Product Placement and the Effects of Persuasion Knowledge
# Table of Contents

Abstract ..................................................................................................................................... 1  
Introduction ............................................................................................................................... 2  
Literature Review ...................................................................................................................... 2  
  Product Placement................................................................................................................. 3  
  Persuasion Knowledge ......................................................................................................... 6  
  Cognitive Resources/Busyness ............................................................................................ 7  
  Peripheral Processing under Cognitively Busy Conditions .................................................. 9  
Method .................................................................................................................................... 10  
  Participant and Design ........................................................................................................ 10  
  Stimulus .............................................................................................................................. 10  
  Procedure ............................................................................................................................. 11  
  Measures .............................................................................................................................. 12  
Results ...................................................................................................................................... 12  
Discussion ............................................................................................................................... 13  
References ............................................................................................................................... 16
ABSTRACT
This study examines the effect of persuasion knowledge and cognitive busyness on attitude toward a brand embedded in a popular movie. Product placement is filling an increasingly important role in marketing strategy as conventional techniques have been rendered ineffective by their own ubiquity. Cognitive busyness was hypothesized to cause a product placement message to be processed on a superficial, peripheral level. If joined with persuasion knowledge, the subject’s lack of ability to devote resources to critically evaluate the message would activate compartmentalized knowledge of products and brands increasing the ease of this information’s mental accessibility and thus aid the formation of favorable brand attitudes. A controlled laboratory experiment reveals that when viewers watch the movie in a natural setting, viewers with persuasion knowledge exhibit lower attitude toward the placed brand than viewers without persuasion knowledge. However, such backlash brand-damaging effects are absent, if not reversed, when viewers watch the movie in a cognitively busy setting.
INTRODUCTION
Imagine two consumers, Nathan and Sarah, watching a movie, *Runaway Bride*. They are both watching the same scene, yet are engaged with it differently: when Julia Roberts jumps on the truck that conspicuously shows its brand name, FedEx. Nathan is busy multitasking — while watching the movie, he is ironing his pants and listening to music on a radio. On the other hand Sarah is focused and immersed in the movie, and it is to this which she pays her full attention. Who would develop a more positive attitude toward FedEx, the embedded brand? Would it be Nathan or Sarah? Now further imagine that Nathan and Sarah were consciously aware that marketers inserted the FedEx truck into the film in order to influence their attitude toward the delivery company. Would Nathan and Sarah’s reactions differ if they have persuasion knowledge of the marketer’s intention? The current paper attempts to answer these questions by examining the convergence of product placement, persuasion knowledge and cognitive busyness and the implications that the overlapping of these theoretical concepts can have in marketing strategy.

LITERATURE REVIEW
Products, media, and consumers are evolving so fast today that it is often hard for marketers to find a “sweet spot” where these three units profitably converge. Many think that product placement exists at just such an intersection and it has become a preferred mode of strategic communication between consumers and businesses. Product placement is the practice of inserting brands or products into the narrative of entertainment media where it would traditionally be unexpected. This is a small part of non-traditional media: communication outlets with points of contact that fit into consumers’ lifestyles in ways far more varied and unexpected than those of television and simple print ads. However, as this diffuses across the mainstream, customers are likely to become desensitized to the qualities that make these forms of advertising effective. It is important to understand the progress of this evolution and the implications it has for the future of advertising.
Product Placement and the Effects of Persuasion Knowledge  
Senior Capstone Project for Stephen Fitch

The bulk of research conducted on product placement focuses on memory as the measure of its effectiveness. However, few studies, if any, have simultaneously looked into the roles of persuasion knowledge and cognitive busyness in determining the effects of product placement on brand attitude, although these two are important variables since the former stands as the motivational resistance to that change (i.e., willingness) whereas the latter determines the processing capability of the viewer (i.e., ability). This paper aims to fill this gap.

The objective of this research is to understand persuasion knowledge as the knowledge cultivated from prior experiences which, when triggered, help consumers guard themselves against persuasive marketing ploys. We argue that persuasion knowledge weakens the persuasion effect of product placements in general, but when movie viewers have a limited amount of cognitive resources available, this effect might disappear. Furthermore, beyond a simple cancel-out effect, we expect that persuasion knowledge might “help” the brand image by boosting movie viewers’ attitudes toward the placed brand (i.e., the opposite of the typical persuasion effect) by bringing the brand to the forefront of the consumer’s attention, making it more easily accessible.

Product Placement
Although times have changed since Victorian entrepreneur Thomas Holloway first paid to have his branded medicines mentioned in London plays (Hackley 2005), the concept of product placement has remained the same and marketers are revisiting the strategy with new vigor. It has become an important alternative to the tired methods of the past, as many consumers have reported negative attitudes towards conventional advertising and often use video technology to avoid advertisements with techniques such as ‘zapping’ (Avery and Ferraro 2000). Indeed the advent of the remote control, VCR, DVR, and expanded television channels from cable and satellite transmission have made it increasingly easier for consumers to avoid traditional advertising messages (Lee and Faber 2007) and the search for alternative channels that can capture and hold audiences’ attention has boomed.
Modern product placement began with Proctor and Gamble’s attempts to reach the 1950’s housewife by sponsoring “soap operas.” The intrinsic value of film as a marketing vehicle came to corporate attention when Hershey saw a 65% increase in the sale of Reese’s Pieces after its inclusion into Steven Spielberg’s hit *E.T.* and years later when the new BMW Mini ran out of stock in the USA after starring in the remake of the hit film *The Italian Job*” (Karrh 1998). Today, product placement is much more common, with a particular emphasis on drinks, cars, and tobacco products. Advertisers are now paying Hollywood studios $360 million a year to feature their products (McNatt and Oleck 2000) and they regard product placement as the most cost-effective and precise method of targeting specified, pre-segmented audiences (Matthes 2007) since it costs less than a 30-second advertising slot at the same time in the television schedule (Wells 1996). Past research chronicled some 15 brand appearances per half hour of prime-time television programming in 2000 (Avery and Ferrrarro 2000) and an average of 11 brands appearing in the top 25 films of 1994 (Sapolsky and Kinney 1994). More recently however, interest in product placement has begun to expand to other forms of media, especially video, computer, or online games (Nelson 2002). This could prove to be a significant opportunity if it helps marketers understand the dynamic relationship that exists between consumers, media, and product as to-date, marketers have almost exclusively focused on traditional entertainment vehicles in their product placement efforts.

In its most basic sense, product placement is the incorporation of brand components in entertainment media programming for commercial purposes (Karrh 1998). Consequentially, it can also help enrich the plot, reflect the increase of commercial content in culture, and heighten realism, but only if the promotional intent is not made explicit and is ostensibly presented as a part of the dramatic entertainment (d’Astous and Chartier, 2000). The underlying assumption that drives the popularity of this as a marketing strategy is that product placement is more powerful than traditional advertisements because it is not perceived as a form of persuasive message (Balasubramanian 1994). The rationale behind this conclusion is that a consumer’s processing of product placement in an entertainment environment may be different from their processing of traditional advertising. With traditional advertising, consumers typically recognize the function of the brand message and this activates consumer
skepticism and persuasion knowledge, which can serve to counteract and limit persuasive effects (Lee and Faber 2007).

Product placement in movies, television, and other forms of narrative media are by their very nature “incomplete” forms of consumer advertisements. Unlike, conventional print media and commercials, they do not directly call attention to product features and emotional benefits. As Cowley (2008) argued, “exposure to product placements is different because the consumer is viewing a movie or television show as a form of entertainment.” The difference between the two is that product placement, depending upon the degree of its integration into the vehicle, interrupts the viewing experience of the audience in an attempt to either juxtapose the product amongst the action or benefit from status endorsements of the program or cast. To this end, product placement infringes upon the audience’s sense of continuity.

But there is some evidence of negative attitudes emerging where entertainment marketing practices are not well integrated into the entertainment vehicle, but appear so obviously contrived that they disrupt the entertainment narrative (Barn 2005). Still, it is hard to qualitatively assess the integration of a brand identifier into a piece of media content. This is why the study of how people process brand messages embedded in such entertainment media has emerged as an important research topic in advertising and information-processing literature (Gupta and Lord 1998). However, it is important to note that prior research has focused on memory, equating the recognition and recall with the effectiveness of product placement (Babin and Carder 1996; Matthes 2007).

However, some researchers suggest that placement recall might be independent of placement evaluation and attitude (Russell 2002; Vollmer and Mizerski 1994). At the very least, it seems safe to say that there are different cognitive and emotional engagements for consumers with entertainment than with advertising (Hackley 2005) and this interaction is still not fully understood or addressed to satisfaction in present literature.
Persuasion Knowledge
Commercials and ad pages in magazines have come to be expected, but are separated out of the main vehicle by virtue of either time or space; a commercial is rendered separate because it has a designated time-slot that arrives in carefully segmented intervals in the narrative, while ads in magazines frequently are shown in isolated sub-sections or have their own page. This “interruption” has the potential to trigger negative materials in a target’s associative network, tipping him or her off to the potential for persuasive intent and prompting them to explore ways for coping with the situation. This “persuasion knowledge” could render unfavorable attitudes from so-affected people if sufficiently severe. However, whether the memory effect resulting from incongruous brand placement is accompanied by positive or negative attitudes to the brand is another question. Most consumers who engage in an entertainment experience do not expect to find promotional motives within (Hackley 2005).

To date, few empirical studies have examined ways to mitigate this persuasion knowledge, which by definition is the principle opposition to successful product placement.

Freistad and Wright (1994) described persuasion knowledge as the knowledge that people develop about how, why, and when a message is intended to influence them, which, they say, serves to help customers cope with persuasive episodes. However, this knowledge lies dormant until triggered by a stimulus; often the ostensible message of a sales pitch. To this effect, accumulated persuasion knowledge will hover in readiness until needed to help form valid attitudes about an influence agent or a product making persuasion knowledge a serious obstacle for heavy-handed marketers (Friestad and Wright 1994).

Product placement resists the effects of persuasion knowledge on two levels. The first concerns the relative newness and inexperience of the public to product placement strategies. To this end, customers are relatively unaware of the new trends and thus unprepared to deal with the unexpected inclusion of branded messages in their viewing material. Furthermore, when a stimulus is presented in an entertaining context, consumers will not activate social intelligence about the marketplace and thus leave their performance unguided by defensive knowledge (Wright 2002) and this culminates in the second advantage. Product placement is inexpensive, reaches targeted audiences, and is unlikely to activate consumer mechanisms that
would sour them against the brand or product or else make the marketing message ineffective. This is why product placement is favored among marketers.

Consumers clearly possess persuasion knowledge, calling upon it to make informed decisions and neutralize the persuasive attempts of a third party. However, although we know consumers can make inferences about marketers’ motives and goals, little is known about when consumers use their persuasion knowledge and investigations into the conditions under which consumers are most likely to use it are becoming more important (Campbell 2000). Since product placement is a relatively new tactic that is consistently reinventing itself to accommodate different media, products, and strategies, it is likely that consumers will become accustomed to this method of influence and adapt in a way that more crucially evaluates, interprets, and responds to these marketing attempts. This is to say, over time the effects of certain actions by persuasion agents on people's attitudes and behavior will also change.

People's persuasion knowledge shapes how they respond as persuasion targets (Freestead Wright1994) and those who have developed a high degree of persuasion knowledge during their media socialization are therefore less likely to fall under its influence (Matthes 2007). The more product placement penetrates the mainstream efforts of marketers, the less effective it will be.

Persuasion knowledge is not inherently bad, at least not in the sense that its primary objective is to thwart the strategies and motives of marketers. Persuasion knowledge is rather part of a network, one with irremediable links that connects brand schema’s to defense mechanisms and finally to cognitive processing areas. The negative materials in the associative network activated by persuasion knowledge can be allayed in product placement scenarios by inhibiting processing. That is, persuasion knowledge effects can be mitigated when viewers are cognitively busy.

**Cognitive Resources/Busyness**

Many cognitive psychologists believe that a person’s capacity to focus their attention is limited and that cognitive resources will be divided between the primary task and the remaining as spare capacity (Kahneman 1973). This raises an important question regarding product placement: since the primary objective of consumers is to be entertained, will they
have sufficient resources to process a brand or product to the benefit of marketers? For example, although marketers have inserted their products in video games, studies have found that playing the game is the primary task for game players whereas processing advertisements embedded in the game is the secondary task. That is, the more attentional capacity that needs to be devoted to playing the game, the less will be available for processing brand information (Grigorovinci and Constantin 2004). A computer game is made with the explicit intent of engaging a player in an interactive experience. The game’s plot and action sequences are what occupy players’ attention, and while diegetic ads can increase the realism or humor of a game, players inherently expect to be mentally pre-occupied with the game-play. However, with a movie or TV show, the consumer is motivated by the entertainment value, and the process of engaging in the movie is decidedly more passive with a decreased level of necessary decision making. The real question in this case is how the ad is getting noticed.

Similarly, in another study, it was found that when people were cognitively busy with a simultaneous task, low-prejudiced individuals lacked the necessary capacity to exert the effort needed to avoid discriminatory behavior (Devine 1989) which manifested itself in biased observations and word-choice. What this shows is that when people are engaged in a distractive task, they have a reduced ability to control processes in situations that they would typically deliberately try to control (Cralley 2005), showing an area of vulnerability in which marketers could capitalize.

As persuasion knowledge has an opportunity to sway targets, it is important to know if it is consistent with the results of product placement situations. Due to the extent of the public’s exposure to product placement, it is likely that persuasion knowledge is now the dominant marketing effect being played out across the consumer landscape. Today, consumers are more alert to these intrusions, but they are still viewers who possess certain dispositions and behave in ways that can be predicted by an understanding of the situational demands of their cognitive resources.

Research shows that, people are far less likely to be aware of a persuasion attempt when they are cognitively busy. It is only “unbusy” observers who have the cognitive capacity to engage in the type of information processing that would allow them to detect and guard against such
Product Placement and the Effects of Persuasion Knowledge  
Senior Capstone Project for Stephen Fitch  

attempts. Since the viewers of entertainment media are less cognitively constrained and are similar to busy observers (Gilbert, Jones, and Pelham 1987; Gilbert et al. 1988) the chance that persuasion knowledge will be activated is greater. On the other hand, should a movie watcher be engaged in a simultaneous task, he or she becomes cognitively constrained (or "cognitively busy") while trying to decide how to behave, thinking about alternative possibilities, and assessing the potential outcomes of the interaction (Campbell 2000).

Peripheral Processing under Cognitively Busy Conditions  
It has been shown that recent exposures to a target render the target more readily accessible in memory; in turn, this increased accessibility enhances the ease with which consumers’ identify and recognize the target (Jacoby and Dallas 1981). This conceptual fluency theory simply postulates that if something, such as a brand or product is easy to remember, the consumer will associate that ease of recall with the product qualities and formulate positive attitudes toward it as a result. If consumers base their product evaluation and brand-choice decisions not only on information they have about the brand but also on how easy it is for them to process the information (Lee and Labroo 2004), then persuasion knowledge could be a powerful tool when its link to coping behaviors is broken.

Evidence has suggested that when consumers perceive a product placement to be incongruent rather than congruent to the main plot, the placed brand becomes more memorable (Balasubramanian, Karrh, and Patwardhan 2006; Russell 2002). In a related vein, Cowley and Barron (2008) found that prominent placements negatively affect brand attitudes among viewers who like the program, but positively affect brand attitudes among viewers who dislike the program. Using the persuasion knowledge model (Friestad and Wright 1994), Cowley and Barron (2008) explained that viewers who like the program are likely to pay more attention to the brand placement, and thus to recognize that the brand is intentionally placed in the program, whereas viewers who dislike the program are not as aware of the placement. That is, decreased (increased) scrutiny and recognition result in lower (higher) brand recalls but higher (lower) brand attitudes when the audience is unwilling (willing) to process the message.
Noteworthy in the current context is that when audience motivation is low (i.e., they show little liking for the program), the better they remember the placed brand and the more likely they are to evaluate it positively. That is, viewers with low motivation levels use accessibility heuristics: better remembrance (i.e., increased memory accessibility) may equal or transfer to more positive attitudes. We question whether this principle applies to an analogously similar yet conceptually different setting: If cognitive resources are reduced as they are in lowered motivation levels, are viewers more likely to use accessibility heuristics? We propose that when the viewer deliberately processes the product placement with an ample amount of cognitive resources available, the viewer’s persuasion knowledge would activate the defense mechanism, and thus backlash brand-damaging effects would follow. However, when the viewer peripherally processes the product placement with a limited amount of cognitive resources available, the viewer’s persuasion knowledge would indeed help the brand be more accessible (memorable), and thus positive brand-enhancing effects would follow. Thus, we proposed the following hypothesis.

Hypothesis 1: In the cognitively non-busy condition, participants with persuasion knowledge will have lower attitude toward the placed brand than will participants without persuasion knowledge.

Hypothesis 2: In the cognitively busy condition, participants with persuasion knowledge will have higher attitude toward the placed brand than will participants without persuasion knowledge.

**METHOD**

**Participant and Design**
68 undergraduate students from Marketing 201 class participated in this study. We employed a 2 (cognitively loaded vs. natural) x 2 (Persuasion Knowledge vs. No Persuasion Knowledge) between-subjects design.

**Stimulus**
The stimulus sets were created using a two-step process. First, we searched YouTube using the keywords “Product Placement Top 100.” We selected 10 videos in which the main
character conspicuously interacts with a product (e.g., the actor drives a Cadillac in Matrix
Reloaded). Second, two judges examined the scenes and after extensive discussion selected
FedEx placed in the Runaway Bride (movie) as a final stimulus scene, which was edited to
last for approximately 50 seconds. This clip was placed among other filler clips to disguise
the purpose of the study. Participants were shown five one-minute excerpts from popular
movies or TV shows: Austin Powers, Runaway Bride, Gossip Girl, The Thomas Crown Affair,
and 30 Rock. Among the clips in the experimental set was the stimulus clip in the second
position along with the four filler clips. In the stimulus scene from Runaway Bride, the female
lead leaps into a FedEx truck and flees her groom on her wedding day.

Procedure
The data were collected in a computer lab. On entering the lab, participants were seated in
front of a computer screen that presented the five movie scenes. Each station was isolated
from the others to the extent that participants could not see or hear what was occurring at the
other stations. Participants wore headsets that transmitted the soundtracks and blocked out
extraneous noises.

Before the experiment began, participants were told that they would be in three unrelated
experiments; the first study would involve watching video clips; the second and third
experiments would involve answering questionnaires. In the first experiment (Part 1), they
viewed the video clips. Then they were told that the first study was over and that they would
participate in another study. The second filler experiment (the filler task) lasted for about 20
minutes during which they responded to a set of unrelated questions presented on the
computer screen. In the third experiment (Part 2), they completed the target-dependent
measures that are described in the next section.

In Part 1, participants were randomly assigned to one of the four conditions: cognitively busy
with persuasion knowledge, cognitively busy without persuasion knowledge, cognitively non-
busy with persuasion knowledge, cognitively non-busy without persuasion knowledge. While
watching the clips, participants in the cognitively busy condition were asked to remember and
repeat eight numbers (i.e., 94658952) and participants in the cognitively non-busy condition
were asked to watch the clips as they would normally. On the other hand, participants in the
persuasion knowledge conditions were instructed to look for the products that are purposely placed in the movie, whereas participants in the no-persuasion knowledge were not given such instruction. As noted above, participants completed the second part of the experiment (Part 2) after performing the 20 minute unrelated filler task.

Measures
Attitudes toward the brand were measured using a seven point semantic differential scale: useful/useless, wise/foolish, safe/unsafe, beneficial/harmful, valuable/worthless, perfect/imperfect, and wholesome/unhealthy (Crites, Fabrigar, and Petty 1994). These seven items displayed high internal consistency ($\alpha = .92$), and were therefore averaged to produce an overall affect score where a higher score indicates more positive attitude. In addition to attitude toward the target brand, attitudes toward two filler brands (i.e., Vitamin Water and AT&T’s Wireless) were measured to disguise the purpose of the study with an identical scale.

RESULTS
To test our hypothesis, the attitude measure for FedEx was submitted to a 2 (Cognitively Loaded vs. Natural) x 2 (Persuasion Knowledge vs. No Persuasion Knowledge) fully factorial ANOVA. The analysis revealed significant two-way interactions, $F (1, 63) = 11.03, p < .01$. As predicted, contrasts revealed that among cognitively non-busy participants attitude toward the brand was significantly lower, $t (32) = -3.32, p < .01$, when they had persuasion knowledge ($M_{knowledge} = 5.02$) than when participants did not have persuasion knowledge ($M_{no-knowledge} = 6.02$). However, among cognitively busy participants, attitude toward the placed brand FedEx was higher, although non-significant, $t (31) = 1.47, p = n.s.$, when participants had persuasion knowledge ($M_{knowledge} = 5.92$) than when they did not have persuasion knowledge ($M_{no-knowledge} = 5.42$).
The findings supported the notion that viewers who have insufficient cognitive resources to allocate to information processing may be forced to rely heavily on the accessibility heuristic, where persuasion knowledge helps them recall the brand, which may lead to heightened attitude toward the placed brand. However, when consumers have ample cognitive resources available for information processing, they are better able to fully digest the content, so that persuasion knowledge triggers the defense mechanism to kick in, and results in lowered attitude toward the placed brand.

**DISCUSSION**
In addition to re-affirming the validity of the persuasion knowledge model, this study has expanded the breadth of our understanding of the use and effect of persuasion knowledge. It seems that in their relegation of cognitive resources, people who do not make their attention to the viewed material top priority suffer from a weakened capacity to interpret the meanings of embedded placements. Interestingly, they find persuasion knowledge useful for its ability to increase the accessibility of their own compartmentalized knowledge. Our finding runs counter to traditional understandings of persuasion knowledge, which until now, has considered it the principal threat to marketing effectiveness and an obstacle that needed to be worked around.
This study has the potential to help marketers a great deal. Given the fact that attitudes can increase in a persuasion knowledge setting, marketers could seek cognitively busy environments, such as a gym perhaps, and sponsor it to an extent that its brands are obtrusively placed but a functional part of the equipment and décor. This would result in the highest levels of attitude formation and allow businesses to engage in their natural marketing propensity in arenas most suitable to their needs.

In the future, it would be worth exploring the persuasion knowledge – cognition relationship more thoroughly as it related to other forms of media, such as video games, music, books, and online content. Furthermore, since the results of this study were not conclusive in that the cognitively busy participants did not prove to have statistically significant differences between their knowledge and non-knowledge states, it would beneficial to re-run this experiment with a larger subject pool as well as a greater number and variety of stimuli.

This study was limited by the scope of its participants which were all undergraduate college students. The most that can be said is that cognitively busy college students loaded with persuasion knowledge would be more apt to form favorable brand attitudes than their non-busy counterparts. To add to this, only product placement scenarios were examined. It is possible, although unlikely, that this theoretical framework does not apply to non-college aged demographics or media beyond film.

For example, if a commercial was aired at the same time in the same program each night the audience would come to expect it and the commercial would just remind them of information of which they were already aware. Their expectation is the first component of persuasion knowledge. However, if the effects of the second part of persuasion knowledge could be mitigated, that is the defense mechanism countering the message, persuasion knowledge could be activated but not necessarily used, and the aroused knowledge of product and brand could prime the target and enhance the ease with which consumers could process the embedded product and in turn, this fluency would lead to more favorable attitudes toward the product (Seamon 1995).
Product Placement and the Effects of Persuasion Knowledge
Senior Capstone Project for Stephen Fitch

The results of this study have major implications for the future of product placement as a marketing strategy. Although prior research showed that audiences have adjusted themselves to expect the persuasive intent of marketers when engaged in an entertaining experience facilitated by media technology, our findings demonstrated that persuasion knowledge is not an unequivocal enemy of marketers. The marketplace knowledge that guards against persuasion can be separated out, and simply the previously accumulated knowledge informing the customer of the brand and product can be utilized if the cognitive capacity of the consumer is sufficiently monopolized.
REFERENCES


