# Consumer Evaluations of Brand Extension: The Roles of Case-Based Reminding on Brand-to-Brand Similarity

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#### **ABSTRACT**

Utilizing the case-based reminding theory in analogical reasoning, this research proposes that the evaluation of a brand extension can be improved by reminding consumers of a similar brand in the extension category. This effect is derived from a brand-to-brand similarity, in addition to the product-to-product and brand-to-product similarity identified in prior literature. Experiment 1 explores the idea that the effect of similar case reminders is most pronounced in moderately similar extensions than in highly similar or highly dissimilar extensions due to schema congruity. Experiments 2 and 3 distinguish the levels of similarity (i.e., product-to-product, brand-to-product, and brand-to-brand similarity) as a source of consumers' evaluations on a brand extension and further eliminate an alternative explanation of instantaneous learning in the advertisement setup of Experiment 1. © 2010 Wiley Periodicals, Inc.

Consumer evaluations of brand extension have been extensively investigated in consumer behavior and marketing research. From a psychological perspective,

brand extension evaluation is a categorization process in which the extension evaluation is determined by the perceived category overlap between the new extension and the core brand or product attributes (Felcher, Malaviya, & McGill, 2001; Mao & Krishnan, 2006). Among the research related to categorization, analogical reasoning recently has received attention from the consumer research community. In a review article, Gregan-Paxton and Roedder (1997) suggested that psychological research in analogical reasoning may be a fruitful area for consumer research (e.g., Moreau, Lehman, & Markman, 2001; Moreau, Markman, & Lehman, 2001). Brand extension was one of the areas on their list that could potentially benefit from psychological research in analogical reasoning.

The purpose of the present paper is to apply the theory of analogical reasoning to consumers' brand extension evaluations. Specifically, it is suggested that consumers' evaluations of brand extension can be manipulated by reminding them of a similar case in the extension category. The knowledge about the brand in the extension category (i.e., the "case") can thus be analogically transferred to the proposed extension, elevating the extension evaluation. The following sections present a brief literature review, the research hypotheses, and finally the three experiments to test these hypotheses.

# LITERATURE BACKGROUND AND RESEARCH HYPOTHESES

#### **Consumer Evaluations of Brand Extension**

Brand extension is a major research interest in the academic community of branding and consumer studies (Boush, 1993; Hennig-Thurau, Houston, & Heitjans, 2009; Nan, 2002; Oakley et al., 2008; Shine, Park, & Wyer, 2007; Volckner & Sattler, 2006). Among the topics concerning consumer evaluations of brand extensions, one central issue is the psychological mechanisms through which consumers evaluate brand extensions (Kumar, 2005). In prior literature, there were two major lines of research that explored the determinants of consumers' brand extension evaluations. The first was product category similarity, which asserted that consumers' brand extension evaluations are determined by the similarity between the core product category and the extension product category (Aaker & Keller, 1990; Yeo & Park, 2006). Because the basis of brand extension evaluation relies on the similarity between two product categories, it can be called productto-product similarity. The second was brand concept consistency, which argued that in addition to the product category similarity, the conceptual consistency between the brand name and the extension category was also a major factor determining consumers' brand extension evaluations (Broniarczyk & Alba, 1994; Mao & Krishnan, 2006; Park, Milberg, & Lawson, 1991). Because this line of research emphasized the importance of the relationship between specific brand associations and the extension products, the basis of the similarity for brand extension evaluations can be called the brand-to-product similarity.

The present study approaches the issue of consumers' evaluations of brand extensions from a different perspective. As described above, brand extension evaluations are essentially a psychological process of categorization (Medin & Schaffer, 1978; Rosch & Mervis, 1975; Rosch, 1978). Overlap in features between the core product/brand and the extension category can assist the categorization

process (Tversky, 1977). Both product category similarity and brand concept consistency are sources of computing such overlap of features. The source of the overlapping features in this study is different from those in prior literature. Because the source of the overlapping features in the present study involves similarities of a core brand to a case brand in the extension category, it can be called brand-to-brand similarity.

Brand-to-brand similarity has been discussed in the study of the co-branding strategy (Walchli, 2007), where the essential concept was the between-partner congruity. Therefore, the congruity or fit of the two brands was the major factor in determining consumers' evaluations of a new product launched by two brands together (Walchli, 2007). However, in the present study the brand-to-brand similarity is employed from a different perspective, one that goes beyond the application of co-branding. One brand serves as a cue or a reminding case for the focal brand that the manufacturer intends to extend to a new product category.

# **Analogical Reasoning and Case-Based Reminding**

Analogical reasoning is a pivotal research area for psychologists interested in the cognitive process of knowledge transfer. Many theorists (Gentner, 1983; Gilboa & Schmeidler, 1995; Holyoak, 1985; Holyoak & Thagard, 1989; Kolodner, 1993; Ross, 1987, 1984) have delineated how internal knowledge was transferred from a base domain to a target domain during the relational mapping process of analogy (Green et al., 2008; Krawczyk, Holyoak, & Hummel, 2004). Case-based reminding theory is among the various theoretical models of analogy that emphasized the importance of content in analogical transfer. Case-based reminding theory (Ross, 1987, 1984) argues that when making inductive inferences, people sometimes rely on similarity-based heuristics rather than normatively valid rules to draw inductive inferences. One such rule is to use a prior case that is similar to the present case as a basis for judgment, and then draw inductive inferences by analogically transferring the knowledge of the similar case to the present case in question. A doctor, for example, may diagnose a patient based on observed symptoms (Ross, 1984). Instead of using normative rules, such as the Bayesian Rule, the doctor may use a judgmental heuristic based on the similarities in symptoms between the present patient and a prior patient (i.e., the "case"). The symptoms of the present patient may remind the doctor of a similar prior case, and the doctor may analogically transfer the knowledge of the prior patient to the present patient as the basis of diagnostic judgments.

Previous studies have explored the idea that consumer evaluations of a new product could be manipulated by reminding consumers of a similar example to enhance the corresponding product attributes with the analogy process (Goode, Dahl, & Moreau, 2010; Gregan-Paxton & Roedder, 1997; Gregan-Paxton et al., 2002). Therefore, the present research approaches the issue of consumer evaluations of brand extension from the perspective of case-based reminding and suggests that the proposed brand extension evaluations can be manipulated by reminding consumers of a similar brand in the extension category. Consider the following example: Assume Apple Inc. plans to extend its product lines to the automobile category. According to prior research in brand extension evaluation, the overlapping features between the personal computer and the automobile category (i.e., product-to-product similarity), or between the Apple brand concept and the automobile category (i.e., brand-to-product similarity) are necessary

for consumers to accept this extension. It is not readily apparent that either type of comparative features between these two products would overlap at all. However, consumers might still find it appealing to have an Apple car if they were reminded by a case brand, say the Smart car, in the automobile category. How does this perceived fit come about?

This study suggests that consumers' perceived fit may arise as a result of the aforementioned case-based reminding process. It is postulated that the existence of a particular car brand like Smart, which shares a similar brand concept with Apple, may help elevate the evaluation of Apple cars. Apple produces chic and stylish Mac computers, and other trendy products such as the iPad and iPhone. Smart is a chic and cute car in the automobile market. That is, the similarities between Smart and Apple help clarify a defining and desirable characteristic of the Apple car. An Apple car would look essentially like a Smart car: stylish, fun, colorful, cute, versatile, and creative. Therefore, reminding consumers of the Smart car can elevate the evaluation of the Apple car. The brand concept of Smart is analogically transferred in the process of evaluating the proposed Apple car: An Apple car is just like a Smart car.

The Smart car is a special example because Smart's brand concept is not similar to the prototypical car (Rosch, 1978). A prototypical car may look like the one in your garage: four-door, five-seat sedan with a conservative, single color. If Smart did not exist in the market, then an Apple car might not be seen as a reasonable or desirable product.

Note that in the above hypothesized case, the source of similarity for evaluating the brand extension occurs between two brands (i.e., Apple and Smart). This brand-to-brand similarity is different from the product-to-product similarity (Aaker & Keller, 1990) and the brand-to-product similarity (Broniarczyk & Alba, 1994; Park, Milberg, & Lawson, 1991) discussed in previous research. The brand-to-brand similarity through case-based reminding can be viewed as a complementary source to the product-to-product and brand-to-product similarities. However, a simple demonstration of the effect of case-based reminding would be a result of a mixture of all three sources of similarities. Thus, it is advantageous to be able to separate and identify the effects of different sources of similarities.

To summarize, the present study predicts that the brand extension evaluations of consumers who are reminded of a similar brand in the proposed extension would be more favorable than those who are not reminded of such a brand. Furthermore, because the basis of the analogical transfer depends on the perceived similarity (Markman & Gentner, 1993), the present study also attempts to distinguish the case-based reminding effect due to the brand-to-brand similarity from other kinds of similarities (e.g., brand-to-product and product-to-product similarities).

The present research consists of three experiments. Experiment 1 first demonstrates the basic hypothesis of case-based reminding. Experiment 2 and 3 address the issue of a possible confounding effect in Experiment 1 and further clarify the effects of the different levels of similarities (i.e., product-to-product, brand-to-product, and brand-to-brand similarities).

#### **EXPERIMENT 1**

According to Mandler (1982), people are likely to resolve or make sense of moderate schema incongruities by enacting minor changes in their mind-sets.

Not only are such moderate incongruities thought to be interesting and positively valued in their own right, but the process of resolving such incongruities tends to be rewarding. Congruent schemas do not require people to resolve incongruities, and hence do not provide such rewarding experiences. Thus, congruent schemas are slightly preferred. Moreover, it is unlikely that extremely incongruent schemas can be resolved even with intensive processing, and hence are not preferred as much as moderately incongruent schemas (Meyers-Levy, Louie, & Curren, 1994; Meyers-Levy & Tybout, 1989).

Schema incongruity, then, is expected to interact with the effect of case-based reminding in the present research. The effect of case-based reminding should be most pronounced with moderately similar extensions than with either extremely similar or extremely dissimilar extensions. As consumers strive to resolve a schema incongruity when there is a moderately similar brand extension, reminders of a similar brand can best help them resolve the incongruity; this, in turn, improves brand extension evaluations, particularly with respect to perceptions as to what is the better fit and in generating positive attitudes toward the extension product. The marginal contribution is diminished with extremely similar or extremely dissimilar extensions. Extremely similar extensions do not require such reminding, and extremely dissimilar extensions would not register much consideration of fit even with reminding. Therefore, the main effect of case-based reminding on the brand extension and its interaction with the similarity between the original and extension categories are proposed in the following hypotheses:

**H1a:** Consumers tend to perceive a better fit between the core brand and the extension product category when they are reminded of an existing brand with brand concepts similar to the core brand in the extension category than when they are not reminded.

**H1b:** Consumers tend to perceive a better attitude toward the extension product when they are reminded of an existing brand with brand concepts similar to the core brand in the extension category than when they are not reminded.

**H2a:** The effect of case-based reminding on the perceived fit of the extension is stronger when consumers face a moderately similar extension than a highly similar extension or a dissimilar extension.

**H2b:** The effect of case-based reminding on the attitude toward the extension is stronger when consumers face a moderately similar extension than a highly similar extension or a dissimilar extension.

#### **Pretests**

A series of pretests were conducted to select experimental materials, including the core brand, the three extension categories varying in the level of similarities to the product category of the core brand, and the reminding brand in the extension categories similar to the core brand.

The first pretest was conducted to select the core brand for the experiment. A set of actual brands that college students were familiar with was first collected by a panel of consumer researchers. Then two candidate brands with the

criteria of familiarity and wide potential extensions were chosen by the panel: Rolex watches and the Discovery Channel. Forty undergraduate students from a major university were asked about the awareness, possible extensions, and brand–product associations of the two candidate brands. The results revealed that Rolex enjoyed higher brand awareness (100%) than the Discovery Channel (80%), more potential extensions (9 suitable extensions vs. 4 extensions for the Discovery Channel), and stronger brand–product associations (96% of respondents associated Rolex with the watch category vs. 66% respondents associated the Discovery Channel with the TV channel category). Thus, Rolex was selected as the core brand for the experiment.

The second pretest was conducted to choose three target extension categories. A panel of three researchers in consumer behavior first selected five possibly suitable extensions for Rolex: handbags, cosmetics, sunglasses, fountain pens, and whiskey. A new sample of 40 undergraduate students rated the relative similarities of each extension category to the core watch category. Statistical tests comparing the differences in the similarity ratings between each pair of products and between the product and the core product showed that, except for whiskey and cosmetics, most extension categories were found to be significantly different in their similarity to each other, as well as to the core product, the watch. Thus, the other three product categories were chosen as the experimental materials. The highly similar extension was the sunglasses (Mean similarity to the watch category = 1.45, SD = 2.35). The moderately similar extension was the fountain pen (Mean similarity = 0.16, SD = 2.81). Finally, the dissimilar extension was the handbag (Mean similarity = -1.14, SD = 2.63). Scheffé's tests revealed significant differences in the similarity between each of the three extension categories (Mean difference = 1.29, SD = 0.52, p < 0.05 between the sunglasses and the fountain pen; Mean difference = 2.59, SD = 0.52, p < 0.01between the sunglasses and the handbag; Mean difference = 1.30, SD = 0.52, p < 0.05 between the fountain pen and the handbag).

The third pretest provided for the selection of the case brand in the respective extension category as the reminding brand. The panel first inspected the core brand Rolex and came up with two brands in each extension category that were judged to be similar to the core brands in certain respects. Another 40 respondents were asked to provide an unaided recall of brands and then indicated the similar features between the core brand and the case brand (Medin, Goldstone, & Gentner, 1993). Because the case-based reminding effect was demonstrated when the reminding group had higher brand extension evaluations than the non-reminding group, it was essential to make sure that the non-reminding group would not recall the reminding brand spontaneously. All case brands qualified in this regard. Furthermore, the attribute "prestige" was found in the brand associations for Rolex, Giorgio Armani's sunglasses, Mont Blanc's fountain pens, and Louis Vuitton's handbags. The concept of prestige was mentioned by 90% of participants for Giorgio Armani, 90.5% for Mont Blanc, and 91.2% for Louis Vuitton. Thus these three case brands (i.e., Armani, Mont Blanc, and Louis Vuitton) were selected as the reminding case brands for the respective three extensions.

Finally, because the case brand reminding was manipulated with a priming procedure in which respondents viewed a series of ads before they were given the brand extension evaluation task, a set of ads including both the target ads and filler ads was developed. The fourth pretest measuring the attitude toward

these ads revealed no differential preferences among these ads [F(5,222) = 0.40, n.s.]. Thus these ads were employed for Experiment 1.

# **Main Study**

Experiment 1 involved two sections. In the first section respondents were asked to evaluate three print ads. The target ad of the case-based reminding brand was embedded in the series of ads for the reminding group but not for the non-reminding group. After respondents filled out some questions about these ads, they moved on to the second section to evaluate brand extensions.

# **Design and Procedure**

The experiment was a 2 (case brand reminding: yes or no)  $\times$  3 (product similarity: highly similar, moderately similar, and dissimilar extension) between-subject factorial design. The core brand Rolex was employed in all conditions. The highly similar extension was the Rolex sunglasses. The moderately similar extension was the Rolex fountain pen. The dissimilar extension was the Rolex handbag. For the reminding case brand, Giorgio Armani was used for the sunglasses extension, Mont Blanc was used for the fountain pen extension, and Louis Vuitton was used for the handbag extension.

Participants were given an experimental booklet which opened with a general instruction that this was a study on consumer behavior. The first part of the experimental booklet consisted of three print ads. For the reminding group, one of the ads was the target ad of the case-based reminding brand. The other two ads were filler ads. For the non-reminding group, all three ads were filler ads. The orders of the ads were randomly arranged. Participants first viewed the ads and then answered questions about both the content of the ad and their attitudes toward the ad and the product, such as the design, layout, and information amount. These questions were designed to engage participants to elaborate on the information in ads more thoroughly.

After they finished rating the three ads in the first section, they moved on to the second section, which was framed as a new study independent of the first one. Participants were first given the simple definition of brand extension. They then evaluated the proposed extension for Rolex. The dependent measures were five items of consumers' perceptions of extension fit (viz., "fit," "reasonable," "connected," "associated," and "understandable") and six items of their attitudes toward the proposed brand extensions (viz., "likeable," "attractive," "of good quality," "recommended," "acceptable," and "purchase intention") (Aaker & Keller, 1990; Bhat & Reddy, 2001; Bruke & Edell, 1989; Chen & Li, 1999; Klink & Smith, 2001; Sheinin & Schmitt, 1994). Seven-point semantic differential scales were employed in which the middle point 0 represented a neutral attitude. Positive numbers from +1 to +3 represented positive evaluations, and negative numbers from -1 to -3 represented negative evaluations. The last part of the questionnaire was the manipulation check, in which participants' brand associations for Rolex and other possible extensions for Rolex were measured. The brand awareness and associations of the case-based reminding brands as well as the similarities between the core product (i.e., the wrist watch) and the three extension categories were also collected.

#### Results

Two hundred forty undergraduate students from a major university were recruited to participate in the main study for extra credit in a course. The valid samples were those who had heard of the core brand (i.e., Rolex) and the reminding case brand (i.e., Giorgio Armani, Mont Blanc, and Louis Vuitton) prior to the experiment, resulting in 160 valid participants.

**Manipulation Check and Reliability.** Pairwise comparisons of the similarities between the core product and the three extensions using Scheffé's tests revealed significant differences between the highly similar, moderately similar, and dissimilar extensions. (Mean difference = 2.25, SD = 0.73, p < 0.05 between the sunglasses and the fountain pen; Mean difference = 4.20, SD = 0.73, p < 0.01 between the sunglasses and the handbag; Mean difference = 1.95, SD = 0.73, p < 0.05 between the fountain pen and the handbag). The similarity between the watch and the sunglasses was 2.35 (SD = 1.84) on a 7-point scale from +3 to -3; the similarity between the watch and the fountain pen was 0.1 (SD = 2.38); and the similarity between the watch and the handbag was -1.85 (SD = 2.62). In addition, both the core brand, Rolex, and the three reminder brands enjoyed high awareness among participants. They were also associated with the notion of "prestige," as expected (92% of the participants associated Giorgio Armani with prestige, 84% associated Mont Blanc with prestige, and 90% associated Louis Vuitton with prestige). Thus, the manipulations were successful.

Consumers' attitudes toward the ads were not significantly different [F(5,699)=2, n.s.]. Moreover, the Cronbach's alphas for both the dependent measures of the perceived fit (Cronbach's alpha = 0.92) and the attitudes toward the proposed extensions (Cronbach's alpha = 0.86) showed that the reliabilities for both measures were high enough for further analysis.

**Hypothesis Testing.** A 2  $\times$  3 ANOVA was performed on the experimental data. Two dependent measures, the perceived fit of the new extension and the attitude toward the proposed extension, were analyzed separately. The results revealed, for the perceived fit, a significant main effect for case-based reminding [F(1,154)=8.68,p<0.01], a significant main effect for the product similarity [F(2,154)=5.10,p<0.01], and a significant interaction effect between the two factors [F(2,154)=4.17,p<0.05]. Similarly, for the attitude toward the proposed extension, there was a significant main effect for case-based reminding [F(1,154)=5.86,p<0.05], a significant main effect for product similarity [F(2,154)=3.36,p<0.05], and a significant interaction effect between the two factors [F(2,154)=4.54,p<0.05].

Further analysis addressed the specific hypotheses. The main effect for case-based reminding was significant. The mean of the perceived fit for the reminding group was 0.79~(SD=1.31), which was significantly higher than the perceived fit for the non-reminding group, with a mean = 0.26~(SD=1.50), supporting H1a. The mean of the attitude toward the new extension for the reminding group was 0.22~(SD=1.13), which was also significantly higher than the non-reminding group, with a mean = -0.15~(SD=1.25), also as expected in H1b.

To examine the moderating role of product similarities, planned contrasts were employed to compare the differences between reminding and non-reminding in

Table 1. Mean Values and Standard Deviations of Brand Extension Evaluations in the Respective Product Similarity Conditions of Experiment 1.

		Highly Similar Extension	Moderately Similar Extension	Dissimilar Extension
Case brand reminding	Perceived fit Extension attitude	$0.74 (0.96)^{A} \ 0.18 (1.15)^{D}$	$\begin{array}{c} 1.57\ (0.89)^B \\ 0.81\ (0.93)^E \end{array}$	$\begin{array}{c} 0.23\ (1.60)^{\rm C} \\ -0.20\ (1.09)^{\rm F} \end{array}$
No case brand reminding	Perceived fit Extension attitude	$\begin{array}{c} 0.71\ (1.20)^{A} \\ 0.25\ (1.58)^{D} \end{array}$	$\begin{array}{c} 0.09\ (1.72)^b \\ -0.40\ (1.40)^e \end{array}$	$\begin{array}{l} -0.16\ (1.45)^{\rm C} \\ -0.41\ (1.05)^{\rm F} \end{array}$

Notes: Standard deviations are in parentheses.

three different product similarity conditions. The results showed that the case-based reminding effect on the perceived fit was larger with the moderately similar extension than with the highly similar extension (F = 7.88, p < 0.01). The effect of reminding on the perceived fit of the moderately similar extension was also higher than that of the dissimilar extension (F = 4.05, p < 0.05). A similar pattern was also found for attitudes toward new extensions. The effect of case-based reminding on attitudes toward the extension with the moderately similar extension was more positive than those with the highly similar extension (F = 8.44, p < 0.01). The effect of reminding on attitudes toward the new extension with the moderately similar extension was also more positive than those with the dissimilar extension (F = 4.71, p < 0.05). Thus, the effect of case-based reminding on brand extension evaluations was more pronounced with the moderately similar extensions than with either highly similar or dissimilar extensions. H2a and H2b are both supported. Table 1 lists the mean values and standard deviations of the brand extension evaluations in the respective product similarity conditions.

#### Discussion

Experiment 1 found that reminding consumers of a similar case brand in the extension category can improve the brand extension evaluations. This reminding effect was more pronounced with a moderately similar extension than with either a highly similar or a dissimilar extension. Respondents who were reminded of the Mont Blanc fountain pen (i.e., a moderately similar extension category) would have a higher evaluation of a Rolex fountain pen. This effect of reminding respondents of a similar case diminished with a highly similar extension (sunglasses), or with a dissimilar extension (handbags). The data of Experiment 1 provided support for the role of case-based reminding in elevating consumers' brand extension evaluations.

Nonetheless, two issues are noteworthy. First, as was argued above, the case-based reminding stimuli should elicit brand knowledge from consumers' stored memory, which would then be used to evaluate the proposed brand extension. The prior brand knowledge, it was believed, was ensured by deleting those who did not know the core or case brand before the experiment. However, one possibility resulting from the participants in Experiment 1 being given print ads

Upper and lower case superscripts represent a significant difference in the pair comparison.

as the reminding stimuli before they were given the brand extension questions is that participants could have made the "prestige" connection directly from the ad picture and not from prior knowledge, as delineated in the case-based reminding theory. Thus, an alternative explanation is to attribute the effect found here to an instantaneous learning of the content in the print ads (i.e., a stimulus-based response), rather than to respondents' memories, as is required by casebased reminding. In such instances, case-based reminding may not be the underlying process in Experiment 1. Thus, if the integrity of the position is to be maintained, it is essential to eliminate the possibility of this alternative explanation. One way to eliminate the confounding explanation of instantaneous learning would be to use a simple description of the reminding case without pictorial information, which delivers the image of the reminding brand. Without the picture generating the unwanted stimulus-based learning (i.e., a picture of a prestigious fountain pen by Mont Blanc), if the participants did not know the case brand prior to the experiment or the case did not bring out the analogy, no effect of the brand-to-brand similarity would be revealed.

Second, case-based reminding is a form of analogical reasoning that depends on the perceived similarity between the case brand and the target brand. In the present setting, there are various bases of similarity (Yoo & MacInnis, 2004) responsible for the observed brand extension evaluations, such as productto-product similarity (see Aaker & Keller, 1990), brand-to-product similarity (Broniarczyk & Alba, 1994; Park, Milberg, & Lawson, 1991), and brand-to-brand similarity (Bei & Shen, 2007; Walchli, 2007). Brand-to-brand similarity through case-based reminding can be viewed as a complementary source to the productto-product and brand-to-product similarity in prior research. However, the casebased reminding effect observed in Experiment 1 was a mixture of all three sources of similarity. For instance, the evaluation of Rolex making fountain pens prompted by Mont Blanc as a similar case was a result of all three sources of similarity: product-to-product similarity (i.e., the similarity between the watch and the fountain pen), brand-to-product similarity (i.e., the similarity between Rolex and the fountain pen), and brand-to-brand similarity (i.e., the similarity between Rolex and Mont Blanc). It would be desirable to be able to isolate effects out of the three levels of similarities: product-to-product, brand-to-product, and brand-to-brand. Experiment 2 manipulated the product association to control for the effect of brand-to-product similarity. With the reminding case for the brandto-brand similarity, the effects of three levels of similarities could be identified.

### **EXPERIMENT 2**

Experiment 2 was modified based on the two concerns cited above. In order to distinguish the three different sources of similarity and purify the net effect of case-based reminding (i.e., brand-to-brand similarity), the same core brand, Rolex, and the moderately similar extension, the fountain pen, were employed in Experiment 2. The moderately similar extension was chosen for two reasons: (1) the obvious difference between the reminding and non-reminding case in Experiment 1 would allow the effect of brand-to-brand similarity to be easily observed; (2) the fountain pen revealed a partially functional and partially prestigious product concept in the pretest, which provided room to manipulate participants' perceptions of brand-to-product similarity.

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Experiment 2 utilized short "product passages" in which either prestigious or neutral product associations for fountain pens were embedded. A prestigious product association pointing out that a fountain pen symbolizes a businessman's social status would evoke a higher level of brand-to-product similarity between Rolex and fountain pens. A neutral product association described only the history of a fountain pen and its function, without any prestige- or symbolrelated information, in order to evoke a lower level of brand-to-product similarity between Rolex and fountain pens. For instance, when the brand extension evaluation of a Rolex fountain pen is given a prestige association with the fountain pen category, it reflects the brand-to-product similarity between the prestigious status of the Rolex brand and the prestigious fountain pen product category. In contrast, when the brand extension evaluation of a Rolex fountain pen is not given a prestigious association with the fountain pen, it reflects that no such brand-to-product similarity could be established. Thus, comparing the two conditions would reveal the net effect of the brand-to-product similarity, and comparing the two conditions would reveal the net effect of the brand-toproduct similarity.

The print ad was discarded to eliminate the possible instantaneous learning due to the picture in the ad conveying an association with prestige. In addition, another set of short "brand passages" describing the history of the reminding brand, written in a neutral tone and rhetorical style, were designed to serve the role of the reminding case in Experiment 2. No direct allusions to prestige were used in the brand passage to avoid the possible confusion with instantaneous learning. The effect of case-based reminding due to the presence of the Mont Blanc brand name must come from respondents' brand schemas, where both Rolex and Mont Blanc shared similar characteristics. The brand passage, similar to the print ad in Experiment 1, was used to elicit the perception of a similarity in prestige between Rolex and Mont Blanc. The comparison between this condition and that without such a brand passage would reveal the net effect of the brand-to-brand similarity on the brand extension evaluation.

The rationale is as follows (see Table 2). First, for participants who are given the neutral product passage about the fountain pen (in which the fountain pen was mainly described as a functional product with no symbolic or prestigious meaning) and without the reminding case, their brand extension evaluation should mainly reflect the effect of product-to-product similarity—in other words, the similarity between the watch and the fountain pen. Second, for participants who are given the product passage in which the fountain pen was described as a prestigious product and without the reminding case, their brand extension evaluations should be based on both product-to-product similarity (i.e., similarity between the watch and the fountain pen) and brand-to-product similarity (i.e., similarity between the prestigious brand image of Rolex and the prestige association of the watch category). Thus, the difference between these two groups would reflect the net effect of brand-to-product similarities. Third, for participants who were given the product passage in which the fountain pen was described as a prestigious product and given the brand passage with the reminder brand in the fountain pen category, their brand extension evaluation is the sum of all three levels of similarities (i.e., product-to-product, brand-to-product, and brand-to-brand). As a result, the difference between the third and second group of participants would reflect the net effect of brand-to-brand similarities (i.e., the similarity between Rolex and Mont Blanc).

Table 2. The Combination of Different Similarities in the Design of Experiment 2 and Experiment 3.

Product Passage or Product Association:	Prestige Product	Neutral Product
Brand Passage:	Association	Association
Case brand reminding No case brand reminding	PtoP + BtoP + BtoB PtoP + BtoP	PtoP + BtoB* PtoP

*Notes:* Prestige versus neutral product associations are manipulated (or measured) by product passage in Experiment 2 (or product association in Experiment 3).

PtoP stands for Product-to-Product Similarity, BtoP stands for Brand-to-Product Similarity, and BtoB stands for Brand-to-Brand Similarity.

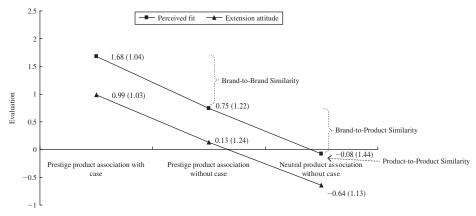
Finally, the condition of a neutral product association with the reminder brand is more at issue (as shown in the upper-right quadrant of Table 2). Logically, the brand extension evaluation from this group would be based on the productto-product similarity (i.e., similarity between the watch and the fountain pen) plus the brand-to-brand similarity (i.e., the similarity between Rolex and Mont Blanc). Thus, the difference between this group and the group with neutral product associations without the reminding case (that is, product-to-product similarity only) should reflect the net effect of brand-to-brand similarity. However, the perceived similarity between the reminding brand and the core brand may render the neutral product association manipulation ineffective. The reason for this is that the presence of the Mont Blanc reminding brand may be sufficient to lead participants to perceive the fountain pen as a prestigious product even though they are given the manipulation of a neutral product association. Thus, although Experiment 2 did include this condition to create a complete  $2 \times 2$  design, it was not expected to be employed to test the net effect of B2B similarity.

To summarize, in Experiment 2, it is hypothesized that the effect of providing a reminding case in the extension category when the product category is introduced as a prestigious product is stronger on the extension evaluation than the effect when the extension product category is prestigious but without the reminding case. In addition, both effects are stronger than the effect when the extension product category is described as neutral and without the reminding case. The last condition represents the product-to-product similarity, and the net differences from the previous two levels represent the brand-to-product and brand-to-brand similarities, respectively (as shown in Figure 1).

#### Method

**Materials.** The basic experimental concepts were the same as in Experiment 1, except for the manipulations of the product category association and the reminding brand. The product association was not controlled in Experiment 1, but was manipulated by constructing short passages describing the fountain pen either as a prestigious product or as a neutral product in Experiment 2. The two versions were about the same length (149 words for the prestige version and 151 words for the neutral version of the passage). A pretest using a 7-point semantic differential scale on 60 participants showed there was a

<sup>\*</sup> The combination of PtoP + BtoB is not included in Experiments 2 and 3.



Note: Standard deviations are in parentheses.

**Figure 1.** The effects of case-based reminding and product associations in Experiment 2.

significant difference in terms of the prestige status of the fountain pen between the two passages [Mean prestige rating = 5.43, SD = 0.85 for the prestige passage; Mean prestige rating = 2.08, SD = 0.64 for the neutral passage; between group t(58) = 17.34, p < 0.01].

To manipulate the reminding brand, short informational passages (i.e., brand passages) about Mont Blanc replaced the role of print ads in Experiment 1 in order to reduce the possible confounding of instantaneous learning opportunities due to the picture of a prestige pen conveying the prestige message of the brand. The brand passages only described the history of Mont Blanc, without referring to any concept of prestige. Two other brand history passages about Kikkoman soy sauce and Charlie Wang soft drinks were also developed for this purpose. For the non-reminding group, the passage about Kikkoman was used instead of Mont Blanc. The passage about Charlie Wang was the filler presented after either Mont Blanc or Kikkoman. A pretest on 30 participants comparing the amount of information, the persuasiveness, comprehensibility, and clarity of the message revealed that there were no significant differences among these passages.

**Design and Procedure.** Two independent variables (case-based reminding vs. product association) were manipulated in Experiment 2. The experiment was a 2 (case brand reminding: yes, i.e., Mont Blanc vs. no, i.e., Kikkoman)  $\times$  2 (product association: prestige vs. neutral association with the fountain pen) between-subject factorial design. The dependent measures were the same as in Experiment 1.

Participants were told that they would participate in two studies. The first one was masked as a survey judging the quality of PR statements. Participants received a booklet in which the first page was the product association passage, where the fountain pen was described as either a prestige or a functional product (to manipulate the level of brand-to-product similarity). After finishing the product passage, they evaluated the amount of information, the persuasiveness, comprehensibility, and clarity of the passage on four 7-point questions. Participants were also asked to write down their free associations after reading the

PR statements. The second page was the brand passage for the manipulation of the reminding case, the brand history of either Mont Blanc or Kikkoman. The final page was the filler passage. The same set of four 7-point questions and one open-ended question were asked for both passages. These data were collected for the purpose of a manipulation check.

Next, participants were introduced to the second study, the brand extension evaluation, which was the same as in Experiment 1. After completing the questions on brand extension evaluations, participants provided their judgments on the perceived prestigious status of the extension category (i.e., the prestigious—not prestigious level and the symbolic—functional level) on the 7-point semantic differential scales and other manipulation check measures, just as in Experiment 1.

#### Results

One hundred twenty-four undergraduate students from a major university were recruited as participants. Of these, 104 students who knew the core and case brands composed the valid sample. They were given extra course credit for their participation.

**Manipulation Check.** As in the pretest, the two product passages were not different [F(1,307)=0.01,p=0.95]; the two brand passage manipulations were not different [F(1,307)=0.30,p=0.59] either, in terms of the message clarity, the amount of information, or the message's persuasiveness. Furthermore, 90% of participants answered the prestige status of the fountain pen consistently with the manipulation. The average of two questions (i.e., the prestigious and symbolic level) measuring the prestige status of the fountain pen also revealed significant differences between the conditions of the prestige product association (M=5.91,SD=0.71) and the neutral product association [Mean = 2.59, SD=0.87; t(102)=20.71, p<0.01]. The manipulation of the prestige product association was successful.

As expected, the manipulation of the condition with the fountain pen as a neutral product and Mont Blanc as the reminding brand failed. In this condition, all participants viewed the fountain pen as a prestigious product, albeit they were given the neutral manipulation. As reasoned above, it was possible that the reminding manipulation of a prestige case brand (i.e., Mont Blanc) would render the product association manipulation ineffective. As a result, the data of this condition were removed from further analyses. The same product association manipulation was successful in other conditions. Participants viewed the fountain pen as a prestigious versus neutral product as expected.

**Hypothesis Testing.** The Cronbach's alphas for both the perceived fit  $(\alpha=0.93)$  and attitude toward the brand extension  $(\alpha=0.89)$  were both higher than the conventional acceptable level. The average scores of corresponding items were taken for the following tests of the hypotheses. Because the group of neutral product associations with a reminding case was not included in the design, the design became an incomplete design. Thus, the rest of the three groups were treated as three levels of one variable. The result of the ANOVA showed that for the perceived fit, a significant main effect [F(2,101)=16.82, p<0.01] was found. The same was also true for the attitude toward the brand extension [F(2,101)=17.04, p<0.01].

The brand reminding passage containing neutral information was found to be effective in eliciting stronger brand extension evaluations. The two non-reminding groups given the prestige and neutral association manipulation were first combined in order to compare them with the reminding group. The perceived fit of the extension with the reminding passage (M=1.68, SD=1.04; see Figure 1) was higher than without the reminding passage (M=0.35, SD=1.38; planned contrast F=24.68, p<0.01). Similarly, the attitude toward the extension with the reminding passage (M=0.99, SD=1.03) was more positive than without the reminding passage (M=0.99, SD=1.03) was more positive than without the reminding passage (M=0.24, SD=1.24; planned contrast F=25.17, p<0.01). These results further supported the mechanism of casebased reminding by eliminating the confounding effect from the potential instantaneous learning arising from of the print ad presentations in Experiment 1.

Moreover, to isolate the effects from different levels of similarities, the brand extension evaluations across consumers who were given different product associations were analyzed. The perceived fit for participants in the non-reminding group given the prestige association of the fountain pen (M=0.75,SD=1.22) was significantly stronger than the same non-reminding participants given the neutral associations (M=-0.08,SD=1.44; Scheffé test p<0.05). Similarly, the attitude toward the extension for participants in the non-reminding group given the prestige association of the fountain pen (M=0.13,SD=1.24) was significantly stronger than the same non-reminding participants given the neutral associations (M=-0.64,SD=1.13; Scheffé test p<0.05). Thus, the data provided support the existence of this source for the effect from the brand-to-product similarity. These results concurred with the notion of brand concept consistency in prior literature (Broniarczyk & Alba, 1994; Mao & Krishnan, 2006; Park, Milberg, & Lawson, 1991).

Most importantly, the case-based reminding mechanism relies on brand-to-brand similarity as the source of the effect. This effect was revealed when there was a significant difference between the group given the prestige association of the fountain pen and the reminding brand (i.e., brand-to-brand, brand-to-product, and product-to-product) and the group given the prestige association but not given the reminding brand (i.e., brand-to-product and product-to-product). The data analysis showed that the perceived fit for reminding participants (M=1.68, SD=1.04) was significantly stronger than for the non-reminding participants (M=0.75, SD=1.22; Scheffé test p<0.01). Similarly, the attitude toward the extension for participants who were given the reminding brand (M=0.99, SD=1.03) was also significantly more positive than the non-reminding participants (M=0.13, SD=1.24; Scheffé test p<0.01). Therefore, the data supported the existence of the brand-to-brand similarity as the source of effects in the case-based reminding.

#### **Discussion**

Experiment 2 successfully established that the reminding effect observed in Experiment 1 came from consumers' memory, as opposed to the alternative explanation of instantaneous learning from the print ads. Reminding consumers with case materials that did not convey the notion of prestige, as in the pictorial stimuli of Experiment 1, reduced the possibility that the observed effect of reminding came from instantaneous learning and not from consumers' internal schemas. Obviously, respondents perceived that Rolex extended to a fountain pen

more plausibly and preferably when the reminder of Mont Blanc was present. Without the picture of a prestige product, respondents could retrieve the prestige image of Mont Blanc from their memory based on a simple statement of reminder. The result further supported the theory of case-based reminding as the mechanism responsible for improving the brand extension evaluation.

Furthermore, Experiment 2 also distinguished the brand-to-brand similarity from the other two brand-to-product and product-to-product similarities as the sources of effects for the case-based reminding. It was found that all three sources of similarities contributed to the observed effect of case-based reminding on improving brand extension evaluations.

In the current study, the brand-to-product similarity was manipulated and somehow was different from that of previous research (Broniarczyk & Alba, 1994; Park, Milberg, & Lawson, 1991), where the brand-to-product similarity naturally existed in respondents' perceptions. The fountain pen in this study was selected as the extension product due to its moderate similarity to the watch and its indistinguishable position on the prestige–function axis. Experiment 3 intended to elicit respondents' internal perceptual schema to identify the prestige-function position; they could thus retrieve the brand-to-product similarity naturally. Furthermore, the effect of case-based reminding could be fully relieved of the demand artifact caused by manipulating (as opposed to measuring) the brand-to-product similarity.

#### **EXPERIMENT 3**

To further consolidate the conclusions of Experiment 2, Experiment 3 replicated the findings of Experiment 2, with one modification of the procedure. In Experiment 2 the product association (prestige vs. neutral) was manipulated by giving undergraduate participants short passages. However, the product association could also be an individual difference that depends on the person's knowledge. A fountain pen may be viewed as a prestigious product by many white-collar workers, for instance, but not by most students. Thus, in Experiment 3 the product association was measured (rather than manipulated as in Experiment 2).

Another reason to use white-collar workers as samples to further enhance the meaning of the case brands in Experiment 3 is that they are the targets of fountain pens. As reported in the previous two experiments, many student samples were classified as invalid because they had not heard of the reminding case brands. One could criticize the experiment on the grounds that students might not fully understand the meaning of the product's functional or social value or comprehend the desired projected image of the brand. Nonetheless, it was expected that the result patterns of Experiment 2 would be similarly obtained in Experiment 3. In sum, the hypotheses of Experiment 3 were the same as in Experiment 2. Most experimental procedures were the same as well, except that the product association was measured rather than manipulated.

### Method

**Participants.** In order to ensure there were enough participants who could make the product association between fountain pens and the image of prestige, middle-aged, middle-class consumers were sampled for this experiment, since they are more likely to be users of prestigious fountain pens. Out of the 100

respondents, 98 were familiar with both Rolex and Mont Blanc, and therefore constituted the valid samples. These participants were between 30 and 40 years of age, half of them males and half females.

**Materials.** Most materials were the same as in Experiment 2, except that the product association was measured rather than manipulated. To measure the product association, participants were asked whether they thought the fountain pen was a prestigious/symbolic product or a not prestigious/functional product on two 7-point semantic differential scales, ranging between -3 and +3. The prestige and neutral groups were classified using the conventional median split.

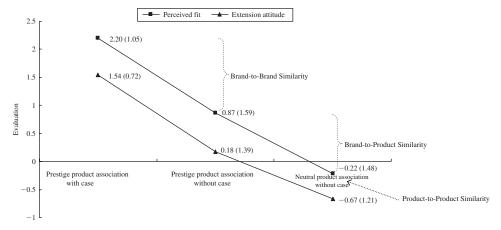
**Design and Procedure.** As in Experiment 2, Experiment 3 consisted of one variable with three conditions, excluding the condition of neutral product associations coupled with case-based reminding. The first condition was the reminding condition, in which participants were given the brand passage describing Mont Blanc's brand history as a reminder to them of the similar case in the extension category. The other condition was the non-reminding condition, in which the brand passage introducing Charlie Wang's brand history was given. Participants in this condition were divided into two groups based on their perceptions of fountain pens: those who viewed the fountain pen as a prestigious product and those who viewed it as a neutral or functional product. The dependent variables were the same as in Experiment 1 and 2.

The experimental procedure was similar to that in Experiment 2. The booklet for the experiment first presented the reminding brand passages and questions about the brand/product awareness and associations, as well as questions about the amount of information and the persuasiveness, comprehensibility, and clarity of the message. Participants were also asked to write down their free associations after reading the passages. After participants finished the first section of the experiment, they moved on to the second section on brand extension evaluations, as in the previous two experiments; they completed questions on brand extension evaluations, the perceived prestigious status of the extension category, and other manipulation check measures.

#### Results

**Manipulation Check.** The two passages were not different in terms of the amount of information, the persuasiveness, comprehensibility, or clarity of the message in the passage [F(1,96) = 0.23, p = 0.63].

**Hypothesis Testing.** The Cronbach's alphas for both the perceived fit ( $\alpha=0.95$ ) and attitude toward the brand extension ( $\alpha=0.91$ ) were both higher than the conventional acceptable level. The result of a one-way ANOVA showed that there was a significant main effect for the perceived fit [F(2,95)=23.01,p<0.01], as well as for the attitude toward the brand extension [F(2,95)=29.26,p<0.01]. The perceived fit of the extension with the reminding passage (M=2.20, SD=1.05) was higher than without the reminding passage (M=0.34, SD=1.60; planned contrast F=49.67, p<0.01). Similarly, the attitude toward the extension with the reminding passage (M=1.54, SD=0.72) was more positive than without the reminding passage (M=-0.21, SD=1.36; planned contrast F=56.79, p<0.01). This result agreed with that of Experiment 2; it further



Note: Standard deviations are in parentheses.

Figure 2. The effects of case-based reminding and product associations in Experiment 3.

supported the mechanism of case-based reminding and eliminating the confounding explanation of instantaneous learning. The means and standard deviations of three conditions are presented in Figure 2.

The brand-to-product similarity as the source of effects was first investigated. The perceived fit for the two subgroups of participants in the non-reminding condition were significantly different (Scheffé test p < 0.05). Those who held a prestige association with the fountain pen (M=0.87, SD=1.59) perceived a better fit with the brand extension than those without such prestige associations (M=-0.22, SD=1.48). Similarly, the attitude toward the extension for participants in the non-reminding group maintaining a prestige association with the fountain pen (M=0.18, SD=1.39) was significantly better than the same non-reminding participants without such prestige associations (M=-0.67, SD=1.21; Scheffé test p < 0.05). Thus, the brand-to-product similarity naturally existing in participants' perceptions as the source of effects was again supported as in Experiment 2.

For brand-to-brand similarity as the source of effects, participants who were given the reminding brand (M=2.20, SD=1.05) perceived a significantly better fit for the extension than the participants with the prestige association and without the reminding case (M=0.87, SD=1.59; Scheffé test p<0.01). Similarly, participants who were given the reminding brand (M=1.54, SD=0.72) would hold more positive attitudes toward the extension product than participants with the prestige association but not given the reminding case (M=0.18, SD=1.39; Scheffé test p<0.01). These results were the same as in Experiment 2, supporting brand-to-brand similarity as the source of the effects on consumers' brand extension evaluations.

#### GENERAL DISCUSSION AND CONCLUSIONS

# **Summary of Findings**

The role of case-based reminding in consumers' brand extension evaluation was investigated in three experiments. Experiment 1 first revealed the effect of

case-based reminding and its interaction with extension similarities. Experiment 1 found that consumers' brand extension evaluations could be improved by reminding them of a similar case brand in the extension category. A brand-to-brand similarity was then defined. This effect was more pronounced with the moderately similar extension than with either the highly similar extension or the dissimilar extension. However, the effects from three levels of similarities (i.e., brand-to-brand, brand-to-product, and product-to-product similarities) were unfortunately mixed in Experiment 1. Therefore, follow-up experiments were designed to further purify the effect of brand-to-brand similarity. The additive effect of the brand-to-brand similarity was illustrated on top of the effects of brand-to-product and product-to-product similarities.

Experiment 2 first eliminated the possibility of the confounding explanation that the effect came from an instantaneous learning of a print ad's pictorial presentations used in Experiment 1, and further explored the three levels of similarities as the potential sources of these effects. Using a moderately similar extension, Experiment 2 concluded that consumers' perceived fit and attitudes toward the extension were highest when they were provided with a reminding case with a similar brand image in the extension category (which revealed the brand-to-brand similarity) and when the extension product category was introduced as being as prestigious as the core brand (which represented the brand-to-product similarity).

Experiment 3 consolidated the findings of Experiment 2 by treating the product association as an individual difference to fit the definition of brand-to-product similarity in previous studies, as opposed to the manipulation approach used in Experiment 2. Similar and even stronger effects of the brand-to-brand similarity arising from case-based reminding were found again in Experiment 3. Also, Experiment 3 utilized the preexisting product concept and brand image perceived by middle-aged consumers to increase the external validity of the results.

# **Implications for Brand Extension Researchers** and **Practitioners**

The contributions of the present research to academia are twofold. First, the present research provides a bridge between research in analogical reasoning and brand extension evaluation. Although literature (Gregan-Paxton & Roedder, 1997; Gregan-Paxton et al., 2002) has identified the possibility of using theories in analogical reasoning to study new product and brand extension evaluations, the present research is an effort to realize such a possibility. It also offers a new perspective for brand extension research in that consumers' brand extension evaluations can be improved by prompting a similar case brand in the extension category through an analogical reasoning mechanism. Second, the present research identifies different levels of similarities as the sources of brand extension evaluations. Prior research (Aaker & Keller, 1990; Broniarczyk & Alba, 1994; Felcher, Malaviya, & McGill, 2001; Park, Milberg, & Lawson, 1991) has implicitly employed different levels of similarities (product-to-product and brandto-product similarities) as the sources of effects on brand extension evaluations. The present research summarized these differences and further added brandto-brand similarity as a complementary source of effects for brand extension evaluations.

The present research also carries implications for marketing practitioners. In order to grow and increase revenue successfully, brand owners tend to consider extending a successful brand to similar product categories. These products are usually supplementary or substitutive (Aaker & Keller, 1990). After analyzing the core image of a brand, marketers may extend the brand into a product category such that the product concept fits the brand concept; for example, they might extend a prestige brand into a luxury product (Park, Milberg, & Lawson, 1991). The present research demonstrates that an existing brand with similar brand concepts in the new product category can further enhance consumers' acceptance of the brand extension. Thus it is possible to improve consumers' brand extension evaluations by aligning the new, albeit dissimilar, extension with a similar case brand in marketing communication campaigns (Markman & Gentner, 1993). The result of the present research opens a window for a company that needs to extend its brand to a dissimilar category.

A practical issue is how to utilize the effect of case-based reminding. Different from the product-to-product and brand-to-product similarities, which can be applied by selecting the proper extension product categories or building a more desirable brand image, half of the brand-to-brand similarity is not controlled by the marketer of the core brand. It is suggested that the company may place its ads close to or after the ad of the competitor, which is also the perfect case in the new category to elevate consumers' perceived fit. Another tactic is to employ competitive advertising and directly bring the similar case into its own ad. This tactic can also directly position the core brand side-by-side with the competitor. Of course, the marketer of the core brand should avoid the possible deleterious effect on the original brand image due to the undesirable "me too" suggestion of such a placement.

# Further Discussions, Limitations, and Directions for Future Studies

Case-based reminding is the key theory on which the present study is developed. It should be noted that case-based reminding is just one form of analogical reasoning that can be applied in studying brand extension evaluations. It is possible that other major theories of analogical reasoning such as Structure Mapping (Gentner, 1983) or the Pragmatic Theory of Analogy (Holyoak, 1985) could also be employed as the basis for studying consumers' evaluations of brand extensions. Future research may address these theoretical approaches.

On the other hand, this study only employs an analogy theory to introduce the new concept of brand-to-brand similarity. Analogy theories may also be applied on product-to-product and/or brand-to-product similarities. Previous studies have explained that a brand extension to a complementary or substitutive product could generate a higher perceived fit (Aaker & Keller, 1990). It is very likely that one successful brand extension from one product to another category (which is not complementary or substitutive) may serve as an analogical case and increase the product-to-product similarity and the perceived fit of other similar extensions. More specifically, this study found that when given the reminding case Mount Blanc, respondents immediately associated the image of prestige with the fountain pen product category (Experiment 2). This reveals that consumers can spontaneously make analogies by connecting a brand with a product even when they are not primed. Expending the application of case-based reminding

to product-to-product and brand-to-product similarities can be another direction for further studies.

It is also recognized that not every product category has a similar case brand. It may not be easy for a company to find a similar case brand with which to align its own brand in the intended extension category. The difficulty can be explained by virtue of the fact that pretests were necessary to find proper experimental materials in the present research. In addition, a similar brand in the same product category is usually assumed to be a competitor. However, the results of the present research suggest the positive assistance one can gain from this so-called competitor brand. It would be interesting and even indispensable to distinguish and compare the competing forces and the transference forces of a similar preexisting brand in the extension product category.

Moreover, the notion of prestige was used as the basis of similarities in the present research. Other dimensions may or may not have the same effects (Medin, Goldstone, & Gentner, 1993). Future research can address these issues based on the findings of the present research. Finally, recent research (Mao & Krishnan, 2006) has related consumer evaluations of brand extensions to the categorization process. Future research may consider other theories of categorization as the basis for further developments in marketing.

#### REFERENCES

- Aaker, D. A., & Keller, L. K. (1990). Consumer evaluations of brand extension. Journal of Marketing, 54, 27–41.
- Bei, L., & Shen, Y. (2007). Effects of brand-to-brand similarity and brand-to-attribute similarity on brand extension evaluation. Journal of Management, 24, 551–567.
- Bhat, S., & Reddy, S. K. (2001). The impact of parent brand attribute associations and affect on brand extension evaluation. Journal of Business Research, 53, 111–122.
- Boush, D. (1993). How advertising slogans can prime evaluations of brand extensions. Psychology & Marketing, 10, 67–79.
- Broniarczyk, S., & Alba, J. (1994). The importance of the brand in brand extension. Journal of Marketing Research, 31, 214–218.
- Bruke, M. C., & Edell, J. A. (1989). The impact of feelings on ad-based affect and cognition. Journal of Marketing Research, 26, 69–83.
- Chen, C., & Li, S. (1999). The influence of consumer perceptions and product characteristics on the purchasing intentions for brand extensions. Pan Pacific Management Review, 2, 295–313.
- Felcher, E. M., Malaviya, P., & McGill, A. L. (2001). The role of taxonomic and goal-derived product categorization in, within, and across category judgments. Psychology & Marketing, 18, 865–874.
- Gentner, D. (1983). Structure-mapping: A theoretical framework for analogy. Cognitive Science, 7, 155–170.
- Gilboa, I., & Schmeidler, D. (1995). Case-based decision theory. Quarterly Journal of Economics, 10, 605–639.
- Goode, M. R., Dahl, D. W., & Moreau, C. P. (2010). The effect of experiential analogies on consumer perceptions and attitudes. Journal of Marketing Research, 47, 274–286.
- Green, A. E., Fugelsang, J. A., Kramer, D. J., & Dunbar, K. N. (2008). The micro-category account of analogy. Cognition, 106, 2, 1004–1016.
- Gregan-Paxton, J., & Roedder, J. D. (1997). Consumer learning by analogy: A model of internal knowledge transfer. Journal of Consumer Research, 24, 266–284.

- Gregan-Paxton, J., Hibbard, J. D., Brunel, F., & Azar, P. (2002). "So that's what that is": Examining the impact of analogy on consumers' knowledge development for really new products. Psychology & Marketing, 19, 533–540.
- Hennig-Thurau, T., Houston, M. B., & Heitjans, T. (2009). Conceptualizing and measuring the monetary value of brand extensions: The case of motion pictures. Journal of Marketing, 73, 167–183.
- Holyoak, K., & Thagard, P. (1989). A computational model of analogical problem solving. In S. Vosniadou & A. Ortony (Eds.), Similarity and analogical reasoning (pp. 242–266). New York: Cambridge University Press.
- Holyoak, K. J. (1985). The pragmatics of analogical transfer. In G. H. Bower (Ed.), The psychology of learning and motivation: Advances in research and theory (pp. 59–87). New York: Academic Press.
- Klink, R. R., & Smith, D. C. (2001). Threats to the external validity of brand extension research. Journal of Marketing Research, 38, 326–335.
- Kolodner, J. L. (1993). Case-based reasoning. San Mateo, CA: Morgan Kaufmann.
- Krawczyk, D. C., Holyoak, K., & Hummel, J. E. (2004). Structural constraints and object similarity in analogical mapping and inference. Thinking and Reasoning, 10, 85–104.
- Kumar, P. (2005). Brand counterextensions: The impact of brand extension success versus failure. Journal of Marketing Research, 42, 183–200.
- Mandler, G. (1982). The structure of value: Accounting for taste. In M. S. Clark & S. T. Fiske (Eds.), Affect and cognition: The 17th annual Carnegie symposium (pp. 3–36). Hillsdale, NJ: LEA.
- Mao, H., & Krishnan, H. S. (2006). Effects of prototype and exemplar fit on brand extension evaluations: A two-process contingency model. Journal of Consumer Research, 33, 41–49.
- Markman, A. B., & Gentner, D. (1993). Structural alignment during similarity comparisons. Cognitive Psychology, 25, 431–467.
- Medin, D., & Schaffer, M. M. (1978). Context theory of classification learning. Psychological Review, 85, 207–238.
- Medin, D., Goldstone, R., & Gentner, D. (1993), Respects for similarity. Psychological Review, 100, 254–278.
- Meyers-Levy, J., & Tybout, A. M. (1989). Schema congruity as a basis for product evaluation. Journal of Consumer Research, 16, 39–54.
- Meyers-Levy, J., Louie, T. A., & Curren, M. T. (1994). How does the congruity of brand names affect evaluations of brand name extensions? Journal of Applied Psychology, 79, 46–53.
- Moreau, C. P., Lehman, D. R., & Markman, A. B. (2001). Entrenched category structures and resistance to "really" new products. Journal of Marketing Research, 38, 14–29.
- Moreau, C. P., Markman, A. B., & Lehman, D. R. (2001). "What is it?" Categorization flexibility and consumers' responses to really new products. Journal of Consumer Research, 27, 489–498.
- Nan, X. (2002). Affective cues and brand extension evaluation: Exploring the attitude toward the parent brand and attitude toward the extension ad. Psychology & Marketing, 23, 597–608.
- Oakley, J. L., Duhacheck, A., Balachander, S., & Sriram, S. (2008). Order of entry and the moderating role of comparison brands in brand extension evaluation. Journal of Consumer Research, 34, 706–718.
- Park, C. W., Milberg, S., & Lawson, R. (1991). Evaluation of brand extensions: The role of product feature similarity and brand concept consistency. Journal of Consumer Research, 18, 185–193.
- Rosch, E. (1978). Principles of categorization. In E. Rosch & B. B. Lloyd (Eds.), Cognition and categorization (pp. 27–48). Hillsdale, NJ: LEA.
- Rosch, E., & Mervis, C. B. (1975). Family resemblances: Studies in the internal structure of categories. Cognitive Psychology, 7, 573–605.

- Ross, B. (1984). Remindings and their effects in learning a cognitive skill. Cognitive Psychology, 16, 371–416.
- Ross, B. (1987). This is like that: The use of earlier problems and the separation of similarity effects. Journal of Experimental Psychology: Learning, Memory, and Cognition, 13, 629–639.
- Sheinin, D. A., & Schmitt, B. H. (1994). Extending brands with new product concepts: The role of category attribute congruity, brand affect, and brand breadth. Journal of Business Research, 31, 1–10.
- Shine, B. C., Park, J., & Wyer, Jr., R. S. (2007). Brand synergy effects in multiple brand extensions. Journal of Marketing Research, 44(4), 663–678.
- Tversky, A. (1977). Features of similarity. Psychological Review, 84, 327–352.
- Volckner, F., & Sattler, H. (2006). Drivers of brand extension success. Journal of Marketing, 70, 18–34.
- Walchli, S. B. (2007). The effects of between-partner congruity on consumer evaluation of co-branded products. Psychology & Marketing, 24, 947–956.
- Yeo, J., & Park, J. (2006). Effects of parent-extension similarity and self regulatory focus on evaluations of brand extensions. Journal of Consumer Psychology, 16, 272–279.
- Yoo, C., & MacInnis, D. J. (2004). Same or different? How distance and variation affect similarity judgments. Psychology & Marketing, 21, 209–220.

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