

## Emerging Issues in Advertising Research

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Advertising is a fascinating subject. No other marketing vehicle captures the attention of consumers like advertising, although the attention it does capture tends to foster a love-hate relationship. Viewers spend sizeable amounts of money on recording devices to enable them to avoid viewing ads, but at the same time schedule Super Bowl parties in which ad-watching is a planned event (Lowrey, Shrum, & McCarty, 2005).

Advertising is also a fascinating area of research, and just as ads themselves capture consumers' attention, understanding how advertising works has also captured the attention of academic research. Moreover, this research has spanned a number of disciplines, including but not limited to marketing, mass communication, various areas of psychology (e.g., social, cognitive, developmental), sociology, and political science. Although each of these may have their own idiosyncratic reason for studying the phenomenon, all are interested in documenting and explaining its effects (intended or unintended, individual or societal).

The interdisciplinary attention and interest that advertising brings has generated a voluminous amount of research. Numerous books and journals are devoted primarily to advertising-related phenomena within each of the disciplines just noted. For this reason, space constraints preclude any adequate discussion of advertising effects in general (see Petty, Priester, & Briñol, forthcoming and Stewart, forthcoming for more thorough reviews). Rather, in this chapter we discuss some of the emerging issues in advertising research, with the aim of providing a snapshot of the current theoretical and functional areas that have more recently captured research interest. The broad issues we address are product placement research, interactivity effects research, and psycholinguistics research. Although these three topics are certainly not exhaustive in terms of emerging areas of research, they provide a good cross-section of theories and methodologies that are being employed.

## Product Placement Research

One area of advertising research that is generating substantial interest is product placement. Product placement refers to the practice of inserting identifiable brands, brand names, or brand logos within non-marketing media content (Balasubramanian, 1994; Lowrey et al., 2005). It is most readily identifiable with placements in films and movies, but placements in other forms of media (e.g., magazines, novels) can also occur. As McCarty (2004) details, product placement has a long history, appearing as early as the 1920s (see also Balasubramanian, Karrh, & Patwardhan, 2006), but it is only most recently that placement has been seen as an important and strategic marketing function.

Although marketers seem confident enough of the positive effects of product placement on marketing effectiveness measures, the empirical research landscape is very muddled (for reviews, see Balasubramanian et al. 2006; Bhatnagar, Aksoy, & Malkoc, 2004; Law & Braun-LaTour, 2004). Part of this is because of the difficulty in conducting both internally and externally valid research. Laboratory studies tend to suffer from the usual suspects of reasons: unnatural viewing environment, short-duration experimental stimuli, and artificial stimuli, among others. Field research, which has the potential to provide the more ecologically valid results that practitioners often prefer, suffers from lack of experimental control, which is particularly problematic because the effects of product placement are not only often subtle and transitory, but difficult to distinguish from other promotional inputs (advertising, sales promotion, publicity) that are part of the entire marketing campaign (Balasubramanian et al., 2006).

### *Factors Influencing Product Placement Effects*

Despite the difficulties just noted, a number of factors have been shown to be

important mediators and moderators of product placement effects. Some of these are execution factors, such as the prominence of the placements within the media content, the modality of the placement (visual, audio, both), and the extent to which the placement is integrated into the story. Other factors include ones that pertain to the viewers themselves, such as brand familiarity, brand preferences, and attitudes toward marketing and advertising practices in general, and product placement in particular (Balasubramanian et al. 2006). Compounding the complexity is the virtual certainty that many of these factors interact with each other.

Consider the issue of the prominence of placement in the media content. An oft-cited industry maxim is that one's product (whether in conventional ads or product placements) must be noticed, or attended to, to have an effect. Thus, one would likely predict that the more prominent a placement appears within a program, the more effective the placement. However, placements are much different than ads. Viewers have come to accept ads as a necessary evil (attempts to by-pass them notwithstanding) that occur between the programs they are viewing for entertainment. But what happens when the entertainment itself is altered to include a marketing message via placement? In such cases, at least when noticed, the general enjoyment of watching the program may be interrupted, and feelings of "flow" (Csikszentmihalyi, 1990) or "transportation" (Green & Brock, 2000; Green, Garst, & Brock, 2004) may diminish. Research shows that when consumers recognize a communication as a persuasive attempt, they process the information in fundamentally different ways than if they are not aware of a persuasive intent (Friestad & Wright, 1994). Thus, recognition of a persuasive attempt in the form of a product placement may induce viewers to scrutinize aspects of the placement and the placement context, to disengage from the communication,

and possibly resent the intrusion into program enjoyment (McCarty, 2004). In such cases, awareness of the product placement—which should be greater in high- than low-prominence situations—may result in more negative than positive attitudes (but would result in higher recall).

Some evidence supports this possibility. For example, when placements are more prominent because they are a major focus of a scene, increased exposure time has a positive effect on recall, but when the placements are more in the background of scenes, exposure time is unrelated to recall (Brennan, Dubas, & Babin, 1999). However, the situation becomes more complex when factors such as the extent to which the placements are integrated into the program are considered. For example, when placements are highly integrated into the program, liking for the placements is greater than when the placements were not highly integrated, but delayed recall is actually lower. In a similar manner, the obviousness of the placement has a more positive effect on liking when the placement is well-integrated into the scene than when it is not (d'Astous & Chartier, 2000; see also Russell, 2002).

#### *Measuring Product Placement Effectiveness*

The issues raised concerning execution factors such as the prominence or obviousness of the placement and possible consumer reactions to the placements bring up interesting issues regarding methods used to evaluate the effectiveness of the placements. In typical advertising research, recall is often considered a crucial measure of effectiveness and even a necessary condition for attitude change. The assumption is that recall will have a positive effect because the portrayal of the brand in the ad is invariably positive. For placements, however, this may not necessarily be the case. If, as we have speculated, certain conditions foster better recall but induce more negative attitudes (e.g., an obvious, incongruous

placement that is poorly integrated), then recall measures may be unrelated or negatively related to attitude and choice measures. Consistent with this proposition, Law and Braun (2000) found that even though product placements that were central to the plot were better remembered than placements that were not central, there was no effect of centrality on product choice.

Based on the findings just discussed, it seems clear that there is often a disjunction between memory and attitude measures. In some cases placements are recalled but attitudes are unaffected, in other cases attitudes are positively affected in conjunction with no recall effects. These situations (particularly the latter), have led a number of researchers to make a distinction between explicit and implicit memory measures when assessing product placement effects (Auty & Lewis, 2004; Yang, Roskos-Ewoldsen, & Roskos-Ewoldsen, 2004). Examples of explicit memory measures are recognition and recall, whereas implicit measures are ones such as attitudes, beliefs, and behavior, or methods that attempt to measure accessibility effects (e.g., reaction times, word fragment completion). The latter are termed implicit memory measures because it is assumed that, at least under well-controlled experimental conditions, some notice of the product placement—even if not consciously recalled—is required for attitude change or for a concept to have been made more accessible. Thus, for example, Auty and Lewis (2004) found that product placement was positively related to product choice but showed little relation with explicit recall. In a study of placement effects in video games, Yang, Roskos-Ewoldsen, Dinu, and Arpan (2006) found that participants exhibited low levels of explicit memory measured via a recognition test, but demonstrated implicit brand memory measured via a word fragment completion task.

Although the research we have reviewed represents only a subset of product

placement research, it should make clear the difficulties that this type of research presents. On the one hand, marketers for the most part want to be somewhat subtle in the placement in terms of interrupting the enjoyment of the program, but on the other hand, such subtleness makes it difficult to detect memory effects. However, as the research we have reviewed also suggests, using implicit measures of memory may be more effective in detecting subtle but potentially important effects. Clearly, the issues involved in understanding the effects of product placements are very complex, and will likely be pursued for some time to come.

#### Interactivity Effects Research

Another emerging area within advertising research—interactivity—is brought forth by the fast-growing Internet media. Unlike traditional mass media, interactive online media allow consumers to actively participate in the advertising process, select the information they receive, and build an instantaneous two-way dialogue with advertisers. Consider a typical web browsing session where a consumer encounters an advertiser's message in the form of a banner ad. Depending on the level of interest in the ad, the consumer can ignore the ad completely, view the ad but without taking any further action, or click on the ad to access a deeper layer of information present on the advertiser's website. In the last scenario, the consumer can further choose from a large amount of information on the website and view only the pages that are most relevant to him or her, creating in effect a customized advertising exposure. The advertiser, in the meantime, can capture all this information in the form of web log data to gain a better understanding of the audience and to customize future advertising offerings. As can be seen in this simple scenario, interactivity can significantly alter advertising experiences as traditionally constructed.

Although interactivity can have a far-reaching impact on advertising, a theoretical

understanding of interactivity and its effects on advertising has only begun to emerge in recent years. Early interactivity research dealt primarily with the definition (e.g., Rafaeli & Sudweeks, 1997), representation (e.g., Ghose & Dou, 1998), and measurement of the construct (e.g., Liu, 2002). More recently, researchers have started to focus more on understanding the effect of interactivity on advertising processes and outcomes and on identifying factors that work in conjunction with interactivity to produce persuasive outcomes (e.g., Sicilia, Ruiz, & Munuera, 2005; Sohn, Ci, & Lee, 2007). So far, some consensus seems to have emerged from the literature, such as the multi-dimensional nature of interactivity and its presence in both the objective and the perceptual domain. In the meantime, controversy still remains as to whether interactivity truly facilitates persuasion (Sohn et al., 2007). This section synthesizes existing research in this area, identifies consensus as well as diverging points in the literature, and points out a few important future research questions.

#### *What is Interactivity?*

Although no common definition of interactivity exists in the advertising field, three themes have emerged from the literature: (1) interactivity is a multi-dimensional construct; (2) it can reside among different entities; (3) it can be defined both as structural characteristics and as perception. On the multidimensional nature of interactivity, two-way communication and control have been suggested most often as the sub-dimensions of interactivity (Liu, 2002; McMillan & Hwang, 2002). Two-way communication refers to the bi-directional flow of information *between* two entities, and some researchers have also added to it the speed or responsiveness of the information flow (e.g., Johnson, Bruner, & Kumar, 2006; Steuer, 1992; Sundar, Kalyanaraman, & Brown, 2003). This dimension of

interactivity readily distinguishes the Internet from traditional mass media, as advertising information in those media is normally presented in one direction from advertisers to the audience without a feedback channel (Hoffman & Novak, 1996).

The control dimension of interactivity refers to the autonomy consumers have in manipulating an information flow (Ariely, 2000; Liu & Shrum, 2002; Sicilia et al., 2005). One of the earliest studies on interactivity (Bezjian-Avery, Calder, & Iacobucci, 1998), for example, manipulated interactivity by allowing consumers to determine the order in which they viewed a series of ads instead of being given a set order of presentation. Recently, however, researchers have questioned the inclusion of control as a dimension of interactivity, citing that control cannot be readily generalized into other media contexts (Johnson et al., 2006). The difficulty with presenting control as a separate construct, however, lies in the implicit tie between control and two-way communication. By allowing bi-directional flow of information, one assumes that each party has at least some level of control over the communication process. Therefore, it would be difficult to tease the two apart both theoretically and empirically.

Besides the dimensional content of interactivity, it is also necessary to specify the domain within which it resides. One issue in this area is the specification of the entities between which interactivity is assumed to exist (Stromer-Galley, 2004). Three dyads have been proposed: human-human, human-message, and human-machine (Ko, Cho, & Roberts, 2005; Liu & Shrum, 2002). The first dyad comes from an interpersonal communication perspective, and focuses on the parties engaged in the communication and the dynamics of information exchanged, often independent of the medium involved (e.g., Alba et al., 1997; Rafaeli & Sudweeks, 1997). The second perspective, human-message interactivity, most

closely resembles studies of consumer reaction to traditional advertising and has been the main focus of advertising researchers (e.g. Ariely, 2000; Cho & Leckenby, 1999). The third dyad, human-machine interactivity, focuses on users' reaction to the technical aspects of a medium and is studied most by technology researchers whose goal is to design effective and user-friendly machines and system interfaces (e.g., Gonzalez & Kasper, 1997; Rogers, 1986).

A further distinction made in the interactivity literature is whether interactivity is a structural characteristic of a medium/message or a subjective experience perceived by interacting parties (Tremayne & Dunwoody, 2001). The structural perspective considers interactivity to be an innate attribute of a medium (e.g., the Internet) or a message/environment within that medium (e.g., a website). It is created through the design features of the medium/environment (Fortin & Dholakia, 2005; Lohtia, Donthu, & Hershberger, 2003; Sicilia et al., 2005). The experiential perspective, in contrast, defines interactivity as it is perceived by the individuals engaged in an interaction (McMillan & Hwang, 2002; Yadav & Varadarajan, 2005). It is a malleable experience that is affected by structural interactivity but also varies with individual and situational factors (McMillan, 2003). Both of these approaches have been studied in the advertising context.

#### *Effects of Interactivity on Information Processing and Decision Making*

Within the realm of cognitive processes, interactivity has been posited to affect consumers' cognitive involvement with and elaboration of advertising messages (Johnson et al., 2006; Liu & Shrum, 2002). The control dimension of interactivity has been most often associated with this cognitive component of ad processing. The central thesis is that an interactive message or medium increases consumers' involvement in the communication process and potentially shifts the focus of processing toward a more central route (Johnson et

al., 2006; Sundar et al., 2003). The result of this process is more cognitive elaboration, better recall and learning (Tremayne & Dunwoody, 2001). Supporting this view, Gonzalez and Kasper (1997) found that a more interactive system led to higher decision quality than a less interactive system. In another study, Sicilia et al. (2005) found that a more interactive website not only increases the amount of elaboration but also leads to more favorable elaboration than a non-interactive website.

Interactivity is also associated with significant cognitive costs. Using the talk-aloud technique, Tremayne and Dunwoody (2001) found that user navigation of an interactive system led to more elaboration effort devoted to orientating oneself (i.e., where I am), which sometimes interfered with the rehearsal and elaboration of actual information presented by the system. The effect to this interference was confirmed in Ariely (2000), who found that the ability to control information presentation was beneficial to decision making when users' concurrent cognitive load was low but was detrimental when cognitive load was high. This negative effect of interactivity may explain the nonlinear effect of interactivity found in previous research (Fortin & Dholakia, 2005; Sundar et al., 2003). It may also explain why an interactive advertising representation led to less browsing time and lower purchase intention in Bezjian-Avery et al. (1998).

Given the double-edged effect of interactivity on cognitive processing, it is not surprising that elaboration variables (e.g., need for cognition [NFC]; Cacioppo & Petty, 1982) would moderate the effects of interactivity. However, two studies on this issue have yielded very different results. Whereas Sicilia et al. (2005) found a larger effect of interactivity on high- than low-NFC individuals, Fortin and Dholakia (2005) found the opposite to be true. This divergence in findings may be attributed to the different products

that the two studies used: computers for Sicilia et al. (2005) and power surge protectors for Fortin and Dholakia (2005). Because computers are high-involvement purchases, both low-NFC and high-NFC consumers are likely already engaging in high elaboration, and high-NFC individuals may have been better able to process the large amount of information and at the same time control the information flow. The power surge protectors used by Fortin and Dholakia (2005), in contrast, represent a more moderate amount of involvement. As a result, interactivity may have led to a shift in processing focus among low-NFC individuals who would not have devoted much thinking into the issue.

#### *Interactivity and Attitudinal Outcomes*

Studies of interactivity effects on attitudinal outcomes can be classified into two general categories depending on whether they focus on the structural or experiential aspect of interactivity. Studies of interactivity as a structural feature of an online ad (often in the form of a website) typically used experimental methodology and either manipulated interactivity through features in experimental websites or used existing websites with varying degrees of interactivity (Coyle & Thorson, 2001; Sicilia et al., 2005). So far, this stream of research has yielded ambiguous and sometimes conflicting results. While most studies confirmed a positive effect of interactivity on attitude (e.g., Fortin & Dholakia, 2005; Sicilia et al., 2005), quite a few studies also found no or even negative effects of interactivity on persuasive outcomes (e.g., Bezjian-Avery et al., 1998; Coyle & Thorson 2001).

The literature reveals two potential explanations of these divergent findings. The first is that interactivity may have a curvilinear (rather than linear) effect on attitudes. The positive effect of interactivity either reaches a plateau at moderate levels (Fortin & Dholakia, 2005) or peaks at moderate levels and then turns negative as the level of interactivity

continues to increase (Sundar et al., 2003). Therefore, the findings from past studies may simply have resided in different segments of this curve. Second, individual user preferences and experiences may have also contributed to the ambivalent results on interactivity effects. Sohn et al. (2007), for example, found a positive effect of interactivity on website attitude only when users expect the interactivity level of the website to be high. When users expect the interactivity level to be low, interactivity had a negative effect on attitude. Liu (2007) and Marcias (2003) further suggest that the effect of interactivity may be contingent on how much consumers are ready to engage in interactive communications.

In contrast with research on structural interactivity, studies of experiential interactivity have consistently found positive effects on persuasive outcomes. The shortcoming of such research, however, is the possibility of common methods bias due to the use of self-reported measures. Criticism of such research has even suggested that studying the effects of perceived interactivity is tautological and that researchers should examine structural interactivity instead (Sundar, 2004). More recent research, however, has started to synthesize the two types of interactivity studies by presenting experiential interactivity as a mediator between structural interactivity and persuasive outcomes (Lee, Lee, Kim, & Stout, 2004; Song & Zinkhan, forthcoming; Wu, 2005). These researchers argue that, although interactive mechanisms are provided to users under high interactivity conditions, it is eventually the users' idiosyncratic use and perception of these interactive features that determine the outcome of an interaction.

#### *Future Interactivity Research*

Although research on interactivity has been robust over recent years, much more work remains to be done to clarify some of the existing ambiguities. Thus far, research has

focused mostly on *whether* interactivity leads to positive persuasive outcomes. Once we have a better grasp on the direction of interactivity effects, however, a much more important research question is *how* interactivity actually affects persuasion. In other words, what is the underlying process through which interactivity affects persuasion? Does interactivity affect persuasion through its impact on cognitive information processing? Or is there a more affect-oriented and/or peripheral process that may also take place? The divergence in existing findings further suggests potential individual and situational factors that may moderate the effects of interactivity.

Existing research has paid limited attention to the actual mechanisms that are used to implement interactivity. The advertising literature, however, suggests that the executional elements of an ad, such as color (Meyers-Levy & Peracchio, 1995) and use of pictures (Miniard, Bhatla, Lord, Dickson, & Unnava, 1991), may have varying effects on persuasion depending on how they are implemented. It is reasonable to expect that interactive features that offer consumers higher control versus features that facilitate two-way communication may have differential effects on how consumer responses. Most studies thus far have focused on the control element of interactivity. More research is needed to better understand the implications of two-way communication features and to compare their effect with that of control.

As the Web moves toward the second generation Web 2.0, Internet technology has become more content-oriented, and user-generated contents are playing an even more important role in the online media. However, because many interactivity-related studies were initiated during the early stages of the Internet, they have trailed behind the evolution of technology and consumer behavior. For example, although interactivity has been

conceptualized to reside among users (e.g., Alba et al., 1997), no research on virtual communities has explicitly incorporated the concept of interactivity, despite the central role of interaction in a virtual community. The need to adapt to fundamental changes in technology will prove challenging for interactivity researchers, given the speed of technology innovation in today's environment. On the one hand, this favors the development of fundamental and systematic theories that are independent of technology (Yadav & Varadarajan, 2005). On the other hand, certain technologies create such disruptive changes in the way people communicate that they cannot be totally ignored. Interactivity researchers should endeavor to develop an underlying theory while remaining open toward new developments in the technology field and in the ways consumers utilize technologies.

#### Psycholinguistic Studies of Advertising and Brand Names

A third area of advertising research that has received much attention in recent years is the application of psycholinguistic theory to the study of advertising and other marketing communication tools. Psycholinguistics refers to the psychology of language, and research in this area investigates the mechanisms underlying language acquisition, comprehension, and use. A comprehensive review of all of the research that utilizes a psycholinguistic approach is beyond the scope of this chapter, but a brief overview of recent advances in three areas will be provided: 1) the effects of syntactic complexity, in conjunction with other variables, on the persuasiveness and memorability of advertising; 2) dual language processing of advertising among bilingual consumers; and 3) evidence for phonetic symbolism in brand names across diverse languages.

##### *Syntactic Complexity*

For many years, advertising copywriters have followed the adage of KISS ("keep it

simple, stupid”), but evidence has been mounting that higher levels of complexity in advertising might actually enhance memory for and attitudes toward advertising (Bradley & Meeds, 2002; Chamblee, Gilmore, Thomas, & Soldow, 1993; Lowrey, 1998; Macklin, Bruvold, & Shea, 1985). At the same time, however, other studies have reported contradictory results (e.g., Chebat, Gelinias-Chebat, Hombourger, & Woodside, 2003; Meeds & Bradley, 2007). In an effort to reconcile these conflicting findings, a Complexity Continuum has been proposed (Lowrey, 2008). The Complexity Continuum demonstrates how a particular passage of text can be initially placed on the continuum in terms of textual factors (primarily consisting of syntax and vocabulary), but then shift due to extra-textual factors, including advertising medium and individual difference variables (e.g., age, education, motivation). This conceptualization provides a mechanism for reconciling contradictory results in past research and shows that they are in fact complementary to one another.

To illustrate, let’s say that an ad is written at a moderate syntactic complexity level. If the ad is delivered through a print medium to young, well-educated individuals who happen to be highly motivated to process the information, the ad shifts to the easier end of the Complexity Continuum. In contrast, if that same ad is delivered through a broadcast medium to older, less educated individuals who are not as motivated to process, the ad shifts to the more complex end of the Complexity Continuum. It is the interaction between the syntactic complexity, the individual, and the medium of delivery that ultimately determines memory and persuasion outcomes.

In sum, the important contribution of this framework is the recognition that complexity effects occur in the individual during the processing of advertising messages.

Thus, although the objective complexity of a message is an important determinant of advertising response, it interacts with the medium and individual difference variables to determine final outcomes.

### *Dual-Language Processing*

Given the increasingly global business environment, there has been a recent surge in research on bilingual processing of advertising (e.g., Briley, Morris, & Simonson, 2005; Luna & Peracchio, 2001; Tavassoli & Lee, 2003). Topics investigated have included alphabetic versus logographic language processing, frame switching (the moving back and forth by bilinguals between different cultural frames), and code switching (the mixing of languages in the same utterance, as in “Oh, well, c’est la vie!”), just to name a few (for an in-depth analysis of this literature, see Carroll, Luna, & Peracchio, 2007). For example, most past advertising research using a psycholinguistic framework has been conducted in languages that are processed verbally, using a part of short-term memory known as the phonological loop. In contrast, logographic languages (e.g., Mandarin) are processed visually, with no need to use the phonological loop (Schmitt, Pan, & Tavassoli, 1994). This is particularly important for researchers interested in phonetic symbolism, which will be discussed in more detail below.

Existing findings are mixed, and much more research needs to be done to more fully understand bilingual advertising processing. The fact of the matter is that the majority of the world speaks more than one language, yet until recently, there has been a lack of research addressing this situation. Indeed, it can be quite difficult to conduct multi-language studies, in terms of both stimulus production and data collection, but it is imperative that advertising research continue to tackle this important area.

### *Phonetic Symbolism*

The existence of phonetic symbolism (i.e., the ability of the *sound* of a word alone to convey meaning, apart from the denotative aspects of the word) has been debated since 400 B.C. (Plato, 1892), and the evidence in favor of phonetic symbolism, particularly in the arena of marketing communications, has been mounting in recent years (Klink, 2000, 2003; Lowrey & Shrum, 2007; Yorkston & Menon, 2004), at least with respect to vowel sounds.

Vowels can be pronounced more toward the front of the mouth (e.g., the “ih” sound in mill) or more toward the back of the mouth (e.g., the “ah” sound in mall). In basic psycholinguistic research, both Sapir (1929) and Newman (1933) demonstrated that front vowel sounds tend to be associated with attributes such as smallness, lightness, quickness, and sharpness. In contrast, back vowel sounds tend to be associated with the opposite attributes of largeness, heaviness, slowness, and dullness. Although there are exceptions to this pattern of associations (e.g., big vs. small), the general pattern has been demonstrated across a wide variety of the world’s languages (Brown, 1958; Ultan, 1978; for a review, see Shrum & Lowrey, 2007).

Recent research has shown that these effects impact the preference for brand names for specific products. Klink (2003) discovered that sound symbolism affected perceptions of brand attributes, which in turn impacted brand liking and perceptions of taste. Yorkston and Menon (2004) found that words with back vowel sounds—which through phonetic symbolism connote concepts such as creaminess and smoothness—were preferred as brand names for an ice cream over words with front vowel sounds. Extending these findings, Lowrey and Shrum (2007) demonstrated that this preference differs as a function of product category and its related attributes. Using nonsense words (e.g., tiddip, toddip), they showed

that words with front vowel sounds—which are associated with concepts such as small, fast, quick, sharp—were preferred over words with back vowel sounds when the product category was a small convertible or a knife. However, just the opposite was the case when the product category was an SUV or hammer. In those cases, the very same words with back vowel sounds—which connote large, dull, slow—were preferred over the words with front vowel sounds. A second study that held product category constant (e.g., beer) but varied the primed attributes (name preferred for a “cool, clean, crisp-tasting beer” versus a “smooth, mellow, rich-tasting beer”) produced similar results.

One of the shortcomings in the research we have described is that a vast majority of the studies have been conducted only in English, and replications in other languages would be a significant contribution. A recent research project has started to investigate whether the effects obtained also hold for languages such as French, Spanish, and Mandarin (Lowrey, Luna, Lerman, & Shrum, 2008). These studies are also designed to uncover potential boundary conditions such as language proficiency, type of processing (visual vs. verbal), and processing constraints (such as articulatory suppression, which attempts to diminish use of the phonological loop). Although this research project is in its infancy, the results seem to indicate that phonetic symbolism is observed across languages, particularly those that are processed verbally.

### *Conclusion*

It is clear that more research needs to be conducted in all three of these areas, but it is worth noting that findings in one of these areas have important implications for the other two. Additional factors to add to the Complexity Continuum may include language proficiency, language processing style, and the fit between the brand name and product attributes. The

study of bilingual ad processing should be greatly impacted by implications from the complexity research as well as symbolism research that looks at additional languages. Clearly, researchers interested in phonetic symbolism have a number of potential boundary conditions to investigate ranging from language proficiency issues to processing burdens such as syntactic complexity.

### Conclusion

Although only a subset of emerging issues in advertising research, the general topics of product placement, interactivity, and psycholinguistics represent key areas of interest. These areas are notable because they are a departure from the mainstream topics of the last fifty years. Mainstream topics in advertising research tended to center on executional dimensions of advertising (e.g., use of humor, fear, sympathy appeals, image vs. informational appeals, celebrity endorsers, frequency of exposure), memory issues (e.g., recall and recognition), and persuasion issues (e.g., belief and attitude change). These topics are of course still well-represented in current advertising research. However, as technology has changed and consumers have the ability to interact with a medium and marketers have the ability to insert promotions digitally into a program, new areas of research necessarily are opened. With respect to persuasion, the field of psycholinguistics provides a new way of looking at the persuasiveness of communications, and shows that it is not just the denotative meaning of words we use in advertising that persuades, but the symbolic aspects of the words we use (e.g., phonetic symbolism) and the way we use them (e.g., dual-language ads) have persuasive impact as well. As new technologies are developed, and more is learned about human cognitive processing, still newer and exciting areas of research will surely develop.

## References

- Alba, J., Lynch, J., Weitz, B., Janiszewski, C., Lutz, R., Sawyer, A., & Wood, S. (1997). Interactive home shopping: Consumer, retailer, and manufacturer incentives to participate in electronic marketplaces. *Journal of Marketing*, 61 (3), 38-53.
- Ariely, D. (2000). Controlling the information flow: Effects on consumers' decision making and preference. *Journal of Consumer Research*, 27, 233-48.
- Auty, S. & Lewis, C. (2004). The “delicious paradox”: Preconscious processing of product placements by children. In L. J. Shrum (Ed.), *The psychology of entertainment media: Blurring the lines between entertainment and persuasion* (pp. 117-133). Mahwah, NJ: Erlbaum.
- Balasubramanian, S. K. (1994). Beyond advertising and publicity: Hybrid messages and public policy issues. *Journal of Advertising*, 23 (4), 29-46.
- Balasubramanian, S. K., Karrh, J. A., & Patwardhan, H. (2006). Audience response to product placements. *Journal of Advertising*, 35 (3), 115-141.
- Bezjian-Avery, A., Calder, B., & Iacobucci, D. (1998). New media interactive advertising vs. traditional advertising. *Journal of Advertising Research*, 38 (4), 23-32.
- Bhatnagar, N., Aksoy, L., & Malkoc, S. A. (2004). Embedding brands within media content: The impact of message, media, and consumer characteristics on placement efficacy. In L. J. Shrum (Ed.), *The psychology of entertainment media: Blurring the lines between entertainment and persuasion* (pp. 99-116). Mahwah, NJ: Erlbaum.
- Bradley, S. D., & Meeds, R. (2002). Surface-structure transformations and advertising slogans: The case for moderate syntactic complexity. *Psychology & Marketing*, 19, 595-619.

Brennan, I., Dubas, K. M., & Babin, L. A. (1999). The influence of product-placement type and exposure time on product-placement recognition. *International Journal of Advertising, 18*, 323-337.

Briley, D. A., Morris, M. W., & Simonson, I. (2005). Biculturals and shifting strategies: The role of language and audiences in eliciting cultural styles of decision making. *Journal of Consumer Psychology, 15*, 351-362.

Brown, R. (1958). *Words and things*. New York: The Free Press.

Cacioppo, J. T., & Petty, R. E. (1982). The need for cognition. *Journal of Personality and Social Psychology, 42*, 116-131.

Carroll, R., Luna, D., & Peracchio, L. A. (2007). Dual language processing of marketing communications. In T. M. Lowrey (Ed.), *Psycholinguistic phenomena in marketing communications* (pp. 221-246). Mahwah, NJ: Lawrence Erlbaum Associates.

Chamblee, R., Gilmore, R., Thomas, G., & Soldow, G. (1993). When copy complexity can help ad readership. *Journal of Advertising Research, 33* (2), 23-28.

Chebat, J.-C., Gelinas-Chebat, C., Hombourger, S., & Woodside, A. G. (2003). Testing consumers' motivation and linguistic ability as moderators of advertising readability. *Psychology & Marketing, 20*, 599-624.

Cho, C., & Leckenby, J. D. (1999). Interactivity as a measure of advertising effectiveness: Antecedents and consequences of interactivity in web advertising. In M. S. Roberts (Ed.), *Proceedings of the 1999 conference of the American Academy of Advertising* (pp. 162-179). Gainesville, FL: University of Florida.

Coyle, J. R., & Thorson, E. (2001). The effects of progressive levels of interactivity and vividness in web marketing sites. *Journal of Advertising, 30* (3), 65-77.

- Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience*. New York: Harper & Row.
- d'Astous, A., & Chartier, F. (2000). A study of factors affecting consumer evaluations and memory of product placements in movies. *Journal of Current Issues & Research in Advertising*, 22 (2), 31-40.
- Fortin, D. R., & Dholakia, R. R. (2005). Interactivity and vividness effects on social presence and involvement with a web-based advertisement. *Journal of Business Research*, 58, 387-96.
- Friestad, J., & Wright, P. (1994). The persuasion knowledge model: How people cope with persuasion attempts. *Journal of Consumer Research*, 22, 62-74.
- Ghose, S., & Dou, W. (1998). Interactivity functions and their impacts on the appeal of Internet presence sites. *Journal of Advertising Research*, 38 (3), 29-43.
- Gonzalez, C., & Kasper, G. M. (1997). Animation in user interfaces designed for decision support systems: The effects of image abstraction, transition, and interactivity on decision quality. *Decision Sciences*, 28, 793-823.
- Green, M. C., & Brock, T. C. (2000). The role of transportation in the persuasiveness of public narratives. *Journal of Personality and Social Psychology*, 79, 401-421.
- Green, M. C., Garst, J., & Brock, T. C. (2004). The power of fiction: Determinants and boundaries. In L. J. Shrum (Ed.), *The psychology of entertainment media: Blurring the lines between entertainment and persuasion* (pp. 161-176). Mahwah, NJ: Erlbaum.
- Hoffman, D. L., & Novak, T. P. (1996). Marketing in hypermedia computer-mediated environments: Conceptual foundations. *Journal of Marketing*, 60 (3), 50-68.
- Johnson, G. J., Bruner, G. C., & Kumar, A. (2006). Interactivity and its facets

revisited. *Journal of Advertising*, 35 (4), 35.

Klink, R. R. (2000). Creating brand names with meaning: The use of sound symbolism. *Marketing Letters*, 11, 5-20.

Klink, R. R. (2003). Creating meaningful brands: The relationship between brand name and brand mark. *Marketing Letters*, 14, 143-157.

Ko, H., Cho, C.-H., & Roberts, M. S. (2005). Internet uses and gratifications. *Journal of Advertising*, 34 (2), 57-70.

Law, S., & Braun, K. A. (2000). I'll have what she's having: Gauging the impact of product placements on viewers. *Psychology & Marketing*, 17, 1059-1075.

Law, S., & Braun-LaTour (2004). Product placements: How to measure their impact. In L. J. Shrum (Ed.), *The psychology of entertainment media: Blurring the lines between entertainment and persuasion* (pp. 63-78). Mahwah, NJ: Erlbaum.

Lee, S.-J., Lee, W.-N., Kim, H., & Stout, P. A. (2004). A comparison of objective characteristics and user perception of web sites. *Journal of Interactive Advertising*, 4, <http://www.jiad.org/vol4/no2/lee/index.htm>.

Liu, Y. (2002). Developing a scale to measure the interactivity of web sites. *Journal of Advertising Research*, 43, 207-16.

Liu, Y. (2007). Online interaction readiness: Conceptualization and measurement. *Journal of Customer Behaviour*, 6, 283-299.

Liu, Y., & Shrum, L. J. (2002). What is interactivity and is it always such a good thing? Implications of definition, person, and situation for the influence of interactivity on advertising effectiveness. *Journal of Advertising*, 31 (4), 53-64.

Lohtia, R., Donthu, N., & Hershberger, E. K. (2003). The impact of content and

design elements on banner advertising click-through rates. *Journal of Advertising Research*, 43, 410-18.

Lowrey, T. M. (1998). The effects of syntactic complexity on advertising persuasiveness. *Journal of Consumer Psychology*, 7, 187-206.

Lowrey, T. M. (2008). The case for a complexity continuum. In E. F. McQuarrie & B. J. Phillips (Eds.), *Go figure: New directions in advertising rhetoric* (pp. 159-177). Armonk, NY: ME Sharpe.

Lowrey, Tina M., Luna, D., Lerman, D., & Shrum, L. J. (2008). "Boundary conditions of the phonetic symbolism effect: Evidence in four languages. Manuscript in preparation.

Lowrey, T. M., & Shrum, L. J. (2007). Phonetic symbolism and brand name preference. *Journal of Consumer Research*, 34, 406-414.

Lowrey, T. M., Shrum, L. J., & McCarty, J. A. (2005). The future of television advertising. In Allan J. Kimmel (Ed.), *Marketing communication: Emerging trends and developments* (pp. 113-132). New York: Oxford University Press.

Luna, D., & Peracchio, L. A. (2001). Moderators of language effects in advertising to bilinguals: A psycholinguistics approach. *Journal of Consumer Research*, 28, 284-295.

Macias, W. (2003). A beginning look at the effects of interactivity, product involvement and web experience on comprehension: Brand web sites as interactive advertising. *Journal of Current Issues & Research in Advertising*, 25 (2), 31-44.

Macklin, M. C., Bruvold, N. T., & Shea, C. L. (1985). Is it always as simple as "Keep it simple!?" *Journal of Advertising*, 14 (4), 28-35.

McCarty, J. A. (2004). Product placement: The nature of the practice and potential

avenues of inquiry. In L. J. Shrum (Ed.), *The psychology of entertainment media: Blurring the lines between entertainment and persuasion* (pp. 45-61). Mahwah, NJ: Erlbaum.

McMillan, S. J. (2003). Effects of structural and perceptual factors on attitudes toward the website. *Journal of Advertising Research*, 43, 400-09.

McMillan, S. J., & Hwang, J.-S. (2002). Measurement of perceived interactivity: An exploration of communication, user control, and time in shaping perceptions of interactivity. *Journal of Advertising*, 31 (3), 41-54.

Meeds, R., & Bradley, S. D. (2007). The role of the sentence and its importance in marketing communications. In T. M. Lowrey (Ed.), *Psycholinguistic phenomena in marketing communications* (pp. 103-118). Mahwah, NJ: Lawrence Erlbaum Associates.

Meyers-Levy, J., Peracchio, L. A. (1995). Understanding the effects of color: How the correspondence between available and required resources affects attitudes. *Journal of Consumer Research*, 22, 121-38.

Miniard, P. W., Bhatla, S., Lord, K. R., Dickson, P. R., & Unnava, H. R. (1991). Picture-based persuasion processes and the moderating role of involvement. *Journal of Consumer Research*, 18, 92-107.

Newman, S. S. (1933). Further experiments in phonetic symbolism. *American Journal of Psychology*, 45, 53-75.

Plato (1892). *Cratylus*. In B. Jowett (Ed.), *The dialogues of Plato* (Vol. 1, pp. 253-289). Oxford: Clarendon.

Rafaeli, S., & Sudweeks, F. (1997). Networked interactivity. *Journal of Computer-Mediated Communication*, 2, <http://www.ascusc.org/jcmc/vol2/issue4/rafaeli.sudweeks.html>.

Rogers, E. M. (1986). *Communication technology: The new media in society*. New

York: The Free Press.

Russell, C. A. (2002). Investigating the effectiveness of product placements in television shows: The role of modality and plot connection congruence on brand name memory and attitude. *Journal of Consumer Research*, 29, 306-318.

Sapir, E. (1929). A study in phonetic symbolism. *Journal of Experimental Psychology*, 12, 225-239.

Schmitt, B. H., Pan, Y., & Tavassoli, N. T. (1994). Language and consumer memory: The impact of linguistic differences between Chinese and English. *Journal of Consumer Research*, 21, 419-431.

Shrum, L. J. & Lowrey, T. M. (2007). Sounds convey meaning: The implications of phonetic symbolism for brand name construction. In T. M. Lowrey (Ed.), *Psycholinguistic phenomena in marketing communications* (pp. 39-58): Mahwah, NJ: Erlbaum.

Sicilia, M., Ruiz, S., & Munuera, J. L. (2005). Effects of interactivity in a web site: the moderating effects of need for cognition. *Journal of Advertising*, 34 (3), 31-45.

Sohn, D., Ci, C., & Lee, B.-K. (2007). The moderating effects of expectation on the patterns of the interactivity-attitude relationship. *Journal of Advertising*, 36 (3), 109-119.

Song, J. H., & Zinkhan, G. M. (2008), "Determinants of perceived web site interactivity," *Journal of Marketing*, 72 (2), 99-113.

Steuer, J. (1992). Defining virtual reality: Dimensions determining telepresence. *Journal of Communication*, 42 (4), 73-93.

Stromer-Galley, J. (2004). Interactivity-as-product and interactivity-as-process. *Information Society*, 20, 391-94.

Sundar, S. S. (2004). Theorizing interactivity's effects. *Information Society*, 20, 385-

89.

Sundar, S. S., Kalyanaraman, S., & Brown, J. (2003). Explicating web site interactivity: Impression formation effects in political campaign sites. *Communication Research, 30*, 30-59.

Tavassoli, N. T., & Lee, Y. H. (2003). The differential interaction of auditory and visual advertising elements with Chinese and English. *Journal of Marketing Research, 40*, 468-480.

Tremayne, M., & Dunwoody, S. (2001). Interactivity, information processing, and learning on the World Wide Web. *Science Communication, 23*, 111-34.

Wu, G. (2005). The mediating role of perceived interactivity in the effect of actual interactivity on attitude toward the website. *Journal of Interactive Advertising, 5* (2), 45-60.

Yadav, M., & Varadarajan, R. (2005). Interactivity in the electronic marketplace: An exposition of the concept and implications for research. *Journal of the Academy of Marketing Science, 33* (4), 585-603.

Ulan, R. (1978). Size-sound symbolism. In T. M. Lowrey (Ed.), *Psycholinguistic phenomena in marketing communications* (pp. 103-118). Mahwah, NJ: Erlbaum.

Yang, M., Roskos-Ewoldsen, D. R., Dinu, L., & Arpan, L. M. (2006). The effectiveness of "in-game" advertising. *Journal of Advertising, 35* (4), 143-152.

Yang, M., Roskos-Ewoldsen, B., & Roskos-Ewoldsen, D. R. (2004). Mental models for brand placements. In L. J. Shrum (Ed.), *The psychology of entertainment media: Blurring the lines between entertainment and persuasion* (pp. 45-61). Mahwah, NJ: Erlbaum.

Yorkston, E. A., & Menon, G. (2004). A sound idea: Phonetic effects of brand names on consumer judgments. *Journal of Consumer Research, 31*, 43-51.

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