the fact that the individual has previously experienced similar conflict situations. However, the semi-complex processes are in the focus of this book, both in the empirical part and in the subsequent review of the literature.

#### 1.3. Experimental research

In order to "verify" the proposed model of consumer choice processes, the author has carried out a number of laboratory experiments. (I would suggest that the author's use of the term "verify" is rather assuming and a bit unfortunate, considering the after all rather limited scope of the empirical studies.) The aims of the experimental studies are a) to investigate whether it is possible to predict choices among products with the help of ratings of product attributes and the positive or negative values attached to these attributes, and b) to give some insight into the structure of the choice process (the number of alternatives and values appearing in a choice process, the nature of exploration and search, the existence of post-choice conflicts etc.).

The experimental subjects – students in New Hampshire – were asked to imagine that they were in certain described situations and – in most cases – to report how they thought that they should choose if they

actually found themselves in the situations. In one case, for instance, the subjects were asked to think of themselves as planning a vacation in Europe, and to decide whether to go by boat or by plane. In no cases except one were tangible outcomes associated with a choice of one or the other of the alternatives. The subjects had to make a number of ratings of the various alternatives; in certain experimental conditions before they made a definite choice, in other conditions after making the final choice.

Some conclusions drawn from the experiments were that it is possible to predict choices among product types and product brands with the help of ratings of instrumentalities and values. Certain insights into the inner structure of choice processes were also obtained. The data suggest, according to the author, for instance that the number of salient choice alternatives decreases as the choice process proceeds and that only a limited number of values become salient during choices of consumer goods. (For other conclusions, see a summary on pp. 277–279 of the book.) The exploration behavior in the choice situations employed was difficult to interpret. Therefore, an additional experiment was carried out, where exploration, deliberation, and choice time were especially put into focus. A clear relationship was found between the degree of conflict inherent in a choice situation and the amount of deliberation and exploration taking place.

## 1.4. Decision processes and models of markets

The penultimate section of the book, entitled "Consumer decisions and market behavior", has a rather heterogenous content. In the first chapter of that section, Ch. 14, a discussion of decision processes, i.e. sequences of choice processes, is begun. Various models, well-known to most students of consumer behavior (Rogers' adoption model, the so-called AIDA models etc.) are described. The discussion resolves itself into a taxonomy of decision processes, primarily based on two classificatory grounds: first purchases versus repeated purchases, and durable products versus nondurable products. Durable products are also divided into major and minor, and nondurable products into infrequently and frequently used.

In the following chapter a very thorough literature review is given of what is known about decision processes concerning in particular "first purchases of major durables" and "repeat purchases of frequently used nondurable products", probably the most and least complex of all decision processes, according to the author. In Ch. 16, an attempt is made to present a list of all the values and instrumental perceptions that might govern consumer behavior in the most varying situations. In essence, what is contained in this chapter is a comprehensive account of a very large number of studies in various research traditions from

consumption function studies to opinion leadership research. The connection to "values and instrumentalities" as treated earlier in the book is quite vague, however. On the whole, this is the most textbook-like part of the book (together with Ch. 17, containing a review of studies of collective consumer decision-making).

In Ch. 18, a simplified market model is sketched. The author there attempts to discuss the aggregation problem arising when a number of observed individual choice processes have to be summarized into pictures of markets; the time element is also brought in and the concept "market equilibrium" introduced.

In Ch. 19, again a textbook section is included. A large number – not less than 28 – of models of consumer behavior are described in standardized terms. The terminology is based on some of the taxonomies introduced earlier in the book. The systematic review of all these models may have some value in itself but constitutes a rather isolated section of the book.

The final chapter is short. It contains the discussion of how the variables introduced in the previous chapters could be operationally defined and measured. Simulation possibilities are touched upon, as well as to what extent models of the type Hansen has suggested can be of use in so-called management-oriented information systems.

## 2. Some critical notes and a general assessment

## 2.1. Formal aspects and composition

Some formal deficiencies of the thesis will probably irritate readers. One complaint could concern the lack of an index of authors. The use of the book as a source for locating descriptions and comments on studies and models in various areas of consumer research is made much more difficult for this reason. Then there are not too small a number of misprints, faulty or lacking references etc. The latter errors are sometimes bothersome, as when literature referred to in the text is not listed in the bibliography or when cross-references to other pages within the book turn out to be faulty. Helson's well-known concept of the adaptation level is constantly referred to "adaption level". On p. 56, the author takes over a classification of information stimuli from the Swedish market researcher Jarko Cerha, and uses this classification rather extensively in later sections of the book. Hansen seems to have misunderstood Cerha's terminology, however, or to have introduced changes into it without notifying the reader: whereas by Cerha "tertiary media" stand for personal communication, in Hansen's version "tertiary" is used to denote information acquired in stores, at exhibitions etc., for which class of stimuli Cerha uses the term "distributive media".

To the reviewer, the composition of the whole book seems a bit curious. It is odd that the author has chosen to put the survey of much of the existing knowledge concerning consumer behavior as late in the book as it appears. A more profitable arrangement would probably have been to put the literature survey as a first section of the book, delineating a background with the help of which the author could have made his case for the necessity of a closer study of the micro processes involved in consumer choice behavior. The chosen arrangement is even more astonishing as the model developed in the first part of the book is used very little in the literature surveys. To take one example, in Ch. 15 the steps awareness-interest-evaluation-trial-final adoption are used to describe a consumer decision process in the area of first purchases of major durables. One would expect these terms to have some connection with deliberation, exploration etc., concepts used in the author's own model, but as far as I have been able to see, no attempts are made to make such a connection. In the same manner, on p. 321 the author talks about problem recognition as the first step in a decision process for repeat purchases of nondurables. No attempt is made, however, to connect "problem recognition" with "conflict arousal" or other features of the author's earlier developed model. Generally speaking, then, most readers will probably be disappointed - after having read the interesting discussion in the introductory parts of the book – to find that the author does not find it possible to describe the currently existing body of research in the terms he has himself introduced.

## 2.2. Variables and concepts

Many of the concepts that Hansen has introduced into his basic model are well worth discussing, both as to their epistemological status and as to the possibilities of finding operational measures for them (not always an easy task, to be sure). I will have to delimit myself to a few examples.

Exposure response is one of the more fuzzy concepts used, to this reviewer's mind. It is one of the responses that can be made in a choice situation, according to the model. It is first discussed on p. 34, where it is said that an exposure response can appear as a change in beliefs, values, or intentions following exposure to marketing communications. (I am at a loss to tell whether the restriction to marketing communications has any particular significance here).

The response to exposure is rarely observable, says the author (p. 34). Therefore the measures used to study exposure reflect that exposure has taken place, or one tries to identify some internal response generated by the exposure. One can *observe* actual exposure, or one can attempt to trace the impact the exposure has on knowledge, attitudes etc. But

obviously the author means that neither of these methods really gets at the exposure response itself; they are indicators of the exposure response. What, then, in effect is the exposure response, per se? On p. 53, it is again stated that exposure does not have to be observable, whereas on p. 54, last paragraph, it is said that exposure situations – situations which involve interaction with information sources – are relatively easy to identify, "as they involve some observable action." All these statements seem difficult to reconcile. What one lacks, on these and other pages, is a clear distinction, I think, between exposure, defined in physical terms as some spatial proximity between a source of information and a receiver, on the one hand and the impact of the exposure on the other hand. The introduction of the rather mysterious term "exposure response" does not seem to help elucidating the undoubtedly complex interaction between information source and receiver.

Certain authors, like the social psychologist Milton J. Rosenberg, on whom Hansen leans at various parts of his study, make a clear distinction between cognitions concerning the extent to which a certain object can lead to a certain goal (the attainment of a certain value) - called instrumentality relations - and other cognitions concerning e.g. the object's inherent attributes and their positive or negative qualities. But Hansen makes no such distinction. For him, every subjective impression concerning an object (a product) can be termed an instrumentality relation; if the color of a car, say a green color, is affectively evaluated, then the extent to which you perceive the car as green is called by Hansen an instrumentality relation. Although no definite terminology is established in this research area, the reviewer's distinct feeling is that nothing is won, and much can be lost, by Hansen's very liberal use of terms. To say that the car is perceived as an instrument to obtain the experience of "green" seems rather strained. The use of the term "instrumentality" ought to be restricted to its original meaning of the perceived relationship between an object A and other, distinctively different objects or goals/values. For the extent to which it is perceived that A has more or less of a certain inherent property, like a color or, to take one of Hansen's cases, durability, another term should be used. Rosenberg & Oltman (1962) entitle such percepts "cognitions about the objects' 'attributes'" (cf. also Lundberg & Hultén, 1968, Ch. 3). Also Fishbein, another scholar who has influenced Hansen's thinking in this area, makes a distinction between, on the one hand, beliefs about the component parts of an object or about the characteristic qualities or attributes of the object, and, on the other hand, beliefs about the object's relation with other objects or concepts and beliefs about whether the object will lead to or block the attainment of various goals or valued states (Hansen, pp. 103-104). Some of the

ambiguity in Hansen's terminology is probably due to the fact that he makes no distinction between nominal, categorical "object-like" concepts like e.g. type of goal (or of product, profession, personality, to take other examples), and dimensional, "quality-like" concepts (attributes) like e.g. size, durability, expensiveness, etc. It is particularly with reference to the latter kind of concepts that the use of the term "instrumentality relation" is frequently misleading, as it is meaningless to talk about size or durability – without specifying a certain location on the dimension – as something which an object can be instrumental in attaining.

Further, Hansen lets his subjects state their evaluations of the products' properties in terms of the "importance" of the properties. The use of that kind of scale for assessing the "value" of a property can also sometimes be questionable. For example, with the concepts "durability" or "expensiveness", it would not always be clear, e.g. in the case of clothing, whether the consumer wants much or little of that property in his garment; an importance rating does not give that information. In general, the amount of a property that an object possesses need not be monotonically related to its attractiveness, as Clyde Coombs has taken great pains to point out.

#### 2.3. The basic model

Conflict is aroused - according to Hansen's account of a choice process - either when two (or several) more or less equally attractive alternatives are available or when no alternative is satisfactory. The question is: is it probable that exploration and deliberation are as extensive and have the same general structure - when a person is choosing between two good alternatives as when he is out looking for a first, satisfactory alternative? At least in Fig. 8.3. in Hansen's book, a summing up of much of his reasoning concerning choice processes, no distinction seems to be made between these two cases. This reviewer would not like to be overly critical on this particular point; it is obvious that one can start a discussion and a model with the postulate that if no alternative is satisfactory, conflict will occur, and a number of processes will ensue. It will be necessary, however, for future research to deal energetically with the question of how some alternatives come to be characterized as satisfactory and others (sometimes, all) as unsatisfactory. How, in essence, is it that unattractive alternatives arouse considerable conflict, and why are people not always adhering to very low aspirations, thus experiencing no negative deviations from expectancies and thus eliminating one source of conflict?

As mentioned earlier, the author makes a distinction between rational choices and semi-complex choices. It would probably have been better to talk about complex and less complex choices, because of the connotations involved in the use of the term "rational" choice. I am convinced that the author does not in any sense wish to imply that it is always less rational to use semi-complex or clue-guided choice processes.

The discussion of the consumer's environment is very product- and marketer-centered. This is evident from e.g. the distinction between three kinds of stimuli: those of which the product itself is a part, those in which the product symbolically is represented, and other stimuli of importance for the consumer's behavior. I am later to discuss to what extent it is reasonable to concentrate the study of consumer behavior to choices of products and brands. But other questions can be raised in this context as well.

It is clear from Hansen's writings that he considers all stimuli as sources of *information* to the consumer. In one sense it is, I suppose, possible to interpret all stimulation in this way: even the income of an individual or the weather, say, constitute an input of information to the individual, who processes the information in various ways and transforms it into cognitions. On the other hand, we know fully well that psychological variables (cognitions, attitudes etc.) do usually far from explain all differences in the behavior of individuals. On that ground, if for no other reason, I would tend to hold that the addition of environmental and situational variables – treated as direct influences on behavior without "passing through" the individual – do frequently add to the amount of variance explained by a model of individual behavior.

Sometimes, the environment acts very directly upon the individual, forcing as it were a certain behavior on him or preventing the same behavior. E.g., in Ch. 16, the author discusses the effects of income on consumer choices, but he then immediately starts to talk about the effects of perceived income. I am not disagreeing with his statement that subjective perceptions of financial status do influence purchasing behavior, but I am wondering whether it helps to perceive one's income - or buying power (p. 352) - as sufficient for a certain purchase, if in fact it is not large enough to provide the individual with the actually needed sum of money (assuming credit or savings not to be available)? (If such credit is available, of course, people sometimes do act on the basis of their – incorrect – perceptions of their economic status and may go bankrupt). The lacking supply of goods is another example of a potential restriction: if a particular product is no longer produced or for some reason withdrawn from distribution, there are no physical possibilities left for the individual to procure that particular product, and we then hardly need any psychological variable to account for the cessation of purchases. Sometimes the transportation system of a large city more or less forces certain inhabitants to use a car as the means of travelling to their work-place, even if some of them have cognitions or attitudes which are negative towards buying a car etc. etc.

In other cases, different kinds of behavior may be open to individuals, and cognitions, attitudes etc. may play an important role in shaping the behavior in question. Let us also assume that we can measure these psychological variables pretty accurately and explain a certain amount of differences in individual behavior by means of these measures. Even then, however, it is certainly sometimes the case that the inclusion of environmental variables add to the predictive capacity of a model. To take just one example: I strongly suspect that in many areas of consumer choice behavior, some differences among individuals can be explained by differences in factual level of education or income of consumers over and above the effects which education, income etc. have on cognitions and attitudes (and which - if picked up by our instruments for measuring the latter - on that indirect route are transmitted to and transformed into behavioral differences). The same would hold, I believe, for, say, the geographical place of residence of consumers, at least if one considers consumers residing in different regions or countries. So, whether as psychologists we like it or not, there are probably at least pragmatic reasons for including in an all encompassing model of consumer behavior the notion that sometimes stimuli hinder or give rise to certain responses without mediation of cognitive processes. (At the same time I do, of course, agree with the author that the inclusion of cognitive variables in models of behavior frequently do add substantially to the understanding of relations between stimuli and responses.)

#### 2.4. The experiments

The reports of the experimental studies do not contain information concerning essential parts of the experimental procedures used. There are further some errors and some carelessness in the reporting of the results, and the statistical sophistication in the analysis is not very high. These circumstances make an over-all evaluation of the experimental contributions rather difficult. Nevertheless, I will certainly admit that the author has put forward some interesting hypotheses in this part of the study, and that some valuable insights into the structure of choice processes may be gained from a perusal of the results. But of course, the articiality of the experimental situation makes any generalizations doubtful.

One point to which I particularly would like to draw attention is the fact that the author sometimes seems to interpret a (somewhat) successful *prediction* of one set of values Y (e.g., actual or simulated choices) from another set of values X (e.g., attractiveness ratings),

where X is measured prior to Y, as indicating a causal or explanatory relation (= changes or differences in X causing changes or differences in Y). This is of course a nonsensical interpretation of a correlation. Naturally, the capability of attractiveness scores to predict actual choices can be of value in many practical applications, but it can certainly not be taken as an indication that cognitive or attitude change precedes, much less "explains" behavioral change. To establish such a fact, it is necessary to show that at one point in time, only cognitive or attitude changes are present whereas behavioral changes do not occur until later though searched for also at the first occasion (see Ölander, 1969, for a closer discussion). Unless this condition holds, to predict choices from ratings is not to establish any explanation or time ordering of effects. This point is not sufficiently stressed in Hansen's discussion (see, e.g., p. 208 of his book). It is also to benoticed that Hansen rather inconsistently - never uses the term "prediction" when finding positive correlations between choices (Y) and ratings (X) in the case when Y is measured prior to X. Is it uninteresting to be able to predict attractiveness ratings from choices?

## 2.5. The purpose of the study and the choice of framework and variables

After these criticisms of specific parts of the book, I would like to return to the purpose of the study and its general content. It is said (p. 4) that to study the role of the consumer in the marketing system is interesting in itself, but "it does not warrant extensive studies." Rather, it is said, understanding of the consumer is important because it makes improved decision-making possible for the marketers, the consumers, and the state and federal officials concerned with regulating the system. I do not agree with that statement. I think the study of choice processes within the area of consumer behavior has a great intrinsic interest, irrespective of whether it is useful to certain decisionmakers. Such study can for several reasons lead to valuable insights into the general psychology of choice behavior and decision-making, some of these reasons being that economic behavior is very frequent and usually of rather great importance to the actors. Psychologists have usually frowned on studies of consumer behavior as an area for developing and testing psychological theories, but they have been unwise in doing so.

Of course, the study of consumer behavior for the purpose of serving decision-makers is also a legitimate undertaking. From reading the first and last chapters of the book, noting e.g. that there is a discussion of management-oriented information systems but none of consumer-oriented information systems, it is obvious — although not explicitly stated — that the author primarily directs himself to one particular

group of decision-makers in society, namely the marketers. And of course there is nothing improper in that either (if spelled out). Then it is also natural to concentrate on certain kinds of sonsumer behavior, namely choices among products, brands, stores etc., like Hansen does. (One can have different opinions about the present usefulness to management of individual or aggregate models of the kind that Hansen or anybody else is capable of constructing to-day, but that is another matter.)

The point I would have liked to see more emphasized in the book, however, is that if Hansen would have identified himself with some other group in society, his model and - above all - his choice of dependent variables in the study of consumer behavior might have been quite different. Seen from the view-point of, e.g., government or consumer organizations, it is not at all certain that the choices to which Hansen devotes most of his attention, would be the most interesting to study, to predict and to influence. In a brief section in Ch. 15 (pp. 343-345), the author makes some very cogent points concerning the studies (or, rather, lack of studies) dealing with the interaction among purchase, consumption, and communication. He points out that very few studies have been carried out concerning consumers' priority patterns among goods, their budgeting habits, and, in general, the process of allocating family income. It is my contention that these processes would have been more in the central focus of the book, had the author identified himself with other decision-makers. In Ch. 15, decision processes are classified in terms of differences among product types, and this choice is also influenced, I think, by the decision-makers' viewpoint. When in Ch. 18 he makes some attempts at aggregation, it seems quite natural for him to aggregate over consumers for a single product rather than to aggregate over products for a single consumer: another influence of the perspective chosen for the study, to be sure. I doubt very much that a consumer educator would agree, e.g., with the statement on p. 16 that "consumption behavior is important because subsequent purchases are influenced by previous consumption" (sic!). He might have preferred to say that purchasing behavior is interesting because it has some impact on consumption behavior. And I am certain that not all consumer educators - or for that matter, consumers would agree with the statement on p. 22 that "basic motives are normally satisfied equally well by most of the alternatives the consumer considers." Recent research in Sweden (The Low Income Commission, "Låginkomstutredningen") indicates that when it comes to food habits - even in an affluent country like Sweden - 41 % have bad meal habits, about 25 %, according to nutritional calculations, have an inadequate consumption of meat, fish and eggs, 56 % eat so little of vegetables and fruit that they are stated to be clearly below the minimum satisfactory level etc. One can take issue with these specific figures, but if we study consumption patterns rather than choices of single products, most observers would probably tend to agree that even basic motives are not always taken care of by present consumption habits. If people act primarily on the basis of only the affective values of products (p. 22), there might be a need for a model explaining why this is so, why basic motives do not always dominate the individual's behavior. In a study of consumption patterns, perhaps also sociological factors, like group norms, cultural values etc., would be given more place than in models of the Hansen type, which attempt to explain single choices or decisions.

A final example. On p. 15 the author states that "a consumer can be seen as a unit that receives some input (stimuli) from the environment and produces a certain output (responses)." It is a rather passive and bleak picture that Hansen is here painting of the individual. And it is interesting - and in line with this passive picture of the consumer to see that among the communication responses that he is discussing in his book, most of the space is devoted to communication from one consumer to another. The possibility that consumers might want to communicate with the producer or retailer in order to change the behavior of the latter is touched upon but only in a few sentences, as far as the reviewer has been able to see. E.g., in Fig. 1.5. - the author's most extended market model - there is no feedback from the market to the marketer, certainly not by way of communication. And there is no discussion of the circumstances under which such communication takes place and under which it does not take place. Again, I sustain, a result of the perspective chosen for the study.

To emphasize once more the gist of my critique: I have given these different examples not in order to complain that Hansen has concentrated on the single choice or decision process — it is immensely difficult to study and explain more complex behavior. But it would have been more satisfying, had the author shown more awareness of the fact that the starting-point of a research undertaking does influence the whole frame of reference, and had he stated more explicitly that his selection of independent as well as dependent variables is due to his management-oriented outlook. Households and state and federal officials, the other decision-makers Hansen apostrophizes as interested in understanding consumers, might very well have expected something else of "a general model of consumer behavior" (to quote from the Preface).

This reviewer would also like to argue with the author on many of the views expressed in the section "The influence of the marketing system upon society" (pp. 4-7), where Hansen gives his personal views on good and bad ways of regulating a marketing system. First: isn't the

marketing system a part of the society? (Society is said to be "interested" in the marketing system; what the author wants to state, presumably, is that certain groups in society - government, other authorities, various organizations etc. – are "interested"). But more important: the views that the author expresses in this section are heavily valueladen. I could agree that it is a good thing for an author to declare his own values at the start of a book. In "Consumer choice behavior", however, many of the value statements are stated as matters of fact rather than as value expressions, such as "basically, marketers adapt to consumers regardless of how they behave" (p. 6), or "the creation of a business sector, dominated by consumer corporations, employeeowned corporations or nationalized companies etc. may have such drastic effects upon society that it becomes questionable whether such change really is wanted by a majority of the population" (p. 5). It is also suggested without further explication that legislation on consumer issues "often has a limited effect or is burdened with significant secondary effects," i.e. of a negative nature (p. 5-6), and that the complete prohibition of television advertising would make marketing more expensive (p. 6) etc. If these are intended as factual statements, surely at least they would have to be supported by evidence and references in view of their controversial content. The term "efficiency of the marketing system" is also used without any explicit definition. This reviewer is rather surprised at the inclusion in the book of this particular section - it certainly does not seem to be necessary to the author's subsequent model-building.

## 2.6. A general assessment

After this prolonged review, let the reviewer summarize his impressions. (Obviously, they are the impressions of only one reader, and as such quite subjective; I am certain that there are many ways of perceiving and using this many-faceted volume).

The theoretical part of the book – the survey and integration of psychological research around the concept of optimal arousal and the development of a model of choice behavior – has certainly intrigued this reviewer most. I cannot maintain that all parts of the exposition of the model are crystal clear; I have tried to point at some difficult passages in this review. But at the same time I think it is very important that researchers are allowed to write about these immensely difficult problems even before every detail is finely and finally chiselled, and every definition formally unobjectionable. The question is whether such a perfected work would not be of less interest than a wide-ranging discussion and exposition of the Hansen type. By introducing a number of so-called open concepts into his model, I am pretty certain that the author will get readers to start thinking on their own concerning the

concepts and the possibilities of operationally defining them. The model might very well give rise to interesting experimental work that will clear some of the fog around choices and decisions. In particular, I find it an asset that the author has tried seriously to grapple with those processes which start off a choice or decision sequence; we have a lot of literature dealing with how choice processes proceed but very little dealing with the pre-choice phase, and here Hansen's contribution might very well stimulate others also to think harder about that problem area, where very few psychologists have dared to tread.

The latter part of the book, including the construction of models of markets, this reviewer is hardly competent to evaluate. Let me just indicate my suspicion that the way is long from the model of a single choice process to the simulation of the consumer behavior of whole populations in the same terms. In my opinion, on this issue the author is rather over-optimistic in his final chapters, and the aggregated models that are sketched there do not add much to the reviewer's hopes for the near future in this area. Some high-flown terminology is also rather unnecessarily introduced in the later chapters, such as "stable dynamic equilibria" (p. 345), for some rather simple, perhaps trivial, notions.

The experiments that the author has carried out are in many ways interesting and shrewdly planned, but the methods used make at least some of the hypotheses difficult to test. Also, the use of simulated choices, the rather artificial choice setting, and the use of university students contribute to my impression that it is difficult to tell whether the experiments – quite irrespective of the actual results – can be said to *verify* the model (the author's aim, see p. 225). This is not to say that the experiments should not have been carried out – the heuristic value for theoretically bent researchers of visits to the lab should definitely not be underestimated.

The introductory part I have already evaluated, partly on the basis of my own personal biases, but also on the basis of the very serious and important point, that decision-maker viewpoints always influence the construction even of descriptive models. In this respect, the present book is no exception.

### References:

- 1. D. Lundberg & O. Hultén: Individen och massmedia, EFI/Norstedt, Stockholm, 1968.
- M. Rosenberg & P. K. Oltman: "Consistency between attitudinal affect and spontaneous cognitions", pp. 485-490 in *Journal of Psychology*, 1962, Vol. 54.
  F. Ölander: "Sambandet mellan attityder och beteende ett mångfacetterat problem", pp. 28-46 in *Markedskommunikasjon*, 1969, Vol. 6, No. 2.