

"A man is  
great by  
deeds, not by  
birth"

-Chanakya

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**Temporal Construal and Brand Categorization**

**Pronobesh Banerjee<sup>1</sup>**

<sup>1</sup>Assistant Professor, Marketing Management, Indian Institute of Management, Kozhikode, IIMK Campus PO, Kunnamangalam, Kozhikode, Kerala, India; Email - pbanerjee@iimk.ac.in, Phone Number - 0495-2809239

## **Abstract**

This paper shows that brand categorization that is clubbing brands into distinct categories is influenced by the temporal construal of an individual. Though past research shows that people use a narrower versus a broader categorization perspective when they are in near versus distant temporal construal but no studies until date has explored the same in the context of brand categorization. Through a series of two studies, I show that exemplar associations of a brand are used for brand categorization in near temporal construal while prototype associations are used for the same when one is in a distant temporal construal. In essence, this research shows how brand categorization changes with time and holds potential to understand how marketing strategies need to change as one moves from near to a distant time frame.

The accessibility of brand associations influences brand categorization or grouping of brands into a particular category (Ng and Houston 2006). Therefore, different accessibility of brand associations across time could have a similar effect. Past research shows that individuals with distant temporal construal's form broader categories to classify a given set of products, e.g. things that need to be taken for a camping trip in the future, into specific groups (Liberman, Sagristano and Trope 2002). However, individuals with near temporal construal form narrower product categories for the same purpose. Liberman et al. (2002) argue that an abstract mental construal in the distant future leads to broad categories and a concrete mental construal in the near future leads to narrower categories. I argue that an abstract mental construal leads to the use of prototype similarity as the basis of brand categorization, while concrete mental construal leads to the use of exemplar similarity for the same purpose. In the following section, I will explore this interaction.

#### *Prototype and Exemplar Accessibility, and Brand Categorization*

Past research showed that any new product belongs to a category if it resembles the exemplar or prototype of that category (Cohen and Basu 1987; Murphy and Medin, 1985). The exemplars and prototypes associated with a brand category, which is formed by the brand and its products (Bousch and Loken 1991), determine whether a particular brand is suitable for the category. For example, Hush Puppies is primarily a shoe brand and could be in the same category as Nike (the focal brand) because it has the same exemplar as Nike, the shoe. However, Polo Ralph Lauren could also be in a category with Nike because it has a similar prototype as Nike, i.e. being upscale. Are Hush Puppies or Polo Ralph Lauren going to form a category when one shifts from a near to a distant temporal construal? In the next section, I will explore the theoretical basis of *brand categorization* and how it is influenced by an individual's temporal construal.

### *Temporal Construal, Prototype and Exemplar Accessibility, and Brand Categorization*

Knowledge accessibility in decision making shows that when faced with a consumption choice, consumers mostly remember only the most accessible information rather than all information available (Wyer, 2008). For example, Adval and Monroe (2002) found that participants subliminally exposed to high numbers evaluated the target objects as more expensive than those exposed to lower numbers.

Brand knowledge, which is represented by the exemplars and prototypes of a brand, also influences brand categorization. In other words, the accessibility of brand knowledge across the self-construal influences the grouping of two or more brands into a coherent category (Ng and Houston 2006). Use of categorization bases, or “cognitive building blocks that underlies the formation of a category in general” (Rosa and Porac 2002, p. 504), as in exemplars versus prototypes, depends on the self-construal (Ng and Houston 2006). Ng and Houston (2006) found that when participants were given a set of ten brands and asked to pick any three that form a “coherent group” with a focal brand, individuals with independent self-construals primarily picked brands that shared common prototype associations, while those with interdependent self-construals mostly picked brands that shared common exemplar associations.

Therefore, I expect that the use of the categorization bases, exemplars and prototypes, will vary with their accessibility in individuals with different temporal construal. Why? Temporal construal theory posits that the representation of an event varies with time (Trope and Liberman 2003). When one thinks of an event in the near future one thinks of the event more concretely, while the same event is construed more abstractly when one thinks it will materialize in distant future. For example, arranging a party tomorrow entails calling the food vendor as soon as possible while arranging the same one month from now changes focus to what types of food one will serve.

In a similar vein, brand knowledge is stored both concretely and abstractly, which will play different roles when asked to categorize in time. For example, Nike brand knowledge contains both shoes, which is an exemplar of the brand, while it also contains stylish, which is a prototype of the brand. Thus, as near temporal construal will increase the accessibility of the exemplars of a brand, it will form the basis of categorization. Similarly, as distant temporal construal increases the accessibility of prototypes of a brand, which in turn will drive category formation.

This study will test the following hypotheses:

- H<sub>1</sub>: For brand categorization, individuals with near temporal construals will use more exemplars than prototypes as a basis for categorization.
- H<sub>2</sub>: For brand categorization, individuals with distant temporal construals will use more prototypes than exemplars as a basis for categorization.

Two studies tested the use of categorization bases to form brand categories to see if it varied with different temporal construal. For the categorization task, participants picked any three brands from a given set that formed a group with a focal brand. This study used two focal brands: a broad brand, Nike, in study 1, and a narrow brand, Rolex, in study 2.

## *STUDY 1*

### *Method: Design, Participants, Variables, and Procedures*

A simple two-group design was used. Participants consisted of 109 participants (54% female and 46% male) at a large U.S. university, varying in age from 18 to 24.

*Independent variable.* The near and distant temporal construals, which are manipulated.

*Dependent variable.* Number of prototypes and exemplar based reasons for categorization.

*Thought coding.* The brand categories that were picked were coded as either exemplar or prototype, based on the reasons given by the participants. The inter-rater-reliability was 98%, and the differences were resolved through discussions. For example, “They are all companies that manufacture shoes” and “They are all companies that manufacture apparel” were coded as exemplar-based categorization, while “The target market for these companies is geared to athletes” and “All the chosen brands help athletes to reach peak performance” were coded as prototype-based categorization.

*Procedure:* In the first part of the study, the temporal construals of the participants were manipulated. Then, they were given a list of ten brands and asked to pick any three that formed a “coherent group” with the focal brand Nike.

The ten brands were Timberland, Polo Ralph Lauren, Hush Puppies, Casio, Asics, Prince, Wilson, Esprit, Dr. Scholl’s and Caterpillar (a filler brand). These brands are adopted from Ng and Houston (2006). The meaning of “coherent” was not explained to the participants because it was expected to vary with the temporal construals of the participants. Participants with a distant temporal construal would think of “coherent” as something that is prototypically similar with Nike, e.g. prestige, high-end, or fashionable. On the other hand, participants with a near temporal construal would define “coherent” as something that has similar exemplars as Nike, e.g. shoes, apparel, or equipment. Indeed, the given set contains brands that form categories based on similar exemplars, e.g. Asics or Dr. Scholl’s because they manufacture shoes like Nike, or prototypes, e.g. Polo Ralph Lauren and Nike are both high-end brands, while Wilson and Prince are used for the same sport. Next, I measured the task

involvement of the participants, the task difficulty, and their favorability and familiarity of the brands. Finally, after asking questions on classification, the participants were thanked and debriefed.

### *Results*

There were no significant differences in involvement, task difficulty, favorability and familiarity of the brands across different temporal construals. A MANOVA analysis showed that there was a significant interaction between the categorization bases and the temporal condition of the participants ( $F(1, 107) = 9.87, p < .01$ ). Planned contrasts revealed that participants in near temporal conditions used significantly more exemplars than prototypes as categorization bases ( $M_{\text{Exemplar}} = 1.81 (1.27)$  versus  $M_{\text{Prototype}} = 1.18(1.27)$ ,  $t(54) = 1.84, p = .07$ ), thereby supporting hypothesis 1. In contrast, participants in distant temporal conditions used significantly more prototypes than exemplars for categorization ( $M_{\text{Prototype}} = 1.96 (1.31)$  versus  $M_{\text{Exemplar}} = 1.03 (1.31)$ ,  $t(53) = 2.58, p < .01$ ), thereby supporting hypothesis 2. An analysis of the other dependent variables, i.e. common characteristics and what went through the mind, revealed the same results (see Figure 1).

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Insert Figure 1 about here

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It is interesting to note that 35 participants with both near and distant temporal construals picked Asics to form a category with Nike. However, the reasons for grouping were different in the two construals. Participants with a near temporal construal primarily gave exemplar-based reasons for grouping Asics with Nike (both of these brands manufacture shoes, apparel, or gears), while those with distant temporal construals primarily gave

prototype-based reasons for grouping Asics with Nike (“same quality products,” “overall athletic purposes” or “sports brand”).

## STUDY 2

In study 1, I chose a narrow brand, Rolex. The results of a pre-test revealed that Rolex fits the definition of a narrow brand because it is associated with only one exemplar – watches. Moreover, Rolex is associated with several prototypes, e.g., top of the line.

Following discussion with a group of students that was similar to the study participants, I chose six brands – Seiko, Citizen, Gucci, Cartier, BMW, and Ritz Carlton – that formed the set from which participants would pick any three that formed a coherent group with Rolex. The brands chosen have exemplar, prototype or exemplar and prototype similarity with Rolex. Seiko and Citizen have, primarily, an exemplar similarity with Rolex—watches, Gucci and Cartier bear both exemplar—watches, and prototype—prestigious, high end, similarity, and finally, BMW and Ritz Carlton have only prototype similarity—top of the line, for example.

### *Method: Design, Participants, Variables, and Procedure*

This study used a simple two-group design. Participants were of 69 students (56% males and 44% females) at a large U.S. university, ranging in age from 18 to 23.

*Independent Variable:* The near and distant temporal construals, which are manipulated.

*Dependent Variable:* Prototype- and exemplar-based reasons for categorization.

The thought coding and procedure was the same as in study 1.

### *Results*

There were no significant differences in involvement, task difficulty, favorability and familiarity of the brands across the different temporal construals. A MANOVA analysis



showed a significant interaction between the bases for categorization and the temporal construals of the participants ( $F(2, 66) = 4.56, p < .01$ ). Planned contrasts revealed that the participants with a near temporal construal used more exemplars than prototypes as a basis for categorization ( $M_{\text{Exemplar}} = 1.93 (1.22)$  versus  $M_{\text{Prototype}} = 1.03 (1.03)$ ,  $t(32) = 2.17, p < .05$ ), thereby supporting hypothesis 1. In contrast, participants with a distant temporal construal used significantly more prototype- than exemplar-based reasons for categorization ( $M_{\text{Prototype}} = 1.94 (1.30)$  versus  $M_{\text{Exemplar}} = 1.02 (1.31)$ ,  $t(35) = 2.09, p < .05$ ), thereby supporting hypothesis 2. Thus, the results of study 2 are consistent with those of study 1 (see Figure 2).

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Insert Figure 2 about here

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### *Conclusion*

The results of studies 1 and 2 show that the formation of brand categories depends on the temporal construal of a consumer. Exemplars guide the formation of brand categories in the near future, while prototypes do so in the distant future. The results also indicate that the principles of categorization apply to brand categorization. Any product or brand belongs to a category if it is similar to either the exemplar or the prototype of that category. Consequently, brands were grouped on exemplar or prototype similarity to the focal brand.

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Figure 1

TEMPORAL CONSTRUAL AND BROAD BRAND CATEGORIZATION BASES

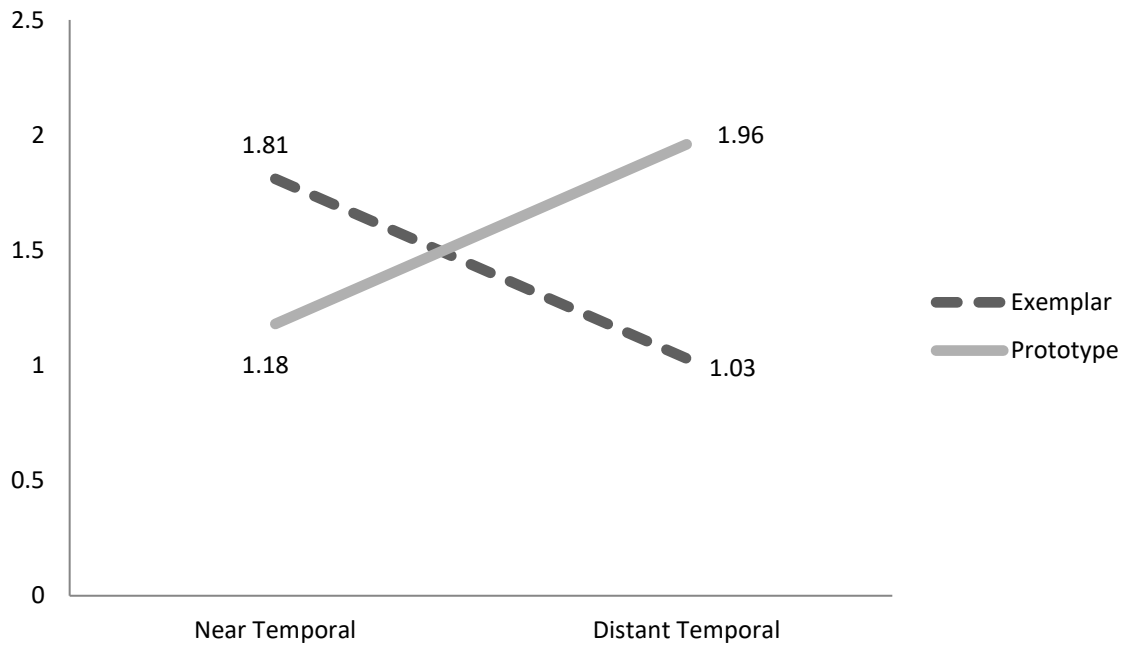
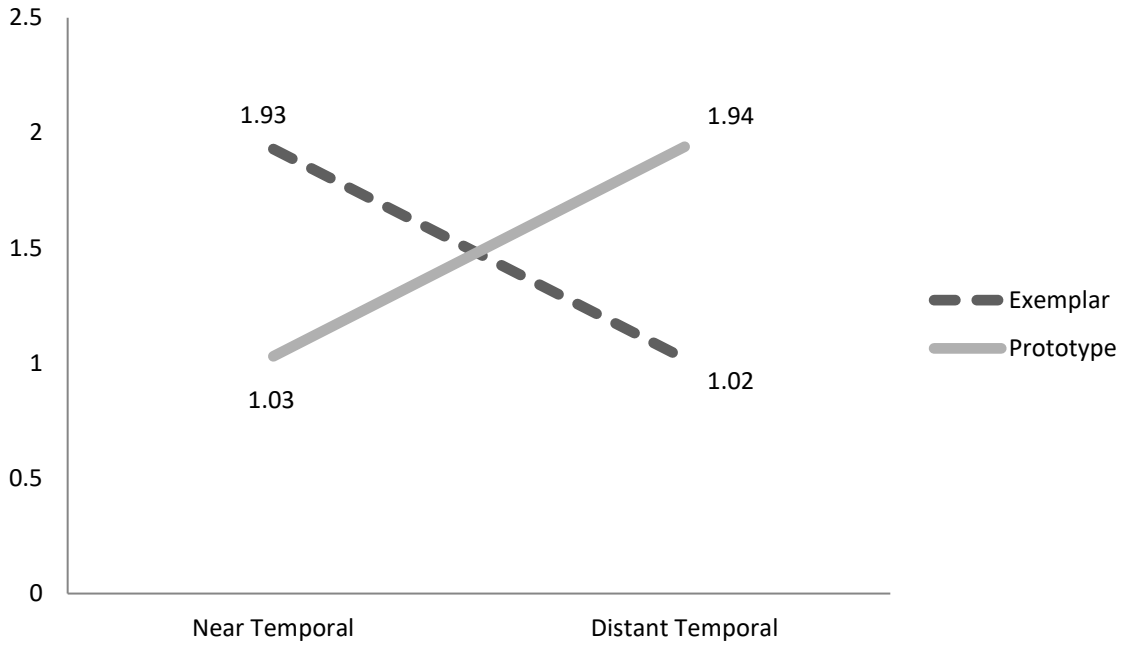


Figure 2

TEMPORAL CONSTRUAL AND NARROW BRAND CATEGORIZATION BASES



Research Office

Indian Institute of Management Kozhikode

IIMK Campus P. O.,

Kozhikode, Kerala, India,

PIN - 673 570

Phone: +91-495-2809238

Email: [research@iimk.ac.in](mailto:research@iimk.ac.in)

Web: <https://iimk.ac.in/faculty/publicationmenu.php>

