# BRAND ATTITUDES AND THE PLACEMENT OF SEMANTIC PRIMES IN NOVELS

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# **ABSTRACT**

This study considers whether the priming of content which is semantically related to brand will enhance attitudes towards the target brand. The present study examines the robustness of semantic priming within the context of a novel--an environment in which priming does not occur in isolation, but is instead integrated in the development of the plot's characters and locations. Two laboratory experiments examined the influence of semantic priming on brand attitudes. Semantic priming fails to influence brand attitudes when priming occurs within the cluttered environment of a novel. The study is the first to examine the robustness of semantic priming within the context of a novel. Practitioners (concerned that recent legislation requiring authors engaging in explicit brand placement to disclose their material connection to a product seller) will be interested in the merits of a semantic-priming strategy that does not require explicit references to a brand

# INTRODUCTION

Brand references populate all facets of modern media. The Wheaties brand of cereal fueled the training program of Sylvester Stallone's character in *Rocky III* (Brennan, et al., 1999), while Smirnoff and BMW were drunk and driven by James Bond in the movie *Tomorrow Never Dies* (Karrh, 1998). There is an explicit reference to Miller beer in Bruce Springsteen's music video *Born in the USA* (Brennan 2008), and an implicit reference to Doublemint gum in Chris Brown's song *Forever*—as the soundtrack was based on the Doublemint gum ad jingle (Burkhalter & Thornton, 2014). The Volvo brand is mentioned on no fewer than sixteen occasions in Stephenie Meyer's (2005) novel *Twilight*. Sony features prominently in Tom Clancy's *Splinter Cell* video game, where the protagonist Sam Fisher carries a Sony device that is critical to the game's plot (Anderson, 2005). Although some brand references stem from the desire of the media content providers to add verisimilitude to creative output (Brennan, et al., 1999), others result from commercial considerations—a practice referred to as brand placement (Karrh, 1998).

Brand placement in movies is not a new phenomenon, with placements appearing in Lumiere films as early as 1896 (Newall, Salmon & Chang 2006); however, the practice of placing brands in novels occurred more than a century earlier. *The History of Little Goody Two-Shoes* (1765) was published by John Newbery and was printed and made available for sale at the Bible and Sun Printers and Bookshop in the churchyard of St Paul's in London — a bookshop that also sold pharmaceutical products. The possibilities presented by the coupling of a bookshop and a pharmacy were not lost on the publisher, as these opening sentences attest:

"Care and Discontent shortened the days of little Margery's Father. He was forced from his family and seized with a violent fever in a place where Dr. James's Powder was not to be had, and where he died miserably" (The History of Little Goody Two-Shoes p.1).

At the conclusion of the book, the publisher informs readers that Dr James's Powders—a treatment for "Fevers, the Small Pox, Measles, and Colds" -- is available at the Bible and Sun bookshop for two-and-a-half shillings.

A number of recent authors have continued the practice of brand placement in novels. Cumberland Packaging Corporation—the manufacturer of Sweet and Low-- invested in 1.3 million dollars in Hillary Carlip's novel *Eat Me I'm Yours*—a book that not only contains numerous references to Sweet and Low, but also includes a reference to the inability of the FDA to connect the brand to cancer in lab rat studies (Alter, 2014). William Boyd was compensated by Land Rover to feature the Land Rover brand in the novel *The Vanishing Day Game (Flood 2014)*. Similarly, Paspaley pearls commissioned Anna Funder to feature Paspaley jewelry in the short story *Everything Precious*, a jewelry brand placement commission that echoes that obtained by Fay Weldon, author of *The Bulgari Connection*, for references to its jewelry products (Nelson, 2004). Proctor and Gamble's brand Cover Girl and Ford's Fusion brand have also featured in placement deals with novelists (Petrecca, 2006 & Lehu, 2007).

Previous research on brand references in books has examined the effect of explicit references to the brand on brand attitudes (Olsen & Lanseng, 2012), as well as recall for both the referenced brand (Brennan, 2008, Brennan & McCalman, 2011) and its competitors (Brennan, 2015b). The present study considers whether author references to objects and ideas which are related to a brand may make a brand more accessible in memory and influence brand attitudes, even when an author does not explicitly mention a brand. Support for the idea would mean marketers might be prepared to offer commercial support to an author for 'brand relevant content', even when there is no explicit reference to the brand itself. A number of studies indicate that an object (e.g., a brand) is better liked when it becomes easier to process (i.e., acquires greater conceptual fluency) as a result of enhanced accessibility in memory (Berger & Fitzsimmons, 2008; Labroo et al., 2007; Reber, et al., 2004). In the context of a novel, however, any content that is conceptually related to a brand will not appear in isolation, but will be surrounded by a sea of unrelated characters, scenes, and images—clutter that may attenuate conceptual fluency. Accordingly, the present study examines the robustness of conceptual fluency effects on brand attitude within the cluttered environment of a novel.

# **Semantic Priming**

Changes in attitudes and behaviors may be induced through the creation of an environment in which subjects are exposed to semantically related cues—a process known as semantic priming (Lee & Labroo, 2004). The psychology literature contains numerous examples of semantic priming. For example, liking for the word "book" was enhanced when preceded with the related concept "librarian" in comparison with the situation where the word "book" was preceded by the unrelated concept "neighbor" (Whittlesea, 1993). Similarly, attitudes towards a picture of a lock became more favorable when the picture was preceded by the related word "key" in comparison with the unrelated word "snow" (Winkielman & Fazendiro, 2003). With regard to behavior, Bargh et al. (1996) demonstrate that subjects who undertake a scrambled sentence task in which they are exposed to words related to politeness (e.g., respect and polite) or

rudeness (aggressively or rude) were more likely to demonstrate behaviors consistent with these traits than subjects in a control group. For example, those primed with polite words were less likely to interrupt the researcher's conversation. Similarly, Macrae and Johnston (1998) report that subjects primed with the concept of helpfulness demonstrated a greater willingness to pick up objects that the experimenter had "accidentally dropped" in comparison to control subjects.

In a marketing context, a growing body of evidence suggests that attitudes towards products may be enhanced by creating an environment in which subjects are exposed to semantically-related cues. For example, subjects evaluated a bottle of ketchup more favorably after being exposed to a story set in a fast-food restaurant than was the case when the story was located in a supermarket (Lee & Labroo, 2004). Similarly, students exposed to pictures of dogs rated a conceptually-related brand (Puma) more favorably than subjects not primed with such pictures (Berger & Fitzsimons 2008-- as a member of the cat family, the authors contend that Puma is conceptually related to "dog" in memory.

Research also suggests that marketers may be able to forge a relationship between a cue and a desired attitude or behavior. For example, while there is no reason to believe that a frog has a semantic relationship with a bottle of wine, an experiment by Labroo et al. (2007) indicates that if subjects are first primed with a pictures of a frog, a brand of wine with a frog on the label will be preferred to the same brand with a label displaying another object (such as a truck). Similarly, in a field experiment, students who ate at dining halls that utilized trays were exposed to the slogan "Each and every dining hall tray needs five fruits and veggies per day" were observed to increase their consumption of fruits and veggies per day." In a control group of students, who ate at a facility that did not expose them to trays, the tray slogan did not impact behavior (Berger & Fitzsimons, 2008).

Research also indicates that the semantic priming of content that is negatively valenced may have a negative influence on a semantically-related brand. An experiment by Lee and Labroo (2004) exposed subjects either to an ad for "2-in-1-Not-Nice-to-Lice Shampoo" or to an ad for "Agnesi Pasta", and subsequently measured attitudes towards Nutriance Conditioner. As hypothesized, evaluations of Nutriance Conditioner suffered when it was paired with a semantically-related product with negative connotations (a shampoo designed to treat head-lice) in comparison with the neutral pasta advertisement. Accordingly, in the present study we examine whether semantic primes (employed in isolation in previous studies) have the capacity to influence brand attitudes in the posited direction when those primes are placed in the more cluttered environment of the novel.

 $H_1$ : Subjects exposed to positive, semantically-related content in a book chapter will report more favorable attitudes towards the target brand than subjects exposed to unrelated content.

 $H_2$ : Subjects exposed to semantically related, but negatively valenced, content in a book chapter will report less favorable attitudes towards the target brand than subjects exposed to unrelated content

# **EXPERIMENT ONE**

In order to examine hypothesis one, forty students from a South-Western University in the USA participated in a laboratory experiment. After being randomly assigned to two versions (prime/no prime) of the experimental stimulus—a chapter of fiction that was purportedly written by a new novelist---students evaluated the Crofters brand of jelly. The chapter featured a light-

hearted discussion between a college president and his wife on the problems facing the university. Subjects in the semantic priming condition were exposed to several references to peanut butter in the chapter. Peanut butter is often paired with jelly in sandwiches in the USA; indeed, the average American consumes 1500 peanut butter and jelly sandwiches before graduating from high school (Prepared Foods, 2002). Accordingly, jelly might be expected to be closely associated with peanut butter in the semantic networks of American college students. Subjects in the no prime condition were exposed to a chapter in which all references to peanut butter were removed.

The cover story involved informing the subjects that they would be evaluating a chapter of fiction written by an aspiring author. Prior to the chapter and author evaluations, subjects completed some product evaluations which included the dependent variable—attitude towards the Crofters brand of jelly (measured by averaging responses to two 7-point items -- unfavorable/favorable and dislike/like) and two products (Nutriance Conditioner and Puma) unrelated to the peanut butter prime (also measured on two 7 point items-- unfavorable/favorable and dislike/like). The evaluations of the unrelated products were designed to ensure that any priming effects resulting from the treatment condition were not an artifact of the treatment producing a general enhancement of product attitudes.

# **Results**

The results failed to support H1. A comparison of reported attitudes towards the Crofters brand of jelly were not significantly different between subjects exposed to the peanut butter prime (M=4.25) and those in the no prime condition (M= 3.93, t(38) = .758, p > .45). As expected, the peanut butter prime did not induce any general enhancement of product attitudes. Subjects in the peanut butter prime condition did not produce more favorable attitudes towards Nutriance conditioner (M = 3.37) than those in the no prime condition (M= 3.4, t(38) = .064, p > .94). Similarly, subjects in the peanut butter prime condition did not produce more favorable attitudes towards Puma brand (M=4.02) than those in the no prime condition (M= 3.9, t(38) = .231, p > .81).

#### **Discussion**

The positive effects of semantic priming on attitudes towards related products observed in previous research (Lee & Labroo 2004, Berger & Fitzsimons, 2008) do not appear to extend to the situation in which priming occurs within the more cluttered environment of the novel. The product category chosen in experiment one (jelly) did not, however, feature in the priming studies of Lee and Labroo (2004) and Berger and Fitzsimons (2008). Accordingly, a second experiment was devised--employing the same brands as Berger and Fitzsimons (2008) and Lee and Labroo (2004)—to test tested the generalizability to a more cluttered environment of semantic relationships that had been positively primed (i.e., a retest of hypothesis one) in the study of Berger and Fitzsimons (2008) and negatively primed (i.e., a test of hypothesis two) in Lee and Labroo (2004).

#### EXPERIMENT TWO

Thirty-eight undergraduate students from a Southwestern University in the USA participated in a laboratory experiment. After being randomly assigned to modified versions of the experimental stimuli described in experiment one—a chapter of fiction that was purportedly written by a new novelist---students evaluated two brands (a Puma T-Shirt and Nutriance Conditioner). The cover story used in experiment two was identical to that employed in experiment one. Prior to the chapter evaluations subjects completed some product evaluations (which included the dependent variables). The dependent variables—attitudes towards Puma and Nutriance —were captured by averaging responses to two 7-point (unfavorable/favorable and dislike/Like) items. As in experiment one, subjects evaluated of a product (the Crofter's brand of Jelly) unrelated to either prime to ensure that any priming effects were not an artifact either treatment producing a general increase in product attitudes.

Subjects in the positively-valenced priming condition were exposed to semantically-related content in the stimulus chapter—paragraphs featuring the protagonist's dog—designed to enhance the conceptual fluency of cats, and as a result enhance attitudes towards the Puma brand. Subjects in the negatively-valenced priming condition were exposed to paragraphs discussing the protagonist's problems with head-lice and the "Not-Nice to Lice Shampoo" solution. This negatively- valenced content was designed to reduce attitudes towards the semantically-related Nutriance brand of conditioner. Thus, subjects in the positively valenced priming group served as control subjects in evaluations of Nutriance, while subjects in the negatively-valenced priming group served as control subjects in evaluations of Puma. In a previous study, dogs had served as effective positively-valenced semantic primes for the Puma brand (Berger & Fitzsimons, 2008), while "Not-Nice-to-Lice Shampoo" served as an effective negatively-valenced semantic prime for the Nutriance brand of conditioner (Lee & Labroo, 2004).

#### **Results**

As was the case in experiment one, the results failed to support H1. A comparison of reported attitudes towards the Puma brand were not significantly different between subjects exposed to the dog prime (M=4.26) and those exposed to the shampoo prime (M= 4.76, t(36) = .94, p > .35) Similarly, H2 was not supported. A comparison of reported attitudes towards the Nutriance brand were not significantly different between subjects exposed to the shampoo prime (M=3.32) and those exposed to the dog prime (M= 3.37, t(36) = .12, p > .9). As in the case of experiment one, the priming treatments did not induce any general change in attitudes towards a product unrelated to the prime The evaluation of the Crofters Jelly brand did not differ significantly between the shampoo prime (M= 3.81) and the dog prime (M= 3.81, t(38) = .00, p > .99).

#### **Discussion**

Consistent with experiment one, the results of experiment two indicate that the placement of content that is semantically related to a brand fails to influence brand attitudes when that semantically-related content appears with the cluttered environment of a book chapter. This result was unaffected by the valence of the prime.

Apart from differences in clutter, the priming stimuli employed in experiment two of the present study also differed from those employed in Lee and Labroo (2004) and Berger and Fitzsimons (2008) with respect to the deployment of visual imagery. In the Lee and Labroo (2004) study the priming stimulus was an advertisement for Not-Nice-to-Lice shampoo which featured a picture of the shampoo. In the Berger and Fitzsimons (2008) study, the priming stimulus was a series of pictures of dogs. In the present study, the priming stimulus contained only text. It is unlikely, however, that the absence of a visual priming stimulus in experiment two of the present study explains the absence of support for the semantic priming effects which were observed by Lee and Labroo (2004) and Berger and Fitzsimons (2008). The rationale is that both Whittlsea (1993) and Lee and Labroo (2004) report experiments in which a plain text priming stimulus (without any accompanying visual stimulus) induces more pleasant evaluations of a semantically-related target word. For example, in an experiment by Lee and Labroo (2004) subjects exposed to the word "tree" in the sentence "behind the shed there were some low fences surrounding the word tree" report more pleasant evaluations of the semantically-related word "leaf."

#### **GENERAL DISCUSSION**

Semantic priming involves inducing changes in attitudes and behaviors through the creation of an environment in which subjects are exposed to semantically related cues (Lee & Labroo, 2004). Research suggests that such priming increases the accessibility in memory of a conceptually related object, which results in positive affect for the target object (Berger & Fitzsimmons, 2008; Labroo, et al., 2007; Reberet al., 2004). The present study examined the robustness of semantic priming in the context of a novel-- an environment in which semantic priming is surrounded by the clutter of the author's plot. The results of two laboratory experiments indicate that neither positively-valenced nor negatively-valenced semantic priming induces significant effects on attitudes towards semantically-related brands when semantic primes are located within the context of a novel.

This study extends research on both brand placement in novels, as well as on semantic priming. Previous research has examined the effects of brands placed in a novel on brand recall (Brennan, 2008; Brennan, 2015b) and brand attitudes (Olsen & Lanseng, 2012). These previous studies on brand placement have examined the effects of an explicit brand placement rather than the effects of primes that are semantically related to a brand which is not explicitly mentioned in the text. Brennan (2008) reported that the clutter (plot and character development) that surrounds explicit brand placements in a novel results in the suppression of the part-list cueing effect—the finding that the ability of subjects to recall competitive brands becomes impaired after subjects focus their attention on a single brand from that product class (Alba & Chattopadhyay, 1985; Alba & Chattopadhyay, 1986). The results of the present study suggest that clutter has a similar attenuating impact on semantic priming—an effect that has been supported in environments in which the semantic primes are isolated (Labroo et al., 2007; Lee & Labroo, 2004).

The present study also contributes to the emerging literature on priming replication and extension. A number of recent papers in priming have failed to replicate results from some of the classic papers in the field. For example, Bargh, Chen & Burrows (1996) reported that that people walk more slowly if they have been unconsciously primed with age-related words; however, Doyen et al (2012) failed to replicate the result. Similarly, Calin & Standing (2013) failed to replicate Ciani & Sheldon's (2010) finding that priming subjects with a letter (A versus

F) resulted in improved cognitive performance. Finally, Dijkterhuis & van Knippenberg (1998) reported that individuals' accuracy in answering general knowledge questions can be influenced be activating intelligence-related concepts, such as professor or soccer hooligan; however, Shanks et al (2013) were unable to replicate the finding in nine separate experiments. Recently, research has explored the generalizability of priming results across subjects that may differ in cognitive ability (Brennan, 2015a) and attention to the prime (Xiao & Yamauchi, 2015). The present study contributes to the generalizability of priming results across environments that differ in the relative clutter surrounding the priming stimulus. Future research should consider the sensitivity to clutter of other priming manipulations that have been demonstrated in isolated priming environments.

The study also has practical implications for authors and brand managers involved in the negotiation of brand placement contracts in the USA. Historically, authors were not required to disclose the fact that they had been compensated for including references to specific brands (Brennan, 2008), and so readers were unable to distinguish between brand placements and those that the author had included merely to add realism to a character or plot. In 2009, however, the Federal Trade Commission report *Guides Concerning the Use of Endorsements and Testimonials in Advertising* issued new guidelines requiring the disclosure of any material connection between the endorser and the seller of a product when such a connection is not reasonably expected by an audience. Brand managers who attempt to evade the disclosure rules by compensating an author for semantic primes which may be semantically-related to their brands are likely to be disappointed by the results of the present study. Before brand managers abandon the strategy of using semantic priming in novels, however, future research should consider whether making the semantic primes the central focus of a chapter will overcome the attenuating effects of clutter that were observed in the present study.

One limitation of the present study is that the priming stimulus in each of the experimental manipulations always appeared towards the end of the chapter—the last 13-19% of the chapter. Future research should examine whether the introduction of the priming stimulus towards the start of a chapter, or distributing the priming stimulus throughout the chapter could induce sematic priming. Future research could also examine the effect of increasing the quantity of semantic primes within the chapter. The number of semantic primes deployed in the experimental manipulations of present study varied from three (shampoo prime) to eleven (dog prime). Although Lee and Labroo (2004) contained only a single shampoo prime (and Berger and Fitzsimons (2008) obtained a significant priming result with as few as five dog primes), it is possible that a larger quantity of primes are required to offset the effects of clutter within the environment of a novel.

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