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Results of four studies demonstrate that perceptions of how different a brand is from other brands in the product category affect perceptions of the brand's position within the category. Specifically, perceptions that a brand is strongly discrepant result in a subtyped (or niche) position, whereas perceptions that a brand is moderately discrepant result in a differentiated position within the general category. Perceptions of discrepancy are affected both by the extent of discrepancy on an attribute and whether the discrepant information is concentrated in a single ad for the brand or dispersed across multiple ads for the product. The effects associated with a subtyped position, in comparison with a differentiated position, are identified (study 1) and are found to increase with time (study 2). The subtyped versus differentiated distinction for a strongly versus moderately discrepant brand is validated with a sorting task (study 3). This distinction is shown to hold in the context of multiple discrepant brands that differ in their extent of discrepancy (study 4). Implications of the findings for a theoretical understanding of subtyping versus differentiation and for the application of positioning strategies in the marketplace are discussed.

The Effects of Brand Positioning Strategies on Consumers' Brand and Category Perceptions: Some Insights From Schema Research

An important aspect of a brand's position in a product category is how similar or different the brand is perceived to be in comparison with other brands in the product category. For positioning a new brand, especially one that is in some way different from present brands in the category, several choices are available to the marketer. First, the marketer can choose to position the brand within the overall market as a "differentiated" product. With this strategy, the brand is positioned so that it is seen as sharing important attributes or product characteristics with other brands in the category and as being superior on the differentiating or distinguishing attributes (Dickson and Ginter 1987).

A second strategy, also based on differentiating the brand from other brands, involves an attempt to create

a separate submarket or niche for the new brand. With this strategy, an attempt is made to set the brand apart from the general category rather than to position the brand within the overall market as in the first strategy. The differentiating attributes are used to create a strong perception of difference—that the brand is in a class or category by itself. A subtype is thus a brand (or set of brands) unique enough in comparison with other brands in the market that a well-defined perceptual "boundary" separates it from the other brands (Day, Shocker, and Srivastava 1979; Srivastava, Alpert, and Shocker 1984), affecting marketing behaviors such as brand switching. A key aspect of the subtyping strategy is that the brand is not perceived as a prototypical example of the overall market but rather as a specialized product, possibly appealing to a focused market (Porter 1980).

Both the product differentiation and subtyping strategies have inherent advantages. On an aggregate level, the product differentiation strategy may afford a wider market because the brand is seen as consistent with the category and therefore substitutable for other brands.

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However, by the same argument, the subtyping strategy affords a better defense of the brand's competitive position because the brand is seen as isolated from the rest of the market and less likely to be substituted for another brand. Profitability may depend on how these factors (i.e., size of the target market and sustainable competitive advantage) balance out.

In some conditions, aspects of the brand itself (e.g., physical attributes) may limit the options or situational factors (e.g., size of the target market) may determine which positioning strategy is best for the brand. However, in other conditions the differentiation and subtyping strategies can be considered options for the same brand (e.g., the positioning of Porsche 911; Schutz and Cook 1986). Communication then can be used to implement the chosen positioning strategy.

Little research has been done on the differences between the subtyping and differentiation strategies in terms of their effects on consumers, especially at an individual level. These strategies might be different only in how similar the advocated brand is perceived to be to other brands in the category on the differentiating attribute, with the subtyping strategy resulting in greater perceptions of difference. However, these strategies might also be associated with differences on other aspects of brand perceptions. Perceptions of and memory for attributes of the brand other than the distinguishing attribute might be different for a subtyped and a differentiated brand. In addition, because both subtyping and differentiation strategies position a brand as different from other brands, each strategy might work, though differently from the other, to influence perceptions of the product category itself.

The purpose of our article is to examine, at an individual level, the effects of marketing communications on brand positioning and brand and category perceptions. Specifically, we report four studies that investigate the effects of conveying strongly versus moderately discrepant information about the brand on brand positioning (a differentiated vs. subtyped position) and the associated effects on consumers' perceptions of the brand and of the product category. Schema-based research, especially research that addresses how discrepant information is integrated into present knowledge bases, is used to investigate these issues.

A SCHEMATIC APPROACH TO UNDERSTANDING THE EFFECTS OF POSITIONING STRATEGIES

Schemas are cognitive structures representing one's expectations about a domain (Bettman 1979). Over time, a consumer is likely to develop a schema or set of expectations about a product category. These expectations might include hypotheses about what are the usual values on attributes, importance weights of attributes, and how much variability there is across brands on attributes. Schemas have been shown to have a profound effect on the processing of new information.

An assumption made here is that given a new brand

related to a category (e.g., labeled a "sports car") but different from present brands, one initially processes information about the brand with one's present schema (Fiske and Pavelchak 1984). Two fundamental processes that describe how individuals can cope with incongruent information are assimilation and accommodation (Rumelhart and Norman 1972). Assimilation occurs when a new concept is integrated into the present mental schema. Accommodation occurs when a new mental schema is created or when the present schema undergoes substantial modification to interpret a new concept.

We use two models—the schema plus tag model and the subtyping model—as *exemplars* of the general approach taken in schema-based research to examine the processing of incongruent brands. Our purpose is *not* to test between these models, but merely to use these models to generate hypotheses, at an individual level, about the differences in brand and category perceptions that might underlie consumer judgments about a differentiated versus a subtyped brand. Though these models were developed originally in a person perception context, and there may be important differences between person perception and object perception (Lingle, Altom, and Medin 1984), these models appear applicable to the product context. Essentially product schemas are similar to person schemas in that they contain well-organized beliefs that guide the interpretation of new information. Product schemas may differ from person schemas in that the latter may be associated with higher levels of affect. However, there is empirical evidence of the applicability of such models (e.g., the subtyping model) to a product context (Sujan 1985).

The Process of Assimilation: Schema Plus Tag Model

As might be expected, the process of assimilation to a generic schema is likely to occur when new information is slightly to moderately discrepant from the category schema, but not when it is strongly discrepant. The schema plus tag model (Graesser, Gordon, and Sawyer 1979; O'Sullivan and Durso 1984) more specifically suggests that attributes consistent with the schema are copied from the schema into the memory representation for the new brand. Therefore, the resulting memory representation does not distinguish between consistent attributes actually stated as being descriptive of the brand and consistent attributes not stated. Brand attributes discrepant from the general schema cannot be represented in the schematic portion and instead are linked to the representation by unique "tags."

The schema plus tag model describes particularly well one's memory representation for a differentiated brand. Consistent with the general view of a differentiated brand, the model predicts that the advocated brand will be seen to share many consistent attributes with other brands in the category. The brand also will be seen as different from other brands in that its schema will contain a unique tag linking the differentiating attribute to the brand.

Based on this representation, the schema plus tag model

predicts that for a differentiated brand, memory will decline faster over time for discrepant (tagged) brand attributes than for consistent brand attributes because the former are not as strongly associated with the organizing schema. Further, the model predicts an inclination to ascribe other consistent attributes to the brand. These tendencies might explain why a great amount of advertising may be required to remind consumers of the unique attributes of a differentiated brand.

In addition to brand beliefs, brand evaluations might be influenced. Recent research has emphasized that schemas contain knowledge about both cognitive beliefs and affect (Fiske and Pavelchak 1984). Hence affect may be transferred from the general schema to the specific brand, and judgments of the overall product category may influence judgments of the specific brand.

Finally, given the process of assimilation, there is likely to be little impact of new information on the general product category schema with a product differentiation strategy.

The Process of Accommodation: Subtyping Model

As might be expected, the process of accommodation is likely to occur when inconsistencies are large and cannot be filtered out (O'Sullivan and Durso 1984; Taylor and Crocker 1981; Weber and Crocker 1983). The subtyping model (Taylor 1981) was proposed as a method of accommodation that would explain two apparently conflicting results in the schema literature—that incongruencies can be exceptionally well remembered (Srull 1981) and yet schemas are extremely resistant to change based on the new information (Taylor and Crocker 1981). The subtyping model suggests that in the attempt to reconcile inconsistent information with the schema, this information is deeply processed and well remembered. The specific process of resolution is the formation of subcategories to accommodate the discrepant instances. Thus, the schema for the category as a whole can be maintained (Crocker 1984; Taylor 1981).

The subtyping model predicts that for a subtyped brand, memory for discrepant brand attributes should be high. Further, because the brand is set apart from the general product category, there should be less tendency to ascribe attributes consistent with the product category to the specific brand. Thus subtyping, in contrast to brand differentiation, should result in greater memory for the brand's distinguishing features and possibly poorer memory for the features it shares with other brands in the category.

In addition, because the brand is set apart in a separate subcategory, there is likely to be little transference of affect from the general schema to the specific brand. Instead, if the brand is truly different and the subtype is newly formed, evaluation of the product is more likely to depend on a "piecemeal" approach (Fiske 1982; Sujan 1985), wherein evaluation is based on the attributes of the brand and how those attributes are evaluated.

Finally, a subtyping strategy is likely to affect the general product category schema. One aspect of schemas

that may be tied specifically to the process of subtyping is perception of variation among brands. Though subtypes—instances that are highly discrepant on some attribute—may not change what is considered consistent with the general schema, they may influence perceptions of variability on that attribute within the overall schema. Recent research suggests that individuals store information on perceived variability of category members (Park and Hastie 1987).

One implication of such perceptions of variability on an attribute induced by a subtyping strategy concerns the importance of that attribute. Earlier research on choice models (Nakanishi and Bettman 1974) suggests that the greater the perceived variation among brands on an attribute, the greater is the perceived importance of the attribute as a choice or evaluation criterion. Thus, the subtyping strategy might influence perceptions of the market by affecting both the perceived variability on attributes and the importance of attributes associated with the general product category.

RESEARCH HYPOTHESES

Effects of Discrepant Information on Product Positioning

The schema-based research predicts that to position the brand, a brand differentiation strategy can be implemented by using attributes that are moderately discrepant from the overall product category schema whereas a subtyping or niche strategy can be implemented by using attributes that are strongly discrepant from the general product category schema. Though this link between extent of discrepancy and positioning seems almost definitional, the relationship must be tested as a precondition for the other hypotheses we examine.

- H₁: Strong discrepancy of the focal attribute from the overall product category schema results in a subtyped position, whereas moderate discrepancy results in a differentiated position.

Effects on Memory for Brand Features

When information is moderately discrepant, consistent features of the brand are likely to be remembered better than discrepant features, especially over time, because of stronger links to the brand's schema. Consistent features not mentioned are likely to intrude from the product category schema and to be ascribed to the brand. Similarly, more inferences based on product category membership can be made about missing features of the brand. Conversely, when information is strongly discrepant, discrepant features are processed deeply and therefore are well remembered. The method of resolving the conflict—creating a subcategory for the discrepant brand—dampens intrusions of information from the overall schema into the memory representation of the brand.

- H₂: Strong discrepancy of the focal attribute from the overall product category schema, in comparison with moderate discrepancy, results in:

- a. higher recall of the discrepant features of the brand,
- b. lower recall of the consistent features of the brand,
- c. lower "false" recall of features not explicitly stated, and
- d. fewer inferences about features not explicitly stated.

Effects on Brand Evaluations

When the discrepancy is moderate and the brand is assimilated to the category schema, as in the differentiation strategy, transference of affect from the schema to the specific brand is likely (Fiske 1982). Brand evaluation is likely to be based on product category membership. Any correspondence between brand features and brand evaluations is therefore indirect and mediated by category membership. In this situation, correspondence between features and evaluations is likely to be low. Specific reasons for the low correspondence might be the separation in memory of affect from beliefs about features (Fiske 1982) or the different processes (spontaneous online processes vs. memory-based processes) used to retrieve affect versus beliefs about features (Hastie and Park 1986). However, when the discrepancy is strong and the brand is subtyped, the brand is likely to be evaluated directly on its own features and on how important the various attributes are perceived to be (Fiske 1982; Suján 1985; Suján, Bettman, and Suján 1986). In this situation, correspondence between brand features, the importance of attributes, and brand evaluations is likely to be greater.

- H₃: Strong discrepancy of the focal attribute from the overall category schema, in comparison with moderate discrepancy, results in:
- a. greater correspondence between brand features and brand evaluation and
 - b. greater correspondence between focal attribute importance and brand evaluation.

Effects on Product Category Perceptions

Two important aspects of category perception are the extent of perceived variability within the category on an attribute and the importance of attributes associated with the category. Extreme discrepancy on an attribute, in comparison with moderate discrepancy, is likely to result in greater perceptions of variability on that attribute and in greater determinance or importance of the attribute as a decision criterion. Perceptions of greater variability between brands on the focal attribute(s) also may result in perceptions that the product category, instead of being homogeneous, is composed of separate submarkets.

- H₄: Strong discrepancy of the focal attribute from the overall product category schema, in comparison with moderate discrepancy, results in:
- a. greater perceptions of variability on the focal attribute,
 - b. greater perceived importance of the focal attribute as a decision criterion, and
 - c. greater perceptions of submarkets within the product category market.

Effects Over Time

The schema-based research, especially research on the schema plus tag model (e.g., Schmidt and Sherman 1984), suggests that time consolidates the organizing schema in memory so that information consistent with the schema is well remembered and information discrepant from or irrelevant to the schema is forgotten. The increasing importance of the organizing schema over time—the product category schema in the case of the differentiated brand and the subcategory schema in the case of the subtyped brand—may therefore actually strengthen the predicted differences between the differentiation and subtyping strategies.

- H₅: The differences specified in H₁ through H₄ between a strong discrepancy and moderate discrepancy strategy are enhanced over time.

STUDY 1

Subjects

Subjects were undergraduate and graduate business students at a major eastern university. Announcements were made in classes asking for volunteers for a one-hour study on advertising. A lottery of \$100 was offered as an incentive. While signing up for the study, subjects indicated their level of knowledge, interest, and experience for a set of product categories, including 35mm SLR cameras. Subjects' responses to the knowledge, interest, and experience scales for 35mm SLR cameras were averaged ($\alpha = .71$) and subjects scoring 3 or more (where 7 was highest) were contacted for the experiment. Seventy-seven percent of subjects who signed up qualified on the basis of the knowledge cutoff and were contacted for the experiment. Seventy-five percent of subjects who were contacted kept their appointment. A total of 46 students participated in the experiment. The mean knowledge score of subjects who participated was 5.0, where 7 corresponded to most knowledgeable about 35mm SLRs.

Procedure

Subjects were run in two groups of approximately 25 in large classrooms. All three experimental conditions were conducted in each session. Three booklets, marked 1, 2, and 3, were laid out on each desk. Subjects were asked to turn first to the booklet marked 1 and read the ad in the booklet so as to form an impression of the brand advertised. After about 2 minutes, subjects turned to booklet 2, which contained the distractor task. The distractor task was constructed so that it appeared to be an integral part of the experiment yet prevented subjects from rehearsing the specific ad they saw. It was held constant across conditions. In the distractor task, "informational" and "emotional" ads were described and subjects were asked to list their thoughts about each type of ad for about 5 minutes. After completing this distractor task, which took about 10 minutes in total, subjects turned to booklet 3, which contained the dependent measures and manipulation checks. Subjects finally were debriefed,

signed up for the lottery, and left. The entire procedure took about 40 minutes to administer.

Independent Variable

Level of discrepancy. Three levels of discrepancy were developed: no discrepancy (called "consistent"), moderate discrepancy, and strong discrepancy. A moderately important attribute was chosen as the focal attribute because a very important attribute could create a ceiling effect and an unimportant attribute a floor effect on some measures (e.g., attribute importance). Pretests showed sturdiness of construction to be a moderately important criterion for evaluating 35mm SLR cameras (mean = 3.7 where 7 is most important, $n = 20$) and hence it was chosen as the focal attribute. Three features (waterproof qualities, body construction, and lens construction) relevant for determining sturdiness were manipulated. Note that though the terms "attribute" and "feature" are often used interchangeably, for methodological clarity we use the term "attribute" to refer to an abstract, multidimensional characteristic (e.g., sturdy) and "feature" to refer to a more specific, less multidimensional characteristic (e.g., waterproof). The features used were constructed and pretested to be consistent with schemas for 35mm SLR cameras (can be used in a drizzle, has a camera case for protection, has a lens shield; means = 2.9, 3.1, 2.7 where 1 is very typical and 7 very atypical, $n = 20$), moderately discrepant (can be used in the rain, sturdy body construction, scratch-resistant lens; means = 4.4, 5.1, 5.0), or extremely discrepant (can be used in the water, shatterproof body construction, shatterproof lens; means = 5.7, 6.1, 6.3). A repeated-measures analysis on the mean levels of discrepancy verified that the three levels of discrepancy were significantly different from each other (none vs. moderate: $t = 3.0$, $p < .01$; moderate vs. strong: $t = 1.9$, $p < .05$).

In addition to the information on the focal attribute, other information was provided to establish the schema. The product category schema was established by using the category label ("Introducing AM-1, the newest 35mm SLR camera") and three schema-consistent features relating to compactness of design (the control attribute). This schema-consistent portion of the description was constant across all descriptions. Discrepancy was manipulated in the second half of the description by using the features relating to the focal attribute. Features relating to the focal and control attributes used to create the ad stimuli are given in the Appendix.¹

Dependent Variables

Several dependent measures were used to assess brand and category perceptions associated with the subtyping and differentiation strategies. These measures are de-

scribed in the order in which they were collected.

Recall. After the 10-minute distractor task, subjects were asked to recall the features of the camera. The unaided recall data were coded by two independent judges blind to the hypotheses. Interjudge reliability was high (94%) and disagreements were resolved by discussion. The distinct features relating to sturdiness (recall of focal attribute), to compactness (recall of control attribute), and to other attributes not mentioned in the ad (intrusions) were counted to derive three recall scores.

Inferences. Subjects also were asked to list features of the brand that were not stated explicitly, but which they believed the brand was likely to have. The number of inferences made was counted for each subject. Subjects were asked to rate each feature (both recalled and inferred) as a "positively" valued feature, a "neutral" feature, or a "negatively" valued feature. The proportion of positive to total features ascribed to the brand was determined and used as a valenced feature index (Hastie and Park 1986).

Brand evaluation. Subjects indicated their overall evaluation of the brand on three (positive/negative, good/bad, favorable/unfavorable) 7-point scales ($\alpha = .94$).

Importance of attributes. Subjects indicated the importance of the focal attribute on three (not at all important/very important, a feature I would not/I would definitely consider, irrelevant to my choice/very relevant to my choice) 7-point scales ($\alpha = .93$). They also indicated the importance of the control attribute on three similar scales ($\alpha = .92$).

Variability on attributes. Subjects indicated how much variability (difference) they believed there was between brands of 35mm SLR cameras on the focal attribute. They indicated their responses on two (little variability/a great deal of variability, brands are not at all different/brands are very different on this feature) 7-point scales ($\alpha = .94$). They also indicated their perceived variability on the control attribute using similar scales ($\alpha = .93$).

Perceptions of brand differentiation. Perceptions of brand differentiation were measured on two 7-point agree-disagree scales: "the camera is generally like other brands of 35mm SLR cameras" and "the camera has features that distinguish it from other brands of 35mm SLR cameras." A differentiated position versus a subtyping or undifferentiated position would be represented by greater agreement with both statements; that is, a differentiated brand would be generally like other brands *and* have distinguishing features. Conversely, a subtyping position would be represented by agreement with only the second statement; that is, a subtyped brand would *not* be generally like other brands but would have distinguishing features. An undifferentiated position would be represented by agreement with only the first statement; that is, an undifferentiated brand would be generally like other brands but would *not* have distinguishing features. Therefore, because the two measures of differentiation would not necessarily be correlated across conditions, they were analyzed separately.

Perceptions of brand subtyping. Perceptions of whether

¹This manipulation confounded discrepancy and favorability of information. As can be seen from the Appendix, the strongly discrepant features appear to be more favorable than the moderately discrepant features, which are more favorable than the consistent features.

the advertised brand itself was perceived as a distinct subtype were measured on two 7-point agree-disagree scales: "the camera is in a class (category) by itself" and "compared to other brands of 35mm SLR cameras, the camera is a different type of 35mm SLR camera" ($\alpha = .94$).

Perceptions of submarkets in the product category. Subjects indicated their perceptions of the 35mm SLR camera market on two scales: "there are many different types of 35mm SLR cameras" (on a 7-point agree-disagree scale) and "the number of types of 35mm SLR cameras is —" (for which subjects could indicate a number from 1 to 7) ($\alpha = .79$).

Manipulation Check

Subjects indicated how similar or different they perceived the advertised brand to be from other 35mm SLR cameras. They responded on four scales (identical/completely different, similar/not at all similar, many features in common with other 35mm SLRs/few features in common, typical/atypical), which were averaged ($\alpha = .96$).

Results

All dependent measures were analyzed in a one-way between-subjects analysis of variance design with three

levels of the manipulated factor (consistent/moderately discrepant/strongly discrepant information). The hypotheses were tested with directional *t*-tests (with 43 d.f.) using the mean square error from the overall analysis of variance table.

Manipulation check. The effect of discrepancy is significant ($F(2,43) = 12.0, p < .01$). The moderately discrepant brand was seen as more different from other 35mm SLR cameras than the consistent brand (3.8 vs. 2.6, $t = 2.5, p < .01$) and the strongly discrepant brand was seen as more different than the moderately discrepant brand (5.0 vs. 3.8, $t = 2.5, p < .01$). The mean values for each condition for the manipulation check and the dependent measures are given in Table 1.

H₁: Effects on brand positioning. Analysis of the subtyping measure indicated that subjects perceived the brand to be a different *type* of 35mm SLR camera in comparison with the description of a consistent 35mm SLR camera when the brand description was strongly discrepant (4.1 vs. 2.6, $t = 2.7, p < .01$). However, there were no perceptions of the brand's being a subtype when the brand was moderately discrepant in comparison with when the brand was consistent (2.7 vs. 2.6, n.s.).

Analyses on the two separate brand differentiation measures indicate that in both the moderate discrepancy

Table 1
CELL MEANS FOR MEASURES IN STUDY 1

	Brand description		
	Consistent with the category (<i>n</i> = 15)	Moderately discrepant (<i>n</i> = 16)	Strongly discrepant (<i>n</i> = 15)
Manipulation check (7 = most atypical)	2.6 ^b	3.8 ^c	5.0 ^d
Brand subtyping (7 = maximum agreement)	2.6 ^b	2.7 ^b	4.1 ^c
Brand differentiation			
Generally like other brands (7 = maximum agreement)	5.1 ^b	4.4 ^b	3.3 ^c
Has differentiating features (7 = maximum agreement)	2.8 ^b	4.8 ^c	5.1 ^c
Memory for brand features			
Recall (3 = maximum)			
"Discrepant" features ^a	2.4 ^{b,c}	2.0 ^b	2.7 ^c
"Consistent" features	2.2 ^b	2.3 ^b	2.3 ^b
Intrusions	.6 ^b	.6 ^b	.3 ^b
Inferences	3.5 ^b	3.4 ^b	2.1 ^c
Basis for brand evaluation			
Correlation between brand evaluation and valenced feature index	.28 ^b	.34 ^b	.38 ^b
	(n.s.)	(n.s.)	(n.s.)
Correlation between brand evaluation and attribute importance	.28 ^b	.27 ^b	.50 ^c
	(n.s.)	(n.s.)	(<i>p</i> < .05)
Category perceptions			
Attribute variability (7 = maximum variability)	3.5 ^b	3.2 ^b	4.4 ^c
Attribute importance (7 = maximum importance)	4.7 ^b	4.6 ^b	5.6 ^c
Product category submarkets (7 = maximum agreement)	3.1 ^b	2.9 ^b	3.5 ^b

^aDiscrepancy was manipulated by varying these features. Thus, these features were actually consistent in the consistent condition and either moderately or strongly discrepant in the two discrepant conditions.

^{b,c,d}Means with different superscripts are significantly different from each other at $p < .05$.

and the consistent conditions, subjects saw the brand as being generally like other brands of 35mm SLR cameras (4.4 vs. 5.1, n.s.), but the moderate discrepancy condition differed from the consistent condition in that, in comparison with the consistent brand, the moderately discrepant brand was seen as having features that distinguished it from other 35mm SLRs (4.8 vs. 2.8, $t = 3.5$, $p < .01$). Conversely, the strongly discrepant brand, in comparison with the consistent brand, was seen as *not* being generally like other brands of 35mm SLR cameras (3.3 vs. 5.1, $t = 3.6$, $p < .01$) and as having features that distinguished it from other 35mm SLRs (5.1 vs. 2.8, $t = 4.1$, $p < .01$). The strongly discrepant and moderately discrepant brands were different in that the strongly discrepant brand was seen as being less like other brands of 35mm SLRs than the moderately discrepant brand (3.3 vs. 4.4, $t = 2.2$, $p < .05$). However, the strongly and moderately discrepant brands were similar in that both were seen as having distinguishing features (4.8 vs. 5.1, $t < 1$, n.s.). Hence the strongly discrepant brand was perceived as a distinct subtype with distinguishing features (a subtyped position), whereas the moderately discrepant brand was perceived as generally like other brands but with distinguishing features (a differentiated position). H_1 , relating to the effects of discrepancy on brand positioning, is supported.

H_2 : *Effects on memory for brand features.* Of the three discrepant features descriptive of the focal attribute, subjects recalled on average 2.7 features in the strong discrepancy condition and 2.0 features in the moderate discrepancy condition ($t = 2.4$, $p < .01$), supporting H_{2a} . There are no differences in recall of consistent features. Subjects recalled about 2.3 features in all conditions. Nor are there any differences in recall intrusions. Intrusions averaged .3 in the strong discrepancy condition and .6 in the moderate discrepancy and consistent conditions; though these results are directionally consistent with the hypothesis, none of the differences are significant. Thus H_{2b} and H_{2c} are not supported.

When specifically asked to infer what additional features the brand might have, subjects made fewer inferences when the brand was strongly discrepant than when the brand was moderately discrepant (3.4 vs. 2.1, $t = 2.4$, $p < .01$), supporting H_{2d} . Further, there are no differences in inferences generated between the moderately discrepant and consistent conditions (3.4 vs. 3.5, $t < 1$, n.s.), though there are fewer inferences in the strongly discrepant than in the consistent condition (2.1 vs. 3.5, $t = 2.6$, $p < .01$). Thus, overall, the subjects had better memory for the discrepant features and fewer inferences about other features when the brand description was strongly discrepant than when the description was moderately discrepant.

H_3 : *Effects on brand evaluations.* No significant relationship is found between a valenced feature index (measured as the proportion of positive to total features ascribed to the brand) and brand evaluation across any of the conditions, and hence no support for H_{3a} . How-

ever, correspondence between focal attribute importance and brand evaluation is greater in the strong discrepancy condition ($r = .50$, $p < .05$) than in either the moderate ($r = .27$, n.s.) or consistent ($r = .28$, n.s.) condition. Direct comparison between correlations using the z -transformation also indicates that the correspondence is marginally greater in the strong discrepancy condition than in the other conditions ($z = 1.34$, $p < .09$ for comparison of the strong discrepancy condition with either the moderate or consistent condition), supporting H_{3b} . Thus, we find partial support for the notion that brand evaluation is based more on an assessment of the importance associated with the focal attribute in the strong discrepancy condition.

H_4 : *Effects on category perceptions.* Strong discrepancy, in comparison with moderate discrepancy, led to greater perceptions of variability on the focal attribute (4.4 vs. 3.2, $t = 2.1$, $p < .05$) and greater importance of the focal attribute (5.6 vs. 4.6, $t = 2.2$, $p < .05$). No differences in perceptions of variability or importance of the control attribute are found across any of the experimental conditions. There are also no differential effects on perceptions of submarkets within the overall market (agreement scores are 3.5 vs. 2.9, n.s.).

Discussion. The findings of study 1 support the hypothesis that strong discrepancy leads to a subtyped position and moderate discrepancy to a differentiated position (H_1). However, as pencil-and-paper measures of subtyping versus differentiation were used, a different and possibly more direct measure of positioning would be very useful in validating H_1 (such a measure is used in studies 3 and 4). The findings also provide limited support for H_2 , H_3 , and H_4 . Strong in comparison with moderate discrepancy results in better memory for the brand's distinguishing features, fewer inferences, and greater correspondence between focal attribute importance and brand evaluations. Strong in comparison with moderate discrepancy also results in perceptions of greater variability in the product category on the distinguishing attribute and greater importance of the distinguishing attribute.

The results do not support the hypothesis that moderate in comparison with strong discrepancy will facilitate recall of consistent features. However, some extensions of the subtyping model suggest that highly incongruent information, in the course of being elaborately processed, is linked extensively to other information. Recall of discrepant information therefore might facilitate recall of consistent information (Srull, Lichtenstein, and Rothbart 1985). Thus, there may be no differences in memory for consistent features—as the data here indicate—between the moderately and the strongly discrepant conditions.

STUDY 2

Study 2 had several purposes. First, we wanted to determine whether the hypothesized differences between moderate and strong discrepancy would appear and be

strengthened with time delay. Thus one substantive objective of study 2 was to test H_5 . A second objective was primarily methodological—to reexamine H_1 through H_4 with a different operationalization of discrepancy. In particular, in manipulating discrepancy, we attempted to remove some of the problems associated with the manipulation of discrepancy in study 1. In study 1, the more strongly discrepant features were also more positive. In study 2, the actual information was held constant and the pattern of discrepancies was varied across multiple ads for the same product. This specific manipulation fulfilled the third, primarily application-oriented, objective of study 2—to demonstrate how marketing variables such as advertising execution could affect brand positioning. On the basis of previous research (Crocker 1984; Weber and Crocker 1983), we expected that if all the discrepant information were concentrated in a single ad for the brand, the brand would appear to be strongly discrepant and would be subtyped. The many discrepant features of the brand would challenge several aspects of the product category schema at one time, making difficult the assimilation of the brand to the overall product category as a differentiated brand. However, if the discrepant information were dispersed across multiple ads for the brand, the brand would appear less discrepant—because only one aspect of the schema would be challenged at a time—and therefore would be perceived as a differentiated product. Further, if the multiple ads for the brand were separated by other incoming information, as is generally true in reality, each discrepant feature could be processed and assimilated in turn, facilitating assimilation of the brand to the overall product category as a differentiated brand. This manipulation of discrepancy suggests how marketers might influence perceptions of subtyping versus differentiation, without actually altering product features, by simply varying the pattern of information across multiple ads for the product.

Procedure

The experimental stimuli and procedure were essentially similar to those in study 1, with a few exceptions. The control attribute of study 1, compactness of design, served as the focal attribute in study 2. Three features (built-in telephoto lens, built-in flash, and pocketable) judged as relating to compactness of design by pretest subjects (means = 5.1, 5.4, 6.2 where 7 is very relevant) and as being discrepant for 35mm SLR cameras (means = 5.8, 5.1, 6.3 where 7 is very atypical) were used to create perceptions of discrepancy. In the strong discrepancy condition, all three features were clustered in a single ad for the product. In the moderate discrepancy condition, the three discrepant features were dispersed across three ads for the product. In addition to the information on the focal attribute, each ad contained the product category label and information on three consistent features relating to sturdiness of construction. Thus, in the strong discrepancy condition, subjects saw an ad in which the product was described in terms of three

consistent and three discrepant features, whereas in the moderate discrepancy condition, subjects saw three ads for the product, each ad describing the product in terms of one discrepant and one consistent feature.

To control for number of exposures, ad booklets were made up with the same ad (with variations on the visual elements) inserted three times in the strong discrepancy condition.² The same visual elements were used in the moderate discrepancy condition and assigned randomly across the three different ads for that condition, each of which described a different discrepant feature. The visual elements were portraits of children and animals and contained no information relevant to the attributes described in the copy. The ads were separated by filler ads. Subjects read a short editorial and then saw five ads, of which the first, third, and fifth were the ads of interest. Subjects filled in the dependent measures after either a brief (10-minute) or a long (2-day) delay. Seventy-one subjects participated in the study.

Results

The dependent measures were analyzed in a 2 (strong (clustered)/moderate (dispersed) discrepancy) \times 2 (immediate/delayed time interval) analysis of variance design. The hypotheses were investigated with one-tailed *t*-tests (with 67 d.f.) using the mean square error from the overall analysis of variance table.

Manipulation check. The main effect on perceived discrepancy of clustering discrepant information in one ad versus dispersing it across multiple ads is significant ($F(1,67) = 10.6, p < .01$). Neither the main effect of time ($F(1,67) = < 1, n.s.$) nor the interaction with time is significant ($F(1,67) = < 1, n.s.$). The clustered condition was seen as more discrepant than the dispersed condition in both the immediate (5.1 vs. 4.3, $t = 1.7, p < .05$) and delayed conditions (5.4 vs. 4.1, $t = 2.8, p < .01$). Given that the manipulation check is significant, henceforth the clustered condition is referred to as the “strongly discrepant condition” (average rating of 5.3 on a 7-point scale, where 7 is most discrepant) and the dispersed condition is referred to as the “moderately discrepant condition” (average rating of 4.2). The means for the manipulation check and dependent measures are given in Table 2.

Effects on brand positioning. The effect of discrepancy on brand differentiation is significant ($F(1,67) = 3.4, p < .05$). As in study 1, the moderately discrepant brand was seen as generally more like other 35mm SLR cameras than the strongly discrepant brand (3.8 vs. 3.2). Consistent with study 1, the effect of discrepancy on perceptions of subtyping is also significant ($F(1,67) = 4.3,$

²Controlling for the number of ad exposures confounds the number of times subjects saw each brand feature with the manipulation of discrepancy (thrice vs. once in the strongly vs. moderately discrepant condition). However, this seemed a more “realistic” manipulation because advertising costs are related more to number of ad exposures than to information content of ads.

Table 2
CELL MEANS FOR MEASURES IN STUDY 2

	Condition			
	Immediate		Delayed	
	Dispersed (n = 18)	Clustered (n = 18)	Dispersed (n = 17)	Clustered (n = 18)
Manipulation check (7 = most atypical)	4.3 ^b	5.1 ^c	4.1 ^b	5.4 ^c
Brand subtyping (7 = maximum agreement)	3.5 ^{b,c}	4.1 ^b	3.2 ^c	4.3 ^b
Brand differentiation				
Generally like other brands (7 = maximum agreement)	3.9 ^b	3.2 ^c	3.7 ^b	3.2 ^c
Has differentiating features (7 = maximum agreement) ^a	5.0 ^b	5.1 ^b	4.6 ^b	5.1 ^b
Memory for brand features				
Recall (3 = maximum)				
"Discrepant" features	1.9 ^b	2.5 ^c	1.3 ^d	2.3 ^c
"Consistent" features	2.5 ^b	2.6 ^b	2.0 ^c	2.0 ^c
Intrusions	.5 ^{b,c}	.2 ^b	.9 ^c	.4 ^b
Inferences	3.1 ^b	1.8 ^c	2.6 ^b	1.6 ^c
Basis for brand evaluation				
Correlation between brand evaluation and valenced feature index	.22 ^b	.31 ^b	.14 ^b	.45 ^c
	(n.s.)	(n.s.)	(n.s.)	(<i>p</i> < .06)
Correlation between brand evaluation and focal attribute importance	.27 ^b	.48 ^c	.05 ^b	.46 ^c
	(n.s.)	(<i>p</i> < .05)	(n.s.)	(<i>p</i> < .05)
Category perceptions				
Attribute variability (7 = maximum variability)	3.9 ^{b,c}	4.4 ^b	3.7 ^c	5.0 ^b
Attribute importance (7 = maximum importance)	4.5 ^{b,c}	5.0 ^b	4.4 ^c	5.7 ^b
Product category submarkets (7 = maximum agreement)	3.3 ^b	3.6 ^b	3.7 ^b	3.6 ^b

^aIn this study, no differences were expected on this measure because all brand descriptions contained differentiating features.

^{b,c,d}Means with different superscripts are significantly different from each other at *p* < .05.

p < .05). The strongly discrepant brand was perceived as a more different type of camera than the moderately discrepant brand (4.2 vs. 3.4). The time × discrepancy interactions are not significant for either measure.

Effects on memory for brand features. The recall and inference data were coded by two independent judges and disagreements were resolved by discussion (initial agreement = 96%). Memory for discrepant features was affected by discrepancy, validating study 1 ($F(1,67) = 32.2$, $p < .01$; strong vs. moderate discrepancy: 2.4 vs. 1.6). Further, the effects of time ($F(1,67) = 8.9$, $p < .01$; immediate vs. delayed = 2.2 vs. 1.8) are significant and the time × discrepancy interaction also approaches significance ($F(1,67) = 2.7$, $p < .10$). As predicted by the schema-based models, memory for discrepant features declined over time in the moderately discrepant condition (1.9 vs. 1.3, $t = 2.9$, $p < .01$), but showed little decline over time in the strongly discrepant condition (2.5 vs. 2.3, $t < 1$, n.s.).

Results for memory for consistent features parallel those for study 1. There are no effects for discrepancy ($F(1,67) = < 1$, n.s.), nor is the time × discrepancy interaction significant ($F(1,67) < 1$, n.s.). Memory for consistent features basically declined over time across both the strong and moderate discrepancy conditions ($F(1,67) = 9.1$, $p < .01$, 2.5 vs. 2.0).

Though the effect of strong versus moderate discrepancy on intrusions is not significant in study 1, it is significant in study 2 ($F(1,67) = 4.7$, $p < .05$, .3 vs. .7). The time × discrepancy interaction, however, is not significant. As in study 1, the effect of discrepancy on inference making is significant ($F(1,67) = 12.7$, $p < .01$; strong vs. moderate discrepancy: 1.7 vs. 2.8). No other effects are significant.³

Effects on brand evaluation. As in study 1, greater correspondence between focal attribute importance and brand evaluation is found in the strong discrepancy condition than in the moderate discrepancy condition in both the immediate ($r = .48$, $p < .05$ vs. $r = .27$, n.s.; $z = 1.4$, $p < .08$) and delayed ($r = .46$, $p < .05$ vs. $r = .05$, n.s.; $z = 1.4$, $p < .08$) time conditions. Further, though not significant in study 1, in the delayed time condition there is a significant correspondence between

³A *post hoc* analysis of the brand feature recalled first indicated that over time a discrepant feature was recalled first for an increasing proportion of the subjects in the clustered condition (28% vs. 45%); in the dispersed condition a consistent feature became most accessible over time (72% vs. 89%). (Time × discrepancy interaction: $\chi^2 = 3.1$, $p < .07$.) This pattern is interesting because it shows that over time a subtyped brand becomes most associated with a discrepant feature and a differentiated brand with a consistent feature.

the features ascribed to the brand (measured as the valenced feature index) and brand evaluation for the strongly discrepant brand ($r = .45$, $p < .06$; n.s. in all other conditions; $z = 1.3$, $p < .10$). Thus, we again find some evidence that a more strongly discrepant brand is evaluated "piecemeal"; if evaluation is delayed, the correspondence between features ascribed to a brand, the importance of the focal attribute, and brand evaluation is enhanced.

Effects on category perceptions. The pattern of results is the same for perceived variability on the focal attribute and importance of the focal attribute. There is a significant effect of discrepancy, as in study 1, on both variability ($F(1,67) = 6.5$, $p < .01$) and importance ($F(1,67) = 7.1$, $p < .01$). The strong versus moderate discrepancy condition led to greater perceived variability (4.7 vs. 3.8) and importance (5.3 vs. 4.5). The time \times discrepancy interaction is not significant for either measure. As in study 1, there are no significant effects on perceptions of submarkets within the overall market.

Discussion. The findings of study 2 replicate the findings of study 1 for several variables: strong in comparison with moderate discrepancy influences brand positioning (a subtyped vs. a differentiated position), brand perceptions (greater recall for discrepant features and fewer inferences in the strong discrepancy condition), the process of reaching brand evaluations (greater correspondence between the importance of the focal attribute and brand evaluations in the strong discrepancy condition), and category perceptions (greater perceived variability and importance of the focal attribute in the strong discrepancy condition). Also, some effects not apparent in study 1 (i.e., the effects on intrusion and correspondence between features ascribed to the brand and brand evaluations) emerged in study 2 in the delayed time condition.

The effects of time delay are not significant in all cases. However, in those cases where time delay did influence brand and category perceptions, the influence is in the hypothesized direction—exaggerating the differences between the effects of strong and moderate discrepancy.⁴ Thus we find some support for the schema-theory-based prediction that time delay increases the importance of the organizing schema (H_5).

STUDY 3

The purpose of study 3 was essentially to provide a different measure for the subtyped versus differentiated distinction. Rather than using pencil-and-paper measures

of positioning, we employed a sorting task. The basic idea was that increased support for the subtyping versus differentiation measure would be obtained if a subtyped brand were sorted into a pile by itself and a differentiated brand were mixed in with other brands when subjects are asked to sort a set of brands from a product category.

Procedure and Results

Forty subjects (all scoring above the knowledge cut-off) participated in a sorting task. Subjects were told that they were engaging in a short study designed to assess consumers' perceptions of a new brand of 35mm SLR. The stimuli from study 1 were used. Subjects first read a description of the focal brand that was appropriate to their condition, that is, the consistent, moderately discrepant, or strongly discrepant description ($n = 13$, 13, and 14, respectively). They were then given a deck of 10 index cards, each of which listed a brand name of a 35mm SLR camera. The deck consisted of the names of nine familiar, consistent brands and the focal brand. Subjects were asked to sort the cards into piles on the basis of perceived similarity. They were told that they could form as many or as few piles as they wanted and that each pile could contain any number of brands, ranging from a minimum of one to the maximum possible of 10. In each condition, the number of subjects who put the focal brand in a pile by itself was counted. The proportion was significantly greater in the strongly discrepant condition (71%) than in the moderately discrepant (23%) and consistent (15%) conditions ($\chi^2 = 10.7$, $p < .01$), providing support for the notion that the brand in the strongly discrepant condition was perceived as a distinct subtype. What is also interesting is that the moderately discrepant and consistent conditions do not differ, indicating that there may be some threshold level of discrepancy at which subtyping occurs. Because this finding is different from previous findings (Weber and Crocker 1983) suggesting that even moderately discrepant instances are subtyped, it is considered further in the General Discussion section.

STUDY 4

Study 3 examined the subtyping versus differentiation distinction when the relevant set of brands included many consistent brands and a single discrepant brand. In study 4 we attempted to extend the findings to examine how discrepant brands are perceived when there are multiple discrepant brands in the set and those brands differ in the extent of their discrepancy. For example, the study was designed to help answer such questions as: (1) When there are two strongly discrepant brands, does each occupy its own subtype? and (2) Is a moderately discrepant brand perceived differently when a strongly discrepant brand is present in the set? Answers to such questions should be useful in applications—for example, in making positioning decisions considering competition. In addition, the study is interesting in theoretical terms because the literature (cf. Weber and Crocker 1983) does

⁴Even though the time \times discrepancy interaction is not significant in all cases, we compared the individual cell means to determine the effects of time delay. These comparisons indicate that time delay exaggerated the differences between the strongly and moderately discrepant conditions on measures of subtyping (immediate: $t = 1.1$, $p < .13$; delayed: $t = 2.0$, $p < .05$), recall intrusions (immediate: $t = 1.3$, $p < .10$; delayed: $t = 2.2$, $p < .05$), perceived variability on the focal attribute (immediate: $t = 1.0$, $p < .15$; delayed: $t = 2.7$, $p < .01$), and importance of the focal attribute (immediate: $t = 1.1$, $p < .13$; delayed: $t = 2.4$, $p < .01$).

not address how discrepant instances are perceived in the context of multiple other discrepant instances that differ systematically in their extent of discrepancy.

Procedures and Results

Through pretests, eight consistent descriptions, two moderately discrepant descriptions, and two strongly discrepant descriptions of 35mm SLR cameras were generated. Each description was made up of three statements, which were rated either as all consistent (average rating = 2.9 where 7 is very atypical), moderately discrepant (average rating = 5.1), or strongly discrepant (average rating = 6.3). These descriptions were put on index cards. Six different combinations of index cards then were made up, with combinations corresponding to one of six experimental conditions. All conditions included the eight consistent descriptions, to which were added one or more discrepant descriptions that were either moderately or strongly discrepant. Thus, the six experimental conditions corresponded to the addition of (1) one strongly discrepant description, (2) one moderately discrepant description, (3) one strongly and one moderately discrepant description, (4) two strongly discrepant descriptions, (5) two moderately discrepant descriptions, and (6) two strongly and two moderately discrepant descriptions. We compared subjects' perceptions across these conditions to provide insights into how discrepant brands are perceived in different contexts.

Ninety-six subjects (all scoring above the knowledge cutoff) participated in the study. The task and instructions were essentially similar to those in study 3. Subjects were told they were engaging in a study designed to assess consumers' perceptions of 35mm SLR cameras. They were then given the deck of index cards appropriate to their condition (16 subjects were in each condition). Subjects read the descriptions and sorted the cards into piles based on perceived similarity. They were free to form any number of piles and to put any number of brands in each pile (from a minimum of one to the maximum possible of all brands).

The results from the sorting task are given in Table 3. For ease of comparisons across conditions, one strongly discrepant brand and one moderately discrepant brand were designated as the focal brands. (The results were essentially the same for the second strongly discrepant and moderately discrepant brands.) The results replicate the findings from study 3. The proportion of subjects who put the focal brand in a pile by itself (i.e., subtyped it) is significantly greater in the one brand strongly discrepant condition than in the one brand moderately discrepant condition (69% vs. 19%, $\chi^2 = 6.2$, $p < .01$).

The data also afford some additional insights on the perception of discrepant brands in the context of multiple discrepant brands. As can be seen from the table, a strongly discrepant brand continues to occupy its own subtype even in the context of a second strongly discrepant brand (subtyping in the one brand vs. two brand strongly discrepant condition = 69% vs. 63%, n.s.). There is also an increase in the tendency for a strongly discrepant brand to be subtyped in the context of a moderately discrepant brand, though it is not significant (subtyping in the one strongly discrepant brand vs. one strongly plus one moderately discrepant brand condition = 69% vs. 81%, n.s.). The tendency for a strongly discrepant brand to be subtyped (75%) is also evident in the context of many discrepant brands (i.e., a second strongly discrepant brand and two moderately discrepant brands). Thus, our claim that a strongly discrepant brand is subtyped appears to be true even in the context of competing brands that differ in the extent of their discrepancy.

Perceptions of the moderately discrepant brand show interesting shifts in the context of other discrepant brands. As is evident in study 3, a moderately discrepant brand is grouped with consistent brands when there is only one moderately discrepant brand in the set (81%). This tendency to group a moderately discrepant brand with consistent brands is also very evident when there is only one moderately discrepant brand and a strongly discrepant brand is added to the set (94%). However, there is a

Table 3
SORTING RESULTS FROM STUDY 4^a
(percent)

Condition	Strongly discrepant focal brand				Moderately discrepant focal brand			
	By itself	With strongly discrepant brand	With moderately discrepant brand	With consistent brand(s)	By itself	With strongly discrepant brand	With moderately discrepant brand	With consistent brand(s)
1 strongly discrepant brand	69	NA	NA	31	NA	NA	NA	NA
2 strongly discrepant brands	63	25	NA	12	NA	NA	NA	NA
1 moderately discrepant brand	NA	NA	NA	NA	19	NA	NA	81
2 moderately discrepant brands	NA	NA	NA	NA	12	NA	44	44
1 strongly and 1 moderately discrepant brand	81	NA	6	13	0	6	NA	94
2 strongly and 2 moderately discrepant brands	75	25	0	0	0	6	13	81

^aAll conditions included eight consistent brands. $N = 16$ in each condition.

noticeable reduction in the tendency to group a moderately discrepant brand with consistent brands when there are two moderately discrepant brands in the set (grouping with consistent brands in the one vs. two moderately discrepant brands condition = 81% vs. 44%, $\chi^2 = 3.3$, $p < .07$). Instead, the two moderately discrepant brands are grouped together and form a “subtype” of their own (44%). However, this tendency to group the moderately discrepant brands together and separately from consistent brands is noticeably dampened with the introduction of strongly discrepant brands into the set (grouping of moderately discrepant brands together in the two moderately discrepant vs. two moderately and two strongly discrepant brands condition = 44% vs. 12%; $\chi^2 = 2.5$, $p < .10$). The moderately discrepant brands are again mixed in with the consistent brands (grouping of moderately discrepant brand with consistent brands in the two moderately discrepant vs. two moderately and two strongly discrepant brands condition = 44% vs. 81%, $\chi^2 = 3.3$, $p < .07$). Further, the tendency to group moderately and strongly discrepant brands together is virtually absent (6%).

GENERAL DISCUSSION

The results of the four studies, taken together, indicate the usefulness of a schema-based approach for understanding the effects of brand differentiation versus brand subtyping strategies on consumer perceptions. The results demonstrate that perceptions of strong discrepancy lead to brand subtyping whereas perceptions of moderate discrepancy lead to brand differentiation. The results also suggest that these strategies are associated with differences on several measures of importance to marketers—consumers’ perceptions of brand attributes, brand evaluations, and market or category perceptions. Specifically, a subtyped position, in comparison with a differentiated position, is associated with better memory for the brand’s distinguishing features, fewer inferences about other attributes, perceptions of greater variability among brands on the distinguishing attribute, increased importance of the distinguishing or focal attribute, and a significant relationship between focal attribute importance and brand evaluation (study 1).

These results also hold when the specific information about the brand is held constant and thus potential confounds such as favorableness of brand information are removed (study 2). Study 2 further suggests that time delay polarizes some of these effects, so that the organizing “schema”—the product category schema for the differentiated brand and the subcategory schema for the subtyped brand—is strengthened over time. A sorting task (study 3) complementing the pencil-and-paper measures of positioning used in studies 1 and 2 replicates the finding that the subtyping versus differentiated distinction holds for a strongly versus moderately discrepant brand. These differences in brand positioning for strongly versus moderately discrepant brands also are shown to hold in the context of multiple discrepant brands that differ in their extent of discrepancy (study 4).

Despite the converging evidence for the subtyping/differentiation distinction across the four studies, all four studies share some limitations. The stimuli used in the studies were artificial and described hypothetical brands for studies 1, 2, and 4. In study 3, the focal brand was also hypothetical though the nonfocal brands were actual brand names. Further, all ads constructed were informational and the product category used (cameras) may have lower affective content than some others. Therefore, it is important to validate these findings in other contexts and the implications drawn must be considered tentative at this stage.

Marketing Consequences

Our findings suggest that managers should consider the tradeoffs at an individual level that are associated with these strategies. Specifically, the findings suggest that there is likely to be less transference of learning from the product category to the brand and a greater focus on the brand itself—its attributes and the importance of those attributes—with a subtyping strategy than with a differentiated strategy. Hence, managers should explicitly consider their marketing situation and these tradeoffs in making positioning decisions. For example, adoption of new brands in complex product categories might be facilitated with brand differentiation strategies, whereas new brands in a variety-seeking market might fare better with subtyping strategies. Though clearly a more precise analysis of marketing situations is warranted, our findings suggest some of the tradeoffs to be considered in making positioning decisions.

The studies also suggest communication methods to achieve a subtyped versus a differentiated position. Study 2 shows that communicating several differentiating features in a single ad leads to perception of a subtype, whereas dispersing the features across multiple ads leads to perception of a differentiated brand. Thus, even for a brand with strongly discrepant features, by sequential presentation of those features marketers may be able to execute what amounts to a differentiation strategy.

The distinction made here between subtyped and differentiated brands also has relevance for understanding marketing issues related to how consumers categorize products. For example, recent research (cf. Alba and Hutchinson 1987) suggests that recalling one brand in a product category can facilitate or dampen recall of other brands and that the recall effect is contingent upon how brands are grouped or categorized in memory. Subtyping notions therefore are important in explaining retrieval patterns for competing brands and the formation of evoked sets. As another example, the distinction between subtyping and differentiation strategies might help to explicate when it is possible to “compete away a market pioneer’s advantage” (cf. Carpenter and Nakamoto 1987). Carpenter and Nakamoto (1987) essentially suggest that the pioneer sets up expectations for the category. Therefore, later entrants are likely to be assimilated to the category, which makes it difficult to create a competitive advantage for themselves unless they are successful in

achieving a subtyped position. Thus, in a managerial context, the schema-based approach taken here might extend current behavioral approaches for understanding issues such as competition and market pioneering.

Theoretical Contributions

Our findings afford a better understanding of schema-based processes, especially subtyping processes. From previous work that has examined subtyping, researchers have concluded that the process of subtyping does not change category perceptions because subtypes are seen as exceptions to the category (cf. Weber and Crocker 1983). Though this conclusion might be valid in terms of what are considered to be consistent attribute values for category members, our studies 1 and 2 demonstrate that subtyping does affect perceptions of variation within the category and that these perceptions have consequences for what attributes are considered important within the category.

Our findings also help advance understanding of the actual process of subtyping. Specifically, previous research has implied that two or more discrepant instances are necessary to form a subtype and that instances need not be extremely discrepant but just noticeably different to be subtyped (cf. Weber and Crocker 1983). Our results challenge both these assumptions about the process of subtyping. Both studies 3 and 4 demonstrate that a strongly discrepant brand will form a subtype of its own. In fact, the intuitive idea that subtyping sets an instance apart from everything else might suggest that this process of creating a subtype of one represents the true process of subtyping.

Study 4 demonstrates that noticeably or moderately different instances are subtyped together (supporting previous findings), but the results also suggest contingencies when this will not be true. Specifically, the results suggest that instances that are noticeably, but not strongly, different will not be subtyped together when strongly discrepant instances are in the set. Thus, our data argue for important context effects in the process of subtyping. These context effects help further develop the Weber and Crocker (1983) model by suggesting that the context might create important assimilation-contrast effects in the process of subtyping. Moderately discrepant instances, which may be subtyped in the context of only consistent instances, may not be subtyped in the presence of strongly discrepant instances that create a contrast effect. Hence the threshold level of discrepancy at which subtyping occurs might vary with context. Further research might investigate other context effects.

APPENDIX

FEATURES USED TO CREATE THE STIMULI IN STUDY 1

Consistent Features Relating to the Control Attribute

- The AM-1 has several accessories and add-ons available. There are nearly 100 wide-angle, telephoto, zoom, and other lens to choose from.

- The AM-1 snugly fits your hand. It can be comfortably held both in the vertical position and in the horizontal position.
- There are several versatile flash units available. For example, even our smallest flash can be operated manually or set to flash automatically.

Consistent Features Relating to the Focal Attributes

- The AM-1 is sturdily constructed. It also comes with a well-crafted carrying case with a heavy duty strap for comfortable, carefree carrying.
- Camera lenses can be easily scratched, resulting in a loss of picture clarity. The lens of the AM-1 is fitted with a detachable lens shield to protect the quality lens.
- The AM-1 is designed to keep out dirt and moisture. The camera can be used on the beach, by the pool, and even in a drizzle.

Moderately Discrepant Features Relating to the Focal Attribute

- The AM-1 is sturdily constructed. The strong metal alloy body and fiberglass casing provide complete protection against the occasional, though inevitable, banging.
- Camera lenses can usually be easily scratched, resulting in a loss of picture clarity. The lens of the AM-1 has a special protective coating to make it scratch-resistant.
- The AM-1 is designed to keep out dirt and moisture. The camera can be used on the beach, by the pool, and even in the rain.

Strongly Discrepant Features Relating to the Focal Attribute

- You could drop the AM-1 on a rock and not damage it. The strong metal body and fiberglass casing provide complete protection against the occasional, though inevitable, banging.
- Camera lenses can usually be easily scratched, resulting in a loss of picture clarity. The lens of the AM-1 is constructed to be scratch resistant and almost shatterproof.
- Special waterproof seals keep out dirt and moisture. The AM-1 can be used on the beach, by the pool, and even under water.

REFERENCES

- Alba, Joseph W. and J. Wesley Hutchinson (1987), "Dimensions of Consumer Expertise," *Journal of Consumer Research*, 13 (March), 411-54.
- Bettman, James R. (1979), *An Information Processing Theory of Consumer Choice*. Reading, MA: Addison-Wesley Publishing Company.
- Carpenter, Gregory S. and Kent Nakamoto (1987), "Market Pioneering, Learning and Preference," in *Advances in Consumer Research*, Vol. 15, Michael Houston, ed. Provo, UT: Association for Consumer Research, 275-9.
- Crocker, Jennifer (1984), "A Schematic Approach to Changing Consumers' Beliefs," in *Advances in Consumer Research*, Vol. 11, Thomas C. Kinneer, ed. Provo, UT: Association for Consumer Research, 472-7.
- Day, George S., Allen D. Shocker, and Rajendra K. Srivastava (1979), "Customer-Oriented Approaches to Identifying Product-Markets," *Journal of Marketing*, 43 (Fall), 8-19.
- Dickson, Peter R. and James L. Ginter (1987), "Market Segmentation, Product Differentiation, and Marketing Strategy," *Journal of Marketing*, 51 (April), 1-10.

- Fiske, Susan T. (1982), "Schema-Triggered Affect: Applications to Social Perception," in *Affect and Cognition: The 17th Annual Carnegie Symposium on Cognition*, Margaret S. Clark and Susan T. Fiske, eds. Hillsdale, NJ: Lawrence Erlbaum Associates, 55-78.
- and Mark A. Pavelchak (1984), "Category Based Versus Piecemeal-Based Affective Responses: Developments in Schema-Triggered Affect," in *The Handbook of Motivation and Cognition: Foundations of Social Behavior*, Richard M. Sorrentino and E. Tory Higgins, eds. New York: Guilford Press.
- Graesser, Arthur C., Sallie E. Gordon, and John D. Sawyer (1979), "Recognition Memory for Typical and Atypical Actions in Scripted Activities: Tests of a Script Pointer + Tag Hypothesis," *Journal of Verbal Learning and Verbal Behavior*, 18 (June), 319-32.
- Hastie, Reid and Bernadette Park (1986), "The Relationship Between Memory and Judgment Depends on Whether the Judgment Task is Memory-Based or On-Line," *Psychological Review*, 93 (July), 258-68.
- Lingle, John H., Mark W. Altom, and Douglas L. Medin (1984), "Of Cabbages and Kings: Assessing the Expendability of Natural Object Concept Model to Social Things," in *Handbook of Social Cognition*, Vol. 1. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Nakanishi, Masao and James R. Bettman (1974), "Attitude Models Revisited: An Individual Level Analysis," *Journal of Consumer Research*, 1 (December), 16-21.
- O'Sullivan, Chris S. and Francis T. Durso (1984), "Effect of Schema-Incongruent Information on Memory for Stereotypical Attributes," *Journal of Personality and Social Psychology*, 47 (July), 55-70.
- Park, Bernadette and Reid Hastie (1987), "Perception of Variability in Category Development: Instance-Versus Abstraction-Based Stereotypes," *Journal of Personality and Social Psychology*, 53 (October), 621-35.
- Porter, Michael E. (1980), *Competitive Strategy*. New York: Collier Macmillan.
- Rumelhart, David E. and Donald A. Norman (1972), "Accretion, Tuning and Restructuring: Three Modes of Learning," in *Organization of Memory*, E. Tulving and W. Donaldson, eds. New York: Academic Press, Inc., 197-246.
- Schmidt, Daniel F. and Richard C. Sherman (1984), "Memory for Persuasive Messages: A Test of a Schema-Copy-Plus-Tag Model," *Journal of Personality and Social Psychology*, 47 (July), 17-25.
- Schutz, Peter and Jack Cook (1986), "Porsche on Nicheman-ship," *Harvard Business Review*, 5 (March/April), 98-106.
- Srivastava, Rajendra K., Mark I. Alpert, and Allen D. Shocker (1984), "A Customer-Oriented Approach for Determining Market Structures," *Journal of Marketing*, 48 (Spring), 32-45.
- Srull, Thomas K. (1981), "Person Memory: Some Tests of Associative Storage and Retrieval Models," *Journal of Experimental Psychology: Human Learning and Memory*, 7 (November), 440-63.
- , Meryl Lichtenstein, and Myron Rothbart (1985), "Associative Storage and Retrieval Processes in Person Memory," *Journal of Experimental Psychology*, 11 (April), 316-45.
- Sujan, Mita (1985), "Consumer Knowledge: Effects on Evaluation Strategies Mediating Consumer Judgments," *Journal of Consumer Research*, 12 (June), 31-46.
- , James R. Bettman, and Harish Sujan (1986), "Effects of Consumer Expectations on Information Processing in Selling Encounters," *Journal of Marketing Research*, 23 (November), 346-53.
- Taylor, Shelley E. (1981), "A Categorization Approach to Stereotyping," in *Cognitive Processes in Stereotyping and Intergroup Behavior*, David L. Hamilton, ed. Hillsdale, NJ: Lawrence Erlbaum Associates, 88-114.
- and Jennifer Crocker (1981), "Schematic Bases of Social Information Processing," in *Social Cognition: The Ontario Symposium*, Vol. 1, E. T. Higgins, C. P. Herman, and M. P. Zanna, eds. Hillsdale, NJ: Lawrence Erlbaum Associates, 89-134.
- Weber, Renee and Jennifer Crocker (1983), "Cognitive Processes in the Revision of Stereotypic Beliefs," *Journal of Personality and Social Psychology*, 45 (November), 961-77.

Reprint No. JMR264106

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