

## PRODUCT DISPOSSESSION: A CONCEPTUAL APPROACH

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### Abstract

Long neglected, the field of product disposal is gaining recognition. The need for conceptual clarification is immediate if the area is to merit further inclusion in the literature on consumer behavior. The concepts of dispossession and its velocity are developed within the context of overall consumption activity. Exploratory research provides empirical evidence of the ideas presented.

### Introduction

A household has been likened to a physical input-output system that allocates energy to six general areas of activity: work, play, mental and spiritual development, acquisition, consumption/usage, and dispossession (Burke, Conn, and Lutz 1978). Typically the realm of consumer behavior, and therefore marketing, has been viewed as restricted to acquisition, usage, and dispossession. These three activities, together, form a type of chain that depicts overall consumption.

Recently, growing concern has been expressed (Hanson 1980; Jacoby, Berning, and Dietvorst 1977) about the dearth of research on the various facets of consumer disposal behavior. Consumer behavior literature, rather, has appeared to focus on acquisition and usage behavior. While understanding acquisition and usage behavior is indeed an important step in understanding overall consumption, it is only part of the picture. A thorough investigation and understanding of disposal behavior is paramount to a complete understanding of the entire consumption process.

Admittedly few in number, the studies that have been undertaken in the area of product disposal have also suffered from being limited in scope. Primary attention appears to focus on the disposal of nondurable goods. Various researchers (Hollander 1978; Rathje and Hughes 1978; Wallendorf and Reilly 1983) have utilized analyses of the physical remains of consumption activity to track overall consumption patterns. This approach, which at times has incorporated searches through garbage cans as a research methodology, has proven enlightening with respect to understanding the consumption patterns of primarily nondurable items, albeit somewhat distasteful for the researchers.

Other research focusing on product disposal has focused on its effects on the environment (Rathje, Harrison, Hughes, and Jernigon 1976; Rathje and Hughes 1978; Zigmund and Stanton 1971). This vein of research has been primarily concerned with the effects of product disposal from a normative perspective, questioning the societal impact of the behavior.

While existing research represents an important beginning to a complete understanding of product disposal and thus overall consumption activity, there are a number of issues that continue to require attention. Careful definition and delineation of the multiple concepts involved is, most logically, the place to begin. It appears that currently, however, the issue of what product disposal is and its role in overall consumption remains unclear.

### Definition and Delineation of Product Disposal Concepts

While the consumer behavior discipline has been lean in research on the topic of product disposal, there also appears to be a lack of rigor in the usage and delineation of the concept. The issue may have gone beyond the point of mere semantics, to a position where clarity of meaning is at stake.

Jacoby and his associates (1977) spearheaded thinking on the taxonomic development of the area of product disposal by presenting a taxonomy for describing consumer "disposition" (their word) behavior. They list the three main components of disposition as:

1. keep the product;
2. permanently dispose of it; and
3. temporarily dispose of it.

This taxonomic formulation suggests that Jacoby and his colleagues include consumption/usage (as reflected by category 1 as part of what they call disposition. Others have followed the same tack. DeBell and Dardis (1979) consider disposition (of disposed appliances) to cover categories of: dealer removal; gave away; used elsewhere in the home; sold; donated; and traded in. All of these refer to outright disposal with the exception of "used elsewhere," which really belongs in the category of goods that continue to provide utility to the household. Burke, Conn, and Lutz (1978) also tend to lump storage along with outright disposal decisions. In their investigation, with the sole exception of storage of product, all the disposition decision options were oriented to getting rid of the item permanently--namely, discard it; sell it; donate the item to charity; give it to a friend or to a relative; and trade it in on a newer model.

In retrospect, these researchers, as well as Hanson (1980) seem to have used the term disposition to cover both outright disposal and cases of continued usage. At other times, however, they have employed the term disposition to mean outright disposal. Consequently, disposition has not always been delineated to encompass product usage; rather, it appears to be specified as a separate (though related) activity. For example, Jacoby (1976) defines consumer behavior as the "acquisition, consumption, and disposition of goods, services, time and ideas by decision-

making units." In a similar vein, Hanson (1980) has identified the three domains of consumer behaviors as: (1) acquisition, (2) consumption, and (3) disposition. He has presented a paradigm of disposition in the development of which he has reviewed and integrated concepts from acquisition and consumption that may "aid" in the understanding of disposition processes.

In summary, it would appear that confusion has resulted from using the term disposition variously to refer to either the whole of post-acquisition household decision making or only a part of it, i.e., disposal.

Another problem presents itself. The idea has crept into the literature that products that are rented or loaned out (Jacoby 1976) or even stored (Burke, Conn, and Lutz 1978) are disposed of. This would present the paradox that the item is still on the household inventory and presumably produces utility, but at the same time is considered disposed of.

Yet another difficulty arises when disposal is linked automatically to replacement. Thus, disposal has been defined as "the action taken by the owner when he decides to replace an appliance, regardless of the motive" (DeBell and Dardis 1979, p. 384). Product disposal does not necessarily have to be contingent upon replacement; indeed, as indicated later in this paper, this symmetry of decisions is not always the case.

With a view to sharpening future research of product end-processes, it would be well to reserve the term disposition to refer to post-acquisition activities of: (a) keeping the product (either by way of usage, storage, or other temporary disengagement such as rental or loan); and (b) permanent disposal with no thought of recouping the item. Further, in order to minimize indiscriminate identification of the term disposition with outright disposal, the term dispossession is suggested here to cover the latter. To dispossess literally means to put out of possession. Thus, a commodity that is dispossessed is that which no longer in any way adds to the total utility of the household. Conversely, if a product or service contributes to aggregate household satisfaction, it is still part of the household and has not been dispossessed.

### Dispossession

In the dispossession mode, households dispose of inventories of products that have been at least partly consumed or that are no longer required. This activity takes several forms, ranging from the process of bequeathal and gift to other households or organizations, to outright sale or discarding of product as unusable waste. Obviously, products that are waste for one household may still be capable of generating utility for other persons. Thus, a cascade of demotion assigns products from one household to another until inevitably the item becomes completely unusable and is trashed.

Dispossession is not an empty or trivial function. From the household's point of view it brings its own feedback and reward in the shape of different modes of monetary, space, alternative form, and even psychic utility. It would be easy to minimize the role of dispossession. Compared, for example, to the commonly recognized utility generated through acquisition and usage, it might be tempting to look upon dispossession as solely a residual effect. This view would certainly be justified if the dispossession process of the household were entirely automatic in the sense that some fixed proportion of inventory is got rid of in any time period. Many physical energy systems are of this kind. The fact remains, however, that decisions to dispose of products need not be the simple reverse images of the original decisions to acquire them. Dispossession has a logic of its own.

### The Velocity of Dispossession

Dispossession decisions naturally engage the household in determination not only of what to dispossess but also at what rates. The velocity of dispossession ( $V_d$ ) is the rate at which goods are disposed of and services discontinued. Obviously, different products have different rates of dispossession. A family may turn over its main automobile every three years, but its "good china" (at a twentieth of the cost of a car) may last the entire life of the household and will then probably fall into the heirloom category. Dispossession rates will also vary depending on the household's stage in the life cycle, as well as on the pertinent demographic factors. In the first few years of the new household's existence, the greater part of consumption has to do with maintenance goods--food, clothing, fuel, etc.--from which there is a fairly recognizable waste.

As mentioned earlier, past studies of product disposal have focused primarily on these types of products (i.e., nondurables). The concept of velocity, however, expands focus to the disposal of all products acquired. Dispossession is inevitable; it is only its varying rate that distinguishes products. For example, during the household's early years, durables are being acquired and consumed. Gradually, some of the durables also begin to wear out and have to be replaced.

Clearly, then, different products have differing rates of dispossession, and, in turn, within each product category the rates will no doubt differ among consumer segments. There will be some quite pronounced effects on marketing strategy. Firms will be considered passive followers of the household disposal processes if they merely utilize their knowledge of existing dispossession rates to update and strengthen their marketing strategies. They could, on the other hand, be considered active agents for change if their promotional activities actually result in changes in the velocity of dispossession. Very little marketing effort seems to be directed at changing  $V_d$  rates directly, though if manufacturers really do build obsolescence into certain products, there may be some case for revising this view.

## The Problem of Measurement

If we are to progress to quantification of dispossession velocities it is important to specify operational definitions. Macrodissession rates present a somewhat intractable problem. Gross rates are available in the reported rates of auto scrappage and hulk collection, for example, but for most if not all other durables household scrappage rates are an unknown quantity due primarily to the absence of official registration data. If one scraps an automobile the act becomes an official statistic, but this is not true for any other durable, to our knowledge. This field of measurement is practically untouched.

For microsegments (including the household itself), recourse will have to be made to the evolving, new operational definitions in primary and exploratory research. Some of this work will open new fields. We have, for example, a great deal of information and expertise concerning consumers' intentions to buy particular durables, but very little on peoples' intentions to hold, particularly for big-ticket items like homes and automobiles. To measure these, new scales have to be devised. Furthermore, if intended dis- possession was the simple motivational or attitudinal obverse of intended acquisition, there would be no problem, but this may be so for very few commodities outside the maintenance category. Differences in rates of intended dis- possession will signal pronounced future changes in household and national inventories.

To anticipate these rates of intended dispossession, an appropriate measure of anticipated Vd will be an attitudinal measure based on stated intentions of consumers to hold particular commodities. An additional measure will be required for analysis of actual dispossession. Vd may be defined in this case as the rate at which the product is dispossessed by the household during a specified time period, e.g., one year; then, for repetitive purchases, Vd will be represented by the simple frequency of dispossession in the stated time period. For large durables and less frequently purchased items, the rate will be represented by a fractional quantity on a yearly basis. For example, a consumer who anticipates holding a product for ten years and then dispossessing of it would be represented by an anticipated annualized velocity of dispossession of .10. A consumer who did, in fact, dispose of a product in ten years would be represented by an actual annualized velocity of dispossession of .10.

### An Exploratory Attempt to Measure Velocity

Recognizing the measurement problems delineated, an exploratory effort to measure the velocity of dispossession using the processes described above was undertaken. The objective of the empirical undertaking was to assess the velocity of dispossession for different products.

## Methodology

The data were collected by means of personal interviews conducted in a major southern California metropolitan area. By design, the total sample of 258 subjects was comprised of women actively engaged in homemaking. Generally accepted randomization processes were used throughout. The majority (60%) lived in single-family residences, and the remainder in apartments or condominiums. The sample was almost evenly split between renters and owners.

The questionnaire solicited information on three durables--food processor, vacuum cleaner, and automobile--the respective products being components of the consumer's kitchen, household cleaning, and transportation inventories. The food processor was selected as indicative of a relatively "new" durable available to the consumer, as contrasted with an old standby like the vacuum cleaner. The interview contained a series of questions for each product; specifically:

- Whether the respondent currently owned the product;
- How it had been acquired;
- Its price (if purchased);
- Reasons why it was purchased;
- How long the respondent thought she would keep the item;
- Whether the respondent had previously owned the product, and if so, how it was acquired, its price, whether she still had it and the reasons for retaining it, how long she had kept it, and how and why it had been disposed of;
- The respondent's overall attitude to the product in terms of its disposability, obtained by means of a semantic differential listing of product attributes.

### Findings

Persons owning the product previously were considered to constitute that segment of the sample that had had the potential for making actual dispossession decisions. A total of 322 possible, and 256 actual, dispossession decisions resulted:

	<u>Food Processor</u>	<u>Vacuum Cleaner</u>	<u>Auto</u>
Potential dispossession decision (#)	13	123	186
Actual dispossession decisions made (#)	9	88	159
Actual as percentage of potential	69	72	86

Persons currently owning the product were considered to constitute the segment of the sample that could accurately anticipate a dispossession decision.

	<u>Food Processor</u>	<u>Vacuum Cleaner</u>	<u>Auto</u>
Presently owned (number/percent)	86/33	205/79	230/89

The anticipated as well as the actual dispossession velocities have been computed and listed in [Table 1](#).

TABLE 1  
DISPOSSESSION VELOCITIES  
(ACTUAL AND ANTICIPATED)

	Annualized Velocity				
	.05 or less	.051 to .10	.101 to .20	.201 to .333	.334 to 1.0
(Reported in Percentages)					
<b>Food Processor</b>					
Anticipated	15	39	37	4	5
Actual	0	0	20	30	50
<b>Vacuum Cleaner</b>					
Anticipated	11	41	28	8	12
Actual	3	28	38	18	13
<b>Auto</b>					
Anticipated	2	25	39	19	15
Actual	0	9	20	36	35

In most instances, consumers expect to keep a food processor, a vacuum cleaner, or an automobile for 5 to 10 years before disposing of it. On the other hand, particularly in the cases of food processors and automobiles, actual dispossession occurred in a much shorter period of time (generally 1 to 5 years).

The exploratory findings suggest that consumers may think they will own something longer than they actually will in many instances. This finding would have implications for product design as well as promotional strategies.

#### Summary and Conclusions

In this paper a detailed attempt has been made to position the consumer dispossession function in the total household management process. It was shown that the term disposition has been used in consumer behavior literature to denote some generalized area of household decision making (usually consisting of consumption and disposal), and at other times to refer only to the particular subset of outright disposal activity. To eliminate confusion and help establish a more secure terminology for future research, the term dispossession was offered to be used solely for irreversible disposal activity, leaving the term disposition for use with the broader area of post-acquisition household decision making generally. Further, the concept of dispossession was based on the traditional theory of utility. The utility approach has helped obviate some of the difficulties of classification of product end-processes that have beset other studies.

A beginning has been made on providing operational statements and measures of the main quantity involved, which is  $V_d$ , the velocity of dispossession, both actual and anticipated. The work has fitted well into a continuing effort to fill the blanks in the methodological base that should lie behind a complete and general theory of consumer behavior. In this regard, viewing the household as a throughput (input-output) mechanism may prove to be helpful in putting the various flows of goods and services into perspective. The work begun here, with its emphasis

on the product inventory decision that households make, may get us closer to this generality.

Dispossession decision making has been largely ignored in the literature, partly because the decisions at the other end of the consumption chain, i.e., to acquire a product, seem so much more positive and fruitful, and partly because of the notion that decisions to dispossess are simply a mirror image behaviorally of the original decisions to acquire. We have tried to establish that this is not so and that dispossession is a behavioral set in its own right.

Much remains to be done to put flesh on the bones of dispossession theory. Future research will undoubtedly propose more sophisticated measures of velocity. Choice of mode and stated rationale for dispossession behavior need investigation. Considerable efforts must be directed at understanding the factors (acquisitional? product perception? demographics?) that account for variance in dispossession velocities.

This paper is meant as an invitation to others to begin attacking this important consumer behavior area in an effort to better understand it. The exploratory research reported here is meant to suggest that the concept does in fact offer sufficient merit to pursue investigation.

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