Creating meaningful new brand names: A study of semantics and sound symbolism

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ng 27

CREATING MEANINGFUL NEW BRAND NAMES: A STUDY OF SEMANTICS AND SOUND SYMBOLISM

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Little academic research has been directed to developing new brand names. While guidelines for creating effective new brand names have been proposed (e.g. the name should be distinctive, easy to pronounce, meaningful, etc), results of following such prescriptions are largely unknown. The purpose of this study is to examine customer response to products introduced with "meaningful" new brand names. Specifically, this research proposes and empirically tests two methods for creating meaningful new brand names. Results of the study indicate that products with brand names using sound symbolism to convey product-related information are liked better by consumers and positioned more strongly in their minds. Supplementing sound symbolism imbeds with semantic imbeds in a brand name further enhances both product liking and positioning.

INTRODUCTION

Selecting a brand name for a new product is often considered the centerpiece of introductory marketing campaigns (Keller, Heckler, and Houston 1998). An effective brand name can enhance awareness and create a favorable image for the product (Aaker 1991). Ineffective brand names, on the other hand, can severely hinder a product's success. For example, one of the more notorious failures in marketing history, the Ford Edsel, has been attributed to a poor brand name. Adding to the challenge of creating effective new brand names is the staggering level and rate of growth of names being introduced to the marketplace. In 1999, the U.S. Patent and Trademark Office received 290,000 applications for trademarks, nearly double the amount from 5 years ago (PTO Today 2000). With the purpose of brands being to differentiate competitive offerings (Keller 1993), these figures suggest that creating new brands distinguishable from others is more difficult today than

In response to this challenge, marketing scholars have identified certain desirable properties of effective new brand names, e.g. distinctiveness, easily recalled, easily pronounced, etc. (Robertson 1989). Marketers also commonly espouse that the brand name should be meaningful or suggestive – i.e., the name should convey relevant information about product features or benefits (Keller, Heckler, and Houston 1998; Pavia and Costa 1993). While intuitively appealing, results of developing a meaningful brand name are relatively unknown. That is, little academic research has investigated consumer

reaction to products introduced with meaningful new brand names.

Further complicating the issue of naming new products is the apparent difficulty in adhering to prescribed guidelines. Imagine, for instance, that a marketer is charged with creating a brand name for a new internet service provider. Given our current state of knowledge on brand name development, how does one create a meaningful and distinctive name given the plethora of existing brands using "tech," "link," "com," "web," or "net" in their names (e.g., Netscape, Netguide, Profnet, Netcom, UUNet, etc.)? One marketer's frustration with the current state of knowledge on brand name development is evident in the following passage: "It's hard to name any product....branding decisions are still made by the seat of the pants" (WSJ 1994).

The purpose of this study is to examine whether meaningful new brand names enhance product liking and positioning. Two methods for creating meaningful brand names are proposed and empirically tested. The first method involves using semantics – i.e., imbedding existing words or word fragments in the brand name to convey meaning (e.g., "cold" in *Coldspot*). Another method, which may allow for greater brand name distinctiveness, involves using sound symbolism – i.e., imbedding sounds of individual letters or combinations of letters in the brand name to convey meaning. To illustrate, the popular press contends that the *Prozac* brand name communicates efficacy through the letter z (Erlich 1995).

Spring 2001 27

CREATING EFFECTIVE BRAND NAMES

Few academic studies have examined properties of effective brand names. One of the first, Peterson and Ross (1972), tested whether certain fictitious names are more readily identified with certain product categories, i.e. breakfast cereals or laundry detergents. Their results suggest that one-syllable words and plural forms are more "remindful" of cereal, whereas singular word forms are associated more with laundry detergent. Vanden Bergh, et al (1984) found that names which start with a plosive (hard sounding consonants such as p, t, and k) are more easily recognized and recalled than names beginning with nonplosives.

Vanden Bergh, Adler, and Oliver (1987) examined 479 brand names from 1971 to 1985 and categorized each according to linguistic qualities, including phonetic (e.g. plosives, as found in Bic), orthographic (e.g. acronyms, such as AMOCO), morphological (e.g., compounding, such as Jack-in-the-Box), They find that semantic and semantic characteristics. appositeness (i.e., fit between product and name, e.g. Bufferin) is used most often, 31.9% overall. Furthermore, research suggests that consumers can even draw product inferences from the numbers imbedded in alpha-numeric brand names (Pavia and Costa 1993). Benefits of creating brand names that convey product-related information include enhanced consumer recall (Kanungo 1968). More recently, Keller, Heckler, and Houston (1998) found that brand names conveying product benefits lead to higher recall of an advertised benefit that is consistent in meaning with the brand name.

This research proposes that meaning can be ascribed to a brand name in two ways. First, marketers can impute semantic meaning by imbedding entire words (e.g., "craft" in Craftmatic) or morphemes (i.e., fragments of words like 'accu' in Accutron) in the brand name. While popular, imbedding words and morphemes has several drawbacks. First, use of words and morphemes may compromise the distinctiveness of the name. As mentioned, some product categories are characterized by countless brands of similar sounding names. Further, securing trademark protection is considerably more difficult for brand names that contain descriptive terms (Cohen 1986). Simply put, brands with descriptive terms are less distinctive and accordingly have less protection from trademark infringement. Lastly, the ability to derive meaning from semantic imbeds in a brand name is dependent upon consumers' language abilities. It is unlikely, for instance, that individuals unfamiliar with English would derive semantic meaning from the brand name Coldspot. This issue is particularly pertinent for products competing in international markets.

Given these limitations, marketers may chose to imbed meaning in a brand name through sound symbolism. Sound symbolism is defined as "the direct linkage between sound and meaning" (Hinton, Nichols, and Ohala 1994). The concept of

linking sound with meaning can be traced back to ancient Greek philosophy. In the dialogue Cratylus, for instance, Plato offers that "the letter r appears to me to be the general instrument expressing all motion" (p. 460). In a landmark study, Sapir (1929) asked English-speaking subjects to associate two invented words, mil and mal, with a small and a large table. About 80% of subjects identified mal with the large table and mil with the small one. Subsequent sound symbolism research has been performed on languages from around the world - e.g., French (Peterfalvi 1970), Japanese (Hamano 1986), African languages (Samarin 1967), and American Indian (Nichols 1971). Evidence suggests that sound symbolism cuts across languages as well. Ultan (1978) reports that in almost 90% of the languages sampled, words representing diminutive form are similar in their vowel sounds.

In terms of marketing-related research, only two known studies have explored the potential use of sound symbolism in naming new products. Heath, Chatterjee, and France (1990) found that, as consonant hardness and vowel frequency increased in fictitious brand names for toilet paper and household cleansers, consumer perception of the harshness of the product also increased. Klink (2000) found that products with brand names that contained relatively higher frequency vowel and consonant sounds were perceived as smaller, lighter (relative to darker), lighter (relative to heavier), more mild, thinner, weaker, softer, faster, colder, prettier, more bitter, friendlier, and more feminine. Concerning vowel sounds, the letters i and e generally produce higher frequency sounds than the letters o and u. The letter a produces sounds more toward the middle of this frequency continuum. With respect to consonants, fricatives (i.e., the letters f, s, v, and z) produce higher frequency sounds than stops (i.e., p, t, b, g, d, and k or hard c) (Ladefoged 1975). 1

THE STUDY

Products with brand names communicating product-related information may fare better in terms of customer response than products with brand names failing to convey such information. To understand why, consider that consumers often rely on known brand names to reduce the risk involved with a new product purchase decision (Montgomery and Wernerfelt 1992). The information conveyed by an established brand name reduces purchase risk. Indeed, one argument for extending existing brand names onto different products (e.g., Jeep luggage) is that the brand name carries information about the product (e.g., ruggedness). This information reduces the risk associated with the new product (brand extension) and, in turn, enhances product liking and trial (Smith and Park 1992).

¹ Fricatives and stops differ in their manner of articulation – i.e., the degree to which the oral tract of the mouth is closed off by articulators (teeth, tongue, and lips). Unlike fricatives, stops have complete closure of articulators so that the airstream cannot escape the mouth during pronunciation.

²⁸ Journal of Marketing THEORY AND PRACTICE

Extending this concept to new brand names, it is expected that consumers would prefer products with brand names conveying relevant product information. The information contained in the new brand name may reduce product uncertainty and thereby enhance consumer acceptance of the new product. As such, use of semantics and sound symbolism in brand names to convey a relevant product benefit should result in more favorable product evaluations. Furthermore, it is expected that imbedding both semantics and sound symbolism together in a given brand name will be more effective than using one method alone to convey product related information. Provided that the information is consistent, the messages contained in the semantic and the sound symbolism imbeds should reinforce each other.

As mentioned, instances exist where use of semantics is inadvisable. Accordingly, a marketer may wish to use only sound symbolism imbeds. It is expected that product liking will be more favorable for brand names using sound symbolism to convey product information than for brand names not using sound symbolism to convey such information. Thus, this study proposes that:

> Hla: Products with brand names using sound symbolism imbeds to convey a relevant product benefit are preferred to products with brand names that do not use sound symbolism imbeds to convey such information.

> H1b: Products with brand names using semantic and sound symbolism imbeds together to convey a relevant product benefit are preferred to products with brand names using only sound symbolism imbeds to convey such information.

It is proposed that brand names using sound symbolism and semantics to convey a message also better positions a product in consumers' minds. Therefore:

> H2a: Products with brand names using sound symbolism imbeds to convey a relevant product benefit are perceived as possessing greater levels of that benefit than products with brand names not using sound symbolism imbeds to convey information.

> H2b: Products with brand names using semantic and sound symbolism imbeds together to convey a relevant product benefit are perceived as possessing greater levels of that benefit than products with brand names using only sound symbolism imbeds to convey such information.

Methodology

The study was a between-subjects design involving 215 undergraduate students from a Mid-Atlantic university. These individuals, of whom 51% were female, averaged 20.4 years of age. A greeter told subjects that a research firm was

interested in gathering their reactions to some potential new products. The first page of the survey booklet oriented subjects to the task. On the following page appeared a concept statement for 1 of 3 new products. After reading the concept statement, subjects turned the page and answered questions about the potential new product, including questions related to product liking and product positioning. The procedure took approximately 10-12 minutes.

Measures

Product liking was measured using three 7-point adjective scales (1=Not at all Favorable/7=Very Favorable; 1=Not at all Likeable/7=Very Likeable; 1=Not at all Desirable/7=Very Desirable) (Ajzen and Fishbein 1980). These three items were averaged into one score to provide a more reliable measure of the attitude construct (alpha = .93). A second measure central to the study related to the positioning of the product in consumers' minds. Subjects were asked to indicate with 7point scales the extent to which they agreed/disagreed with 2 statements regarding product positioning ("XXXX pain relievers would seem to work faster than competing brands" and "I associate XXXX pain relievers with fast-working"). The two items were averaged into one product positioning measure (r = .71).

Stimuli

The three product concepts were each tested with 3 different sets of fictitious brand names. The product concepts were for a new shampoo, a new pain reliever, and a new laptop computer. These products were selected based on the primary criterion of being of interest to subjects. The concept statements consisted of approximately 60 words and focused on positioning the product on a relevant benefit. A pretest was used to select the benefits on which to position the new product. Specifically, the concept statements positioned the shampoo as "leaving hair soft," the pain reliever as "fastworking," and the laptop computer as "light-weight."

Three names were created for each product: a no-imbed name, a sound symbolism-imbed name, and a combination-imbed name. The no-imbed name served as a baseline name in that it did not use semantics or sound symbolism to reinforce a relevant product benefit claim. The sound symbolism-imbed name altered the first two letters of the no-imbed name so that it would convey the relevant benefit information. Using sound symbolism imbeds in the first syllable of a brand name is consistent with previous research (e.g., Klink 2000). The combination-imbed name combined sound symbolism with semantics by replacing the last syllable of the sound symbolism-imbed name with a semantic imbed that reflected the relevant benefit. To illustrate with shampoo, Polbee served as the no-imbed name. As the letters s and i are more closely associated with softness than p and o, Silbee was created to serve as the sound symbolism-imbed name. By replacing the last syllable with the word soft, the combinationimbed name of Silsoft was created. Concerning the other products, the fictitious brand names of Bondin, Zindin, and Zinfast were used for the pain reliever while Guxtrill, Vextrill, and Vexlight were used for the laptop computer. With respect to these brand names, the letters z and i better communicate rapidity than b and o and also v and e better convey lighter weight than g and u. The semantic imbeds were purposely chosen to explicitly match the relevant product benefit so as to leave less room for possible misinterpretation. Finally, the selected brand names were chosen from a set of hypothetical names based on a pre-test that established that these names did not differ in terms of favorability nor did they consistently remind subjects of other real words or existing brand names.

Results

A summary of the data is provided in Table 1. ANOVA was the primary statistical tool used to analyze the data.

Product Liking. To assess whether the alternate methods for imbedding brand meaning resulted in differences in product liking, an ANOVA was run with 3 planned contrasts: (1) comparison of sound symbolism-imbed names to no-imbed names; (2) comparison of combination-imbed names to noimbed names; and (3) comparison of combination-imbed names to sound symbolism-imbed names. The overall ANOVA was significant (F = 25.56, p < .001) and results for each of the planned contrasts were also significant and in the expected direction. More specifically, results of the first planned contrast indicated that subjects evaluated products with sound symbolism-imbed names more favorably than products carrying no-imbed brand names ($\bar{x}_{no-imbeds} = 3.67 \text{ vs.}$ $\bar{x}_{ss-imbeds} = 4.29$, t = 3.34, p < .001). Regarding the second planned contrast, product liking was higher for combinationimbed names than for no-imbed names ($\bar{x}_{no-imbeds} = 3.67 \text{ vs.}$ $\bar{x}_{combination-imbeds} = 4.61, t = 5.06, p < .001$). Lastly, results of the third contrast revealed that product liking was higher for brand names using semantic and sound symbolism imbeds than for names using only sound symbolism imbeds to convey product information ($\bar{x}_{ss-imbeds} = 4.29$ vs. $\bar{x}_{combination-imbeds} = 4.61$, t = 1.738, p < .05). Thus, H1a and H1b are supported. Furthermore, it should be noted that differences in product liking were not product specific. Rather, as can be seen in Table 1, the mean level of product liking is in the hypothesized direction for each product category.

Product Positioning. To assess the effect of the imbeds on product positioning, a second ANOVA was run with 3 planned contrasts: (1) comparison of sound symbolism-imbed names to no-imbed names; (2) comparison of combination-imbed names to no-imbed names; and (3) comparison of combination-imbed names to sound-symbolism imbed names. The overall ANOVA was significant (F = 27.67, p < .001). Also, results of each of the planned contrasts were significant and in the hypothesized direction. Specifically, with respect to the first contrast, sound symbolism-imbed names positioned the product more strongly on the relevant benefit than no-

imbed names ($\bar{x}_{\text{no-imbeds}} = 3.48 \text{ vs. } \bar{x}_{\text{ss-imbeds}} = 3.93, t = 2.06, p < .05$). Regarding the second planned contrast, combination-imbed names also positioned the product more strongly on the relevant benefit than no-imbed names ($\bar{x}_{\text{no-imbeds}} = 3.48 \text{ vs. } \bar{x}_{\text{combination-imbeds}} = 4.68, t = 5.26, p < .001$). Finally, products with semantic and sound symbolism imbed names were perceived as stronger on the relevant benefit than products with sound symbolism-imbed names ($\bar{x}_{\text{ss-imbeds}} = 3.93 \text{ vs. } \bar{x}_{\text{combination-imbeds}} = 4.68, t = 3.22, p < .001$). H2a and H2b are supported. An inspection of Table 1 reveals that the results regarding these hypotheses were not product category specific.

DISCUSSION

The overarching goal of this study was to shed light on the common prescription to create meaningful new brand names. Techniques for creating meaningful brand names, i.e., use of semantic and sound symbolism imbeds, were discussed. The study examined the effect of these techniques on consumers' product liking and product beliefs. As expected, results of the study revealed that consumers prefer products with meaningful brand names to products carrying less meaningful brand names. More specifically, products with brand names using sound symbolism to reinforce a relevant product benefit were liked more than products with brand names that did not use sound symbolism in this manner. Further, products with brand names that supplemented sound symbolism with semantics to convey the relative product benefit were received more favorably than products with brand names using sound symbolism alone to communicate this message. Regarding product positioning, products with brand names reflecting a relevant product benefit were positioned more stronlgy on that benefit. Specifically, products with brand names using sound symbolism to convey a product benefit were perceived as possessing greater levels of that benefit than products with brand names not using sound symbolism to convey this message. Also, as expected, use of semantics coupled with sound symbolism in the brand name was found to better position the product on the benefit than use of sound symbolism alone.

Managerial Implications

While marketers have been creating meaningful new brand names, prior to this study it was unknown what effect using semantics and sound symbolism had on product liking and positioning. Because results of this research indicate that imbedding semantics and sound symbolism together in a brand name has a relatively strong effect in terms of product liking and positioning, marketers may be inclined to use these approaches together when creating a new brand name. One must recognize, however, the potential drawbacks of imbedding semantics into a brand name. As noted, using semantics can compromise the distinctiveness of the name and, accordingly, reduce its protection from trademark infringement. In addition, semantics may be inadvisable for brand names competing in international markets.

30 Journal of Marketing THEORY AND PRACTICE

TABLE 1 VARIABLE MEANS

Products	n	Product Liking	Association With Relevant Attribute
No-Imbed Names			
Polbee shampoo	23	3.29	3.08
Bondin pain-relievers	23	3.86	3.47
Guxtrill laptop computers	25	3.88	3.87
Sound Symbolism-Imbed Names Names Silbee shampoo	25	4.37	3.72
Zindin pain-relievers	23	4.43	4.00
Vextrill laptop computers	24	4.06	4.10
	W. I		
Combination-Imbed Names			
Silsoft shampoo	23	4.75	4.80
Zinfast pain-relievers	25	4.51	4.22
Vexlight laptop computers	23	4.58	5.04

^{*}leaving hair soft for shampoo, fast-working for pain-relievers, and lightweight for laptop computers

Furthermore, one should also consider *long term* implications of using semantic imbeds. For instance, use of semantics may compromise the ability of the brand to be later repositioned and extended. Because of interference and inhibition effects, brand names that strongly suggest certain product benefits can be difficult to link new brand associations (Keller, Heckler, and Houston 1998). For instance, brand names such as *Oldsmobile*, *Old Spice*, and *John Hancock* have struggled to create more youthful images. It also stands to reason that brand names that explicitly convey product benefits (e.g., *Your Hair Smells Terrific Shampoo*) would be harder to extend into categories where the benefit is irrelevant or unvalued (e.g., soap or cosmetics).

Heller, Heckler, and Houston (1998) offer that, in instances where future additional benefit claims will be made, use of "non-suggestive" brand names is advised. However, results of this study reveal that such brand names are less preferred and more difficult to position. Perhaps a middle-ground approach that provides greater positioning flexibility and extendibility, yet still conveys product-related information, is the use of sound symbolism in branding. Specifically, because letters have more varied interpretation than words, brand names that use sound symbolism, as opposed to semantics, may be more amenable to future repositioning and extension. For instance, the initial positioning of Silbee as a shampoo that "leaves hair soft" may be later replaced with one of "greater bounce." Because the letters s and i convey not only softness but also lighter weight, this brand name may be able to accommodate a subsequent claim stating that the shampoo does not weigh hair down. The multiple meanings of s and i should also increase the extendibility of the brand name. For example, because s and i are also associated with "prettiness," Silbee would be a more appropriate name for a line of cosmetics than Your Hair Smells Terrific Shampoo.

Limitations and Future Research

The previous discussion of research implications should be interpreted within the limitations of the study. While it was found that names containing both semantic and sound symbolism imbeds were associated with more favorable product liking and stronger product positioning than names using sound symbolism alone, these results were obtained with a relatively strong manipulation of semantics. That is, the semantics chosen to create the semantic-imbed names (i.e., soft, light, and fast) directly corresponded with the intended positioning and associated measures. Future research may wish to determine whether a less explicit match between semantics and intended positioning would have similar results.

Other directions for future research include examining how characteristics of the brand name, e.g. use of sound symbolism and semantic imbeds, affect recall and recognition. Also, research may wish to examine whether brand names using sound symbolism do permit greater opportunities in terms of future extension and repositioning.

As sound symbolism is relatively new to marketing decision-making, considerable research opportunities exist in this area. For instance, in addition to studies on recall and recognition, research may wish to examine how combinations of sounds or letters in a brand name alter messages. Also, does the position of the imbed in the brand name affect the message? One might expect that imbeds appearing in the first syllable of a brand name may dominate messages conveyed by brand sounds positioned further in the brand name. Directions for future research may also include other potential uses of sound symbolism in marketing — e.g., developing ad copy, slogans, and jingles.

Lastly, understanding the meaning in brand sounds can also inform brand mark development. We know that selecting an appropriate brand mark is critical, as it is one of the main vehicles for creating brand image (Henderson and Cote 1998). While guidelines for developing brand marks have been proposed and tested, little attention has been directed toward understanding the fit between brand mark and brand name. Sound symbolism offers insight on how brand marks can be developed to reinforce a consistent brand image. For example, Köhler (1947) proposed that higher frequency words like "takete" are more closely associated with angular shapes, while lower frequency words like "maluma" are associated with rounded figures. Davis (1961) empirically tested and found support for the relationship between sound and shape.

Along with shape, sound has a relationship with other visuals such as size and color. The English philosopher and political theorist, John Locke was perhaps the first to recognize colored-hearing synesthesia:

A studious blind man who had mightily beat his head about a visible object, and made use of the explanations of his books and friends, to understand those names of light and colours, which often came his way, brayed one day, that he now understood what scarlet signified. Upon which, his friend demanded what scarlet was? The blind man answered, it was like the sound of a trumpet. (1690, p. 4)

Numerous studies have since been conducted in this area and the general conclusion is that red and blue are associated with the vowel a, white and yellow with e and i, and blue, brown, and black with o and u (Marks 1997; Jacobson and Waugh 1987). Future research in marketing may wish to consider how properties of a brand mark can complement the brand name to create consistent brand meaning.

32 Journal of Marketing THEORY AND PRACTICE

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