

# Consumer Response to Polysemous Brand Slogans

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Polysemous brand slogans have multiple meanings that may convey several product attributes. We build on extant research by suggesting that some consumers automatically access multiple meanings of a polysemous brand slogan, whereas others access only a single, immediately available meaning. A novel measure of automatic access to secondary meaning (the Secondary Meaning Access via the Automatic Route Test, or SMAART) is developed to capture this individual difference and show its consequences for consumer responses to polysemous slogans with unfavorable secondary meanings. The automatic-access account is further validated by employing the Implicit Association Test (Greenwald, McGhee, and Schwartz), suggesting that the unconscious impact of polysemous brand slogans can be more influential than intuitively expected.

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We reason metaphorically throughout most of our waking, and even our dreaming lives, but for the most part are unaware of it. (George Lakoff [1995, 229])

We surveyed 100 people and asked them: "Name a place you are likely to see skeletons." About 65% of the respondents to this *Family Feud* question named the closet, while the rest mentioned the cemetery, a school lab, and other similar sites. The scientific (in)adequacy of the show's sampling techniques notwithstanding, it is apparent that people's mental representations for the setting of a skeleton split between two possible interpretations of the question—one figurative, one literal. Phrases with multiple meanings are referred to as polysemous and are commonly used in brand slogans. Examples include Jackson Hewitt's tax preparation service advertising that "you get more in return," Pemco Insurance proclaiming that "safe drivers get it," and Sprint PCS stating that it is "the clear alternative to cellular." As the linguistic cue most associated with a

brand name, the slogan represents an important priming device that conveys information and occupies prime consumer memory space. The tag price for developing a slogan that works is often around \$1 million but comes with few guarantees of success.

Despite the topic's importance, work on polysemy is largely absent in marketing and plagued by conflicting perspectives in psycholinguistics. The present work tries to fill the conceptual gap in consumer behavior research and to contribute a new theoretical framework to the cognitive and linguistic areas. Previous work suggests that the effectiveness of polysemous brand slogans depends on three factors: the nature of the recipient, the possible meanings of the slogan, and the context in which the slogan is received. The initial focus of this article is the recipient—determining whether individuals systematically differ in their processing of polysemous expressions in general. Next, we report the results of two studies exploring how these individual differences interplay with meaning and context to affect the processing of polysemous slogans.

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## INDIVIDUAL DIFFERENCES IN MEANING ACCESS: THE SMAART SCALE

Consumers differ widely in their language abilities and disabilities (Wallendorf 2000). Whereas most individual differences in comprehension are related to higher-order abilities, we propose that basic language reflexes of the automatic kind account for some differences distinct from general intellectual and educational differences (Perfetti 1994). Recent neuropsychological research supports the existence of such linguistic-ability disparities. Ramachandran

(2005) studied patients who had a defect in the brain's left angular gyrus but were otherwise normal. When asked to explain the deeper meaning of a series of metaphors, these patients took the phrases literally, such that "the grass is greener on the other side" was interpreted as the literal judgment of the color of grass in two different locations. Patients with lesions in different brain areas correctly interpreted the metaphors' deeper meaning.

In their much-cited article, Bransford and Franks (1971) concluded that what we store in memories of conversations or messages is the gist of what is said, rather than its surface form. The extraction of gist appears to be automatic, allowing for the subsequent recall of semantic meaning, even as the surface form of the utterance quickly disappears from memory. Because multiple-meaning sentences are an artful deviation in the surface form taken by a statement (McQuarrie and Mick 1999), the question that inevitably emerges is what specific meaning or meanings will individuals appropriate when both literal and figurative meanings are possible.

The earliest conceptual account of metaphorical speech processing and meaning access adopted a multistage view that essentially proposed that individuals invariably access the literal meaning before any figurative ones (Searle 1969). A subsequent matching of the literal meaning against context in search of appropriateness was proposed to result in either acceptance of the meaning or its rejection followed by a supplementary search for a figurative match. After numerous empirical studies failed to support this account, Verbrugge (1976) articulated the revised view that it was erroneous to believe that the literal meaning is the first to be accessed merely because of its supposed cognitive simplicity and suggested that other factors play a significant role. Later, Glucksberg, Gildea, and Bookin (1982) proposed that individuals simply cannot ignore metaphors because the comprehension of metaphors is automatic and need not be mediated by access to literal meaning.

The present research joins the debate by arguing that individual differences in implicit access to meaning play an important role in consumers' ability to understand metaphorical language. Just and Carpenter (1992) argued that both processing and storage are mediated by activation, whose total available amount in working memory varies across individuals. The larger capacity of some individuals allows them to cope better with ambiguity because it apparently permits them to access and maintain multiple interpretations. Their automatic access to multiple meanings provides the inescapable meaning quality conceptualized by a parallel model in which both figurative and literal meanings easily come to mind. However, the meaning access process for lower-capacity individuals resembles a serial (one meaning at a time) model, explaining why they often have difficulty understanding metaphors. This account lies at the core of a new measure of automatic access to meaning that is described next.

The Secondary Meaning Access via the Automatic Route Test (SMAART; SMAARTS when referring to the test

score) is adapted from McCloskey and Glucksberg's (1979) test in cognitive psychology. This sentence-verification procedure is designed to see if the availability of metaphorical meanings interferes with literal false decisions. The test involves three blocks: one for learning the key assignments (e.g., hitting the Q key for true and the P key for false), one for practice sentences, and one for test sentences. In the procedure, participants are requested to verify the literal truth of sentences of the type "Some X are Y." During the test block, response latencies (accurate to the millisecond) are measured for both random target sentences such as "Some cars are snails" (literally false but figuratively true) and random filler sentences such as "Some flowers are roses" (literally true) and "Some insects are roses" (literally false). Errors are assumed to show incapacity to suppress metaphor interference and are treated as a 3,000 millisecond penalty, roughly equivalent to a 3 standard deviation latency increase for that item (note that, underscoring the importance of practice trials, such errors only occurred in 1.65% of possible instances and never twice for the same subject). The difference between latencies on metaphor and filler sentences (incremental response time) is measured and used as a proxy for automatic comprehension. If incremental response time is positive (i.e., mean response time for targets is higher than that for fillers), it is understood that interference from the available secondary figurative meaning is slowing participants' reaction time, an occurrence that classifies them as high-automatic-access (or high-SMAARTS) individuals. If the incremental response time is not positive (i.e., average response times for targets and fillers do not differ), the participants are considered low-automatic-access (or low-SMAARTS) individuals.

The SMAART pilot test employed 399 participants. The use of students from the University of Washington allowed sufficient variability in terms of verbal ability (e.g., Scholastic Aptitude Test [SAT] verbal scores ranged from 300 to 790) to represent the general population (whose mean SAT verbal score ranges from 200 to 800) and yielded a normal distribution of scores. The choice of items originated in previous work by Glucksberg et al. (1982). As predicted by psycholinguistic theory, figurative items took the longest time to answer ( $M_{\text{Fig}} = 1,554.14$  milliseconds,  $SD = 472.23$ ), followed by literal-false ( $M_{\text{LitF}} = 1,453.58$ ,  $SD = 473.80$ ) and literal-true items ( $M_{\text{LitT}} = 1,381.17$ ,  $SD = 422.03$ ). In subsequent paired *t*-tests, all three comparisons emerged as significant ( $p < .001$ ). Finally, as an indication of the entire scale's internal consistency, the correlation between two half tests from SMAART was .82 (.90 with the Spearman-Brown prophesy formula).

The cognitive-psychology literature has speculated that at the basis of the ability captured by SMAART lies an inherently larger working-memory capacity. We developed and used a computer-adapted version of Daneman and Carpenter's Reading Span Test that requires participants to remember the last words of a series of 13–16-word sentences (for details on the procedure, see Daneman and Carpenter [1980]). Scores on the Reading Span Test and SMAART

indeed correlated ( $r = .36$ ,  $N = 51$ ,  $p < .03$ ), supporting the view that the automatic access to secondary meanings is related to working-memory capacity. Support for the view that the process is automatic is found by comparing SMAART scores with three other ability measures. First, SMAART scores are uncorrelated with SAT verbal scores ( $r = -.003$ ,  $N = 184$ , NS), a test that partially reflects one's education. Second, they are slightly correlated with the Polychronic Attitude Index (Kaufman, Lane, and Lindquist 1991), which measures individuals' self-reported belief in their ability to multitask (i.e., engage in multiple concomitant behaviors;  $r = -.13$ ,  $N = 184$ ,  $p < .07$ ). The third measure was the Styles of Processing Scale (SOP; Childers, Houston, and Heckler 1985), based on the proposal that verbally inclined individuals differ from visually inclined types. Because our measure addresses automatic processes that tap into a different cognitive route, it should not correlate with SOP, as observed ( $r = .09$ ,  $N = 184$ , NS).

An alternative conceptual account for the processes underlying SMAART is that all individuals are equally able to access the secondary meaning automatically, but those scoring low on our measure are simply more efficient in quickly suppressing the irrelevant meaning. If so, one would expect these same individuals also to be superior at a task that requires the suppression of the irrelevant literal meaning. To test this account, a task was developed in which participants were given a set of dual-meaning sentences and were required to choose the word that would complete the figurative paraphrase of the original. For example, the sentence "Dana's coworkers are a family" was followed by the choice of *caring* and *related* as possible completions to "Dana's coworkers are," under the instructions to choose the word that would produce a figurative paraphrase (in this case, *caring*). Response latencies and choice errors were recorded by specially designed computer software, with the understanding that high average latency (across a series of 15 sentences) would be due to interference from the irrelevant literal meaning. Individuals completed both the SMAART and the alternative task on separate days. The latency scores on the two measures correlated significantly but negatively ( $r = -.14$ ,  $N = 228$ ,  $p < .04$ ), suggesting that, contrary to the alternative explanation, high-SMAARTS individuals experienced less interference from the irrelevant literal meaning than low-SMAARTS individuals. This finding supports the view that access to figurative meanings differentiates high- and low-SMAARTS individuals.

### CONSUMER RESPONSE TO POLYSEMOUS ADVERTISING

Individual proficiency in terms of consumers' evaluation and comprehension of figurative language (e.g., cultural competency, involvement, expertise, functional literacy, attribute-mapping ability, etc.) has been identified as a moderator in the processing of figurative advertising. For example, McQuarrie and Mick (1999) examined the impact

of several specific stylistic elements in advertising: rhyme, antithesis, metaphor, and pun. Using visual rhetorical figures paralleling those found in language, these elements produced more elaboration and led to more favorable attitudes toward the ad. However, these effects significantly diminished or even disappeared for those individuals lacking the capacity required to adequately appreciate the contemporary American ads under review, leading the authors to postulate cultural competency as an important moderating variable. Similarly, Roehm and Sternthal (2001) addressed the persuasive impact of analogies as a promotional vehicle for novel products and found that analogies are persuasive only to the extent that consumers possess both the ability and the resources to map attributes of the base product onto the novel brand.

It is herein proposed that polysemous advertising slogans are processed differentially by consumers, according to their meaning-access ability (captured by SMAART). Specifically, the processing of such slogans is proposed to be dissociated across a cognitive and an affective route, with lower-ability individuals limited to the latter and higher-ability individuals capable of engaging in a deeper processing of meaning that is both conscious and automatic.

Recent methodological advances in our ability to directly measure implicit cognition and attitude formation are critical in providing empirical corroboration for the automatic meaning-access account. The Implicit Association Test (IAT; Greenwald, McGhee, and Schwartz 1998) is employed in order to capture consumers' comprehension of polysemous slogan meanings at a subconscious (and previously undetectable) level. In the IAT, a subject responds to a series of items that are to be classified into four categories—typically, two representing a concept discrimination such as flowers versus insects and two representing an attribute discrimination such as pleasant versus unpleasant valence. Subjects are asked to respond rapidly with a right-hand key press to items representing one concept and one attribute (e.g., insects and pleasant), and with a left-hand key press to items from the remaining two categories (e.g., flowers and unpleasant). Subjects then perform a second task in which the key assignment for one of the pairs is switched (such that flowers and pleasant share a response, likewise, insects and unpleasant). The IAT produces measures derived from latencies of responses to these two tasks and interpreted in terms of association strengths, by assuming that subjects respond more rapidly when the concept and attribute mapped onto the same response are strongly associated (e.g., flowers and pleasant) than when they are weakly associated (e.g., insects and pleasant).

The previous paragraphs have provided the conceptual and methodological framework for the theoretical issue of interest, positing that some individuals exhibit superior access to secondary meaning. For high-SMAARTS consumers, compared to low-SMAARTS consumers, automatic access to secondary meaning should result in a greater association of the secondary meaning of a polysemous slogan with the advertised brand. The most stringent test of

this account would involve situations most likely to inhibit awareness of the secondary meaning, that is, slogans whose context (ad copy) supports the primary meaning (since this puts the maximum amount of strain on the ability to access the secondary meaning). Brand evaluations, in turn, should depend on the valence of the secondary meaning. It is thus possible to observe a subtractive effect when the secondary meaning is negatively valenced. Formally put:

- H1:** After exposure to an advertisement employing a polysemous slogan with a negative secondary meaning, consumers with high automatic access (SMAARTS) will show stronger implicit associations between the promoted brand and the negative attribute implied by the slogan than consumers with low automatic access (SMAARTS).
- H2:** After exposure to an advertisement employing a polysemous slogan with a negative secondary meaning, consumers with high automatic access (SMAARTS) will show less favorable explicit attitudes toward the brand than consumers with low automatic access (SMAARTS).

## STUDY 1

*Stimuli.* Two versions of the test advertisement were developed for a particular brand (Cingular). The implicit test employed a comparable brand (Verizon) as the balancing category. Information about the focal wireless service was presented in a PowerPoint show presentation, across several different frames that highlighted its wide coverage, strong signal, and modern available phones. This suggested a service that is both at the forefront of technological sophistication and beyond any comparable competing offerings. The advertisements were identical except for the brand slogans that were modified to match the treatment condition.

The meaning variable included first the primary (literal) version of the slogan (“Redefining the Best”) suggesting the improved and unequaled attributes possessed by the promoted brand. The polysemous version was “Raising the Bar,” with the primary meaning just described plus a secondary meaning hinting at the difficulty one has in qualifying for the service or meeting the requirements (e.g., credit score and contract length) implied by such an elite service.

*Participants, Measures, and Procedure.* One hundred twenty-nine college students at Georgetown University (all native English speakers) took part in the study in return for partial credit toward fulfilling the requirements of an introductory marketing class. The design was a 2 (slogan meaning)  $\times$  2 (SMAARTS) between-subjects factorial, with SMAARTS as a measured variable. Multiple item measures for consumer attitudes (toward the ad,  $A_{Ad}$ , and brand,  $A_{Brand}$ ) were employed as dependent variables. They each consisted of five seven-point bipolar scales, respectively, with good Cronbach’s alpha reliabilities ( $> .85$ ). Cognitive response

was assessed with an open-ended question requesting participants to describe in their own words the message conveyed by the advertisement slogan (later coded for mentioning the accessibility aspect or not). The IAT task used brand-logo photos as items for each brand and six adjectives as items representing inaccessible and accessible.

Participants were randomly assigned to one of two advertisements for the focal brand, followed by the collection of explicit dependent measures ( $A_{Ad}$ ,  $A_{Brand}$ , and cognitive responses). Two questions required participants to recall the brand slogan they had seen and explain what it was trying to convey. Concluding the explicit part of the study, two questions gauged participants’ perceptions of the difficulty consumers would have qualifying for Cingular (vs. Verizon) service (from 1 = much easier to 5 = much more difficult) and the amount of restrictions a contract with Cingular (vs. Verizon) would involve (from 1 = much fewer to 5 = much more). After about 10 minutes of filler tasks, participants performed the IAT. At the end of the session, participants’ ability to access meanings automatically was assessed via SMAART. Finally, they were debriefed and thanked.

*Results.* Analysis of the implicit (IAT) responses revealed a significant interaction between meaning and SMAARTS ( $F(1, 126) = 4.40, p < .04$ ). Planned contrasts between the two types of participants’ responses on the IAT in the polysemous slogan condition found a significant difference between their log-transformed latencies ( $M_{Low} = -.02, SE = .02, M_{High} = .04, SE = .02; t(67) = -1.96, p < .05$ ), confirming that high-automatic-access individuals are more likely to associate the negative secondary meaning with the advertised brand than low-automatic-access individuals (based on the setup of the specific IAT task, high log-transformed values suggest a stronger association of Cingular and inaccessible, whereas low values describe a stronger Cingular-accessible association).

Data coding for the cognitive responses listed revealed that only one subject in the polysemous slogan condition (“Raising the Bar”) mentioned that the focal brand might be putting itself out of consumers’ reach. When asked to interpret the possible meanings being conveyed by each slogan, responses were limited to either noting Cingular’s market leadership or its superior signal strength (reinforced by the actual ads present in the media at testing time). Participants also responded to two questions directly juxtaposing Cingular and Verizon service. A pair of linear regressions revealed that neither slogan type nor consumer SMAARTS predicted their answers and that in general they did not show differences in terms of their explicit evaluation of how accessible the two companies were or how restrictive their contracts would be. These results held, even when participants’ own cell phone service provider was considered. Thus, implicit associations operated distinctly from top-of-mind explicit associations.

Analysis of attitudes toward the brand ( $A_{Brand}$ ) revealed a significant meaning by SMAARTS interaction ( $F(1, 128) = 7.56, p < .01$ ). Planned contrasts between high- and low-

SMAARTS participants' attitudes after exposure to the polysemous slogans support the prediction of hypothesis 2 (see table 1). High-automatic-access-to-meaning individuals had a less favorable attitude toward the advertised brand than low-automatic-access individuals ( $M_{Low} = 5.25$ ,  $SE = .11$ ,  $M_{High} = 4.63$ ,  $SE = .19$ ;  $t(66) = 2.33$ ,  $p < .03$ ). An ANOVA of the attitude toward the ad ( $A_{Ad}$ ), revealed a significant interaction between meaning and SMAARTS ( $F(1, 128) = 4.53$ ,  $p < .04$ ). Planned contrasts revealed that low-SMAARTS participants expressed a greater liking of the polysemous slogan than high-SMAARTS individuals ( $M_{Low} = 5.01$ ,  $SE = .10$ ,  $M_{High} = 4.46$ ,  $SE = .17$ ;  $t(66) = 2.95$ ,  $p < .01$ ).

*Discussion.* High-automatic-access individuals expressed less favorable attitudes toward an advertised brand than low-automatic-access individuals when the brand used a polysemous slogan with a negative secondary meaning. The automatic-association account is supported by the significant IAT and insignificant explicit-association results: exposure to a polysemous slogan with a negative secondary meaning was more likely to produce an implicit but not an explicit association of this negative thought with the advertised brand for high-automatic-access consumers than for those with low automatic access. An unexpected greater preference expressed by low-access participants for the polysemous slogan ad with a negative secondary meaning suggests that their advertising evaluations may follow a different pattern relative to high-access consumers. Study 2 was conducted to address this possibility and clarify the processing differences between high- and low-automatic-access individuals.

## STUDY 2

Although we found support for the theoretical account positing individual differences in the occurrence of implicit access to secondary meaning among consumers, several issues emerged suggesting the need for additional research. First, it was observed in study 1 that low-automatic-access participants rated the ad with the polysemous slogan more favorably than the ad with a single meaning, which was not the case for the high-automatic-access group. A meta-analysis that included two polysemous and four literal slogans from two pilot studies not reported here indicated that this is a statistically reliable phenomenon. This suggests that these individuals might simply appreciate the art of polysemy without automatically accessing the multiple meanings.

Meyers-Levy and Malaviya (1999) developed an integrative framework of persuasion theory wherein they posited the existence of an experiential-processing strategy. In this case, the process that mediates judgments involves "not message cues per se but the elicitation and interpretation of sensations or autonomic responses that emerge from the very process of processing" (46). Judgments that are based on these sensations may require the most meager level of cognitive resources, as evidenced by experiential processing

**TABLE 1**  
STUDY 1 RESULTS

	Literal "Redefining the best"		Polysemous "Raising the bar"	
	Mean	SE	Mean	SE
$A_{Ad}$ :				
Low SMAARTS	4.80	.21	5.01	.10
High SMAARTS	4.92	.16	4.46	.17
$A_{Brand}$ :				
Low SMAARTS	4.94	.18	5.25	.11
High SMAARTS	5.19	.16	4.63	.19
IAT:				
Low SMAARTS	-.03	.03	-.02	.02
High SMAARTS	-.06	.02	.04	.02

NOTE.—IAT = Implicit Association Test.

having been demonstrated most frequently in conditions in which cognitive capacity is severely constrained (e.g., subliminal stimulus exposure and divided attention). It is thus possible that low-SMAARTS individuals engage in an experiential type of processing that is limited to positive sensations residing in the presence of metaphorical speech without access to its meaning.

Indeed, research by Gerrig and Healy (1983) posits that the processes of comprehending and appreciating a metaphor are dissociated and do not always occur simultaneously. It makes intuitive sense, therefore, to assume that—while perhaps aware somehow of the presence of figurative speech—low-SMAARTS individuals do not generate enough of the meaning to understand it (due to either an inability or lack of resources). However, the mere appreciation in the absence of comprehension subsequently leads to positive affect. Formally put:

**H3:** When initially evaluating slogans, individuals with low automatic access (SMAARTS) will rate polysemous slogans more favorably than nonpolysemous slogans.

The second objective was to better understand the nature of meaning access for low-automatic-access consumers. One view is that these individuals lack the verbal skills to retrieve the multiple meanings of polysemous slogans (implicitly and explicitly unable). Another is that these individuals have this ability, but they simply take longer to do it (implicitly unable but explicitly able under specific conditions). If the latter is true, then providing the motivation and the time should enable them to match the high-automatic-access individuals.

**H4:** When prompted and allowed time, individuals with low automatic access (SMAARTS) will evidence as much understanding of multiple meanings as high-automatic-access (SMAARTS) individuals.

*Stimuli.* A series of 14 advertising slogans was provided to participants under the pretext of helping an ad

agency choose those that appeal to consumers. The slogans were balanced in terms of their meaning, with seven literal (e.g., "You have all our attention") and seven polysemous (e.g., "Holding the world together").

*Participants, Measures, and Procedure.* One hundred sixty-one college students at the University of Washington (all native English speakers) took part in the study in return for partial credit toward fulfilling the requirements of an introductory marketing class. Participants were exposed to the series of slogans and requested to first provide their immediate evaluations of personal liking of each. Subsequently, they were also asked to think of two applicable product categories. No time limit was set for the latter task, which was eventually observed to take about 10 minutes overall. Next, participants performed the SMAART. Finally, they were debriefed and thanked. Dependent measures included participants' personal liking of each slogan on a scale of one (disliked it) to three (liked it), followed by an open-ended question requesting the listing of two product categories that the slogan would be best suited for.

*Results.* Analysis of variance found a significant interaction between slogan meaning (a within-subjects variable) and SMAARTS:  $F(1, 159) = 5.86, p < .02$ . Contrasts within the high-SMAARTS group found no difference in terms of their liking of literal versus polysemous slogans. However, low-SMAARTS participants showed a preference for the polysemous versions ( $M_{\text{Lit}} = 1.98, SD = .36, M_{\text{Poly}} = 2.18, SD = .36; t(79) = 4.15, p < .001$ ). This result suggests that automatic access is not a requirement for appreciating polysemous slogans.

Using the second set of measures, participants' choices of applicable product categories for each slogan were coded for showing access to both meanings or not. For example, providing both phone company and tape to the polysemous "Holding the world together" was coded as one, whereas staples and tape was coded as zero. Incomplete responses were coded as zero. The zero or one scores for these responses were added to create a composite measure of polysemous-meaning access, with a maximum possible score of seven. The *t*-tests between the two groups of consumers found that all individuals were equally likely to provide dual-meaning responses ( $M_{\text{High}} = 3.73, SD = 1.51; M_{\text{Low}} = 3.45, SD = 1.68, t(159) = -1.10, NS$ ).

*Discussion.* Results for study 2 show that, consistent with results from studies exposing individuals to ads employing polysemous slogans, individuals with low automatic access have an inherent preference for polysemous versus literal advertising slogans. This supports viewing their reactions to multiple-meaning communications as experiential (Meyers-Levy and Malaviya 1999) and affect driven, within a process that can be described as "appreciation in the absence of comprehension." Further, study 2's results show that prompting low-automatic-access consumers to go beyond the immediately available meaning (requiring supplementary processing resources) and providing adequate time (by relaxing the response limits) overcomes much of their

nonuse of the automatic route to meaning. Comprehension of polysemy is therefore not out of their reach but simply requires supplementing the amount of resources devoted to processing.

## GENERAL DISCUSSION AND CONCLUSION

Two experiments support a theoretical account of meaning access positing that consumers differ in their response to advertising using polysemous slogans because of differences in their ability to automatically access the secondary meanings contained in such slogans. Efforts to develop a scale to measure this ability were successful: the scale was shown to be reliable, to score individuals so that the ability appears normally distributed, to be distinct from other verbal-ability measures, and to correlate positively with a measure of working memory—presumed to be a factor underlying this ability. Additional support is provided by the observed differences between those scoring higher on the scale versus those scoring lower in their implicit and explicit reactions to ads employing polysemous slogans (study 1) and to the slogans themselves (study 2).

The theoretical account used to develop SMAART and explain the interaction between the multiple meanings of advertising slogans and consumer processing abilities contributes to the psychological debate about how individuals process figurative speech (i.e., serially as first proposed by Searle [1969] or in parallel as subsequently argued by Verbrugge [1976]). It suggests focusing the debate on (a) perceiving the issue as dealing with primary-secondary and not merely literal-figurative access and (b) accounting for individuals' differential ability to access meaning at implicit levels.

Understanding individual differences in the automatic-access-to-secondary-meaning ability on advertising responses is important. It was reliably found that individuals with high automatic access had a stronger implicit association between the advertised brand and the negative attribute implied by the secondary meaning than those with low automatic access. With the explicit measures (e.g., unaided recall or open-ended questions), there was little evidence of a difference. These results support the view that the secondary meanings are often processed automatically. Further, despite the low level of conscious awareness, a stronger implicit association of the negative attribute with the advertised brand resulted in high-automatic-access participants' reporting less favorable attitudes toward it than low-automatic-access participants reported.

Although the conceptual focus of much of this research is on the high-automatic-access individuals, several interesting results occurred for the low-automatic-access participants. One is that their ability to access the secondary meaning appears to be a consequence of a more limited working memory and possibly less interest in thinking about the possible multiple meanings. It was shown in study 2 that when given the motivation and time, low-automatic-access

individuals perform at the same level as the high-automatic-access individuals. Recent work in psychology (see Galinsky and Glucksberg 2000) suggests that preexposure priming with secondary-meaning cues may help low-automatic individuals achieve full comprehension. Another curious aspect of the low-automatic-access individuals is that they consistently expressed more favorable attitudes toward advertising using polysemous slogans than to advertising that did not. Because this was not the case for the high-automatic-access individuals, it cannot be explained by their better wording. Although one might expect that the high-automatic-access individuals' gaining closure by recognizing and retrieving the multiple meanings of the polysemous slogan would enhance their appreciation of polysemous slogans, it may be that incomplete processing keeps the slogan interesting to the low-automatic-access individuals, much as a mystery novel entertains many readers. High-automatic-access participants in study 2 may not have shown better liking of polysemous slogans because their attitudes were purely driven by the valence of meanings and did not incorporate the favorableness of the experiential appeal these slogans present for low-access consumers.

Several issues remain for future research. First, the slogan used in study 1 had a negative secondary meaning and therefore was expected to have a subtractive effect. This prediction is supported by the finding that the high-automatic-access individuals (those expected to access the negative-attribute meaning) were less favorable toward the advertised brand after exposure to the polysemous ad than after seeing the literal ad. Future research should consider whether there is an additive effect for the high-automatic-access-to-meaning individuals. Do they respond more favorably when a polysemous ad presents a positive attribute in its secondary meaning compared to when it is presented directly via a single-meaning slogan? If so, then polysemous slogans might have hidden persuasive qualities not previously realized.

A second issue for future research entails exploring the implicit-explicit relationships among feature associations, affect, and explicit attitudes. In this research, the effect of the ad employing a polysemous slogan on high-automatic-access individuals appears straightforward. Relative to low-access individuals, they evidenced a stronger implicit association between the negative attribute and the advertised brand, resulting in a less favorable attitude toward the brand, despite no effect on their attitude toward the ad. The situation is very different for the low-automatic-access individuals. After exposure to an ad with a polysemous slogan implying a negative attribute, they evidenced no association between the negative attribute and the advertised brand. However, they had a more favorable attitude toward the ad. These differences are not easily explained by the meanings suggested by the slogans and are an indication of an affective reaction to the slogan that influences implicit and explicit responses. Apparently it is the appreciation with or without comprehension (conceptualized by Gerrig and Healy [1983]) that marketers intuitively presume to universally occur when

they indiscriminately use polysemy in their promotions. Cognitive researchers have noticed this as well: "Advertisers have gotten hold of the idea that ads using . . . several intended meanings [are better]" (Mueller and Gibbs 1987, 63). The present article cautions that this intuitive account is incomplete and is even erroneous in the case of consumers that exhibit high automatic access.

Finally, there are potential consumer-welfare implications of this research. In his work addressing consumers' inferential beliefs, Kardes (1988) suggested that individuals often code presented and inferred propositions into a single cognitive unit. The subsequent retrieval of this entire unit from memory may lead to biased judgments (essentially due to source monitoring errors) and suboptimal decisions. The parallel to the case of polysemy is apparent. As shown by our results, it may be possible that unwarranted secondary meanings (not available for explicit evaluation but operating unconsciously nonetheless) be inferred as actual product claims. For example, "Works like a dream" is the slogan that drug maker Sanofi-Aventis uses for its Ambien sleeping pills. Whereas the slogan makes the drug's recommended use immediately salient, it may also discourage consumers from closely scrutinizing some of its negative side effects or from trying substitutes (after all, this pill appears to be a flawless solution to sleeplessness). The implied power of polysemy to both inform and misinform should be apparent, and efforts should be made to understand it more fully in future research.

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