Recall and Recognition of Brand-Modified Product Placement in Movies

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RECALL AND RECOGNITION OF BRAND-MODIFIED
PRODUCT PLACEMENT IN MOVIES

by

Caitlin Anderson

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GRADUATE COMMITTEE APPROVAL

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This thesis has been read by each member of the following graduate committee and by majority vote has been found to be satisfactory.

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ABSTRACT

RECALL AND RECOGNITION OF BRAND-MODIFIED PRODUCT PLACEMENT IN MOVIES

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Department of Communications

Master of Arts

In recent years, the product placement industry has seen a significant boom. The growth of product placement continues as media seeks funding and branded products vie for increased audience attention. Because of the increased product placement, there are many studies that examine the attitudes towards product placement, the experiences and interpretations of brands post-product placement, the effects of product placement, and memory of product placement. However, while product placement is a popular trend, there are occasions when branded products are altered in movies and television (this thesis refers to the altered products as “brand-modified products”). Little, if any, research has been done on the effects, perceptions, or reactions toward brand-modified products. The brand modifications are made for various reasons, including branded product’s lack of desired affiliation with the message of the media and/or casting a product in defamatory light. This study, through a test of unaided recall and aided recognition of
four brand-modified products, demonstrates the immediate associations that were made between brand-modified products and authentic products when the four brand-modified products made appearances in various movie clips.

The results of a survey of 211 undergraduate students’ unaided recall and aided recognition of brand-modified products are reported in this study. It is demonstrated that the participants recalled and recognized authentic brands rather than the actual brand-modified products that appeared in the shown movie clips. Schema theory suggests that the brand-modified products were assimilated into preexisting knowledge structures, and that the recall and recognition of the products was due to prior exposure of the authentic brands. In terms of brand-modifications, this study demonstrates that associations are made to authentic products more often than to the brand-modified products that appeared in the movies.
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Product placement (also called “brand casting” and “brand placement”) has made appearances in motion pictures as early as the late 1940s and early 1950s. In the 1948 drama *Mildred Pierce*, Joan Crawford drank Jack Daniels whiskey (Nebenzahl & Secunda, 1993). Four space travelers that rocketed to the moon in the 1950 movie *Destination Moon* drank Coke and wore Lee jeans. In the beginning, using branded props was a causal process as items were donated, loaned, or purchased for particular movie scenes to enhance their artistic qualities (Spillman, 1989).

“Product placement is a cooperative effort of advertisers and creator of entertainment products in which trademarked goods are embedded into popular entertainment products in order to encourage their consumption, overriding entertainment and artistic concerns (Schejeter, 2005, p. 3).” The Center for Media & Democracy calls it a “[f]orm of advertisement, without disclosing it to the receiving party (Source Watch, 2005).”

Since the appearance of Reese’s Pieces in the blockbuster film *E.T. The Extra-Terrestrial*, over 20 years ago, product placement has developed and evolved significantly. Following the film’s release, Hershey claimed a 65 % increase in sales of Reese’s Pieces (Karrh, 1998). Currently, brand placement is a multi-million dollar business, driven by marketers’ needs to find new media options for brand exposure. Media reports estimate that advertisers paid more than $300 million to producers and the six networks during the 2003-04 TV season (McCarthy, 2004).
One dimension of product placement is to make sure that the product is not used in a defamatory light. Examples that Segrave (2004) listed include: when Walter Matthau used a Nikon camera in *Hopscotch*, the product placers made sure the actor was portraying a competent spy and not an inept one. Beer companies were especially sensitive about not wishing to see their products “misused” by violent or underage characters. Anheuser-Busch turned down placements in *Making Love* – possibly because the bisexual love story could create a controversy – and *E.T.*, because the beer was used to intoxicate a child and an extra-terrestrial.

While product placement is a growing industry, the instances of brand-modified products are increasing. Brand-modified products are those altered for legal purposes, or lack of desired affiliation to the program or movie by the product corporation (Linnet, 2004). Legally, program producers are obligated to manipulate products if they do not have permission to use products. At times, the product corporations are concerned about being identified or associated with sensitive issues, messages, or presumed agendas in the movies or television programming. An example of brand-modification was found on an episode of *Law and Order*. A detective was shown drinking out of a can of “Shata.” “Shata” is a mock brand, not to be found in any store, however; the design of the can, down to the lettering, imitated the soda brand “Shasta.” Without close examination, the can of soda appeared to be the brand “Shasta” because the only difference in the product appearance was the lack of one letter in the logo identification.

Research has demonstrated that people use their perceptions of interstimulus relationships to infer the values of missing information (Huber & McCann, 1982; Jagacinski, 1994; Johnson, 1988; Johnson & Levin, 1985; and Kardes & Sanbonmatsu,
1993). Schema theory (Bartlett, 1932) suggests that respondents assimilate new information conceptually by substituting or incorporating ideas that can be associated with preexisting knowledge structures. According to assimilation theory, when brand-modified products are seen on television or in movies, authentic products are recalled and recognized due to prior exposure to the original products. That is, people are likely to “fill in the blanks” in any received communication with things that are familiar to them.

Schema Theory suggests when images are altered for legal purposes, but still resemble authentic products, it is possible that a person will recognize actual product attributes and make an association to the authentic product rather than notice subtle changes. If brands are modified, yet still resemble brand products enough to be identified and recalled by viewers, it could be assumed that the effects of product placement upon consumers are still occurring. Because of the varying goals of the program producers and the marketers, it becomes important to investigate what recollection, if any, viewers have of the brand-modified products and if viewers are able to create relationships between brand-modified and brand-identified products shown in television and movies.

**Significance:**

This thesis will examine the unaided recall and aided recollection of brand-modified products in movies. The study will also determine if the original brands are given recognition for appearance where no such appearances occurred.

**Limitations:**

As no experiments, surveys, or tests could be located regarding studies of this nature, the information for this study was collected from past studies and experiments.
regarding product placement. Because of the lack of previous research in this area, the data that was gathered from this study was groundbreaking and exploratory.

Delimitations:

Though brand-modification occurs on television, it was determined that locating specific examples of brand-modified products would be difficult. As a result, the brand-modified products are strictly from movies. The choices of samples could possibly influence the results of the study though there was an attempt to find modifications of brands that are well known and easily recognized. Some products are more recognizable (crossing cultural, economic, and even generational boundaries) to the mass audience for example: soft drinks, clothing brands, food brands, electronics brands. Gender neutrality in brand recognition was also important to consider in choosing what products would be recognized by the random convenience sample of participants.

Assumptions:

This study will determine whether or not viewers recognize modification of branded products in movies and if recall and recognition are influenced by prior viewing of the movie. The significance of this study is that it will demonstrate the recall and recognition of brand-modified products. It will also demonstrate if authentic brands are being associated with brand-modified products, as Schema Theory would suggest.

The main question is a linked two-part question: Is brand manipulation actually similar in recall and recognition effects to actual product placement? And, does brand manipulation leave a lasting impression upon its audience?
Product placement in the media has been viewed as a hybrid of advertising and publicity (Balasubramanian, 1994). It is believed that in the near future, there is a good possibility that product placement will be an important revenue source for broadcast television networks (Schneider, 2002). As the practice of product placement continues to increase at rapid rates, there is no sign of discontinuance or even slowing down in the near future. It has become a widely used form of increasing product awareness in many types of media. The increase of use has sparked controversy as to whether it should be regulated, and/or even allowed. Critics argue that the audience is captive and may be unaware of the passive messages that they are receiving. Studies have noted the increase in product placement, simultaneously, consideration has been given for the audience as receivers of the message. Considering the history and dimensions of product placement, it can be argued that though product placement is a booming industry, its success is dependent on viewers’ individually conceived feelings regarding products and/or services.

The purpose of this study is to explore the impact of brand modification on product recall and recognition. Particular emphasis will be placed on whether or not brand modification causes recollection and recognition of actual products.

*In the Beginning*

In the “Golden Age,” advertiser-owned productions, beginning with radio (The Texaco Star Theater), then branching to television (The Kraft Television Theater and The
Colgate Comedy Hour), were common. It was when networks became more independent that lines between program content and advertising became clearly drawn. As advertising has become more competitive, advertisers have “demanded more of a presence in programs through product placement and sometimes even ownership” (McDowell, 2004).

What began as a “sporadic barter arrangement for lowering film and television costs is now a vehicle for multimillion-dollar integrated promotional campaigns” (Karrh, McKee, & Pardun, 2003, p. 138). Friedman (1985, 1986) found that the incidence of brand name appearances within both best-selling novels and popular songs has continually and substantially increased since World War II.

Because of the success of product placement, it has become popular across the media. The practice is prominent in television shows (Avery & Ferraro, 2000; Russell, 2002; Taylor, 2003), movies (Gould, Gupta, & Grabner-Krauter, 2000; Delorme & Reid, 1999), music videos (Chang, 2003), and computer/video games (Nelson, 2002). In recent years, marketers are now moving more aggressively, seeking star roles for their brands in feature films (D’Orio, 1999; McCarthy, 2000), video games (Gunn, 2001; Rodgers, 2002), magazines (Fine, 2004), and television shows (Elliot, 2002; Vagnoni, 2001). Among all different types of media, product placement has become a multi-million dollar business, as marketers search for new methods that will give exposure to specific brands and products.

Karrh (1998) estimated that 90% or more of product placements are done on a barter basis, where the product or service is traded for exposure in the program. However, more recently, some deals have been quite large and have included large sums of money being exchanged for placement services. For example, BMW invested an estimated $20
million on the placement campaign that launched the Z3 roadster. The Z3 made a prominent appearance in the James Bond film *GoldenEye*, as well as in most of the advertisements and trailers for the film (Einstein, 1997).

Due to the limited number of studies regarding product placement, DeLorme and Reid’s 1999 study becomes the basis for much of this review of literature. Although product placement has been around since the 1950s, it has received little notice or focus from researchers, especially regarding brand-modified product placement.

*Product Placement as an Industry*

Product placement is the practice of “placing branded products in the content of mass media programming” (Russell, 2002, p. 306). According to Gupta and Gould (1997, p. 37), product placement in the movies “involves incorporating brands in movies in return for money or for some promotional or other consideration.” Product (or brand) placement is the paid inclusion of branded products or brand identifiers, through audio and/or visual means, within mass media programming (Karrh, 1998). La Pastina (2001) considered product placement as commercial insertions in a program intended to heighten the visibility of a brand, type of product, or service, intended to be integral in the story, encouraging viewers to recognize how characters use and approve the product. As early as 2002, it was believed that in the near future, there was a good possibility that product placement would be an important revenue source for broadcast television networks (Schneider, 2002).

Some of the factors of the media environment that have caused marketers to pursue product placement include *zapping* and *zipping*. *Zapping* is when viewers tune out
formal advertisements or switch channels during commercial breaks (Avery & Ferraro, 2000). Zipping, a result of TiVo, Replay TV, and now the latest Digital Video Recorder (DVR), allows an audience to completely skip commercials. The decrease of viewers actually seeing commercials has caused marketers to promote products via alternative methods, the most prominent method currently being product placement.

Spillman (1989) observed that product placement began casually, as products were donated, loaned, or purchased, enhancing artistic quality of scenes. Interestingly, as product placement has increased, rather than enhancing artistry, DeLorme and Reid stated that “movie critics have expressed concern that brand placement jeopardizes the artistic integrity of movies” (1999, p. 72).

The increase in product placement in the last few years, as well as the institutionalization of the industry, indicates that advertisers are using the technique to sway consumers’ brand attitudes (Avery & Ferraro, 2000). DeLorme and colleagues have found that “consumers connected the world of the film, including product placements, with their social world, as well as consumption-specific aspects of their own everyday life” (Gould, Gupta, & Grabner-Krauter, 2000, p. 43). Russell (1998) theorized that transformational and affect transfer processes aid in establishing linkages between a movie or television show and products placed. The linkages could be important for buying behavior since the decision to purchase a product is likely to be the result of such linkages. Gould, Gupta and Grabner-Krauter (2000) suggested that the recognized links can cause consumers to attach different ethical meanings to product placements in terms of acceptability. Richard Heslin, a professor of psychology at Purdue University, stated that product placement can influence consumers without them even realizing it. He said,
“when we watch a movie or something on television, our defenses are down and we become more receptive to the messages that are coming at us, so this type of product placement is both a very effective ‘niche’ advertising tool and a bit unnerving at the same time” (USA Today, 1999, p. 11). According to Miller (1999), product placements “work as subliminal inducements because their context is ostensibly a movie, not an ad, so that each of them comes sidling toward us dressed up as non-advertising, just as other kinds of ads now routinely come at us disguised” (p. 43). Heslin argued that product placement in movies and television programs are especially effective at increasing the overall awareness of a product.

As product placement has become a common marketing tool, products are integrated so carefully that the audience can be completely unaware of the product presence as a form of marketing. Because of the possibility that the audience may not be aware of its subjection to product placement, there is a continual debate as to whether product placement is an ethical practice. Product placement reaches a captive audience, provides relatively greater reach than traditional advertising, demonstrates brand usage in naturalistic settings (that could sway an unaware consumer), and offers an alternative advertising option for alcohol and tobacco, both of which are restricted from broadcast television (DeLorme & Reid, 1999).

On the other hand, according to Karrh, McKee, & Pardun (2003), “marketers have far less control over most product placement efforts than they have with traditional media advertising” (p. 139). Examples cited included Coca-Cola, which was caught off guard by a brand appearance when a Coke advertisement was interspersed with a bloody murder scene in the film *Natural Born Killers*. Karrh, McKee, & Pardun (2003)
suggested “program producers and placement sponsors operate according to different goals . . . with the balance of power generally tilted away from marketers” (p. 139).

As the product placement industry has boomed in Hollywood, a newly recognized Hollywood icon is Mark Burnett. Mark Burnett Productions has produced multiple reality television programs that integrate product placement and advertising clients in “closer-than-ever relationships” as the practice rapidly expands (Grainger, 2004).

**Qualities and Characteristics of Product Placement**

Product placement in the media has been viewed as a hybrid of advertising and publicity (Balasubramanian, 1994). However, Gupta and Gold (1997) discovered that viewers can react positively and negatively to product placements depending on the type of product featured, suggesting that positive or negative publicity will affect consumers differently.

Gupta and Lord (1998) reasoned that characteristics that render a product placement prominent are similar to those in advertising, such as increasing the size of a print ad or of an image within an ad, which increases the likelihood that it will attract attention. The study categorized product placement into two dimensions. One dimension was presentation (senses activated by the stimulus), and the other was level of prominence (the extent to which the product placement possesses characteristics designed to make it a central focus of audience attention).

Gupta and Lord categorize product placement strategies into three modes: visual only (VIS); audio only (AUD); and combined audio-visual (AV). The first mode (VIS) is showing the product or any other type of brand identifier without any relevant message or
sounds in the audio track drawing attention to the product. The second mode (AUD) involves the mention of a brand name or product by a character without visual aid. The third mode (AV) involves showing a brand name while simultaneously mentioning the brand name or conveying a brand-relevant message in audio form.

Each of the modes can vary in degree of prominence or subtlety. A prominent placement is that in which the product is made highly visible by virtue of size and/or position on the screen or its centrality to the action in the scene. Subtle placements are those in which the brand is or is not small in size, used as a background prop, or given low exposure time.

Many people are involved in determining product placement. Practitioners of brand placement include clients, advertising agencies, public relations firms, production studio departments, and independent “brokers,” such as the previously mentioned Mark Burnett Productions (DeLorme & Reid, 1999). Since mode and prominence of brand placement can vary from the obvious to the subtle and may be visual, audio, or both, all these elements factor into the cost to marketers. Understandably, then, when product placement involves payment, fees are typically based on the amount and type of exposure in a film. “Visual exposure is the least expensive, verbal mentions are moderately priced, and character usage is the most costly” (DeLorme & Reid, 1999, p. 71).

The Product Placement Audience

Three themes as to how brand props were interpreted and experienced by viewers arose from the cross-section of moviegoers in a study by Delorme and Reid (1999). The viewers appreciated realism, noticed the familiar, and related to characters. Concerning
realism, viewers stated that they enjoyed the subtle use of brand placement because they considered the movie to be more realistic, but they disliked excessive and obvious product placement because it distracted from the realism of the movie. Frank Zazza, CEO of a placement-valuation company, iTVX, argued that “placement has become an aesthetic necessity in the branded society. Imagine, he says, an episode of “CSI: Crime Scene Investigation” without recognizable products: “They find a clue, and where’s the clue? In a can of soda. They lift up the can and it says ‘soda.’ It doesn’t work’” (Gordon, 2003, p. 81).

The themes of consumption-specific relevance that DeLorme & Reid (1999) determined are tools for purchasing decisions, tools for identity and aspiration, change and discomfort, and belonging and security among viewers. Each of these themes can potentially raise ethical concerns. Product placement becomes an influence on a person as he or she compares product placement to personal purchasing and consumption decisions, thereby confirming or disconfirming past or planned brand-related behavior. Identity and lifestyles are confirmed or disconfirmed when viewers associate brand props in relation to their own self-impressions as consumers. Change and discomfort can possibly be caused when viewers encounter brand props and then consider those products/services threats and/or interruptions to the normalcy of their own lives. In doing so, encountered props produce negative thoughts and feelings about social trends and patterns. DeLorme & Reid (1999) determined that belonging and security in terms of product placement is generated from, “brand props encountered in a particular movie from which viewers gain emotional security and social connectiveness. As such, encountered props produce positive thought and feelings about social bonds and interactional experiences” (1999, p.
The security and social connectiveness could be considered manipulative, raising questions about the ethics of the practice of product placement. The emergence of these themes from the study suggested that moviegoers have “interpretive experiences with encountered brand props that extend beyond movie-specific experiences and contexts to consumption-specific situations” (DeLorme & Reid, 1999, p. 84). These four themes can be used to question deceptive practices of product placement in movies, television, etc.

In the viewing experience, moviegoers are active participants. “They learned by viewing brand props and related that learning to movies (including characters and plots), to the moviewatching experience, and to aspects of their own everyday lives as consumers” (DeLorme & Reid, 1999, p. 85). DeLorme and Reid (1999) determined that “regardless of age or movie-going frequency, the informants were active participants in the viewing experience and actively interpreted brands encountered in movies” (p. 71). Participants in the study shared sentiments such as,

…Chances are if you’ve heard of something that’s been widely publicized you would go with it. You would be more inclined to go with that brand because you know you’ve heard of it. You can sort of put some trust in it… If it’s a product that you’ve heard of before you probably would tend to go with that first so by seeing it in a movies, it does, I think, have some effect… (p. 81)

Both frequent and infrequent moviegoers ranging in age from 21 to 45 were aware of the persuasive intent of brand props, even when they judged them to be excessive, inappropriate, or unrealistic. The study discovered the following noteworthy
findings: respondents noticed familiar products; brand props that were familiar enhanced movie enjoyment; products can be recognized with or without a logo, commercial advertising, or slogan merely from a company’s past advertising. DeLorme and Reid (1999) reported that “informants indicated that the relationship with characters strengthened, and the involvement in and enjoyment of the movie increased, when they noticed ‘their brands’ being used by a movie character, or even featured in a scene” (p. 79).

Placement Effect on the Viewing Audience

While brand props are deliberately and specifically placed in movies to persuade viewers, DeLorme and Reid (1999) concluded that the question of product placement effects was not “what brand props do to movie audiences, but what movie audiences do with them” (pg. 85). Significance and meaning of product placements are to be interpreted as part of a viewer’s continued day by day experiences that come to life as a reflection of the past, present, and anticipated experiences of viewers. DeLorme and Reid (1999) argued that models of product placement that isolate and decontextualize the audience are off the mark, as the viewer should be the final determinant of influence, not the high-powered executive. DeLorme and Reid recommend subtle product placement, that the viewers to choose to recognize, rather than the obviously blatant product placement that is found in movies such as “iRobot.”

Viewers are active interpreters, not passive receptors of product placement. DeLorme and Reid’s (1999) study determined that influence of brand placement is not able to be typified, thereby suggesting that factors such as perceived needs, self-image,
past experiences, contests, and demographics are all very important. Additionally, viewers are very aware of the persuasive intent of product placement, leading to skepticism and resistance of persuasive attempts. Clearly, then, viewers are not manipulated and deceived into buying every product they see in a movie.

DeLorme and Reid (1999) learned that the majority of the participants in the study were able to recognize and recall brand placements, describing many examples and experiences without aids to recall. Based on this finding, DeLorme and Reid suggested that the potential long-term nature of product placement effects on memory should be acknowledged. Memory of product placements in movies seems to endure, which in turn can act as long-term reminder advertising. In fact, many of the participants willingly reported that brand name recognition and long-term influence are effects of product placement. As attitudes toward brands develop over time, product placement seems to contribute in valuable ways to strengthening and reinforcing preconceived attitudes towards brands. Through brand/product placement, associations that build a brand’s image can be significant, especially in the context of positive and negative settings/portrayals, the treatment of the brand within a movie, the significance of the movie itself, and the nature of the featured brand, as well. Because attitudes towards brands are developed over time, the study suggests that product placement should be investigated in congruence with other types of brand exposures that occur in the consumer environment.
Product Placement in Television

The Fall 2004 television season utilized the practice of product placement in many ways, from subtle shots of products to integrating products into the thick of the episode plots.

In one episode of “What I like About You,” a WB show popular with young women, the plot revolves around two characters competing for acting work in a new Herbal Essence ad. The actual ad then aired for the first time in a commercial break shortly after that scene. Ford’s new Mustang is part of the plot in the second season of Fox’s “The O.C.” Heineken beer made an appearance on Discovery’s “American Casino” reality show. NBC’s “The Apprentice” showcased marketers such as Levi Strauss, Mattel, QVC, and Crest in its competitions. Advertisers have now taken advertising to a new level, as they are trying to be involved from the inception of a show to integrate products, no longer as background props, but incorporating them directly into the programming (Product Placement in TV Shows Moves Out of Background, 2004).

Because of the aggressiveness with which product placement now occurs, “Critics want ‘pop-up’ warning.” Commercial Alert director Gary Ruskin said, “If advertisers get their way, TV characters will be Pringles potato chips (McCarthy, 2004).”

In a rather interesting approach to product placement, a special episode of “American Dreams” was sponsored by Ford but commercial-free, in the traditional sense. It aired on November 21, 2004. The episode focused on a soldier coming home from Vietnam. Before he left for the war, his father told him that upon returning he would buy him a new car. The car was a 1966 Ford Mustang. During the show, a black-and-white Mustang commercial played on a television in the background. There was also a shot
where someone flips through a magazine, briefly showing a Ford Mustang print ad. At the beginning of the episode, Ford did a two-minute introduction for the episode featuring a new 2005 Mustang. At the end of the show there was a four-minute movie made by Ford. It was a spin off of the “American Dreams” episode, depicting an Iraqi veteran returning to his family, and a new 2005 Mustang. As if seeking to justify the number of Ford mentions and moments, the executive producer of the show said that he wanted a commercial-free episode so that the emotion of the drama was not interrupted (Friedman, 2004a).

Product placement is apparently involving some hefty costs. For the third edition of “The Apprentice” (which started early in 2005) the Mark Burnett Production Company demanded $2 million to $3 million for product integration (Friedman, 2004b), totaling $25 million from sponsors. Sylvester Stallone’s boxing reality show, “The Contender” was paid $13 million apiece from auto, soft drink, and telecom sponsors (McCarthy, 2004).

Russell (2002) investigated the effectiveness of product placement in television shows. The study identified the role of modalities on memory, specifically the strong effect of audio placements on memory.

On September 5, 2003, Nielsen Media Research began tracking product placement on television. Analysts now tape and watch every prime-time show on the broadcast networks, checking for product placement. The goal of the research is to “make the advertisers happy so that products get noticed” (Atkinson & Fine, 2004, p. 47). The Nielsen system ranked Coca-Cola Co. as the most frequent product placement in 2004, as the product appeared or was mentioned 2,260 times. Nike apparel products were second,
appearing 1,048 times (Atkinson & Fine, 2004). Nielsen Media Research found that in the television season that ended May 31, 2004, advertisers paid more than $300 million to producers and the big broadcast networks (ABC, CBS, NBC, Fox, WB, and UPN) for brand placement (McCarthy, 2004). One of the biggest media buying agencies, Zenith Optimedia Group, has made a multiyear agreement with Nielsen Media Research to begin using new data measuring all “brand mentions” on network television, including product placement and other integration deals (Mandese, 2004).

*Product Placement in Movies*

Many movie/product placement studies have been performed in the past twenty years. Baker and Crawford (1996) used a self-completion survey combined with oral questions after participants viewed a movie containing several brands. The study found that there were high levels of aided and unaided recall of product placement. Sixteen percent of the sample reported preference for the products that were featured. There was a generally neutral attitude towards product placement, though viewers recognized it as a type of promotion.

Babin and Carder (1996) sampled 108 college students, using “Rocky III” to assess the effects of 39 brands placed in the movie. The study concluded that brand recognition was significantly greater for those who viewed the movie in comparison to a control group for more than 25% of the 39 brands that made an appearance in the movie. Also in the 1996 study, Babin and Carder found that viewers were able to recognize and recall brands that had been placed in the movies they viewed (“Rocky III” and “Rocky
V”). They were also able to distinguish between brands they viewed in the movies and brands that did not appear in the movies.

DeLorme, Reid, and Zimmer (1994) conducted focus groups of college students who were frequent moviegoers. It was concluded that participants like subtle use of brands in movies because it contributes to the realism, where generic products lessened the artistic values. The participants also felt that products in movies brought the movie characters closer because the viewers identified with characters that used the same products they did.

Gupta and Gould (1997) surveyed moviegoers’ perceptions of ethics and acceptability of product placement in movies. The respondents in the study were generally positive about product placement, though some product categories such as guns, alcohol, and cigarettes were deemed less acceptable. Sentiment did vary to some degree, moderating variables being gender, movie-viewing frequency, and relevant attitudes.

Karrh (1994) sampled 76 college students to assess effects of five brands placed within a 33-minute segment of “Raising Arizona.” He found that recognition was significantly higher for only one brand that prominently and continually appeared. Recognition of products may depend on the familiarity of the product as well as its prominence in the scene.

In 1995, Karrh surveyed 22 professional product placement practitioners. Respondents believed that product placement is most effective when the product has a recognizable package or design, is positively portrayed in the movie, and there is additional promotional support (movie trailers or advertisements). The practitioners
consider the best measures of product placement effectiveness to be recall and recognition.

Nebenzahl and Secunda (1993) surveyed 171 college students to determine moviegoers’ attitudes toward product placement in movies. Generally, there were no objections to product placement. It was considered effective as a marketing communication technique. A small minority of respondents disagreed with the practice because they considered it to be deceptive.

Ong and Meri (1994) performed an exit survey for 75 moviegoers. It was found that there was low unaided recall of products placed in the movies “Falling Down” and “Point of No Return,” and recall differed widely between individuals. Those that did remember brands in movies did not indicate increased purchase intentions, but there was a favorable response to product placement as a practice.

Pardun and McKee (1996) surveyed 445 full-service advertising agency media directors to gain an understanding of their perspective on product placement as a media strategy. The study found that advertising agency media directors favored the practice, considering the potential for a national audience to be the most important benefit. They expected to increase their usage of brand placement in the future.

In 1994, Saberwahl, Pokrywczynski, and Griffin used 62 college students to test two conditions of product placement: visual and verbal presentation and visual-only presentation. Sixty-five percent of the subjects recalled the visually and verbally presented product while 43% recalled the product that was visually presented.

Sopolsky and Kinney (1994) sampled the 25 top-grossing Hollywood feature films of 1991. An average of 14 product placements was found in the movies. Patterns
were found in frequency of brand placement by movie genre, product category, and level of product involvement.

Steortz (1987) performed an exit survey for 304 moviegoers to assess the effects of 29 brands placed in six films. The study found that aided recall scores averaged 38 percent. However, recall depended on placement characteristics. Visual/verbal placements averaged 30 percent recall, verbal endorsements 51 percent recall, and visual placement 33 percent. Products used as background props had an eight percent recall.

In 1997, Troup performed a content analysis of the 25 top-grossing Hollywood feature films of 1989. The study found an average of 18 product placements per movie. Most brands were displayed in positive or neutral settings.

Vollmers and Mizerski (1994) sampled 71 college students to assess the effects of two different products placed in six-minute clips of two different films. The study found that there was a high unaided recall of brands placed within the movie clips.

Vollmers (1995) sampled 140 second, fourth, and sixth grade children to assess communication effects of exposure to eight product placements in the movie “Lassie.” Subjects recognized brands in the film. Placement type seemed to affect recognition. After the exposure to the brands, children did not demonstrate affect or immediate preference for the product. Children’s ability to recognize that product placement is a promotional intent improved with age.

Zimmer and DeLorne (1997) sampled 52 non-student moviegoers to identify recall, recognition, and attitude toward product placement in the film “Doc Hollywood,” which contained 16 product placements. There was a 33 percent average unaided recall
and a 55 percent average of aided recognition. Positive effects on memory for prominent placement, verbally mentioned, and character-used products were found.

Product Placement Effects

Some research has suggested that product placement can have greater impact with program audiences than is typically found with comparable advertising exposures. Several studies, using an assortment of research methods, explored this impact. From a content analysis of brand appearances during one week of primetime broadcasting in 1997, Avery and Ferraro (2000) found that most brand appearances were unscripted. The majority (61 percent) occurred during news programs, feature magazine shows, and game shows. The remaining 39 percent of brand appearances occurred in shows with scripted characters and story lines. Approximately 43 percent of all brand appearances were visual only, with 39 percent verbal only, and 18 percent a combination of visual and verbal depictions. After restricting the sample to movie reruns and scripted television programs, Avery and Ferraro (2000) found no significant difference in the types of portrayals between the two.

As product placement continues to be a growing trend in the media market, research has demonstrated that viewers do actually recognize and recall brand/product placement. Because many studies have demonstrated that there is not a change in affect or immediate preference for products once they have been placed in the media, and because most viewers are in favor of product placement because it contributes to realistic settings of scenes, product placement is merely one effect of many upon consumers attitudes. Therefore, regulation and/or restriction of the practice of product placement is
not a necessary procedure. However, it seems product placement can go too far and negate its own intended outcomes. Stuart Fischhoff, a media psychologist at California State University, Los Angeles, went as far as describing a screening audience’s response to the mall scene of Steven Spielberg’s “Minority Report” (which contained extreme and blatant product placement) as “a wave of outrage and finally a tsunami of dismissive hilarity” (Gordon, 2003, p. 81).

To viewers, products, brands, and activities have come to signify or perform social roles. Products are used or avoided as a means of gaining status and avoiding stigmatization. Research and examination of brand modification in comparison to brand identification are needed to gain understanding of the differences and similarities in recognition and recollection of the two. Schema theory explains how brand modification uses existing knowledge or familiar subjects to generate recollection of known and familiar products.

Schema Theory

Schema Theory has been used to explain interpretation of information, and also decoding how information is presented. Price & Driscoll (1997) and Halliday & Hassan (1989) demonstrated how schemas are reflected in text structures of language.

Schemas are representative of pre-existing cognitive structures (Starbuck & Milliken, 1988) that possess conceptual and experiential prior knowledge about incoming stimuli (Fiske & Taylor, 1991; Lord & Foti, 1986; Neisser, 1976; Nisbett & Ross, 1980; Taylor & Crocker, 1981). Norman and Bobrow (1975) referred to the schema construct as a
framework for tying together the information about any given event, with specification about the types of interrelationships that exist and procedures upon the way things fit together. Schemas can activate procedures capable of operating upon local information and a common pool of data. (p. 125)

According to Axelrod (1973), “One of the most important tools that people use is a schema” (p. 1248). He furthers, “a schema is a ‘preexisting assumption about the way the world is organized. When new information becomes available, a person tries to fit the new information into the pattern which he has used in the past to interpret information about the same situation” (p. 1248). Fiske and Taylor (1991) defined a schema as “a cognitive structure that represents knowledge about a concept or type of stimulus, including its attributes and the relations among those attributes” (p. 98). Bartlett (1932), Bransford (1979), Cofer (1977), Dodd and White (1980), Lachman, Lachman, & Butterfield (1979) suggested that schema theory posits an active-strategic receptor in that receivers actively-strategically take part in processing information from their environments. According to these definitions, the role of schemas is imperative in organizing information based on their perceived relationships.

The idea that previously stored information dramatically influences the way that new information is remembered is essential to Bartlett’s notion of remembering via a schema. His suggestion that information is integrated in memory with existing knowledge was based on the observation that distortions in remembering reflect the influence of existing knowledge and are not a result of mere random forgetting. Landis (1982)
This idea was furthered in Landis’ 1982 study between text and prior knowledge in children’s memory for prose.

Beals (1998) determined that Bartlett’s research suggested at least two different types of schemas. The schemas, while they have differences, are not independent of each other. “They are interconnected, working off each other, connecting newly presented material with already known material to make sense of the world” (p. 8).

Cognitive scientists such as G. Mandler (1984), Minsky (1975), Rumelhart and Ortony (1977), and Schank and Abelson (1977), are among those who use schema as an information-processing concept. Rumelhart (1980) defined schema as “a data structure for representing generic concepts stored in memory” (p. 34). He divided the form and function of schemas into four parts. First, a schema is like a play, situations become scripts with different actors. The situations allow participants to predict how others will act, thereby making decisions about how to act on the basis of patterns. Second, a schema is like a theory, understanding how the world works through interpretation of a situation, event, or text. Third, as a computer program, schema sifts through patterns of observations to allow us to identify things we perceive. Fourth, a schema is a device that tells us if a specific sequence of symbols is legal. Rumelhart posited six features of schemas:

(1) schemas have variables; (2) schemas can embed, one within another; (3) schemas represent knowledge at all levels of abstraction; (4) schemas represent knowledge rather than definitions . . . ; (5) schemas are active processes; and (6) schemas are recognition devices
whose processing is aimed at the evaluation of their goodness to fit to
the data being processed. (p. 40-41)

Schema has been applied to reconstructive memory in terms of recall and
comprehension and remembering and reconstruction. Recent studies have used examples
of Bartlett’s application.

Carlson, Buskist, and Martin (2000) used a 1932 experiment of Bartlett’s when he
concluded that people remember only a few significant details of an experience and that
during recall they construct the missing portions to fit into their own expected outcomes.

Butler and McMinus (1998) stated that memory and perception are both
selective and interpretive and that memory involves construction as well as
reconstruction on the basis of Bartlett’s argument that the process of retrieval
involves reconstruction, which is subjected to the preexisting frameworks in
peoples’ heads.

Regarding the intake of new information into a preexisting knowledge structure,
Ost and Costal (2002) stated:

When the material to be remembered does not conform to available
schemas but can nevertheless be assimilated, it will be transformed;
otherwise, it should persist relatively unchanged. Furthermore, at the
level of the individual or the social, the effect of the process of
reconstruction is ultimately conservative. (p. 249)

Regarding Bartlett’s studies of retention of meaningless details, he noted “a strong
tendency to preserve apparently trivial or disconnected detail of a non-representative
character or in a non-representative setting” (Bartlett, 1932, p. 185), meaning that
according to Bartlett, details not readily assimilated to an existing schema should be resistant to change.

In 1999, Schmidt and Hitchon studied schema theory in the context of brand advertisements, exploring how viewers responded to advertisements. In their study, the congruency of schema is addressed. They state, “Schemas guide the processing of incoming information which may be congruent or incongruent with the schema. Incongruent information is that which contradicts prior expectations based on schematic knowledge” (p. 435).

Schmidt and Hitchon further explained:

Although schema congruency has been operationalized in a multitude of studies, the concept retains some ambiguity. This is largely because the focus of schema theory is on the psychological processing within the mind of the individual rather than on characteristics of the stimulus that elicit schematic processing. (p. 436)

Schmidt & Hitchon list three strategies that individuals can employ when presented with incongruent information. First, ignore the information. Second, if forced to use the incongruent information, assimilate it into an existing schema. “The incongruence can be either attributed to situational causes, or distorted to explain it away” (p. 436). According to Schmidt and Hitchon, “Only when incongruent information is extreme and the individual is required to make use of it, however, is recall of incongruent information superior to recall of congruent information” (p. 436). It is expected, therefore, that “incongruent information will influence evaluation only when it is extreme and must be used” (p. 437).
Because schema has been used to suggest that new information will be assimilated into a preexisting knowledge structure, it predicts that participants in this study will recall and recognize actual products rather than the brand-modified products that actually appeared in the movies “Shrek 2,” “Training Day,” and “Coming to America.”

*Research Questions*

RQ 1. Do viewers recall brand-modified products or actual products after viewing a movie scene containing a brand-modified product (unaided measure)?

RQ 2. Do viewers recognize brand-modified products or actual products after viewing a movie scene containing a brand-modified product (aided measure)?

RQ 3. Is the recall and recognition of the products (brand-modified or authentic) affected by prior viewing of the movie?
CHAPTER 3
METHODOLOGY

The participants selected for this study were students enrolled in various classes at a large western university. A sample of 211 students was used for the survey. The dependent variables of the study were: brand association and viewer recall and recognition of the selected products. The independent variables were brand manipulation and identification of both brand identified and brand-modified products.

A brand-identified product is considered to be a product that gives the impression and appearance of a real, existing brand. When brand-modified products are quickly viewed, the use of identical packaging colors and fonts of brand-modified product to the authentic brand being mimicked give the appearance of the actual product. An example of brand modification in the movie “Training Day” is that of the “Suny” brand on a CD player box. It was similar in appearance to the brand logo of “Sony.”

For this study, the samples of brand-modified products came from movie clips. The four brand-modified products were chosen from available clips that had brand modifications of well-known brands. Four products were chosen to give viewers the opportunity to recognize a variety of brand names including “Suny” (Sony), “Foster” (Oster), “Farbucks” (Starbucks), and “McDowell’s” (McDonald’s).

A confederate survey was created so survey participants would not be biased toward the testing. Participants were shown a scene from each movie where the brand-modified and brand identified image made an appearance. To introduce the survey, the participants were asked to pay equal attention to all aspects of the scenes (character,
mood, surrounding, etc.) in order to receive objective and unassuming responses. The survey began with demographics questions, describing age, gender, and class standing of the respondents. The questionnaire determined the participants’ opinions regarding the likeability of the depicted characters, effects of lighting in the scene, and interest in the movie, using a Likert Scale. Again, these questions were asked because the researcher sought objective, unassuming observers, who were not focused on the aspect of brand placement or brand modification. Finally, product placement questions were asked. Initially, the participants were asked to recall all of the brands that were shown in the movie clips by listing them in the provided space. The subjects were then given a recognition test for the advertised brands (see Appendix A). An example of the questions that were asked is: “In the first scene, one of the characters was carrying a CD player. The brand on the box was either Panasonic, Suny, JVC, JVX, Panoramic, or Sony.” The survey was handed out in three parts so that the participants could not be influenced by the choices in the recognition section when they were asked to recall the brands. The use of sequential recall and recognition tests using the same subjects was validated in consumer research by Singh and Rothschild (1983a) and Krishnan and Chakravart (2003).

The quasi-experiment lasted approximately twenty minutes. The survey questions consisted of demographics questions, whether or not the participant had previously seen the movies, and the product recall and recognition questions.

The data relevant to this study were the participants’ recollection and recognition of the brand-modified products. Also noted was the number of times participants recalled and recognized authentic brand images.
The following were assessed in the questionnaire:

Unaided recall: Subjects were asked to recall and list the product/brand/logo of as many products as possible that appeared in the movie clips that were shown immediately preceding the survey.

Product recognition: Subjects next completed recognition tests of brand names. Participants were asked to identify the brand-modified products from among a total of six choices, three actual brands and three brands that resemble the authentic brands.

The research questions were scored by calculating the frequency with which the brand-modified appearances were recalled and recognized as well as the number of occurrences of recall and recognition of the authentic brands that the brand-modifications are similar to in the three scenes. To determine if prior exposure to the brand-modified products influenced participant response, the results of the recall and recollection were compared on the basis of whether or not the participants had previously viewed the movies “Shrek 2,” “Training Day,” and “Coming to America.”
CHAPTER 4

FINDINGS

This study sought to examine participants’ recall and recognition of brand-modified products in movies. Additionally, it sought to determine if actual brands were recalled and recognized as Schema theory suggests. Additional tests were run to ascertain if the recall and recognition of products were influenced by previously viewing the movie thus having prior exposure to the brand-modified product.

The sample of participants was a convenience sample that consisted of students enrolled in general education required classes in the Spring 2005 term. Eighty-seven women and 120 men participated in the survey. Four participants did not report their gender. Of that population, there were 82 Freshmen, 32 Sophomores, 40 Juniors, and 51 Seniors. Six participants did not report their class standing. The average age of the participants was 20. The sample of college students was used because the marketing of movies and the products are targeted towards this young adult age group.

Research Question 1: Unaided Recollection Results

Research Question 1 sought to determine the unaided recall of the authentic brands (McDonald’s, Starbucks, Sony, and Oster) and the brand-modifications (McDowell’s, Farbucks, Suny, and Foster). The results of the unaided recall following the viewing of the three movie clips are shown in Table 1.
Table 1
*Unaided Recollection Results of Authentic Products and Brand-Modified Products*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>McDonald’s</td>
<td>171</td>
<td>81.0</td>
</tr>
<tr>
<td>McDowell’s</td>
<td>14</td>
<td>6.6</td>
</tr>
<tr>
<td>Both</td>
<td>6</td>
<td>2.8</td>
</tr>
<tr>
<td>Neither</td>
<td>20</td>
<td>9.5</td>
</tr>
<tr>
<td>Total</td>
<td>211</td>
<td>100.0</td>
</tr>
<tr>
<td>Starbucks</td>
<td>173</td>
<td>82.0</td>
</tr>
<tr>
<td>Farbucks</td>
<td>6</td>
<td>2.8</td>
</tr>
<tr>
<td>Both</td>
<td>3</td>
<td>1.4</td>
</tr>
<tr>
<td>Neither</td>
<td>29</td>
<td>13.7</td>
</tr>
<tr>
<td>Total</td>
<td>211</td>
<td>100.0</td>
</tr>
<tr>
<td>Sony</td>
<td>47</td>
<td>22.3</td>
</tr>
<tr>
<td>Suny</td>
<td>10</td>
<td>4.7</td>
</tr>
<tr>
<td>Both</td>
<td>1</td>
<td>.5</td>
</tr>
<tr>
<td>Neither</td>
<td>153</td>
<td>72.5</td>
</tr>
<tr>
<td>Total</td>
<td>211</td>
<td>100.00</td>
</tr>
<tr>
<td>Oster</td>
<td>8</td>
<td>3.8</td>
</tr>
<tr>
<td>Foster</td>
<td>68</td>
<td>32.2</td>
</tr>
<tr>
<td>Both</td>
<td>1</td>
<td>.5</td>
</tr>
<tr>
<td>Neither</td>
<td>134</td>
<td>63.3</td>
</tr>
<tr>
<td>Total</td>
<td>211</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Of the authentic brands, Starbucks was recalled by 82% of the participants. Eighty-one percent recalled McDonald’s. Sony was recalled by 47 participants, 22.3% of the survey population. Oster was only recalled by eight (3.8%) of the participants. Of the 211 participants, 153 (72.5%) did not mention the appearance of Sony or its mock brand, Suny. One hundred thirty-four participants (63.3%) did not recall Oster or Foster, however, of the 77 that did mention Oster and Foster, 68 (32.2% of the population surveyed) recalled Foster. Foster was the single mock brand that received more recollection than its authentic brand. Many of the surveys had the response “Foster Beer”
in the space provided for unaided recall. While the logo is different in appearance, the name Foster stuck with the participants.

Research Question 2: Aided Recognition Results

After the participants completed the unaided recollection page, they were given the final page, which consisted of four multiple choice questions that asked the participants to identify the brands that were shown in the three movie clips. The choices consisted of three authentic brands and three brands that were similar to the authentic brands. The results of the aided recognition after the participants viewed the three movie clips are shown in Table 2.

Table 2
Aided Recognition Results of Authentic Products and Brand-Modified Products

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>McDonald’s</td>
<td>137</td>
<td>64.9</td>
</tr>
<tr>
<td>McDowell’s</td>
<td>67</td>
<td>31.8</td>
</tr>
<tr>
<td>Other/No Answer</td>
<td>7</td>
<td>3.3</td>
</tr>
<tr>
<td>Total</td>
<td>211</td>
<td>100.0</td>
</tr>
<tr>
<td>Starbucks</td>
<td>160</td>
<td>75.8</td>
</tr>
<tr>
<td>Farbucks</td>
<td>47</td>
<td>22.3</td>
</tr>
<tr>
<td>Other/No Answer</td>
<td>4</td>
<td>1.9</td>
</tr>
<tr>
<td>Total</td>
<td>211</td>
<td>100.0</td>
</tr>
<tr>
<td>Sony</td>
<td>87</td>
<td>41.2</td>
</tr>
<tr>
<td>Suny</td>
<td>29</td>
<td>13.7</td>
</tr>
<tr>
<td>Other/No Answer</td>
<td>95</td>
<td>45.1</td>
</tr>
<tr>
<td>Total</td>
<td>211</td>
<td>100.0</td>
</tr>
<tr>
<td>Oster</td>
<td>33</td>
<td>15.6</td>
</tr>
<tr>
<td>Foster</td>
<td>133</td>
<td>63.0</td>
</tr>
<tr>
<td>Other/No Answer</td>
<td>45</td>
<td>21.4</td>
</tr>
<tr>
<td>Total</td>
<td>211</td>
<td>100.0</td>
</tr>
</tbody>
</table>
When presented with the actual product appearance, aided recognition for the authentic brands McDonald’s and Starbucks were still reported as appearing in the shown movie scenes. Over three-quarters of the participants (75.8%) responded that Starbucks was the coffee shown in *Shrek 2*, and 137 (64.9%) participants recognized McDonald’s as the restaurant in which the scene from *Coming to America* took place. The numbers for the mock brands, McDowell’s, Farbucks, and Suny increased, though fewer than one-third (31.8%, 22.3%, and 13.7% respectively) of the participants recognized the mock brands as appearing in the three movie clips. Sixty-three percent of the participants recognized Foster as product placement in the shown scene, while 15.6% recognized Oster.

**Comparison of Unaided Recall and Aided Recognition Results**

Studies by Singh and Rothschild (1983a) and Krishnan and Chakravart (2003) determined that recognition scores are higher than recall scores in all equivalent advertisement tests. As product placement is a form of advertising, it was assumed that aided recognition results would be higher than unaided recall scores. Singh and Rothschild (1983a) also found that recall measures mask the existence of some memory trace whereas recognition tests are more sensitive to revealing the occurrence of learning and memory (See Table 3).
Table 3
Product Recall and Recognition Results Compared

<table>
<thead>
<tr>
<th>Brand</th>
<th>Unaided Recall*</th>
<th>Recognition</th>
</tr>
</thead>
<tbody>
<tr>
<td>McDonald’s</td>
<td>81%</td>
<td>64.9%</td>
</tr>
<tr>
<td>McDowell’s</td>
<td>6.6%</td>
<td>31.8%</td>
</tr>
<tr>
<td>Starbucks</td>
<td>82%</td>
<td>75.8%</td>
</tr>
<tr>
<td>Farbucks</td>
<td>2.8%</td>
<td>22.3%</td>
</tr>
<tr>
<td>Sony</td>
<td>22.3%</td>
<td>41.2%</td>
</tr>
<tr>
<td>Suny</td>
<td>4.7%</td>
<td>13.7%</td>
</tr>
<tr>
<td>Oster</td>
<td>3.8%</td>
<td>15.6%</td>
</tr>
<tr>
<td>Foster</td>
<td>32.2%</td>
<td>63%</td>
</tr>
</tbody>
</table>

*These figures exclude participants who recalled both the true brand logo and the brand-modified logo

From the survey, 81% of the participants recalled the McDonald’s logo during the unaided recall portion of the survey. When given multiple choices (including McDowell’s, the actual product logo that appeared in the scene), 64.9% still reported that McDonald’s was the restaurant that appeared in the movie.

Eighty-two percent of the student sample listed Starbucks in the unaided recall section. With the six options, Starbucks was still reported as making an appearance by 75.8% of the participants. While there was a 19.5% increase from the recall to recognition of Farbucks, still the vast majority of the participants recognized Starbucks.

Sony results from recollection to recognition almost doubled (from 22.3% to 41.2%). Suny increased by even more, increasing from 4.7% to 13.7%. While the numbers increased dramatically for Suny, fewer participants recognized Suny than recalled seeing Sony.

The Oster and Foster combination was the exception of the group, being that Foster was recalled and recognized more than Oster. Oster was recalled by 3.8% and recognized by 15.6%. Recall of Foster (32.2%) nearly doubled in the recognition portion
of the survey, as 63% of the participants named Foster as making an appearance in the movie scene shown.

While McDonald’s, Starbucks, Sony, and Oster are all nationally recognized brands, McDonald’s and Starbucks are the more familiar brands. The results for these two products are consistent with the findings of Singh and Rothschild (1983a) as more participants selected the brand labels that actually appeared in the clips when presented with multiple choices. However, McDonald’s and Starbucks were still credited with appearing more than twice as many times as the brand-modified products were. Again, in the unaided recall section, over 80% of the survey participants recalled McDonald’s and Starbucks.

**Exposure to the Movie Preceding Participation in the Survey**

Prior to answering the recall and recollection questions, the subjects were asked if they had previously viewed the movies *Coming to America*, *Training Day*, and *Shrek 2*. Response to those questions and response to recall and recognition were cross-tabulated. The results are shown in Table 4.
Table 4
*Product Recall and Recognition Associated with Viewing of the Movies*

<table>
<thead>
<tr>
<th>Brand</th>
<th>Unaided Recall</th>
<th>Recognition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Did you see the movie?</td>
<td>Did you see the movie?</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>McDonald’s</td>
<td>20.4%</td>
<td>60.7%</td>
</tr>
<tr>
<td>McDowell’s</td>
<td>5.2%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Starbucks</td>
<td>66.4%</td>
<td>15.6%</td>
</tr>
<tr>
<td>Farbucks</td>
<td>1.9%</td>
<td>.9%</td>
</tr>
<tr>
<td>Sony</td>
<td>2.4%</td>
<td>19.9%</td>
</tr>
<tr>
<td>Suny</td>
<td>1.4%</td>
<td>3.3%</td>
</tr>
<tr>
<td>Oster</td>
<td>1.9%</td>
<td>1.9%</td>
</tr>
<tr>
<td>Foster</td>
<td>3.8%</td>
<td>28.4%</td>
</tr>
</tbody>
</table>

No correlation was found between recognition and recall of authentic brand versus mock brand and prior exposure to the movie. It was thought that the McDonald’s/McDowell’s results could possibly be skewed by the participants that had previously viewed the movie, as the plot of the movie includes the mock restaurant, McDowell’s. However, the results demonstrate that there were survey participants who had seen the movie previously and still recalled and recognized McDonald’s as making an appearance. As for Starbucks, Sony, and Oster the results did not demonstrate a substantive differences in the outcome between those who had previously viewed the movie and those who had not.
Authentic Brand v. Brand Modification

This study sought to determine the impact of appearances of products that have a strong likeness to actual products (referred to in this study as brand-modified products). Applying Schema theory, particularly pertaining to the assimilation of new knowledge into the preexisting knowledge structure, it was determined that with short exposure to the brand-modified products, subjects alter slogans conceptually, as the missing information is assimilated. The short exposure to familiar-looking labels did not warrant the need for a new knowledge structure to be formed. The results demonstrate that the modifications of product labels were not strong enough to warrant need for a new schema or knowledge structure to be created. Even when presented with the alternative mock brands as a choice in the recognition questions, the majority of the participants did not recognize the multiple occurrences of brand modifications.

As Landis (1982) observed, “distortions in remembering reflect the influence of existing knowledge and are not a result of mere random forgetting.” The different responses that were given for recall and recognition are manifestations of the participants’ schemas. Generally speaking, college students have been exposed enough to Starbucks to assimilate one viewing of Farbucks into recalling, and even recognizing Starbucks. Beals (1998) furthered Barlett’s 1932 theory of schemas. “Connecting what is new with what is already known is not a simple association. The new material triggers a number of applicable schemas, all of which must be sorted and adjusted in relation to
each other . . . Reconstruction can have a flattening effect on material that does not fit into already established schemas” (p. 9).

In Bartlett’s 1932 study of schemas, he told a story and asked the participants to retell the story multiple times in a longitudinal study. He found that the story used did not fit the expected style for his audience, and in their retelling of the story, they made accommodations to fit their pre-existing schema. While in this study, the participants were only asked to recall and recognize the brand placements once, there were accommodations made to fit prior brand exposure. The new material (brand modification Farbucks and McDowell’s) that appeared similar in color and design to the well-known logos Starbucks and McDonalds, was assimilated to fit into pre-existing schemas. Simultaneously, the brand modification of Oster was assimilated to fit participants’ knowledge structures by name association. The accommodations were made in the ways that were fitting for the participants. If the study had included participants that were 30-year-old homemakers, it would have been likely that there would have been increased recognition/assimilation of the kitchen appliance brand modification. Instead, young adults—who have a generally different preexisting knowledge structure—recall and recognize the Foster label as beer.

An unexpected result was the recall of the brand Foster Beer. While it did not make an appearance, a look-like modification did not appear either. However, it was credited with an appearance by 32.2% of the subjects in the unaided recall and by 63% in the recognition. The modified Oster kitchen appliance was changed to Foster. Though the logo style was different than the Foster Beer logo, perhaps the brand is well enough known that the participants retained the name from prior exposure to the beer brand,
suggesting an alternative way that assimilation of Schema Theory was demonstrated. It is of interest to notice that the brand name Foster was recognized in the unaided recall portion of the questionnaire. Many students went as far as to write “Foster Beer” in the unaided recall portion. During the late teen years and early twenties, it can be easily assumed that both men and women would be more familiar with beer brands rather than kitchen appliances. This response demonstrates that rather than “forgetting” information that was given, the new information (the brand-modification of Oster), was assimilated into the participants’ preexisting knowledge structure of Foster Beer.

*Effect of Prior Exposure to the Movies*

The plot of the movie *Coming to America* is based on the mock restaurant McDowell’s. During the movie, the restaurant McDonald’s is even mentioned multiple times. Because of this, it was assumed that those who had previously seen the movie would remember the McDonald’s spin-off. However, among the 64 subjects that had previously viewed the movie, 43 recalled McDonalds, 11 recalled McDowell’s, one participant recalled both McDonald’s and McDowell’s, and nine did not recall either McDonald’s or McDowell’s. For the recognition section, of the same 64 that had seen the movie, just over half of the subjects (34) answered that they had recognized McDowell’s, while the remaining 30 responded that McDonald’s was the restaurant that appeared in the viewed scene.

*BusinessWeek* and *Interbrand* publish an annual study of the 100 Best Global Brands, valuing a brand in terms of financial value. For 2005, Starbucks was number 99, McDonald’s was number eight. These world-recognized brands received credit for
appearing in the shown scenes because they are so extensively known and the short appearances of Farbucks and McDowell’s closely resemble the authentic brands Starbucks and McDonald’s.

**Overall Discussion**

As mentioned previously, Richard Heslin, a professor of psychology at Purdue University has concluded that product placement in movies and television programs are especially effective at increasing the overall awareness of a product (USA Today, 1999, 11). DeLorme and Reid (1999) found that moviegoers are aware of the persuasive intent of brand props, yet the participants in their study indicated that the product/character relationships in the movies strengthened the participants’ relationships with the characters, increasing the involvement and enjoyment of the movie. The products being used reinforce the brands and attitudes, even in an anti/corrupt cop movie such as *Training Day*, starring Denzel Washington. Washington received an Oscar for his starring performance in the movie, and the movie received tremendous reviews and recognition. For Sony or Oster to have a publicized connection to such a production would only increase familiarity and recognition among the movie viewers. Product placement studies have shown that reviews and recognition of such a nature are shown to benefit the products placed. As also mentioned in the review of literature, subtle use of products is liked by viewers as the overall feeling is that product placement contributes to realism and generic props lessen artistic value.

This study demonstrates that brand modification for well-known products is the equivalent of actual advertising much of the time. While the golden arches of
McDonald’s were altered for the McDowell’s logo and the name was actually changed, the modifications were minimal enough to not cause the majority of the subjects to recognize the appearance of McDowell’s in the shown movie clip. This was the case, even when presented with the choice of the brand-modified product name in the survey. The survey participants did not recall or recognize the modifications of branded products as well as the original products were recalled or recognized. Prior viewing of the movies did not seem to influence the recall or recognition of the brand-modified products. The recall and recognition of the brand-modified products was minor in comparison to the recall and recognition of the original products from which the modifications stemmed. Schema Theory suggests that this is because the changes are insignificant enough to create new knowledge structures. Rather than reconstructing the images, the new information is distorted to match preexisting information.
CHAPTER 6

CONCLUSION

Contributions of Research

Brands are manipulated on occasion because product corporations do not wish to be affiliated with messages from movies and television shows, or because the product is being portrayed in a defamatory light. A tactic called brand-modification in this study has been used to evade this problem. While the purposes for the modifications vary, this thesis demonstrates that the minor changes are not significant enough to cause the viewer to realize that he or she is seeing something other than an authentic brand.

Much of the time brand placements are made at a cost for the brand. The results of these data show that if the alternative to product placement is brand modification, then the well-known branded products have little need to pay for the placement (as the modified products are apparently still an advertisement for the authentic brands). Congruently, products or logos that are not as well-known (such as Oster) are not as well-advertised by modifications. It is possible that a brand logo such as Oster would have been more recognized and had greater recall if the actual brand logo had appeared in the clip. It is also possible that Sony and Oster could have benefited not only from the product placement itself, but from the association that Sony and/or Oster would have had to Washington’s Oscar-Award-Winning performance, as well.

Due to the nature of the movie or message that was conveyed in Training Day, Sony and Oster may have deliberately chosen not to place products in the movie. If that was the case, such product manufacturers need to be aware of the results of this study as it demonstrated that there was still some recognition and association made with the
authentic brands, and the branded product logos were not manipulated enough to
disassociate the product from the movie. In the interest of the products that become
associated to movies for whatever reason, manufacturers may choose to pursue the
establishment of guidelines and regulations that protect their product from such subtle
modifications that most of the viewing public fails to make any distinction between the
actual brand and the brand-modification..

Currently, there are brand modifications in movies that viewers associate with
authentic products even if the brands are not being placed as products. While movie
producers maintain a feeling of reality by simple modifications, brand manufacturers
could be dissatisfied and unaware of the strength and consistency of the associations into
which brand-modified products are assimilated when only minor changes are made.

Study Limitations

When brand awareness is a primary goal and advertisers use product placement,
memory-based awareness measures such as recognition and recall are appropriate.
However, there is much to be learned regarding the longevity of brand recollection and
recognition. Because the participants were questioned immediately following the movie
clips, it is not known if response would change after some time passed.

The brand-modified products were chosen on the basis of availability and
knowledge of the source. However, the products were not equal in duration of exposure,
interaction with characters, or role the individual products played in the scene. Each of
these factors has been proven to influence recall and recognition on products. This study
did not consider the varying lengths of exposure, degrees of interaction, and roles of the chosen products in the recall and recognition results.

**Future Research Suggestions**

Further study of brand-modification could include simultaneous and direct comparison of recall and recognition of authentic brands and modification of that same brand (example: McDonald’s v. McDowell’s). It would be beneficial to know what the variations of recall and recognition would be under those circumstances.

DeLorme and Reid (1999) found that viewers gain emotional security and social connectiveness through product placement, thereby producing positive thought and feelings about the experience. It could be of interest to apply this idea specifically to the products that appeared in “Training Day.” That is, would viewers’ feelings and sentiment for the film, specifically that particular scene, change if the authentic brands Sony and Oster appeared? In other words, would the true brands have had a stronger positive connection effect on viewers than brand modifications?

Another possible course of study would be to use an eye-tracking device while participants were viewing the clips. The device would allow measurement of the time that participants spend looking at the products, actual and modified.

In a 1999 study, DeLorme and Reid found that it is possible that change and discomfort is caused when they are threatened by the products/services and/or interruptions to the normalcy of their own lives, resulting in negative thoughts and feelings about social trends and patterns. It would be interesting to know if negative feelings/emotions depicted in a scene would cause a viewer to make negative associations
with any products/services that appear in the scene. For example, as Coca-Cola was shown in a murder scene in *Natural Born Killers*, is there a negative association connected to Coca-Cola due to the imagery and feeling of that violent scene? If there is a negative association, then there is justification for altering product labeling. Of course, alterations or modifications in the product labeling would have to be meaningful enough to overcome the assimilation effect demonstrated in this study, or most viewers would think they were seeing the actual brand, anyway. However, if that discomfort and/or distrust of the product is not generated by association with violent or unpleasant scenes, general studies of product placement show that viewers have a predisposed preference for products features (Baker & Crawford, 1996). Subtle use is liked by viewers as it contributes to realism, while generic props lessen artistic value (DeLorme, Reid, & Zimmer, 1994), and manufacturers know there is a reinforcement of brands and attitudes when product placement occurs (DeLorme & Reid, 1999).

While products are sometimes altered for legal purposes, this study demonstrates that the alterations selected for this study are not meaningful enough for many viewers to not associate the brand-modified product with the authentic product on which the brand modification was based. Therefore, minimal changes used to avoid legal liability effectively invoke the same impression in most viewers as would use of the actual product. This seems to benefit the movie or television producers and may generate realistic concerns for manufacturers. It will take time to learn more about the effects of brand modification in product placement, but in the meantime, brand modification will continue and be all but indistinguishable for the majority of the viewing public.
REFERENCES


APPENDIX A

Survey

Page 1

This survey is being conducted by a BYU student to determine the influences and effects of various elements of movies. Participants will be chosen randomly from various general education classes at BYU. The survey consists of twenty questions and will take approximately seven minutes to answer. There are minimal risks or and/or benefits to your participation in this study. Involvement in this research project is voluntary. You may withdraw at any time without penalty or refuse to participate entirely. There will be no reference to your identification at any point in the research. If you have questions regarding this study you may contact Dr. Tom Robinson at (801) 422-3977.

If you have questions regarding your rights as a participant in research projects, you may contact Dr. Renea Beckstrand, Chair of the Institutional Review Board for Human Subjects, 422 SWKT, Brigham Young University, Provo, UT 84602; phone, (801) 422-3873; email, renea_beckstrand@byu.edu.
Page 2

Survey # ____________________

Age ________________

Gender:  Female  Male

Class Standing:  Freshman  Sophomore  Junior  Senior

SCENE 1

1. The character portrayed by Ethan Hawke appeared confident
   Strongly Agree  Strongly Disagree
   1  2  3  4  5

2. Lighting technique contributed to the feeling of the scene
   1  2  3  4  5

3. Watching this scene has peaked my interest in the movie
   1  2  3  4  5

SCENE 2

4. The Gingerbread Man appeared to be a villain
   1  2  3  4  5

5. Lighting technique contributed to the feeling of the scene
   1  2  3  4  5

6. Watching this scene has peaked my interest in the movie
   1  2  3  4  5

SCENE 3

7. The character Samuel Jackson portrayed was comical
   1  2  3  4  5

8. Lighting technique contributed to the feeling of the scene
   1  2  3  4  5

9. Watching this scene has peaked my interest in the movie
   1  2  3  4  5

10. Have you seen *Training Day*?       Yes  No

11. Have you seen *Shrek 2*?     Yes  No

12. Have you seen *Coming to America*?  Yes  No
Please list the products/brands/logos that you observed in the movie clips


In the first scene, one of the characters was carrying a CD player. The brand on the box was:

- Panasonic
- Suny
- JVC
- JVX
- Panoramic
- Sony

In the first scene, one of the characters was carrying a blender. The brand on the box was:

- Kitchen Aide
- Bosch
- Foster
- Marsh
- Oster
- Kitchen Inc.

In the second scene, a character attempted to drink from an empty cup. The logo on the cup was:

- Starbucks
- Dunkin’ Donuts
- Cafè Nervosa
- Tully’s
- Farbucks
- Central Perk

The restaurant in the third scene was:

- McDowell’s
- Burger King
- Windy’s
- Wendy’s
- McDonald’s
- Burger Time