

Editor: Patti Summerfield

Newsletter #267

December 2004

## Investigating the effectiveness of product placements in television shows: The role of modality and plot connection congruence on brand memory and attitude

by Cristel Antonia Russell,  
Associate Professor of Marketing, San Diego State  
University

*Journal of Consumer Research*, Vol. 29, December  
2002, pub. University of Chicago

Reproduced with permission of the copyright owner.  
© 2002 by Journal of Consumer Research Inc.

*Chandler:* (Entering the apartment.) Oh, hey, Rachel, sweetheart? You have got to tell the post office that you have moved. OK? We are still getting all your bills and stuff. (He hands her all of her bill!! and junk mail.)

*Rachel:* Oh-oh, Pottery Barn! (She grabs the Pottery Barn catalog and hands the rest back out to Chandler.) You can throw the rest away.

*Chandler:* I'm not your garbage man. I'm your mailman.

*Rachel:* Monica, look! Look-look-look! Here is that table that I ordered. (She shows her the picture.)

*Monica:* You got it from Pottery Barn?

*Rachel:* Yeah! It's an apothecary table. Does anyone even know what an apothecary is?

*Chandler:* A pharmacist. (Rachel mocks him.)

This is not the script of a television commercial for the retail store Pottery Barn but rather an excerpt from the first scene of an episode of the top-rated NBC situation comedy *Friends* (aired January 6, 2000) in which the story revolved around several characters' adventures with products bought from Pottery Barn. This well-integrated reference to a brand is a prime example of the proliferation of product placement, the practice of placing branded products in the content of mass media

programming. Product placement has spread rapidly in the past two years (Ebenkamp 2001), and the Entertainment Resources and Marketing Association estimates that advertisers pay Hollywood studios \$360 million (US) a year to feature their products (McNatt and O'Leck 2000). While historically, the sponsorship of radio and television programs by advertisers allowed product manufacturers direct control over the shows' story lines and creative design (Lavin 1995), today's product placement agents and entertainment marketing directors must collaborate with television and movie writers and producers to get their brands a starring role in their shows. The outcomes of such agreements range from subtle appearances of the brand on the screen, such as a bottle of Dawn dishwashing detergent in a kitchen scene, to tightly integrated cross-promotional campaigns, such as the recent James Bond-BMW Z3 tie-in (Fournier and Dolan 1997).

This increase in product placements and the institutionalization of the industry indicate that advertisers are using the technique to sway consumers' brand attitudes (Avery and Ferraro 2000). In today's oversaturated and fragmented advertising landscape, such hybrid advertisements (Balasubramanian 1994) may prove more powerful than traditional advertisements if they are not perceived as persuasive messages. Product placements may indeed appear natural to many audience members, as consumption symbols are often used to enrich the plot, theme, and characters of popular culture texts (Hirschman 1988; Holbrook and Grayson 1986). Consumers may feel that the use of brand names in popular culture simply reflects the increased commercial content of American culture (Friedman 1985) or the producers' efforts to enhance the realism of their shows (Solomon and Englis 1994).

*continued...*

## ***Investigating the effectiveness of product placements...***

---

However, in cases where the brand takes a major role in the story of an episode, as in the *Friends* vignette, or where its presence in the show might look suspect, audiences may realize that it was placed there to affect their judgments, and they may counterargue them just as they do traditional advertising messages (Friestad and Wright 1995). Critics have already voiced concerns about the increasing embeddedness of marketing efforts within popular culture and the intensifying commercialization of Hollywood (Wasko, Phillips, and Purdie 1993).

Despite the increasing popularity of the technique of product placement among marketers, there is relatively little scientific evidence regarding how, even whether, it affects people. Several studies found preliminary support for the impact of mode and prominence on recall and recognition of brands placed within films (Babin and Carder 1996; D'Astous and Seguin 1999; Gupta and Lord 1998). A qualitative investigation of moviegoers' interpretation of product placements (DeLorme and Reid 1999) suggests that consumers welcome the reality-enhancement aspect of product placement and the cultural meaning that it contributes to mass media programming (Hirschman and Thompson 1997). However, surveys investigating viewers' attitudes toward the practice of product placement (Gupta and Gould 1997) also indicate that other factors, such as too much repetition, obvious commercial motivations, or the use of ethically charged products, are less acceptable. Although the ability of media images, and television in particular, to cultivate individuals' attitudes and perceptions is recognized (O'Guinn and Shrum 1997), evidence of attitude change resulting from product placement is, to date, nonexistent.

Understanding how product placement works remains an open empirical question. While prior

research suggests that consumers sometimes notice the brands placed in their shows, we do not know whether such placements influence brand attitudes. If they do affect attitudes, we do not know the factors that generate these effects. Are some placements more persuasive than others? Do consumers have to remember the brand for the placement to positively affect their attitudes? The research reported below seeks to address these questions by identifying the psychological effect of product placements in audiovisual media programming. Specifically, a conceptual model of product placement is presented and tested utilizing a newly developed approach called the theater methodology.

### **CONCEPTUAL MODEL AND HYPOTHESES**

In order to identify the psychological processes that underlie product placement, we must first classify and distinguish among types of placements. This section presents a conceptual model that links the characteristics of the brand referenced within audiovisual media programming and the psychological processes that lead to memory and attitude change.

#### **Product Placement: A Three-Dimensional Construct**

In my Tripartite Typology of Product Placement, I categorized placements along three dimensions: visual, auditory, and plot connection (Russell 1998). The visual dimension refers to the appearance of the brand on the screen. So-called screen placements can have different levels, depending on the number of appearances on the screen, the style of camera shot for the product, and so forth. The second dimension is auditory or verbal, and it refers to the brand being mentioned in a dialogue. Such "script" placements also have varying degrees, depending

on the context in which the brand is mentioned, the frequency with which it is mentioned, and the emphasis placed on the brand name (tone of the voice, place in the dialogue, character speaking at the time, etc.). Finally, the plot connection dimension refers to the degree to which the brand is integrated in the plot of the story (Russell 1998). Whereas lower plot placements do not contribute much to the story, higher plot placements constitute a major thematic element (Holbrook and Grayson 1986), taking a major place in the story line or building the persona of a character. A mere mention of the brand or a brief appearance of the product on the screen would be considered lower plot. However, cases where a character is clearly identified with the brand, for example James Bond with his Aston Martin, then his BMW Z3, or where the brand becomes a central part of the plot, as in the Pottery Barn episode of *Friends* or the Kenny Rogers' Roasted Chicken episode in *Seinfeld*, constitute higher plot placements.

Albeit limited in number, all empirical studies of product placement to date measure the effectiveness of product placements in terms of how well they are remembered (Babin and Carder 1996; Gupta and Lord 1998; Steortz 1987). This reliance on brand recall and recognition measures presumes that the effects for memory are similar to the effects for attitude. However, the absence of correlations between memory and attitude measures often found in the persuasion literature (e.g., Petty, Cacioppo, and Schumann 1983) challenges this assumption and suggests that the memory-attitude relationship is not necessarily linear. Since recall may be a poor predictor of persuasion (Mackie and Asuncion 1990), research on the effectiveness of product placements should investi-

*continued...*

gate both memory and attitude effects. The Tripartite Typology of Product Placement allows this dual focus by determining not only how a placement is cognitively processed and thus whether it will be recalled but also how it affects consumers' attitudes. The following sections outline the predictions regarding the processing and persuasive impact of each type and combination of placements.

### Modality

Previous research on modality of presentation, one of the key components of the Tripartite Typology of Product Placement, has focused primarily on encoding differences between visual and auditory information. Often modality is treated as a perceptual variable and related to particular encoding mechanisms and their associated memory retrieval processes (e.g., Unnava, Agarwal, and Haugtvedt 1996). Only recently (Tavassoli 1998) have researchers expanded their analysis of modality effects beyond perceptual levels into the realm of elaboration. The audiovisual context of product placement provides the opportunity to investigate a previously unexplored difference between auditorily and visually presented information: their expected level of meaningfulness.

Research on modality of presentation in audiovisual contexts suggests that the visual and auditory channels indeed differ in the amount of meaning that they carry. The visual channel serves to create the context in which the story is set. For instance, branded products are used as props to make television sets more realistic (Solomon and Englis 1994; Solomon and Greenberg 1993). The auditory channel, on the other hand, carries the script of a television program and, as a result, information presented auditorily is inherently more meaningful than visual information. Because individuals can process

auditory information in a television program even when they are not looking, the auditory modality serves as a conveyor of semantic information through speech (Rolandelli et al. 1991). In fact, as compared with visual stimulation, auditory information is often characterized by its greater intrusiveness and intrinsic alerting properties (Posner, Nissen, and Klein 1976). Each modality of presentation thus contributes a certain level of meaningfulness to the story. These modality characteristics are important because meaningful stimuli become more integrated in a person's cognitive structure (Lehnert 1981), are processed more deeply, and thus generate greater recall (Craik and Lockhart 1972) and elaboration. Because it signals how much meaning a stimulus carries, modality of presentation will thus be crucial in determining the effectiveness of a placement.

### Plot Connection

The third dimension of the product placement framework, plot connection, also characterizes a dimension of meaning. Higher levels of plot connection characterize instances when the brand makes a significant contribution to the story and will thus facilitate memory. This effect of meaning was found in several studies of the influence of narrative structure and story on the

recall of information from films. Roberts, Cowen, and MacDonald (1996) showed that recall of implicit primary information from constituent parts of the narrative was better than recall of secondary explicit information because its meaning depends on the story and is therefore linked to important information via the macrostructure. Therefore, the level of plot connection will determine the role and meaningfulness of a placement in a story and, as such, will qualify the effects of modality, as specified next.

### Modality and Plot Connection

In considering the different combinations of modality and plot connection it is clear that there can either be a match or a mismatch between modality and plot connection. Matches can take the form of higher plot audio placements, where verbally mentioned brand names that contribute to the narrative structure are indeed highly connected to the plot, or lower plot visual placements, where visual brands that should serve an accessory role to the story are indeed lower in plot connection. On the other hand, mismatches occur when audio placements are lower in plot connection or visual placements higher in plot connection. These congruent and

Table I Experimental Design		
Modality	Plot	
	Lower	Higher
Visual	Congruent (candy) (1)	Incongruent (soda) (2)
Audio	Incongruent (cookies) (3)	Congruent (ice cream) (4)

*continued...*

## ***Investigating the effectiveness of product placements...***

---

incongruent modality/plot combinations are captured visually in Table 1. This conceptualization suggests a turn to the congruency/incongruency literature to understand the memory and attitude effects associated with each type of placement.

The incongruency literature maintains that, while little elaboration occurs when information is congruent, incongruency triggers cognitive elaboration (Mandler 1982). As a result, incongruent information is memorable because it prompts attention and provokes elaboration (Heckler and Childers 1992). Mismatches between modality and plot will thus improve memory for the placement. However, empirical evidence also supports the fact that the increased elaboration associated with extreme incongruency has an adverse effect on evaluations (Lee and Mason 1999; Meyers-Levy and Tybout 1989). Indeed, while increasing attention to the placement, incongruency will also prompt viewers to think about the reason for the brand's presence in the show. This brand relevant thinking will result in corrective mechanisms, such as counterargumentation or reactance, if the placement is perceived as inappropriate (Friestad and Wright 1995). Therefore, while congruous placements will be perceived as acceptable, incongruous placements are likely to raise viewers' suspicion and prompt counterargumentation. Conditions where modality and plot connection match will thus lead to greater attitudinal evaluations than those where modality and plot connection do not match.

The fact that information incongruency affects memory and attitude measures differently suggests that the combined effects of modality and plot connection will differ depending on how well the plot connection matches the modality of

presentation of the brand. In other words, the plot connection will interact with the modality of presentation of the brand in affecting memory and attitudes. The literature reviewed above suggests (1) that auditory stimuli are more meaningful than visual stimuli and thus generate more elaboration, (2) that higher levels of plot connection also trigger more elaboration, and (3) that incongruency between modality and plot connection increases elaboration but adversely affects attitudes. Since increased elaboration leads to improved memory, auditory placements will be remembered better than visual placements, regardless of their plot connection.

However, among visual placements, higher plot ones only will result in greater memory, because of their unexpected use of the visual modality for carrying central information. Higher plot visual placements will thus be remembered better than their lower plot, congruous, counterparts. This rationale suggests an interaction between modality and plot connection on memory such that:

**H1:** Higher plot visual placements will be remembered better than lower plot visual placements (cell 2 > cell 1), but the level of plot will not affect memory for the audio placements (cell 3 = cell 4).

The expected attitudinal effects are drawn from the incongruency literature discussed above. Congruous placements, higher plot audio and lower plot visual, appear acceptable to the viewers and do not prompt them to think about the reason for their presence in the show. In contrast, incongruency between modality and plot connection is likely to raise viewers' suspicion and counter argumentation. This incongruency happens when the mention of the brand in the dialogue is not justified by the story (lower

plot audio) or when a visual brand becomes an obvious focus of the story when it should serve an accessory role (higher plot visual). A crossover interaction between modality and plot connection on attitudes is therefore predicted per the following hypothesis:

**H2:** Lower plot visual placements will be more persuasive (result in greater attitude change in the positive direction) than higher plot visual placements (cell 1 > cell 2), and higher plot audio placements will be more persuasive than lower plot audio placements (cell 4 > cell 3).

The review of the extant literature suggests that the characteristics of a placement in audiovisual programming, as identified by the Tripartite Typology of Product Placement, will affect the cognitive and the persuasive processes associated with them. The next section presents the proposed methodology for empirically testing the memory and attitude change predictions associated with each type of placement.

## **METHODOLOGY**

### **The Theater Methodology**

Traditional approaches to experimentally testing the theoretical framework would suggest using a quasi-experiment, for example, finding existing TV shows with product placements that map on to the script, screen, and plot dimensions. This procedure would not only be complicated but would also challenge the internal validity of the experiment by introducing unwanted noise. In order to resolve these issues and test the framework under true experimental conditions, a new methodology was developed, which is hereafter referred to as the theater methodology. This

*continued...*

methodology used a videotaped screenplay as the setting for the presentation of stimuli. Branded products were strategically placed inside a specially written original screenplay that followed the structural format of most televised situation comedies.

The main motivation for using a theatrical setting was to increase the level of experimental control while providing an environment similar to existing television shows. Because most brand placements occur in television shows and movies, the experiment had to be conducted in an audio-visual environment that reproduced most of the characteristics of television and cinema. Furthermore, developing an original script and videotaping several versions of the plays allowed the production of multiple treatments. In addition, the use of a specially developed screenplay eliminated any contamination related to prior exposure. For this research, the screenplay was designed specifically with a student subject population in mind. The situation comedy genre was selected to fit the tastes of undergraduates.

The theater methodology provided a unique environment for the empirical testing of product placement forms. By placing different brands within the same environment, it offered an opportunity to experimentally test messages that varied only on certain specified dimensions, thus maximizing the internal validity of the experiment. In addition, although the subjects were recruited specifically to watch the show, they were not told that the aim was to test the brands placed within them. By providing a more natural exposure setting, the methodology alleviated the problems related to forced exposure design of typical persuasion experiments, which tend to push subjects to attend to the stimuli more than they otherwise would (see discussion in Deighton, Romer, and McQueen 1989).

### **Experimental Design**

The study used a within-subjects design, in the sense that all subjects saw all brand placements. While increasing the sensitivity of a study by decreasing the within-groups variance, within-subject designs also possess several shortcomings, all of which are associated with the fact that they rely on repeated measures (Keppel 1991). These issues were addressed by carefully constructing the experimental procedures and by conducting the appropriate statistical operations during the data analysis stage. In particular, in order to minimize the risk of demand artifacts, great care was taken in eliminating subjects who may have been suspicious of the true purpose of the experiment (the specific procedures are discussed in subsequent sections).

Each placement consisted of a different combination of modality and plot connection level based on a 2 (Modality: Visual-Audio) x 2 (Plot: Lower-Higher) full factorial, with each condition represented by one brand. Because having only one brand represent each cell creates a potential confound between the brand and the manipulation, three versions of the show were created, with different brand placements in each version. The three shows were identical except for the brand names placed within them. Each version contained different brands but from the same product categories. For example, in one version, a character was drinking a 7-Up, while, in the other one, she was drinking a Sprite. Real brands were used to coincide with the realistic setting of the screenplay. Details of the procedures for ensuring comparability across brands and product categories are given below.

### **Independent Variables**

The independent variables were the different brand placements

posited in the theoretical framework. In order to reduce memory interference across brands and potential contamination of the results by previous exposure to the product category, each brand was selected from separate product categories (Burke and Srull 1988). Although allowing the product categories to remain stable across play versions and merely changing brand names maximized the degree of similarity between all three versions, it also meant that each treatment was represented by a single product category. To maximize similarities between conditions, and to facilitate the products' incorporation into the story line, all tested products belonged to the taxonomic category of food and beverage.

To further ensure their comparability, a series of pretests was conducted that assessed the amount, nature, and valence of thoughts that each product category generated. The thoughts and corresponding valence ratings were collected from a sample within the population of interest ( $N = 53$ ) and coded in terms of brands within the category, product attributes or benefits, and product associations. The selected products did not differ significantly in terms of subjects' (a) amount of elaboration, as indicated by the total number of thoughts, (b) ratios of positive, neutral, and negative thoughts to total number of thoughts, and (c) ratios of positive to negative attribute and association thoughts (all contrasts; all  $p$ 's  $> .10$ ).

Since real brands were used, they were also pretested to ensure that they possessed equivalent levels of familiarity within the population of interest. In a top-of-mind awareness test ("write down as many brands of \_\_\_\_\_ as you can remember"), the retrieval sets were evaluated for each product category. From these data, three medium-salience brands (about

*continued...*

## ***Investigating the effectiveness of product placements...***

---

50% of subjects included it in their retrieval set) were selected from each category to serve as independent variables in the core of the study. These sets of brands were further tested to ensure that they all possessed equivalent levels of familiarity within the population of interest.

### **Stimulus Development**

In order to enhance external validity, the screenplay was developed to exactly match the format of existing situation comedies. The plot was a classical (Stem 1994) miniature (27-minute) linear progression with a beginning, middle, and end. The story was set in an advertising agency and staged the conflict between two female executives embattled over an account. Each placement consisted of a different combination of modalities and plot connection according to the 2 (Modality: Visual-Audio) x 2 (Plot: Lower-Higher) design. The modalities were operationalized as follows: the visual brands appeared on the screen for approximately five seconds and the audio brands were mentioned twice in the dialogue. The plot connection was operationalized as the degree of connection between the product and the story line, similarly to previous experimental work on the importance of certain scenes in films with regard to the story line (Cowen and Lebel 1998; Roberts et al. 1996). The higher plot brands were tightly integrated to the story as the script was initially developed and thus became a central component of the plot. For instance, ice cream was used as the object of conflict between the two main characters. Similarly, soda was used to stimulate the main character's transformation to a cutthroat executive in the final act. In contrast, the lower plot brands were simply added to the script after the story had been finalized and thus did not affect the progression of the story. Specifically, candy and cookies were

placed in scenes where they did not add to the structure of the story but merely serve as tangential elements to the scenes. Each placement was rated on each dimension by three trained independent judges to ensure that placements were identical on each of the experimental dimensions.

The play was pretested in a live staged reading so that the placement manipulations could be checked and the soundness of the script could be assessed before entering the full-blown production stage (see pilot study section below for a discussion of the findings). Once the screenplay was finalized, Semi-professional actors were recruited from a master of fine arts program, and contact was established with a local video production company for the videotaping and editing of the final tapes. Four two-hour rehearsal sessions were conducted prior to the la-hour shoot. A total of six hours of film were produced, from which the final shots were selected and the final tapes digitally edited. In order to mimic existing television shows, a laugh track was inserted at the editing stage. Editing of the final tapes took a total of 26 hours. The final product consisted of three 27-minute programs exactly similar except for the brands that appeared in them. Figure A I provides a visual snapshot of the program as well as an example of one of the experimental conditions.

### **Lessons Learned From the Pilot Study**

The theater methodology and the experimental design were pretested in a pilot study. A total of 107 students (56 females and 51 males) from two introductory marketing classes were invited to attend a live performance at the beginning of one of their classes. The stage readings were presented as the pilot of a new television sitcom, and the students in the audience were told that, because they were part of the targeted age group for the sitcom (20 to 25-year

olds), their reactions and feedback were sought to improve the script. Following the performance, the students completed a five-page survey that included a two-item seven-point measure of attitude toward the show (like/dislike, good/bad), a series of ratings of the experience (six seven-point semantic differential items anchored by pleasant/unpleasant, enjoyable/not enjoyable, dull/exciting, interesting/boring, usual/unusual, and real/fake), followed by a series of five-point agree/disagree statements (such as "This sitcom has a lot of potential" or "I would watch this sitcom on TV"). The last pages of the questionnaire, designed to check the manipulations, contained a recall measure ("list all the brand names that you remember seeing or hearing during the performance") and a recognition task. For this last task, the subjects were provided a list of 59 brands and instructed to check the ones they remembered seeing and/or hearing in the sitcom they had watched earlier.

Results from the post-performance survey and several focus groups with members of the audience provided strong support for the internal and external validity of the experiment. While a vast majority of subjects were overwhelmingly positive about the theatrical experience (mean attitude = 5.32/7), none guessed the true purpose of the experiment. In addition, audience members found the experience to be comparable with that of watching a television sitcom ( $M = 3.88$ , significantly different than the middle point three,  $p < .01$ ). For instance, 57.55% answered five or above to a question asking how real versus fake the experience of watching the play was (on a seven-point scale). Similarly, 47.17% thought the experience to be more usual than not (answering three or less on a seven-point usual/

*continued...*

unusual semantic differential scale). These results support the fact that the dramatic performance avoided the threat of incompetence (Deighton 1992), since the audience perceived the actors as talented ( $M = 3.27$ , significantly different from the middle point three,  $p < .01$ ), as well as the threat of deception (Deighton 1992), since they felt the experience was real, and the plot believable ( $M = 3.75$ , significantly different than the middle point three,  $p < .01$ ).

The results from the pilot study suggested several changes that would strengthen the experimental design and the dependent measures. First, the recall and recognition measures were significantly correlated and produced a similar pattern of results, suggesting that recognition measures could be used alone in future studies. This is particularly helpful given that a more complete study would require the administration of additional measures, such as attitude toward brands, before the memory task. Another lesson was that the live nature of the pilot study performance created several unanticipated effects that affected the nature of the stimuli and subsequently compromised the validity of certain data. Because of the setting for the performance, all visual placements appeared for a much longer period of time than would be desirable. In addition, the actors' performance styles hindered the plot dimension of some placement. By deemphasizing some higher plot placements and overemphasizing some lower plot placements, the actors changed the way the placements were actually delivered. The pilot study clearly indicated the necessity of videotaping the performance in studios and ensuring that the delivery of the performance was exactly as planned (by conducting many rehearsals). The main study was thus designed to ensure a more controlled delivery of the materials and thus cleaner manipulations.

## **EXPERIMENT**

### **Procedures**

The procedures used in the main study were the same as presented in the methodology section but with the adjustments mentioned in the foregoing section. Five one-hour laboratory sessions were conducted with groups of approximately 30 students, who participated for class credit. Based on the procedures discussed earlier, each group saw one of the three versions of the show. The design was the proposed 2 (Modality: Visual vs. Audio)  $\times$  2 (Plot: Lower vs. Higher) full factorial design (see table 1). Subjects were undergraduate business students recruited from the marketing department subject pool. They were scheduled to participate in a one-hour laboratory session. The experiment involved two phases, which were presented to subjects as two different studies. To mask the connection between the phases, two different experimental assistants were used. This method was verified in the questionnaires by asking the subjects what they thought the purposes of each study were and whether they thought the two were connected (Batra and Stayman 1990). The first part of the experiment was presented as a study to assess the viability of a newly developed situation comedy. After viewing the 27-minute sitcom containing the different placements, the subjects completed a questionnaire presented under the cover of gathering their reactions to the sitcom. They were first asked to "list all the thoughts they had while watching the show." This thought-listing task was not designed to serve as a traditional cognitive response measure but merely to match the cover story and identify potentially suspicious subjects. The subjects then rated their experience of watching the show, using the same questions as in the pilot study, and their attitudes toward the show on a

three-item seven-point scale (like/dislike, good! bad, and favorable/unfavorable). Following a series of five-point agree/disagree statements (as in pilot study), they were asked to indicate their attitude toward each of the characters in the show using seven-point scales anchored by like/dislike, and to provide some demographic and general television habit information. The subjects were given 10 minutes to complete the first questionnaire.

Then, the subjects were turned over to a second experimenter who administered a presumably unrelated questionnaire containing all the dependent measures. This second questionnaire started with a series of seven-point semantic differential brand attitude scales anchored by "I like it" / "I dislike it" and good/bad. There were a total of 29 brands including the brands of interest. In order to mask the real purpose of the experiment, filler items were placed throughout the questionnaire. The filler items were pre-tested familiar brand names and included brands that were verbally or visually comparable to those presented in the show. Finally, a three-item suspicion measure regarding the true purpose of experiment was administered (described below). This second phase lasted approximately 15 minutes.

Following this second survey, the first experimenter returned to the room, claiming that he had forgotten to administer the second part of his survey. This final questionnaire started with the same recognition task as used in the pilot study. Then, after reading a description of the practice of product placement, the subjects completed a 15-item attitude toward product placement scale (adapted from Gupta and Gould 1997), and a three-item plot connection manipulation check for each product category ("\_\_\_\_\_ played an important role in the story"; "Without

*continued...*

## Investigating the effectiveness of product placements...

---

the references to \_\_\_\_\_, the story would be different”; and “\_\_\_\_\_ was connected to the plot”).

In order to be able to detect the hypothesized effects, the measure of attitude was a differential measure (post-attitude minus pre-attitude: see discussion in Webb 1979). Pretest measures (attitudes toward selected brands as well as control brands) had been collected prior to the experiment, using a pen and paper survey completed by all introductory marketing students during the first week of class.

### Sample Characteristics

Data were removed for all subjects for whom English was not the first language ( $N = 18$ ), as well as for those who may have been suspicious of the real purpose of the experiment ( $N = 29$ ). Suspicion was determined by conservatively interpreting the answers to a set of three questions, asked at the end of the second survey (before the first experimenter came back to the mom). The first two questions asked subjects to write down their thoughts about the purpose of study 1 (Ads R' Us) and of study 2 (the brands). The third question asked whether they saw a connection between the two studies and, if so, asked them to explain. Subjects were considered suspicious if they both marked that they saw a connection between the two studies and clearly stated that the presence of brands in the show affected their answers in the second study. Note that the seemingly high suspicion rate is largely due to the fact that the screening was extremely stringent. All analyses were run both on the reduced (not including suspicious subjects) and on the complete sample (including suspicious subjects), and none of the observed effects changed whether the suspicious participants were included or not. The final sample consisted of 107 subjects (58 females and 49 males), of which 44 had seen version

1, 28 had seen version 2, and 35 had seen version 3.

Several analyses were conducted to support the collapsing of the three subsamples. Unlike higher order independent variables, such as the plot connection manipulation, the modality manipulations were concrete, observable variables that were altered directly (Perdue and Summers 1986): the visual placements appeared for the same number of seconds and with the same camera angle, and the auditory placements were all mentioned twice with the same tone and by the same actor. For this reason, only the plot connection manipulations were checked. The three-item plot connection scales yielded alpha coefficients above .70 for each of the tested product categories. Therefore, an overall plot connection measure was computed by averaging the three items for each product category. A one-way ANOVA of plot connection x scores version verified that none of the plot connection means were significantly different across versions ( $F(2, 104) = 1.40$ ,  $p > .10$ ), which permitted the aggregation of the three subsamples. All further analyses reported are therefore based on the combined sample.

### Power Analysis

Before analyzing the data, a power analysis was conducted to determine the study's sensitivity. As suggested by Sawyer and Ball (1981), the power of all tests was set at .80 for the conventional Type 1 error rate of 5%. While the total number of usable post-experiment surveys consisted of 107 observations, that sample size was substantially reduced in the analyses involving post-attitude-pre-attitude measures due to the unavailability of some pre measure surveys. Thus, for the memory analyses, the detectable effect size was about .35 ( $N = 107$ ), while for the attitude analyses the detectable effect size was approximately .40 ( $N = 75$ ). Clearly, the use of a within-

subject design, which provided large sample sizes for each condition, improved the probability of detecting even a small effect, thus rendering the study extremely powerful.

### Tests of Memory Hypotheses

The first set of hypotheses dealt with memory for the different types of placements. The measure for brand recognition was a dichotomous variable equal to one if the subjects had circled the brand in the list provided, and zero otherwise. The memory hypotheses were tested using a 2 (Modality: Visual vs. Audio) x 2 (Plot: Lower vs. Higher) within-subjects ANOVA with the SPSS GLM repeated measures procedure. The analysis yielded significant main effects of modality ( $F(1, 106) = 157.93$ ,  $p < .001$ ) and plot ( $F(1, 106) = 37.75$ ,  $p < .001$ ) qualified by a significant interaction ( $F(1, 106) = 50.07$ ,  $p < .001$ ). These effects for the recognition results are portrayed visually in figure 1. The significant main effects of modality and plot connection provide support for the relationship between meaningfulness and memory. Auditory placements were better recalled than visual placements in both the lower plot condition ( $F(1, 106) = 260.46$ ,  $p < .001$ ) and the higher plot condition ( $F(1, 106) = 9.84$ ,  $p < .01$ ). Plot connection also improved memory but, per hypothesis 1, the plot x modality interaction qualifies this effect. Hypothesis 1 indeed posited that the plot connection would improve recognition of the visual placements but not of the auditory ones. This hypothesis was supported as shown by the significant plot x modality interaction that qualifies the main effect of plot connection. Contrast tests indeed reveal that higher plot visual placements were better remembered than their lower plot counterparts ( $M = .551 (.048)$  vs.  $.056 (.231)$ ,  $F(1, 106) = 90.50$ ,  $p <$

*continued...*

.001) but that there was no significant difference between higher and lower plot auditory placements ( $M = .766(.425)$  vs.  $.738(.442)$ ,  $F(1, 106) = .756$ ,  $p > .05$ ). Thus, as predicted, incongruous placements were better remembered in the visual condition, but not in the auditory condition.

## Tests of Persuasion Hypothesis

In order to report the analyses related to attitude change, new variables were computed that reflected the change in attitude toward each of the tested brands. Attitude scores were computed by averaging the ratings on the two semantic differential brand attitude scales. The differential attitude scores (post-attitude minus pre-attitude scores) were then subject to the analyses.

Hypothesis 2, which predicted a crossover interaction between modalities and plot connection, was tested using a 2 (Modality: Visual vs. Audio) x 2 (Plot: Lower vs. Higher) ANOVA on the differential attitude scores. As portrayed visually in figure 2, the analysis yielded a significant modality x plot crossover interaction ( $F(1, 80) = 10.86$ ,  $p = .001$ ). Analysis of simple contrasts showed that lower plot visual placements were more persuasive than higher plot visual placements ( $r = +.51(1.23)$  vs.  $r = +.10(1.19)$ ,  $F(1, 80) = 5.85$ ,  $p = .018$ ) and that higher plot auditory placements were more persuasive than their lower plot counterparts ( $r = +.47(1.18)$  vs.  $r = +.12(1.08)$ ,  $F(1, 81) = 7.13$ ,  $p = .009$ ). Contrasts within each level of plot connection were also significant: whereas auditory placements were more persuasive than visual placements in the higher plot condition ( $F(1, 80) = 4.43$ ,  $p = .038$ ), the effect was reversed in the lower plot condition, where visual placements yielded greater attitude change in the posi-

tive direction than auditory placements ( $F(1, 81) = 5.19$ ,  $p = .025$ ). Thus, as predicted, congruous placements were more persuasive than incongruous ones.

## DISCUSSION

The purpose of this research was to investigate whether the ways a brand is placed within audiovisual media programming affect memory for the brands and attitudes toward those brands. The Tripartite Typology of Product Placement proves a useful method for classifying product placements and predicting the conditions under which a brand name included in a show would be remembered and whether attitudes toward it would be positively affected. Modality and plot connection were identified as two important factors underlying these processes as they interact to influence memory and attitudes. In particular, this study showed that conditions that maximized memory did not necessarily maximize persuasion: while incongruity between modality and plot connection improves memory,

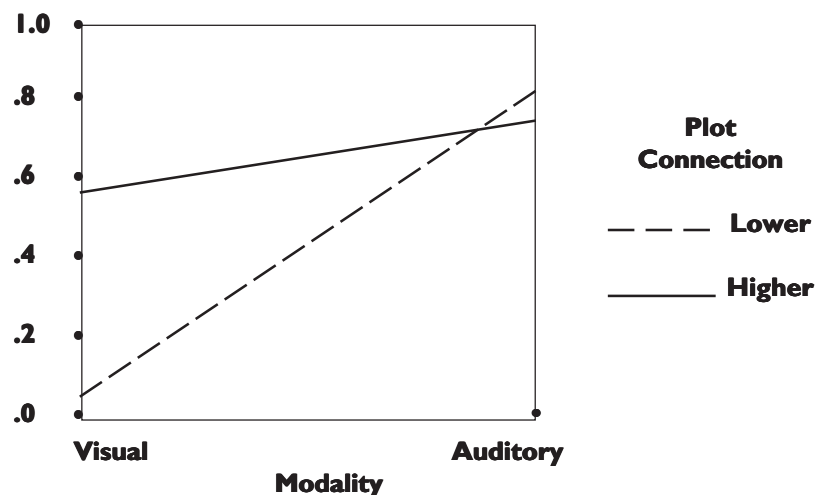
congruity enhances persuasion. In particular, visual placements were only remembered when their plot connection was not in line with their modality, thus creating an incongruous situation. However, incongruent placements were found to adversely affect brand attitudes because such placements appear unnatural and are therefore discounted.

## Theoretical Contributions

This study identified the role of modalities on memory, particularly the strong effect of audio placements on memory. The findings are consistent with the long tradition of cognitive psychology research that shows that memory is influenced by depth of processing such that more elaborate processing facilitates the subsequent recall of information. However, this research also extends this tradition by revealing the role that modality of presentation plays in triggering elaboration. Whereas prior research on memory for pictorial and verbal information in print advertising tends to support a picture superiority effect (Childers and

**Figure 1**

### Recognition Scores



*continued...*

## ***Investigating the effectiveness of product placements...***

---

Houston 1984), this study shows that, in the context of audiovisual media, memory is greater when the stimulus is spoken than when it is only visually presented. This effect occurred because, as noted previously, auditory information is more meaningful and thus processed more deeply than visual information. Visual information, however, can become meaningful through its connection to the plot. By rendering an otherwise peripheral visual stimulus more important to the story, the plot connection can indeed increase attention to and elaboration on that piece of information. This audio superiority effect is consistent with Kahneman's (1973) capacity model of attention, which suggests that there is a single, higher order limitation on processing central to either sensory modality and that visual and auditory stimuli compete for attentional resources (Eimer 1999). The tradeoff between attentional resource allocations across sensory channels (Bonnell and Hafter 1998) implies that audio placements, which are more meaningful, have a better chance of being attended to, and thus remembered, than visual placements, which are less central.

An additional contribution of this research concerns the effect of product placement on attitudes. This study is the first attempt at measuring brand attitude changes that result from exposure to a show in which the brand was referenced. The results indicate that the relationship between memory and attitude is not straightforward: merely because a person remembers seeing or hearing a brand in a show does not mean that his or her attitude toward that brand will change. This non-intuitive relationship stems from the fact that the modality of presentation and the level of plot connection produce interactive but different effects on memory and on persuasion. The congruency/incongruency literature

provides insights into this nonlinear attitude-memory relationship: when a brand's modality of presentation is not congruent with its level of plot connection, viewers tend to think about the reason for the brand's presence in the show and raise their cognitive defenses (Friestad and Wright 1995). For instance, in the case of higher plot visual placements, an expectedly peripheral stimulus becomes a focal point of attention and the obvious focus on it makes it seem obtrusive and prompts counter-argumentation. In contrast, when the modality and plot connection match, the placement seems more natural and less effort is spent on analyzing why it is there, thereby making access to persuasion knowledge less likely (Campbell and Kirmani 2000).

The fact that subtly placed visual brands appeared more natural and were therefore not counter-argued advances our knowledge of visual persuasion. In this experiment, subjects did not consciously recognize the lower plot visual stimuli even though their attitudes were positively affected. These low-recognition results and yet positive attitudinal effects observed in the lower plot visual condition are consistent with the peripheral route of the Elaboration Likelihood Model (Petty and Cacioppo 1986) and Zajonc's mere exposure effect (1968). Evidence of this subconscious process in product placement is notable, since the potentially subconscious nature of the technique is often referenced and even criticized in the popular press (e.g., Shermach 1995).

### **Practical Implications**

By specifying the persuasive impact of different types of cues in a message (Petty and Wegener 1998), the results from this study point to two equally persuasive but dramatically different strategies for product placement practitioners. Product placements that were merely

placed in the visual background were as persuasive as audio placements that were highly connected to the plot. These findings suggest that, instead of negotiating placement arrangements that entail a tight integration of the brand with the plot or mentions in the dialogue, practitioners may simply try to get the brand to visually appear in the background, without any auditory reference or plot connection. This option is dramatically less expensive but, also, as we have seen, less insulting to the viewers. Since these two strategies obviously differ in the intensity of the relationship that marketers must form with television and movie producers (and the attendant costs), they may serve different marketing objectives. For instance, if paired with a cross-promotional campaign, where the connection between the brand and the show is made obvious through traditional advertisements and other promotional tools (e.g., the James Bond-BMW Z3 cross-promotion), a full-blown placement that includes plot connection and auditory mentions would be more beneficial. However, if the placement is used as a stand-alone and does not belong to an integrated marketing communications program, a subtle visual appearance may do. These considerations are especially important as consumers become increasingly sophisticated and skeptical about the ever growing commercialization of the entertainment industry (Wasko et al. 1993).

### **Limitations and Future Research**

As discussed in the methodology section, the nature of the stimulus material, while enhancing the internal validity of the experiment, also weakened its external validity. In the course of creating a show

*continued...*

specifically for the purpose of this study, various aspects of the natural phenomenon of watching television were necessarily altered or contained. Some of these alterations were due to the impracticality of reproducing the natural situation in the laboratory. For instance, the study did not account for the differing levels of involvement and connectedness (Russell and Puto 1999b) that individuals develop with real television shows or characters. The possibility that such factors may shift the focus of a person's attention toward or away from peripheral cues (MacKenzie and Spreng 1992), and thus moderate the effect of modalities and plot connection on memory and attitudes, was not tested in this study.

An additional limitation of the design is the potential confound between product category and the experimental treatments. Although all efforts were made to ensure the comparability of the selected product categories, the complexity of the stimulus development made it impossible to create more versions of the play. As a result, this confound cannot be completely ruled out. Alternative designs, such as those involving between-subject manipulations, would certainly have eliminated this concern but they too have their own limitations.

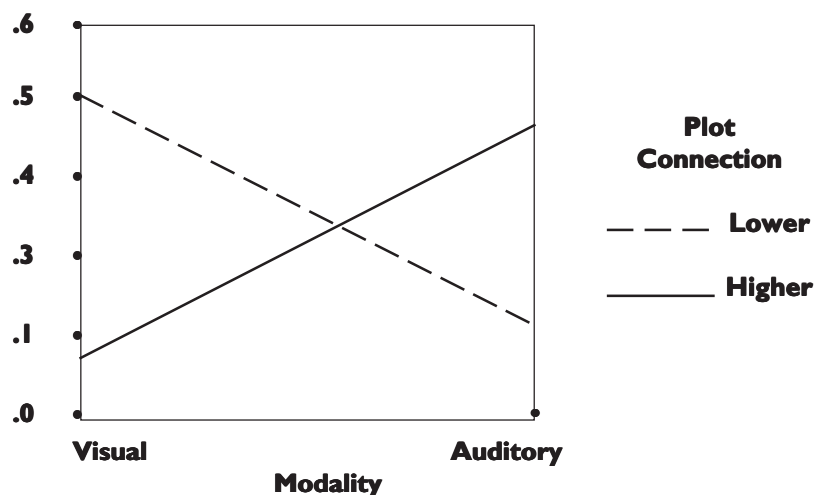
The within-subject design used in this study allowed the power needed to detect relatively small effects but also required procedures that seem potentially threatening to external validity. Suspicion rates were high and may reflect an increased sensitization of the subjects to experimental goals. I believe that this concern is limited since the suspicion level was mostly due to the stringent screening procedures and did not affect the results. However, I also recognize that this awareness may have heightened subjects' attention to the products placed in the program. A logical extension of this

research is the testing of the Tripartite Typology of Product Placement using existing television shows and movies. The limited external validity of this laboratory study can indeed be remedied by analyzing the effect of modality and plot connection on memory and attitude for brands that appear in real shows and under real television watching conditions.

The dependent variables were measured immediately following exposure to the stimuli and only addressed attitude. Thought data were collected only at the end of the show and thus do not adequately reflect the amount of brand-relevant thinking that occurred as subjects were watching and, for this reason, could not be used as traditional cognitive response data. Future research should incorporate on-line cognitive responses so that thoughts suggestive of counter arguing, discounting, or other indicators of access to persuasion knowledge can be gathered as viewers watch the show and specific reactions to each type of placement can be collected. Other variables of interest, such as purchase intentions or actual pur-

chases, which are also differentially affected by the two routes of persuasion, were not measured, and there are many opportunities for future research on the effect of the Tripartite Typology of Product Placement on them. For instance, the possibility that lower plot visual stimuli were processed pre-consciously or peripherally could be further investigated by testing the effects of these lower levels of elaboration on attitude accessibility, attitude persistence, and behavior (Petty and Cacioppo 1986). Similarly, manipulating involvement or motivation (e.g., MacKenzie and Spreng 1992), for instance, by creating different forewarning conditions (Petty and Cacioppo 1986), could provide yet another means of assessing the impact of the different routes to persuasion on subsequent brand attitude. Further studies with additional dependent variables and different experimental conditions would also allow comparisons to be made between the persuasiveness of product placement and that of traditional advertising messages. Examining the potential of product placement as an advertising tech-

**Figure 2**  
**Attitude Change Scores**



*continued...*

## Investigating the effectiveness of product placements...

---

nique should indeed motivate comparative studies of product placement and traditional advertising or studies of the effect of combining product placement with traditional advertisements such as cross promotions.

An additional extension of this research lies in the investigation of different levels of each dimension. This study focused on one level of screen, script, and plot placements for experimentation purposes, but it recognizes the possibility that these effects are not linear. It is indeed possible that the observed positive impact on attitude of modality and plot connection changes if the level of each factor is too high. Future research should address this issue by testing the effect of repeated exposures or different levels of plot connection on memory or attitude.

A related opportunity for future research lies in differentiating among types of plot connections. In a structural analysis of the stimulus material used in this study, Stem (in Russell and Puto 2001) concluded that products might be connected to the plot in different ways, some contributing to the series plot and others to the episodic plot. Exploring the nature and the effect of these different types of connections as well as the valence of plot connections (see, e.g., Elliott 1997) would allow valuable refinements to the typology.

Future research efforts should also focus on the effect of product placement for emotionally laden products, such as alcohol or cigarettes, which past research has found to generate more negative reactions (Gupta and Gould 1997). By providing evidence that even "mundane consumer products" (Pechmann and Shih 1999, p. II) can benefit from subtle appearances in audiovisual programming, this article underscores the need for public policy makers to closely monitor the blurring of the line between entertainment and marketing, particularly when it comes to harmful and

otherwise regulated products.

Other venues for future research lie in the use of the theater methodology. As the proposed methodology is refined, it can have many other applications in consumer research. Because of its liveness, its ability to reproduce real life situations, and its engaging nature, the theater methodology has potential throughout the social sciences (Russell and Puto 1999a). However, given the skills, resources, and time commitment such methodology requires, incorporating experience and talent from the theater arts and media arts disciplines is strongly recommended. Nonetheless, the fact that such drama-based approaches have been used extensively in health education (e.g., Treder-Wolff 1993) and drug awareness programs (Safer and Harding 1993) attests to their potential as an instrument for the study of human behavior. □

### REFERENCES

- Avery, Rosemary J. and Rosellina Ferraro (2000), "Verisimilitude or Advertising? Brand Appearances on Prime-Time Television," *Journal of Consumer Affairs*, 34 (2), 217-244.
- Babin, Laurie A. and Sheri T. Carder (1996), "Viewers' Recognition of Brands Placed within a Film", *International Journal of Advertising*, 15 (2), 140-151.
- Balasubramanian, Siva K. (1994), "Beyond Advertising and Publicity: Hybrid Messages and Public Policy Issues," *Journal of Advertising*, 23 (4), 29-46.
- Batra, Rajeev and Douglas M. Stayman (1990), "The Role of Mood in Advertising Effectiveness," *Journal of Consumer Research*, 17 (September), 203-214.
- Bonnel, Anne-Marie and Ervin R. Hafter (1998), "Divided Attention Between Simultaneous Auditory and Visual Signals", *Perception and Psychophysics*, 60 (2), 179-190.
- Burke, Raymond R. and Thomas K. Srull (1988), "Competitive Interference and Consumer Memory for Advertising," *Journal of Consumer Research*, 15 (June), 55-68.
- Campbell, Margaret C. and Amna Kirmani (2000), "Consumers' Use of Persuasion Knowledge: The Effects of Accessibility and Cognitive Capacity on Perceptions of an Influence Agent," *Journal of Consumer Research*, 27 (June), 69-83.
- Childers, Terry L. and Michael J. Houston (1984), "Conditions for a Picture-Superiority Effect on Consumer Memory," *Journal of Consumer Research*, 11 (September), 643-654.
- Cowen, Paul S. and Alain Lebel (1998), "The Influence of Story, Plot, and Genre on Memory for Action in a Film," *Empirical Studies of the Arts*, 16 (1), 71-83.
- Craik, Fergus I. M. and Robert S. Lockhart (1972), "Levels of Processing: A Framework for Memory Research," *Journal of Verbal Learning and Verbal Behavior*, 11 (6), 671-684.
- D' Astous, Alain and Nathalie Seguin (1999), "Consumer Reactions to Product Placement Strategies in Television Sponsorship," *European Journal of Marketing*, 33 (9-10), 896-910.
- Deighton, John (1992), "The Consumption of Performance," *Journal of Consumer Research*, 19 (December), 362-372.
- Deighton, John, Daniel Romer, and Josh McQueen (1989), "Using Drama to Persuade," *Journal of Consumer Research*, 16 (December), 335-343.
- DeLorme, Denise E. and Leonard N. Reid (1999), "Moviegoers' Experiences and Interpretations of Brands in Films Revisited," *Journal of Advertising*, 28 (2), 71-95.

continued...

- Ebenkamp, Becky (2001), "Return to Peyton Placement," *Brandweek*, 42 (23), 10—18,
- Eimer, Martin (1999), "Can Attention Be Directed to Opposite Locations in Different Modalities? An ERP Study," *Clinical Neurophysiology*, 110 (7), 1252-1259,
- Elliott, Stuart (1997), "The Spot on the Cutting-Room Floor," *New York Times*, (February 7), p. D1.
- Fournier, Susan and Robert J. Dolan (1997), "Launching the BMW Z3 Roadster," Case No, N9-597-002, Harvard Business School, Boston, MA 02163.
- Friedman, Monroe (1985), "The Changing Language of a Consumer Society: Brand Name Usage in Popular American Novels in the Postwar Era," *Journal of Consumer Research*, 11 (March), 927-938.
- Friestad, Marian and Peter Wright (1995), "The Persuasion Knowledge Model: How People Cope with Persuasion Attempts," *Journal of Consumer Research*, 22 (June), 62-74.
- Gupta, Pola B. and Stephen J. Gould (1997), "Consumers' Perceptions of the Ethics and Acceptability of Product Placements in Movies: Product Category and Individual Differences," *Journal of Current Issues and Research in Advertising*, 19(1), 38-50.
- Gupta, Pola B. and Kenneth R. Lord (1998), "Product Placement in Movies: The Effect of Prominence and Mode on Audience Recall", *Journal of Current Issues and Research in Advertising*, 20 (1), 47-59,
- Heckler, Susan E. and Terry L. Childers (1992), "The Role of Expectancy and Relevancy in Memory for Verbal and Visual Information: What is Incongruity?" *Journal of Consumer Research*, 18 (March), 475-492.
- Hirschman, Elizabeth C. (1988), "The Ideology of Consumption: A Structural-Syntactical Analysis of 'Dallas' and 'Dynasty,'" *Journal of Consumer Research*, 15 (December), 344-359.
- Hirschman, Elizabeth C. and Craig J. Thompson (1997), "Why Media Matter: Toward a Richer Understanding of Consumers' Relationships with Advertising and Mass Media", *Journal of Advertising*, 26 (1), 43-60.
- Holbrook, Morris B. and Mark W. Grayson (1986). "The Semiology of Cinematic Consumption: Symbolic Consumer Behavior in Out of Africa," *Journal of Consumer Research*, 13 (December), 374-381.
- Kahneman, Daniel (1973), *Attention and Effort*, Englewood Cliffs. NJ: Prentice-Hall.
- Keppel, Geoffrey (1991), *Design and Analysis: A Researcher's Handbook*, Englewood Cliffs. NJ: Prentice-Hall.
- Lavin, Marilyn (1995), "Creating Consumers in the 1930s: Irna Phillips and the Radio Soap Opera", *Journal of Consumer Research*, 22 (June), 75-89.
- Lee, Yih Hwai and Charlotte Mason (1999), "Responses to Information Incongruity in Advertising: The Role of Expectancy, Relevancy, and Humor", *Journal of Consumer Research*, 26 (September). 156-169,
- Lehnert, Wendy G. (1981), "Plot Units and Narrative Summarization," *Cognitive Science*, 5 (4), 293-331.
- MacKenzie, Scott B. and Richard A. Spreng (1992). "How Does Motivation Moderate the Impact of Central and Peripheral Processing on Brand Attitudes and Intentions?" *Journal of Consumer Research*, 18 (March), 519-529.
- Mackie, Diane E. and Arlene G. Asuncion (1990). "On-Line and Memory-Based Modification of Attitudes: Determinants of Message Recall-Attitude Change Correspondence," *Journal of Personality and Social Psychology*, 59 (1), 5- 16.
- Mandler, George (1982), "The Structure of Value: Accounting for Taste," in *Affect and Cognition: The Seventeenth Annual Carnegie Symposium on Cognition*, ed. Margaret Sydnor Clark and Susan T. Fiske. Hillsdale, NJ: Erlbaum, 3-36.
- McNatt, Robert and Oleck, Joan (2000), "The Plot Thickens, like Heinz Ketchup," *Business Week* (November 6), p. 14.
- Meyers-Levy, Joan and Alice M. Tybout (1989), "Schema Congruity as a Basis for Product Evaluation," *Journal of Consumer Research*, 16 (June), 39-54.
- O'Guinn, Thomas C. and L. J. Shrum (1997), "The Role of Television in the Construction of Consumer Reality," *Journal of Consumer Research*, 23 (March), 278-294.
- Pechmann, Cornelia and Chuan-Fong Shih (1999), "Smoking Scenes in Movies and Antismoking Advertisements before Movies: Effects on Youth," *Journal of Marketing*, 63 (3), 1-13.
- Perdue, Barbara C. and John O. Summers (1986), "Checking the Success of Manipulations in Marketing Experiments," *Journal of Marketing Research*, 23 (4), 317-326.
- Petty, Richard E. and John T. Cacioppo (1986), "The Elaboration Likelihood Model of Persuasion" in *Advances in Experimental Social Psychology*, Vol. 19, ed. Leonard Berkowitz, New York: Academic Press, 123-205.
- Petty, Richard E., John T. Cacioppo, and David Schumann (1983), "Central and Peripheral Routes to Advertising Effectiveness: The Moderating Role of Involvement," *Journal of Consumer Research*, 10 (September), 135-146.
- Petty, Richard E. and Duane T.

continued...

## Investigating the effectiveness of product placements...

- Wegener (1998), "The Elaboration Likelihood Model: Current Status and Controversies," in *Dual Process Theories in Social Psychology*, ed. Shelly Chaiken and Yaacov Tropes, New York: Guilford, 41-72.
- Posner, Michael I., Mary Jo Nissen, and Raymond Klein (1976), "Visual Dominance: An Information Processing Account of Its Origins and Significance," *Psychological Review*, 83 (2), 157-171.
- Roberts, Daniel S. L., Paul S. Cowen, and Brenda E. MacDonald (1996), "Effects of Narrative Structure and Emotional Content on Cognitive and Evaluative Responses to Film and Text," *Empirical Studies of the Arts*, 14 (1), 33-47.
- Rolandelli, David R., John C. Wright, Aletha C. Huston, and Darwin Eakins (1991), "Children's Auditory and Visual Processing of Narrated and Nonnarrated Television Programming," *Journal of Experimental Child Psychology*, 51, 90-122.
- Russell, Cristel A. (1998), "Toward a Framework of Product Placement: Theoretical Propositions," in *Advances in Consumer Research*, Vol. 25, ed. Joseph W. Alba and J. Wesley Hutchinson, Provo, UT: Association for Consumer Research, 357-362.
- Russell, Cristel A. and Christopher P. Puto (1999a), "Novel Experimental Methods: Opportunities and Challenges," in *Advances in Consumer Research*, Vol. 26, ed. Eric Arnould and Linda Scott, Provo, UT: Association for Consumer Research, 599-600.
- \_\_\_\_\_ (1999b), "Rethinking Television Audience Measures: An Exploration into the Construct of Audience Connectedness," *Marketing Letters*, 10 (4), 387-401.
- \_\_\_\_\_ (2001), "Exploring the Relationship between Popular Culture and Consumer Behavior: Insights from Multiple Perspectives," in *Advances in Consumer Research*, Vol. 27, ed. Steve Hoch and Robert Meyer, Provo, UT: Association for Consumer Research, 254.
- Safer, L. Arthur and Carol Gibb Harding (1993), "Under Pressure Program: Using Live Theatre to Investigate Adolescents' Attitudes and Behavior Related to Drug and Alcohol Abuse Education and Prevention," *Adolescence*, 28 (109), 135-148.
- Sawyer, Alan G. and A. Dwayne Ball (1981), "Statistical Power and Effect Size in Marketing Research," *Journal of Marketing Research*, 18 (August), 275-290.
- Shermach, Kelly (1995), "Casting Call Goes Out," *Marketing News*, 29 (16), 11-12.
- Solomon, Michael R. and Basil G. Englis (1994), "The Big Picture: Product Complementarity and Integrated Communications," *Journal of Advertising Research*, 34 (1), 57-64.
- Solomon, Michael R. and Lawrence Greenberg (1993), "Setting the Stage: Collective Selection in the Stylistic Context of Commercials," *Journal of Advertising*, 22 (1), 11-24.
- Steertz, Eva (1987), "The Cost Efficiency and Communication Effects Associated with Brand Name Exposure within Motion Pictures," unpublished master's thesis. West Virginia University, School of Journalism, Morgantown, WV 26506.
- Stern, Barbara B. (1994). "Classical and Vignette Television Advertising Dramas: Structural Models, Formal Analysis, and Consumer Effects," *Journal of Consumer Research*, 20 (March), 601-615.
- Tavassoli, Nader T. (1998), "Language in Multimedia: Interaction of Spoken and Written Information," *Journal of Consumer Research*, 25 (June), 26-37.
- Treder-Wolff, Jude (1993), "The Use of Interactive Theatre in AIDS-Prevention Education," *The Arts in Psychotherapy*, 20 (4), 335-338.
- Unnava, H. Rao, Sanjeep Agarwal, and Curtis P. Haugtvedt (1996), "Interactive Effects of Presentation Modality and Message-Generated Imagery on Recall of Advertising Information," *Journal of Consumer Research*, 23 (June), 81-88.
- Wasko, Janet, Mark Phillips, and Chris Purdie (1993), "Hollywood Meets Madison Avenue: The Commercialization of US Films," *Media, Culture, and Society*, 15 (2), 271-293.
- Webb, Peter H. (1979), "Consumer Initial Processing in a Difficult Media Environment," *Journal of Consumer Research*, 6 (December), 225-236.
- Zajonc, Robert B. (1968), "Attitudinal Effects of Mere Exposure," *Journal of Personality and Social Psychology Monograph*, 9 (2), 1-28.

### An invitation to CARF members from Admap

How do you know what makes your customers tick? What makes an effective brand strategy? Is there a better way to plan, research and evaluate your marketing communications?

If these are pressing issues for your business, you should be reading *Admap* magazine. And, as a member of CARF, you pay less than half the regular subscription rate.

Every month, *Admap* delivers the latest know-how and thinking to help maximize the effectiveness of marketing communications. For brand marketers, agencies, researchers and media owners, *Admap* provides a stream of practical ideas about marketing problems. It is one of the best ways of staying at the forefront of your profession.

Find out more about *Admap* at [www.warc.com/admap](http://www.warc.com/admap). To subscribe and save as a CARF member, contact CARF at (416) 413-3882.

---

## Marketing intelligence and survey research industry associations merge

Three Canadian industry associations for market intelligence and survey research have joined together yesterday to formally create a new national association. The announcement was made last month at the founding board meeting of the newly established Marketing Research & Intelligence Association (MRIA). The consolidation of the three associations strengthens the industry's voice as a world leader in professional standards and self-regulation.

The MRIA, which will come into operation on January 1, 2005, will be made up of members from the three dissolving associations—the Canadian Association of Market Research Organizations (CAMRO), the Canadian Survey Research Council (CSRC) and the Professional Marketing Research Society (PMRS). Over the course of November, members from each association voted overwhelmingly in favour of consolidation and the creation of the MRIA.

"The MRIA will bring greater clarity and improved service to Canadians," explains Don Mills, Founding President of MRIA.

"Creating one concerted voice greatly strengthens our position as a leader in corporate responsibility by helping us to promote and enforce rigorous professional standards. The public benefits by receiving greater assurances that the person they are sharing their attitudes and opinions with is a legitimate researcher, working for a certified, accredited and auditable organization, compliant with some of the highest professional standards in the world."

The new association will take on the many functions served by its predecessors, including:

- *Developing and enforcing professional standards:* currently, the industry maintains some of the highest standards in the world for research practitioners and research companies;
- *Conducting quality audits:* member companies will continue to be subject to random audits to ensure that best practices are employed and industry standards maintained;
- *Ensuring the advancement of the practice:* through the School of Marketing Research and the esteemed Certified Marketing Research Professional designation;
- *Advocating for the industry:* to protect members' ability to conduct affairs effectively; and
- *Empowering respondents:* through a toll free number (1-800-554-9996) that allows members of the public to verify the legitimacy of research projects and to register complaints.

Market intelligence and survey research plays a valuable role in the development of new programs, services and policies for the benefit of Canadians. The MRIA will represent the interests of the public, service users, and the practitioners and organizations that make up the industry. The industry is increasingly growing in Canada, with more than 200 companies accounting for almost three quarters of a billion dollars of market research activities annually.

### MRIA Facts

MRIA's mission is to promote a positive environment that enhances the industry's ability to conduct affairs effectively and to the benefit of the public and members. The MRIA achieves this mission through:

- the development and delivery of world-class professional standards;
- the promotion of the industry as a forum for Canadians to provide their attitudes and opinions
- into the decisions that affect them;
- the advocacy of public policy that balances the need for research services and privacy and
- consumer rights;
- the continuous advancement of industry practices through education and accreditation; and
- the on-going development and delivery of value added products and services to members.

The MRIA designs and delivers a wide array of products and services for its members, all of which serve to benefit the general public whom we deal with on a daily basis:

- **Certified Marketing Research Professional (CMRP) Designation.** A standard for professionalism within the industry, second-to-none in the world.
- **The School of Marketing Research.** A full slate of courses offered to members, including the fundamentals, advanced techniques and more specialized topics such as competitive intelligence, brand equity, web site usability, data mining and focus group moderation.
- **Advocacy and Lobbying.** The voice for those that provide, use and benefit from marketing research and intelligence services.

*continued...*

---

- **Accreditation/Gold Seal Audit.** Strict rules of professional conduct and ethical practice that member companies must comply with.

- **Publications.** A series of products to keep members abreast of the latest trends and developments in the industry, such as the *Canadian Journal of Marketing Research*.

- **Survey Registration System.** A toll-free number (1-800-554-9996) that allows the public to verify the legitimacy of a survey and to register a complaint against a member company.

- **Ethical and Practice Standards.** A set of rigorous principles that shape the relationships with clients and members of the public.

- **Industry Surveys and Reports.** A measurement of the attitudes and opinions of the public towards the industry as a way to identify areas for improvement or enhancement.

- **International Representation.** The promotion of the industry's efforts and high standards and the sharing of best practices with the international research community.

- **Career Support Services.** On-going assistance in the application of industry standards and best practices.

- **Chapters throughout Canada.** Regional representation and the promotion of standards and continued education at the local level.

- **Annual Conferences and Trade Shows.** An opportunity for sharing best practices, promoting advancements in the industry and networking.

**The views expressed by contributors to the CARF Newsletter are their own, and not necessarily those held by the Canadian Advertising Research Foundation.**

## MRIA Board

**President:** Don Mills, Corporate Research Associates

**President Elect:** Nikita Nanos, SES Research

**Director:** John Ball, Maritz Research

**Director:** Cam Baskey, Maritz Research

**Director:** Alain Choinière, Cogem Research

**Director:** Bob Collins, LCBO

**Director:** Brad Francis, TD Canada Trust

**Director:** Brenda Graham, Camelford Graham Research Group

**Director:** Roger Griffin, Griffin & Associates Consultants

**Director:** Gillian Humphreys, TNS Canadian Facts

**Director:** Dan Kirkland, Decima Research

**Director:** Tracy Kozar, Prairie Research Associates

**Director:** Steve Levy, IPSOS-Reid Canada

**Director:** John Snow, Lang Research

**Director:** Ellie Sykes, BC Institute of Technology

**Director:** John Tabone, Canadian Institute of Chartered Accountants

**Director:** Joanne Tofani, Joanne Tofani Consulting

**Director:** Barry Watson, Environics Research Group

**Director:** Tim Wingrove, Commins, Wingrove

**Director:** Hastings Withers, PMB Print Measurement Bureau

## MRIA Portfolio Vice Presidents

**Industry and Government Relations:** Alain Choinière, Cogem Research

**Communications:** Roger Griffin, Griffin & Associates Consultants

**Education:** Tracy Kozar, Prairie Research Associates

**Conference:** Don Mills, Corporate Research Associates

**Publications:** Nik Nanos, SES Research

**Membership:** Elle Sykes, BC Institute of Technology

**Standards:** Vacant

## Worldwide exposure for Canadian research

Through an agreement between CARF and the World Advertising Research Center in the UK, selected Canadian research papers and opinions will be made available to a worldwide audience on its subscription site, warc.com.

Warc.com is the largest single source of online intelligence for the marketing, advertising, media and research communities worldwide. More than 15,000 articles, case studies, research and conference papers from over 25 international sources can be found on the site.

CARF members are also entitled to subscribe to WARC publication *Admap* at a less than 50% discount.

For more information, contact the CARF office at (416) 413-3882.

**We welcome your comments and submissions.**

**To submit a paper for the CARF Newsletter, or for more information about items in this issue, please contact the Editor at:**

**Phone: (705) 431-2359**

**Fax: (705) 431-6902**

**or email:**

**psumm@sympatico.ca**