

CHAPTER FIVE

Product Appearance and Consumer Pleasure

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5.1 INTRODUCTION

In consumer research, a number of methods are used to determine the consumer's preference for the functional possibilities of a product. Ergonomic research in the form of user tasks can also be performed to determine appropriate designs for consumer-product interaction which will maximise task efficiency and minimise discomfort in product use. Far less is known, however, about the ways in which the more subjective perceptions and preferences of consumers, that concern hedonic product value or pleasure, can be investigated. This is most notably the case for aesthetic pleasure, derived from the appearance of a product. How does product appearance appeal to consumers and how does it affect consumer evaluations of the product? Taking hedonic product value into account will help to attune the appearance of a product to the wishes of the consumer, and thus maximise their pleasure in product possession and use.

We will now take a close look at hedonic consumer judgments and the way in which they are formed. On the basis of this we will discuss possible avenues for taking into account the hedonic product value in product design.

5.2 THE ROLE OF PLEASURE IN JUDGMENTS ABOUT PRODUCTS

A number of studies show that a hedonic product experience or pleasure can be characterised by the way in which the product is represented by consumers in their judgment of the product. In a first study, Snelders (1995) validates a measure, originally developed by Ratchford (1987), of self-reported emotionality in the consumer's choice of certain products. Using two questionnaires, Snelders shows that pleasure is one aspect of a more general involvement with products, and that it is independent of the consumer's rational involvement with products. In the two questionnaires (N=405, N=624), three scales were developed that were combinations of self-reported buying criteria. An emotional, hedonic scale contained items about 1) the emotionality of the buying criteria and the decision itself, 2) the extent to which products allowed consumers to express their

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personality, and 3) the intuitiveness of the decision.

Next to this hedonic scale, a rational scale was developed, containing items about 1) whether the criteria were logically applied, 2) whether they were based on objective product functions, and 3) whether the criteria were concrete product attributes.

Finally, a general involvement scale was created, containing items about 1) the importance of the product, 2) the amount of time and effort spent on buying it, and 3) the perception of risk in terms of what one will lose if the wrong product is chosen. Unlike Ratchford (1987), Snelders (1995) correlated these scales and found that the hedonic and rational scale were not correlated, while they both correlated with the general involvement scale. This means that consumers think of pleasure as a separate product value, unrelated to objective product functions, but just as important to them. If either the hedonic or the rational product value increases, then so does the general involvement that people feel with the product. Thus, hedonic and rational product values should be seen as complementary, as two independent aspects of a more general involvement that consumers have with products.

These findings suggest that pleasure is not simply the end result of rational deliberation. It can also point to another way in which pleasure seekers interact with products. This is demonstrated in a second study by Snelders, Creusen and Schoormans (2000). Synthetic clock radios and thermos flasks were created which systematically varied on a number of product attributes. By offering respondents a specific fraction of all the possible combinations, and by asking them to rate each combination on their degree of preference, the main effect of every attribute on the consumer's preference could be calculated (Green and Srinivasan 1978; 1990). The idea was that people who scored high on the hedonic scale would prefer products that contained attributes which described aspects of the form of the product, as it presents itself to the consumer; people who scored high on the rational scale would prefer products that contained attributes which describe how the product can be operated. The synthetic clock radios and thermos flasks both varied on a number of attributes that described aspects of the form of the product (global form, colour and form detail), and various product functions. These attributes were selected in such a way that they could be represented textually (e.g. 'clock radio has the form of a cylinder in a horizontal position') as well as pictorially (e.g. a drawing of a battery to show that a clock radio is protected against power cuts). This was to ensure that the contribution of each type of attribute (form or function) was not dependent on presentation format (pictorial or textual). The results show that people who score high on the hedonic scale are indeed more interested in the attributes that describe the form of the product, irrespective of whether these aspects are represented textually or pictorially.

Are people who pay more attention to form not thinking thoroughly about the consequences of the product form? A third study by Snelders and Schoormans (2000) shows that this is not the case. In a series of structured interviews about telephones and clock radios, 72 consumers were asked to provide arguments about why they valued certain attributes in the product (37 consumers provided 221 arguments for telephones and 35 consumers provided 217 arguments for clock radios). A substantial number of the arguments were about the pleasure the product could provide: 20%, both for telephones and clock radios, were about pleasure. This made pleasure the second most mentioned type of argument. Arguments about ease of use were mentioned most (54% for telephone and 43% for clock radio), but arguments about the finished quality or the price of the product were mentioned considerably less. It was also found that arguments about pleasure differed from the other arguments because, in two thirds of all cases, they were based on abstract attributes of the product* (i.e. qualifications such as modern design,

* As opposed to concrete attributes, which are attributes that one can easily point out in a product, like size, number of buttons, etc.

simple, automatic, etc. Arguments about other aspects for telephones and clock radios were present. The number of buttons makes the product more functional. However, these arguments are pleasure-based factors for telephones and clock radios, and these attributes.

How should we think of pleasure from more concrete attributes? Do not think of concrete aspects of the product. People think of concrete aspects of a distinct product part. Attributes, like elegant design, we can connect the product to. For example, car safety features like safety belts and big bumpers are product aspects that give a robust look of the car. Consumers may not be interested in these attributes valued by consumers. However, they may well be the case for other products. Different, more independent aspects for consumers. This possibility.

5.3 THE PERCEPTION OF PLEASURE

Some studies have investigated the perception of product, thus from the consumer's perspective. Consumers inferred pleasure from specific characteristics regarding specific characteristics of the product (by regarding the product).

Two methods were used to investigate information processing scales to determine the factors that indicate holistic information processing. The four methods are based on the impression that consumers have of the product. Items are about whether the product characteristics are pleasant. Assessment involves information on what information is recorded was made of value (which would indicate overall impression (information)).

Four studies were conducted. The number of product attributes was investigated. For example, flask, desk lamp, coffee machine, making a choice, such as

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simple, automatic, tuneful sound, etc.): 67% for telephone and 66% for clock radios. Arguments about other product aspects were based much less on abstract attributes: 24% for telephones and 28% for clock radios. In a limited number of the arguments abstract attributes were presented as the result of more concrete attributes (e.g., 'a small number of buttons makes the telephone simpler'): 7% for telephones and 8% for clock radios. However, these arguments were typically about ease of use – not pleasure. Thus, pleasure-based factors find their way into the arguments that consumers construct about products, and these are characterised by the fact that they are based on abstract product attributes.

How should we think about these abstract product attributes, which are not inferred from more concrete product attributes? We do not want to imply that abstract product attributes do not exist through some physical aspect of the product. But not all physical aspects of the product are distinct and separate product parts with clear boundaries. If one thinks of concrete attributes, like a button or a specific colour, one usually thinks of distinct product parts that have a specific quality. However, if one thinks of abstract attributes, like elegance, simplicity or safety, then this is only the case to the extent that we can connect the abstract attribute with more concrete aspects of the product. For example, car safety may be connected to a number of concrete attributes like airbags, safety belts and big bumpers, all distinct product parts. But car safety may also reflect on product aspects that are not very distinct, like some aspects of the sound of a door, or the robust look of the car. These aspects are not present in the product in a distinct way, and consumers may not be able to describe them in very concrete terms, but they may still be valued by consumers and as such establish an indistinct sense of product quality. Thus, it may well be the case that abstract attributes describe product qualities that are indistinct. Different, more indistinct product qualities may be targeted by pleasure seeking consumers. This possibility is explored in the next section.

5.3 THE PERCEPTION OF PLEASURE IN PRODUCTS

Some studies have investigated what information consumers infer from looking at a product, thus from the product appearance (see Creusen 1998). It was assessed whether consumers inferred this information by using analytic information processing (by regarding specific characteristics or product parts), or by using holistic information processing (by regarding the overall impression).

Two methods were used to assess whether consumers use holistic or analytic information processing in making a specific product judgment. The first method uses scales to determine the way in which a product choice is made. The scales include items that indicate holistic information processing and items that indicate analytic information processing. The four 'holistic items', for example, are about whether the choice is based on the impression that the product gives, and on the product as a whole. The five 'analytic items' are about whether the subject compares the alternatives on several points, evaluates product characteristics separately, and considers them in detail. The second method of assessment involves interviewing subjects about the way in which they made their choice, on what information they based each choice and how that information was derived. A record was made of whether subjects mentioned specific characteristics or product parts (which would indicate analytic information processing), or said that it was a general or overall impression (indicating holistic information processing).

Four studies were performed, in which subjects had to make a choice from a limited number of product alternatives (two or three). Products used were telephone, thermos flask, desk lamp, coffee maker, clock radio, hairdryer, and answering machine. After making a choice, subjects filled in the type of processing scales and were then

interviewed about the reasons for that choice, as described previously.

It was found that about half of the subjects in each study mentioned choice reasons that concerned hedonic (aesthetic) product value. Most of these hedonic judgments are made using holistic information processing. The results of both ways of assessing the type of processing (see above) point to this. Only a few hedonic judgments are based on a specific characteristic, such as a specific line or part of the product. However, colour is often mentioned as a basis for an hedonic judgment, although subjects often said that this played a role in the whole impression.

About one-third to one-half of the subjects in each study derived utilitarian information from a product's appearance*. Utilitarian judgments concern attributes of a more rational kind, like functionalities and possibilities, ease-in-use and durability/quality. These were mostly made using analytic information processing, based on details and specific parts (e.g. whether the display is in an easy-to-view place, or whether buttons are large enough). However, several utilitarian judgments were also based on the overall impression of the product appearance (between 7 and 15% of the subjects in each study). For example, the product gave a solid or durable impression or looked simple (not a complex shape, from which consumers infer that operation will also be simple). But most judgments that are made by using holistic information processing concern product pleasure, i.e. hedonic product value.

In these studies, some factors that influence the extensiveness of product evaluation before making a choice were investigated. These factors were the amount of knowledge about the product and the amount of time that subjects spent looking at the product alternatives. It was found that holistic information processing played a role in product evaluations, regardless of how extensively subjects evaluated the product. Analytic information processing was used to evaluate utilitarian attributes, and was used even more when the evaluation was more extensive. This means that holistic information processing plays a big role in consumer evaluation based on a product's appearance, and this is also the case when consumers have enough time and product knowledge to process detailed information. Thus, detailed processing comes in addition to global processing, and not in its place.

5.4 CONCLUSIONS AND IMPLICATIONS

It was found that many consumers derive pleasure from the form or appearance of a product. Furthermore, it was found that a large part of these judgments was made with the use of holistic information processing (Creusen 1998), and that they were based on abstract attributes (Snelders and Schoormans 2000). This points to the same conclusion, namely that it would be difficult to pin down specific characteristics that engender a certain holistic impression, as the relation with concrete attributes is not straightforward. This, in turn, may lead to problems of subjective interpretation.

How would abstract attributes, based on holistic impressions, make a consumer response more subjective? Why are they less clear when they are communicated to the consumer researcher? An answer to this question can be found in context availability theory (Schwanenflugel and Shoben 1983; Schwanenflugel, Akin and Luh 1992), where it is shown that concrete attributes can be applied to more restricted sets of situations. Since the situations to which words are applicable are learned during an individual's personal development, they must start off as a very idiosyncratic bunch of situations. Words, however, put social restrictions on our understanding of the world (after Vygotsky

* In the fourth study textual information about functionalities was presented next to the product itself. More than 70 % of the subjects mentioned utilitarian reasons, of which 40 % were based on the product appearance.

1986/1934). The more applicable, the less room. According to Fish (1999), effects are 'the product community the utterance way' (p. 301). Context is the most restrained in understanding, we can however, we may use rule make the abstract word. Schoormans (2000) have pleasure and that, in most cannot be caught by elements leaves room for abstract around us, based on a model.

Since pleasure-based since these are communicative product so that it will give. How then can we help design and perceptions? How can consumers and best suit.

A possible way to 'wanted' perceptions (the design to consumers a communicates the wanted people about associations: design communicates certain research is often done for whether the design/appearance however, not so clear from desired proposition.

Another possibility during the product development can be identified. In addition gathered and could give appearance. There are, however,

Firstly, direct comparison from the more holistic a Stapel, Koomen and Van concept or attribute with comparison standard' (p. is contrasted when consumers there may be effective visual generated that do not clear pictures with details omitted and explicit information. Another possibility, when designs between subjects.

Secondly, it is difficult characteristic will change the change in order to be. This means that, in order

1986/1934). The more restrictions that a word puts on the situations to which it is applicable, the less room there is left for the subjectivity of the meaning of the word. According to Fish (1994), social restrictions lead to 'forceful interpretive acts', whose effects are 'the production of a situation in which for all competent members of a community the utterance of certain words will be understood in an absolutely uniform way' (p. 301). Context availability theory argues that the meaning of concrete words is the most restrained in this sense. Since this will lead to a more uniform way of understanding, we can regard concrete words as less subjective. In some instances, however, we may use rules to relate abstract words to more concrete words, and this will make the abstract words as objective as the concrete ones. However, Snelders and Schoormans (2000) have shown that this rarely happens in responses that are about pleasure and that, in most cases, an abstract word describes an aspect of a product that cannot be caught by elements in the product for which we have concrete words. This leaves room for abstract words to communicate a subjective understanding of the world around us, based on a more holistic impression of the product.

Since pleasure-based human factors are based mostly on holistic impressions, and since these are communicated mostly by abstract attributes, designing the appearance of a product so that it will give a certain impression to consumers is not a straightforward task. How then can we help designers to attune the appearance of a product to consumer wishes and perceptions? How can we assess which product appearance will appeal to (groups of) consumers and best suit the value consumers want from the product?

A possible way to assess whether a certain design/appearance engenders the 'wanted' perceptions (that suit the target group, usage situation, price, etc.) is to show the design to consumers and assess which perceptions it generates and whether it communicates the wanted product value (like ease-in-use). This can be done by asking people about associations with the design, or letting them indicate the extent to which a design communicates certain impressions (like cheap/expensive or business-like). Such research is often done for packages of food products. In this way it can be assessed whether the design/appearance engenders the correct or wanted perceptions. It is, however, not so clear from this how a design can be adapted in order to better suit the desired proposition.

Another possibility is to show a limited number of product concepts to consumers during the product development process, so that the most promising product appearance can be identified. In addition, the reactions of consumers to these concepts could be gathered and could give guidelines to designers as to how to further improve the appearance. There are, however, some difficulties with this approach.

Firstly, direct comparisons between different concepts may direct attention away from the more holistic and indistinct qualities of the product (Wyer and Srull 1989; Stapel, Koomen and Van der Pligt 1997). According to Wyer and Srull 'An abstract trait, concept or attribute with no clear object boundaries lacks the distinctness to be used as a comparison standard' (p. 134). Because of this, it will be mostly concrete information that is contrasted when consumers are asked to make a trade-off between concepts. However, there may be effective ways of solving this problem. For example, concepts could be generated that do not clearly delineate distinct product parts (e.g. rough sketches or pictures with details omitted). In a concept test, such concepts would be presented first and explicit information about distinct product parts would be provided only later. Another possibility, when comparing judgments about different concepts, is to vary designs between subjects so that each subject evaluates only one concept.

Secondly, it is difficult for consumers to envision how the change of a certain characteristic will change the total impression of a product. Consumers will have to see the change in order to be able to say whether or not it is an improvement in their opinion. This means that, in order to gather valid reactions about product appearance, consumers

should be able to see many possibilities or, alternatively, to 'try out' several changes. Consumers could be shown a large number of pictures of an existing product and probed as to why certain of them are valued and others not. This would give the designer some feeling for the appearance that suits the specific target group, and what consumers infer from several aspects of the design. A computerised method which enables consumers to 'try out' several changes in product appearances is the 'Interactive Concept Test', developed by Loosschilder (1998). Here consumers can construct their 'ideal' product appearance from a limited set of options (e.g. form characteristics, material, colour), which gives the designer an idea of valued appearances. The advantage of this method lies in its efficiency in describing the variation in taste for larger samples. However, not much qualitative information can be gathered in this way that explains why consumers value a certain appearance.

Thirdly, it may be difficult for consumers to say concretely exactly what should be changed in a product concept in order to increase its hedonic value. Because a large percentage of consumer judgements that are based on the product appearance are formed by holistic information processing (see Creusen 1998), it is difficult for consumers to pin down the characteristics that influence their judgments. This does not mean that consumers have nothing to say about their holistic impressions. As the research by Snelders and Schoormans (2000) shows, consumers talk a lot about product appearance and the pleasure that it provides, albeit in very abstract terms that are almost never connected to more concrete product parts. It may therefore be worthwhile to find methods that help in the interpretation of these abstract attributes. An example of this may be the method employed by Snelders and Schoormans (2000), where consumers are asked why the abstract attributes are important to them. This can provide reasons (e.g. 'modern furniture gives me a sense of order, which structures my life, which is healthy for me'), which in turn can be used to interpret how a product should incorporate the abstract attribute (e.g. create modern chairs with clear orderly patterns). Another method is proposed by Durgee (1985) and Snelders and Schoormans (1999), who argue that opposites may clarify the meaning of abstract attributes. For example, the opposite of modern may be old-fashioned, but it may also be post-modern or classical or kitsch. Depending on the opposite, we can come to very different interpretations of what it implies for a product to be modern. A last method has to do with the possibility that problems of subjective interpretation arise because the consumer and the consumer researcher are from different communities, and a 'right' interpretation is seen as a test of competence for the researcher who breaks into the consumer community (Fish 1994). The solution for this would lie in an ethnographic study into the local meaning of certain products for members of that community (e.g. Hammersly and Atkinson 1983). As such, the design process can even be seen as an interventionist program to advance certain interests of the consumers in the local community (Thomas 1993).

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