Influencing Consumer Judgments Using Autobiographical Memories: A Self-Referencing Perspective

Kodak ads frequently use nostalgic photographs of past events and admonish consumers not to trust their memories to anything less than Kodak film. L.L. Bean ran a series of ads in which people reminisce about old times, growing up, and family rituals. In ads for Lane Cedar chests, young women think back to their prom, their wedding, or the birth of their child, and the ads suggest that a cedar chest could preserve memories too precious to be erased by time. The common element in all these ads is that they try to evoke fond memories of consumers’ past personal experiences. Understanding the relationship between such personal or autobiographical memories and information processing is an important marketing issue.

Autobiographical memories can be defined as memories of past personal experiences (Brewer 1986; Tulving 1985). One important component of such memories is emotion or affect (e.g., Baumgartner, Sujan, and Bettman 1992; Pillemer, in press). As noted, marketing stimuli such as ads often try to evoke autobiographical memories. By encouraging the retrieval of affective autobiographical memories, marketing stimuli may influence consumers’ judgment processes. That is, consumers’ judgments may be based more on the feelings and emotions aroused by the retrieved autobiographical episode(s) and less on “cold” analysis of product information.

The possible effect of autobiographical memory retrieval on judgment processes has gone largely untested (however, see Alwitt 1983; Krugman 1965, 1967; Leavitt, Waddell, and Wells 1970; and Thorson and Friestad 1989 for exceptions). Baumgartner, Sujan, and Bettman (1992) tested the potential effects of retrieval of autobiographical episodes on judgments. They argue that cuing...
autobiographical memories is one way by which advertisements may evoke feelings and emotional responses. They find that autobiographical memories involving products and product usage experiences often contain affect. Furthermore, they show that the retrieval of autobiographical memories changes consumers' thought processes so that there is more focus on personal memories and their associated affect and reduced analysis of and memory for product information. In addition, they demonstrate that increased retrieval of mostly positive autobiographical memories leads to more favorable attitudes toward the ad. Despite these effects on thought processes and attitude toward the ad, they find only equivocal support for the notion that the retrieval of autobiographical memories influences brand evaluations (no support in Experiment 1, minimal support in Experiment 2, and support in Experiment 3). They argue that understanding these mixed results requires a more complete specification of the factors affecting the relationship between autobiographical retrievals and judgments.

The purpose of the current research is to provide and test such a specification. Thus, in this article we extend previous research in at least two important ways. First, we more completely detail and test the mechanisms by which affect from autobiographical memories influences brand and ad evaluations. Second, we investigate the conditions that facilitate this transfer of affect from the retrieved memory to the ad and brand. To achieve both objectives, we first cast autobiographical memory retrievals within the broader stream of research on self-referencing.

**AUTobiographical retrievals: A self-referencing perspective**

The retrieval of autobiographical memories can be conceptualized as a special case of self-referencing, that is, of accessing knowledge structures about the self (Brewer 1986). However, rather than retrieving some generic or abstract notion of the self, a specific personal experience is retrieved containing time and context cues. What makes autobiographical retrievals special is that several studies attest to the affective quality of autobiographical memories (e.g., Baumgartner, Sujan, and Bettman 1992; Brewer 1988). Furthermore, authors argue that “cold” experiences are not well remembered as separate instances because they become schematized (e.g., Menon 1992). This suggests that with the passage of time the bulk of our autobiographical memories that remain “intact” involve emotion. Furthermore, such affective content may not accompany the retrieval of more abstract self-related knowledge structures or may be present in more muted forms.

Despite autobiographical memories’ special affective status, their retrieval as an information processing strategy is likely to share many of the strengths and liabilities of other forms of self-referencing. Referencing, or thinking about, the self is an attention-consuming task; with an increase in self-focus, attention to the environment diminishes (Carver and Scheier 1981) and there may be interference with the encoding of new information (Vallacher 1978). More specifically, in a communications context, Krugman (1967) found an inverse relationship between ad recall and the number of thoughts connecting the ad’s message to one’s personal life. Mick (1992) hypothesized and demonstrated that message elaborations derived from self-knowledge and self-experiences have positive impact on message recall up to some point but then become disruptive. Baumgartner, Sujan, and Bettman (1992) also argued and demonstrated that increased retrieval of autobiographical memories changes the content of consumers’ thoughts. Thoughts are more focused on the autobiographical episode, and thoughts about, and memory for, product features become less accessible.

Note that all these arguments assume a relatively fixed-capacity model of attention but take no particular stand on why the self attracts attention at the cost of external information. Possible explanations include both ability-based views (e.g., self-referencing is a cognitively demanding task because the self represents a large and complex cognitive structure; cf. Yalch and Sternglass 1985) and motivational perspectives (e.g., self-related information is of high relevance and is therefore a particularly salient distractor from other sources of information; cf. Baumgartner, Sujan, and Bettman 1992). Noting that self-referencing can be disruptive for message learning is necessary for developing our hypotheses, but distinguishing between these alternative perspectives is not crucial.

We examine the effects of self-referencing (i.e., retrieving autobiographical memories) on memory and judgment in a persuasion context. We propose that in a communications context two conditions are important: (1) a self-related knowledge structure (in our case, an autobiographical memory) that has strong positive affect associated with it must be employed and (2) the target stimulus (the ad and/or the advocated brand) has to be closely linked to the self-related knowledge. More specifically, we hypothesize that by linking the target stimulus to the self-related knowledge, the affect associated with that knowledge will be transferred to the ad and/or brand. Thus ad and brand evaluations will be positively impacted. Note that this positive impact of self-referencing on brand and ad judgments will occur in spite of the potentially detrimental effects of self-referencing on learning about the brand’s attributes and features. Mick’s (1992) results support this pattern of relationships. His data demonstrate that deep comprehension levels (on the basis of self-knowledge and self-experiences) were dysfunctional for message learning but were positively related to ad and brand attitudes (though the effects on brand attitudes were relatively small).

In the next section, we detail the mechanisms by which and the conditions under which affect from the self-related knowledge base is transferred to the ad or brand. Given the importance of using an affectively charged self-related knowledge structure, we examine these processes.
using autobiographical memories as the self-related knowledge of interest.

AFFECT TRANSFER FROM AUTOBIOGRAPHICAL MEMORIES TO AD AND BRAND JUDGMENTS

Focus on Autobiographical Affect and the Affect Transfer Mechanism

Several researchers have conjectured that consumers may retrieve autobiographical memories during exposure to product information (e.g., Krugman 1965, 1967). The interest in nostalgia in advertising (e.g., Holbrook and Schindler 1991; Unger, McConocha, and Faier 1991) testifies to advertising's ability to cue or prime such autobiographical memories. Furthermore, Baumgartner, Sujan, and Bettman (1992) show that the degree to which autobiographical memories are evoked can be manipulated by an ad.

What are the effects of increasing such retrievals? As argued earlier, with increased retrieval of autobiographical memories, thoughts are more focused on the autobiographical episode, and thoughts about product features and the analysis of these features are less accessible. In addition, consumers' thoughts are also likely to be more affective in nature, since remembering affect-laden personal experiences can be accompanied by a reliving of the original emotion (Baumgartner, Sujan, and Bettman 1992). This emotion is likely to be positive because there is a bias toward remembering positive episodes from one's life and because ads often encourage the retrieval of pleasant rather than unpleasant memories. Clearly some types of ads rely on personally experienced negative emotions (e.g., guilt, fear, or embarrassment) as motivators; our hypotheses do not apply to such ads. Based on the foregoing argument, which closely follows Baumgartner, Sujan, and Bettman (1992), we predict the following hypotheses:

H1: Encouraging retrievals of autobiographical memories during exposure to product information results in a. more thoughts about past personal experiences and b. higher levels of net positive affect, compared to when autobiographical memory retrievals are not encouraged.

H2: Encouraging retrievals of autobiographical memories during exposure to product information results in a. fewer thoughts about the product's features and b. reduced recall of the product's features, compared to when autobiographical memory retrievals are not encouraged.

This change in thought processes is likely to be accompanied by an increased tendency to use affective inputs for making evaluative judgments (i.e., affect associated with the autobiographical episode is aroused) and hence a reduced tendency to analytically review product features and benefits. This shift in the mix of influences on judgment processes occurs because the retrieval of autobiographical memories serves to focus attention on the associated affect and away from product arguments.

It is difficult to predict how judgment strategies for ad evaluation might change in the context of autobiographical memories. Ad evaluations are often highly correlated with the extent to which an ad generates feelings (Ilsen 1989) and to a lesser extent with product information. A meta-analysis of attitude toward the ad corroborates this notion (Brown and Stayman 1992). The meta-analysis showed that across conditions ad evaluations and feelings were correlated more highly than ad evaluations and brand cognitions. Thus no differential reliance on affect for ad evaluations is predicted when autobiographical memories are more or less accessible.

H3: Ad evaluations are significantly correlated with affect both when autobiographical memory retrievals are and are not encouraged.

Conditions Facilitating Affect Transfer

Despite this potential change in the basis for evaluation—greater reliance on affective inputs rather than feature analysis in the context of increased autobiographical retrievals—there still may be no influence of autobiographical memories on ad and brand evaluations. Whether evaluations are affected depends not only on whether autobiographical affect is accessible as a basis for evaluation, but also on the extent of carry-over or transfer of this affect to the judgment at hand. We hypothesize that the extent of carry-over or transfer depends on the perceived link between the memory and the object of judgment. In an advertising context, this link between the memory and object is likely to be contingent on a number of factors, including the type of judgment to be made (i.e., brand judgment or ad judgment). We hypothesize that when the characters and/or situations portrayed in an ad serve as explicit cues to prime or stimulate autobiographical memories, the link between the retrieved memory and the ad is direct and is perceived readily and naturally by consumers. Thus, we hypothesize that ad evaluations are directly and unconditionally impacted by the affect associated with autobiographical memories.

H4: Encouraging retrievals of autobiographical memories during exposure to product information results in more favorable ad evaluations compared with when autobiographical memory retrievals are not encouraged.

The link between the affect carried by autobiographical memories and brand judgments is likely to be more contingent. Because the brand is embedded in and related to the events and characters shown in the ad, brand evaluations might be impacted by the affective charge of
the autobiographical episode. However, there is not necessarily any direct perceived link between the autobiographical episode and the advertised brand in a given ad, and the mixed results reported by Baumgartner, Sujan, and Bettman (1992) demonstrate that affect transfer is not automatic in the case of brand judgments. We argue that the extent of transfer of the autobiographical affect to the brand is likely to be contingent on the presence (high level of transfer) or absence (low level of transfer) of an explicitly forged association or link between the memory and the brand within the ad (e.g., telling the individual that a special experience can be relived or heightened by use of the advertised brand—we discuss such an association later in the context of our studies). Thus, we hypothesize the following interaction:

H₀: When an explicit link is forged between the brand and memory, the increase in brand evaluations between the autobiographical retrievals encouraged and not encouraged conditions is greater than the increase when no such link is forged.

One final implication of the greater reliance on affect transfer, as opposed to product features, is that the strength (or valence) of product arguments will not affect brand judgments when autobiographical memories are retrieved but will affect those judgments in the absence of autobiographical retrievals.

H₁: When autobiographical memory retrievals are encouraged, brand evaluations are no different for strong and weak product arguments.

H₂: When autobiographical memory retrievals are not encouraged, brand evaluations are more favorable for strong than weak product arguments.

Shared Focus and the Affect Transfer Mechanism

As noted earlier, our proposed model suggests that autobiographical retrievals naturally focus thoughts away from product features. However, a more complete version of the affect transfer mechanism suggests that when autobiographical affect is present and linked to the brand, it is considered a highly relevant cue for judgment even when product arguments are relatively accessible. This can be tested by specifically directing attention to product arguments. Directing attention to product arguments should lead to enhanced recall for product information when autobiographical retrievals are encouraged since product information in these conditions is not naturally attended to. However, when autobiographical retrievals are not encouraged, we argue that recall for product information will not be enhanced to as great an extent by directing attention to it, since product features are already the natural focus of attention in this case. Therefore, we hypothesize an interaction between directing attention to product information and encouraging autobiographical retrievals on recall.

In spite of these effects on recall, we predict that argument strength will not influence final brand judgments in the context of autobiographical retrievals even when attention is directed to product attributes, given the hypothesized reliance on autobiographical affect.

H₃: When autobiographical memory retrievals are encouraged, the increase in recall for product information between the attention directed and not directed conditions is greater than the increase between the attention directed and not directed conditions when autobiographical retrievals are not encouraged.

H₁₀: When autobiographical memory retrievals are encouraged, brand evaluations are no different for strong and weak product arguments, even when attention is directed to product information.

Note that H₀ reflects a moderating effect of attention on the relationship between autobiographical retrievals and recall as specified in H₃. Also note that H₁₀ mirrors H₁ and suggests that consumers use an affect transfer rather than a product feature-based strategy both when autobiographical retrievals naturally focus attention away from product information (H₀) and when autobiographical affect and product arguments are relatively accessible (H₁₀).

Two studies were conducted to test these notions. Both studies tested H₁ through H₃. In addition, Study 1 specifically tested the moderating effects of the memory to brand linkage on affect transfer (H₄). Study 2 further tested the affect transfer mechanism by examining the effects of product argument strength (H₇ and H₉) and attention to product information (H₄ and H₁₀) in a situation in which the ad links the brand and the memory.

STUDY 1

The purpose of Study 1 was to test the basic notion that when an ad triggers an autobiographical memory, the affect associated with the memory readily transfers to the ad but transfers to the brand only when the ad forges a direct link between the memory and the brand.

Subjects and Procedure

Seventy-two junior and senior undergraduate business students participated in the study. Subjects were run in groups of eight or fewer in a computer lab and were randomly assigned to conditions.

An experimenter told the subjects that the study would require them to first use the computer and then fill in a questionnaire. All task instructions were administered by the computer, and subjects were told that they were to form an impression of an advertised wine. Any additional task instructions specific to a subject's condition were also provided at this point. Subjects then moved to the next screen, which displayed the ad for Callaway wine. (See Figure 1 in the example of the ad.) The ad had both visual and text features that were common across all conditions. There was a color graphic display of two glasses of wine against a window, and the wine was described with eight pieces of attribute information (e.g., the grapes came from California's Central Valley, their White Zinfandel wine had won a medal at a wine competition) organized into a short four-sentence paragraph.
below the visual of the wine glasses. Further details relating to differences in the ads across conditions are described later. The computer program was useful in timing how long subjects viewed the ad as well as in preventing subjects from referring back to the ad while filling in the dependent measures.

When subjects had formed an impression, they went to the questionnaire, which contained the dependent measures and the manipulation checks. After subjects were done, they were debriefed. The procedure took about 30 minutes.

Independent Variables

Autobiographical retrievals. The ad encouraged subjects to form an impression of the advertised brand in the context of an autobiographical memory, or no such specific encouragement was provided. When the retrieval of autobiographical memories was encouraged, a headline was included next to the visual of the two wine glasses reading, “Think back to the last time you and a close friend spent a special evening together. Good food, music, conversation . . . just the two of you.” When such retrievals were not encouraged, this headline was omitted.

Brand link. In the brand link present condition, a statement in bold type was inserted below the visual that read, “Next time make it even more special with a bottle of Callaway.” The intended effect of the link manipulation was to associate the advertised product with special occasions. It was expected that the special occasion would be the specific past personal episode when the retrieval of autobiographical memories was encouraged (e.g., “our first anniversary dinner last month”) and a general usage situation when there was no encouragement (e.g., anniversaries, romantic evenings). For the brand link absent condition, this statement was omitted.

Dependent Measures

The measures are listed in the order in which they were collected.

Cognitive responses. The cognitive responses to the impression formation task were collected immediately after subjects read the product description. Subjects were asked to list the thoughts that went through their minds while forming an impression of the wine. Subjects’ responses were separated into individual thoughts and coded by two independent judges who were blind to a subject’s condition. (Interjudge reliability was 80%). Disagreements were resolved by discussion, so that all thoughts were coded.

The coding scheme was adapted from Baumgartner, Sujan, and Bettman (1992). The categories of thoughts identified were (1) mentions of product features (e.g., “Central Valley is well-known for its grapes”); (2) mentions of general usage situations (e.g., “a dinner wine”); (3) mentions of autobiographical experiences (e.g., “I thought of my dinner with my boyfriend last weekend”); (4) ad thoughts (e.g., “the graphics were in nice colors”); and (5) other thoughts (e.g., “I scanned the screen”). Categories 1 and 3, for which we had specific hypotheses, accounted for 55% of thoughts.

Brand and ad evaluations. First, brand evaluation was measured, then ad evaluation. Both were assessed on four 9-point semantic differential scales (e.g., favorable-unfavorable, good-bad). The four measures in each set were averaged to form overall measures of brand and ad evaluations (alphas of .97 and .98, respectively).

Affect measures. Subjects were asked to indicate what their feelings had been while forming an impression of the wine by responding to the following question, “My feelings when I was forming an impression of the wine were . . . .” Twenty-seven feeling states were listed (e.g., joyous, sentimental, proud, sad, angry) and subjects responded on 9-point agree-disagree scales in which 9 was “completely agree” and 1 was “completely disagree.” The feeling states were taken from Burke and Edell (1987). A principal components analysis yielded two factors with eigenvalues substantially greater than one, which together explained 51% of the variance in the data. As expected, the two factors reflected feelings of positive and negative valence, and a Promax rotation showed that they were uncorrelated (r = -.04). The nine negative feeling states were averaged (α = .80) and subtracted from the average of the 18 positive feelings (α = .94) to form one net positive affect scale. However, to aid interpretation we also report the results separately for positive and negative feelings when appropriate.

Recall of product features. At the end of the experiment, subjects were given an unexpected recall test and asked to list all the features of the product that they remembered. The number of features correctly recalled was
counted. Since there were relatively few intrusions, no correction was made for incorrect recall. The recall score could vary between 0 and 8.

**Manipulation Checks**

**Autobiographical retrievals.** Subjects indicated on two 9-point bipolar scales whether their thoughts could be described as (1) personal, involving the self, or impersonal, not involving the self; and (2) not related to past times spent with a close friend or related to past times spent with a close friend. The first scale was reversed and the two were averaged ($r = .63$) to measure the extent to which subjects' thoughts were autobiographical in character.

**Brand link.** Subjects characterized their thought processes as (1) not relating special situations to Callaway wine or relating special situations to Callaway wine; and (2) relating Callaway wines and good occasions or not relating Callaway wines and good occasions. The second scale was reversed and the two were averaged ($r = .75$) to get a measure of the extent to which the brand was linked to a special occasion.

**STUDY 1 RESULTS**

The results were analyzed using a two (autobiographical retrievals: not encouraged/encouraged) by two (brand link: absent/present) between-subject analysis of variance design. Since prior hypotheses were made, means on manipulation checks and dependent measures were directly compared with contrasts using the mean square error from the overall analysis of variance table. The degrees of freedom for the t-statistics of the contrasts are 68 (unless there are missing values). The results are shown in Table 1.

**Manipulation Checks**

With regard to the manipulation check on autobiographical retrievals, the two main effects were significant, but the interaction was not. Subjects assessed their thoughts as more autobiographical when the retrieval of autobiographical memories was encouraged versus when it was not (7.9 vs. 4.1; $t = 11.9, p < .001$). Subjects also assessed their thoughts as more autobiographical when the product was linked to a special occasion versus when it was not (6.6 vs. 5.4; $t = 3.7, p < .01$).

With regard to the manipulation check on brand link, the main effects of autobiographical retrieval ($t = 3.43, p < .01$) and brand link ($t = 6.89, p < .001$) and the interaction of the two factors ($t = -2.32, p < .05$) were significant. Therefore, the simple main effects for link present/absent were computed within each level of autobiographical retrieval. The link manipulation was significant in both the autobiographical retrievals encouraged (7.3 vs. 5.5; $t = 3.2, p < .01$) and not encouraged (6.8 vs. 3.4; $t = 6.5, p < .001$) conditions, but, as indicated by the significant overall interaction, the effect was stronger in the latter case.

Therefore both manipulations—autobiographical retrievals and link—had the intended effects. However, it is also true that these independent variables are related. Inducing subjects to retrieve autobiographical memories results, at least to some extent, in linking the brand to the past personal episode. Similarly, inducing subjects to link the brand to a special occasion seems to result to some extent in subjects retrieving an autobiographical special occasion. However, autobiographical retrievals could be encouraged in the absence of a link and a brand link could be created in the absence of an autobiographical retrieval.

**Hypothesis 1**

The first hypothesis concerns the fundamental assertion that autobiographical retrievals focus thought on the personal memory ($H_{1a}$) and the associated affect ($H_{1b}$). An analysis of subjects' thought protocols revealed that 61% of subjects in the autobiographical retrievals encouraged conditions and 23% of subjects in the autobiographical retrievals not encouraged conditions had at least one thought that was autobiographical in nature. Furthermore, though there was no difference in the total number of thoughts across conditions (overall $F(3,67) = 1.0$, n.s.; mean number of thoughts = 4.7), there was a difference in the focus of these thoughts. As hypothesized in $H_{1a}$, and not surprisingly, there was a significantly greater proportion of thoughts related to personal memories when the retrieval of autobiographical memories was encouraged versus when it was not (29% vs. 10%, $t = 2.5, p < .05$). In addition, there was a marginally greater proportion of thoughts related to personal memories in the brand link present versus brand link absent conditions (27% vs. 13%; $t = 1.9, p = .06$). (An arcsin transformation was used whenever the dependent variable was a proportion.)

This change in focus of thoughts in the autobiographical conditions was accompanied by higher levels of felt affect. As hypothesized in $H_{1b}$, subjects in the autobiographical retrievals encouraged conditions were higher on net (positive less negative) affect than subjects in the autobiographical retrievals not encouraged conditions (3.6 vs. 1.5; $t = 5.2, p < .001$). No other effects were significant with respect to net affect. Separate analyses on positive and negative affect showed that the difference in net affect between the autobiographical retrievals encouraged and not encouraged conditions was because of differences in positive affect. Subjects were higher on positive affect (5.7 vs. 3.8; $t = 5.7, p < .001$) when the retrieval of autobiographical memories was encouraged compared to when it was not, but there was no difference with respect to negative affect (2.1 vs. 2.3; $t = -1.0$, n.s.).

**Hypothesis 2**

Autobiographical retrievals were predicted to result in a reduced focus on product features ($H_{2a}$) and reduced recall of these features ($H_{2b}$). There was a marginally lower proportion of thoughts related to the product's fea-
Table 1
STUDY 1 RESULTS

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Note: Correlations with an asterisk (*) are significant at p < .05.

...tured when the retrieval of autobiographical memories was encouraged compared to when it was not (29% vs. 41%; t = -1.8, p = .07), providing directional support for H3a. No other effects were significant with respect to product feature-based thoughts. Consistent with this hint of a reduced focus on product information, subjects in the autobiographical retrievals encouraged conditions recalled fewer product features than subjects in the conditions in which autobiographical retrievals were not encouraged (1.6 vs. 3.6; t = -5.8, p < .001), confirming H2b. No other effects were significant with respect to recall.

**Hypotheses 3 and 4**

Inputs to brand judgments were predicted to be more affective (H3a) and less product feature based (H3b) when the retrieval of autobiographical memories was encouraged, compared to when it was not. Ad evaluations were always hypothesized to be based on the feelings generated by the ad (H4). The correlations between brand attitudes and net affect were positive and significant when autobiographical retrievals were encouraged (.52 in the brand link absent condition and .76 in the brand link present condition; p < .05 in both cases). Furthermore, the correlations between brand attitudes and product feature recall were insignificant in both these conditions. Conversely, when autobiographical retrievals were not encouraged, the correlation between brand attitudes and recall was either significant or marginally significant (.43, p = .08, in the brand link absent condition and .61, p < .05, in the brand link present condition). Furthermore, in these conditions the correlation between brand attitude and net affect was insignificant in the brand link present condition, but approached significance in the brand link absent condition (.44, p = .06).

When brand attitude was regressed on both net affect and product feature recall in each of the four conditions, the results mirrored the correlational evidence in that both variables were significant in the autobiographical retrievals not encouraged, brand link absent condition, only product feature recall was significant in the autobiographical retrievals not encouraged, brand link present condition, and only net affect was significant in the two autobiographical retrievals encouraged conditions.

Thus, the pattern of data suggests that the inputs to

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1 No significant results emerged for other types of cognitive responses (general usage situation thoughts, ad thoughts, and other thoughts).

2 A regression of brand evaluation on the experimental factors, net affect, recall, and the interaction of net affect and recall with the experimental factors showed that there was no significant impact of affect on brand evaluation when autobiographical retrievals were not encouraged and there was a link to the brand. This finding is consistent with the corresponding results from the correlational analysis. No significant differences by condition emerged for recall.
brand judgment are affective rather than product feature based in the autobiographical retrievals encouraged conditions, supporting H3a. In the autobiographical retrievals not encouraged conditions there is reasonably consistent evidence that product features are inputs to brand judgment, but the evidence for affective input is mixed. Thus H3b received some, but not complete, support.

Finally, as predicted by H4, there was a positive correlation between attitude toward the ad and net affect across all conditions (correlations ranged from .54 to .75; p < .05 in all cases). 3

Hypothesis 5

Ad evaluations were hypothesized to be more favorable when autobiographical retrievals were encouraged than when they were not. There was a significant main effect for autobiographical retrievals on ad evaluations; no other effects were significant. Ad evaluations were higher when autobiographical retrievals were encouraged compared to when they were not (7.2 vs. 5.0; t = 5.8, p < .001).

Hypothesis 6

H6 predicted that autobiographical retrievals would result in higher brand evaluations, especially when the memory and brand were linked. Therefore, a significant autobiographical retrievals by brand link interaction was predicted. Besides main effects for autobiographical retrievals (t = 5.0, p < .001) and brand link (t = 3.9, p < .001), the interaction was marginally significant (t = 1.9, p = .06), providing some support for H6. The pattern of means across conditions was as expected, with brand evaluations being most favorable when the retrieval of autobiographical memories was encouraged and the brand link was present. As hypothesized, when the brand and memory were linked, encouraging the retrieval of autobiographical memories resulted in more favorable brand evaluations than when there was no encouragement (7.7 vs. 5.6; t = 4.9, p < .001). Autobiographical retrievals also resulted in more favorable brand evaluations when the brand and memory were not linked, but the difference was not nearly as large (6.0 vs. 5.0; t = 2.2, p < .05).

Comparing means within each autobiographical retrieval condition was also informative. The link to memory heightened brand evaluation in the autobiographical retrieval encouraged conditions (7.7 vs. 6.0 in the brand link present vs. absent conditions; t = 4.1, p < .001). However, the link had no effect in the autobiographical retrievals not encouraged conditions (5.6 vs. 5.0 for brand link present vs. brand link absent; t = 1.4, n.s.).

STUDY 1 DISCUSSION

The results of Study 1 were encouraging. When autobiographical retrievals were not encouraged, compared to when they were, affect was lower, recall of product information was higher, the inputs to evaluation appeared to be a mix of affect and product features, and brand evaluations were not significantly enhanced by linking the brand to a general usage situation. In contrast, when thoughts were focused on autobiographical memories, higher levels of affect were experienced, accompanied by reduced analysis of and memory for product information. The inputs to brand and ad evaluations were affective rather than feature based when autobiographical memories were accessed. Furthermore, in the context of autobiographical retrievals, the carryover of affect to brand evaluation was facilitated by linking the brand to the retrieved memory.

Our findings are also useful in understanding what strategies subjects follow to make brand judgments when autobiographical affect is present but not linked to the brand. H5 and H6 together predict that individuals still rely on affective inputs to judgments, but that the carryover of affect to brand evaluations is dampened. One possible mechanism that explains this reduced carryover is discounting (Schwarz 1990), wherein individuals discount or dismiss feeling states as a relevant cue for making unrelated judgments. Though we have no direct evidence, our data are consistent with this proposed evaluation strategy. When autobiographical affect is present but not linked to the brand, even though brand judgments and affect are correlated, brand judgments are lower (suggestive of discounting) when the link is absent than when it is present. Furthermore, in the autobiographical retrieval encouraged, brand link absent condition (as in the brand link present condition) there is no support for product feature analysis (as evidenced by the insignificant correspondence between recall of claims and brand judgments) or random responding. (An examination of the variance around brand judgments revealed that brand judgments were not more variable in this condition than in the others.)

Therefore, Study 1 provided support for our view that retrieval of autobiographical memories can encourage reliance on affect in making a judgment. The purpose of Study 2 was to subject the implications of this view to further tests. In particular, H5–H6 and H5–H6 were tested.

STUDY 2

The purpose of Study 2 was to test the notion that when an ad cues an autobiographical episode, the reliance on the affect associated with the remembrance makes brand judgments insensitive to the strength of product arguments, even when these arguments are relatively accessible in memory.

Subjects and Procedures

One hundred sixty-four students from the same subject population as in Study 1 participated in Study 2. Except

3 A regression analysis for ad evaluation similar to that in footnote 2 indicated that there were no significant differences in the effect of net affect on attitude toward the ad across conditions.
for the different manipulations, the procedures were identical to Study 1.

**Independent Variables**

*Autobiographical retrievals.* The manipulation was the same as in Study 1. For both the autobiographical retrievals encouraged and not encouraged conditions the linking statement was included, since we wished to focus on the condition in which affect transfer to the brand might take place.

*Strength of product arguments.* Two versions of the attribute information were developed. In the weak arguments condition, the wine was described in relatively unappealing terms (e.g., the White Zinfandel was dry with medium acidity, the wine had won a bronze medal at a Texas fair, etc.). In the strong arguments condition, the wine was described in more appealing terms (e.g., the White Zinfandel was crisp with a fine balance of flavors, the wine had won a gold medal at an international competition in Paris, etc.).

*Attention to product information.* After the general task instructions and before subjects viewed the ad, half the subjects received specific instructions to pay attention to the product information. In the directed attention condition, instructions requested, “When you look at the ad, read all of the information provided carefully.” These instructions were absent in the non-directed attention conditions.

**Dependent Measures**

The dependent measures were the same as in Study 1, and the scales demonstrated comparable reliability (alphas of .98, .98, .82, and .96 for brand and ad evaluations and negative and positive feelings, respectively). As in Study 1, two factors had eigenvalues substantially greater than one when the 27 feeling states were submitted to a principal components analysis. The two factors, which reflected feelings of positive and negative valence, explained 57% of the variance in the data and were uncorrelated ($r = -.03$). Coding reliability for the cognitive responses was 80%.

**Manipulation Checks**

*Autobiographical retrievals.* The manipulation check was the same as in Study 1, and the two scales were correlated .76.

*Strength of product arguments.* Subjects rated the four sentences describing the wine on 9-point very bad to very good scales. These scales were averaged ($\alpha = .84$) to get a mean favorableness rating of the product description as a whole. The four sentences were also rated on scales of informativeness, believability, comprehensibility, and simplicity. The arguments were constructed to differ on favorableness between the strong and weak argument conditions but to be equal on these other dimensions (Petty and Cacioppo 1986).

*Attention to product information.* The time subjects spent examining the ad was recorded by the computer. In addition, subjects characterized their thought processes using the following 9-point scales: (1) not related to wine attributes or related to wine attributes; and (2) related to characteristics of Callaway wines or not related to characteristics of Callaway wines. The second scale was reversed and the two scales were averaged ($r = .77$) to measure the extent to which a subject paid attention to product information.

**STUDY 2 RESULTS**

The results were analyzed using a two (autobiographical retrievals: not encouraged/encouraged) by two (strength of product arguments: weak/strong) by two (attention to product information: directed/not directed) between-subject analysis of variance design. As in Study 1, since prior hypotheses were made, means on manipulation checks and dependent measures were directly compared with contrasts using the mean square error from the overall analysis of variance table. The degrees of freedom for the $t$-statistics of the contrasts are 156 (see Table 2).

**Manipulation Checks**

Subjects indicated that their thoughts were more personal and more related to past times spent with close friends in the autobiographical retrievals encouraged conditions compared to when autobiographical retrievals were not encouraged (7.2 vs. 4.0; $t = 12.2, p < .001$). No other effects were significant.

Subjects also rated the product arguments to be more favorable in the strong arguments conditions relative to the weak arguments conditions (7.0 vs. 5.0; $t = 10.7, p < .001$). The strong versus weak arguments were, however, not significantly different on measures of informativeness, believability, comprehensibility, and simplicity ($t < 1.6$ in all cases), as expected. Again, no other effects were significant.

Subjects spent more time attending to product information in the attention-directed conditions compared with when attention was not specifically directed to product information (50 sec vs. 41 sec; $t = 5.6, p < .001$). No other effects were significant on this measure.

Subjects also rated their thoughts as more related to attributes and characteristics of wine in the attention directed versus not directed conditions (6.0 vs. 4.6; $t = 6.2, p < .001$). In addition, the autobiographical retrieval effect and the retrieval by attention interaction ($t = 5.5, p < .001$) were significant for this measure. As expected, when the retrieval of autobiographical memories was encouraged, compared with when it was not, subjects indicated that their thoughts were less related to product features (4.4 vs. 6.2; $t = -7.4, p < .001$). Also, directed attention increased the self-rated focus on product features in the autobiographical retrievals encouraged conditions (5.8 vs. 2.9; $t = 8.4, p < .001$), but not in the conditions in which autobiographical retrievals were not encouraged (6.3 vs. 6.1; $t < 1$, n.s.). Hence, the manipulations had their intended effects.
Table 2
STUDY 2 RESULTS

<table>
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<td>6.8 7.1</td>
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<tr>
<td>Ad Evaluations</td>
<td>4.4 6.1</td>
<td>6.5 7.2</td>
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<td>Proportion of</td>
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<tr>
<td>Brand Evaluations-Net</td>
<td>ns .52* ns .61* .44* .67*</td>
<td>.70* .59* .60* .73*</td>
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<tr>
<td>Brand Evaluations-Recall</td>
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<td>ns ns ns ns</td>
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Note: Correlations with an asterisk (*) are significant at p < .05.

Hypotheses 1 and 2

The results of Study 2 replicate the results of Study 1 for these hypotheses. Fifty-seven percent of subjects in the autobiographical retrievals encouraged conditions and 7% of subjects in the autobiographical retrievals not encouraged conditions had at least one thought that was autobiographical in nature. In terms of proportion of autobiographical thoughts to total thoughts, there was a significantly greater proportion of thoughts related to personal memories in the autobiographical retrievals encouraged versus the not encouraged conditions (22% vs. 1%; t = 6.1, p < .001), supporting H1a. There was also a significantly lower proportion of thoughts related to product features and attributes when autobiographical retrievals were encouraged versus when they were not (26% vs. 37%; t = −3.0, p < .01), supporting H2a. In the autobiographical retrievals encouraged conditions versus the conditions in which retrievals were not encouraged, there were also higher levels of net affect (3.6 vs. 1.3; t = 8.8, p < .001), supporting H1b. Separate analyses on positive and negative affect suggested that the difference in net affect between the autobiographical retrievals encouraged and not encouraged conditions was largely due to differences in positive affect. Subjects were significantly higher on positive affect (5.8 vs. 3.2; t = 13.5, p < .001) and only marginally higher on negative affect (2.2 vs. 1.9; t = 1.8, p = .07) in the autobiographical retrievals encouraged versus not encouraged conditions. Also, there was reduced recall of product features when autobiographical retrievals were encouraged (2.7 vs. 3.6; t = −4.4, p < .001), supporting H2b. No other effects were significant for product attribute thoughts and net affect. However, there were significant main effects for attention and significant interaction effects of autobiographical retrievals and attention on proportion of thoughts related to personal memories and recall; these effects are discussed under H2.

Hypotheses 3, 4, and 5

Consistent with H1a, brand judgments were based on affect and not on product information in the autobiographical conditions. Across all four autobiographical conditions, brand judgments and net affect were significantly and positively correlated (correlations ranged from .43 to .77, p < .06 in all cases). Furthermore, across these conditions, brand judgments and product feature recall showed no correspondence (correlations were non-significant in all cases). For the conditions in which autobiographical retrievals were not encouraged, the pattern of correlations was more mixed. For the strong argument cells, brand judgments were significantly cor-
related with both net affect (correlations of .46 and .47, p < .05) and recall (correlations of .62 and .74, p < .05). In the weak argument cells, brand judgments were not significantly correlated with either net affect or recall.

When brand attitude was regressed on both net affect and product feature recall in each of the eight conditions, net affect was the only significant determinant of brand attitude in the four autobiographical retrievals encouraged conditions. In the autobiographical retrievals not encouraged conditions, no significant effects emerged in the two weak argument conditions and only product feature recall was significantly related to brand attitude in the two strong argument conditions. 4

In retrospect, this pattern of results makes sense. Specifically, it appears that brand judgments are overdetermined in the two autobiographical retrievals not encouraged, strong argument conditions, because affect and recall of positive features should covary (the correlations between net affect and recall of features were indeed positive and significant—.53 and .55 in the directed attention and no directed attention conditions, respectively, p < .05). In the two autobiographical retrievals not encouraged, weak argument conditions, there was little affect generated. Further, in these conditions, recall of arguments that were rated as neutral (mean of 5.0 on a 9-point scale) apparently did little to aid brand judgment.

Therefore, overall there is support for one side of the argument made in H4—that brand judgments are made affectively in the context of autobiographical memories. However, the evidence for the other side of the argument—that brand judgments are based more on an analysis of product features in the absence of autobiographical retrievals—was more equivocal.

Consistent with H4, ad evaluations were correlated with net affect across all conditions (correlations ranged from .44 to .73, p < .05 in all conditions). As with brand evaluations, ad evaluations may be overdetermined in the two strong arguments, autobiographical retrievals not encouraged conditions. For these two conditions, ad evaluations were also significantly correlated with product feature recall (.44 and .75, p < .05). Again, this pattern can be explained by the correspondence between affect and recall in these cells. 5

Finally, ad evaluations were higher in the autobiographical retrievals encouraged conditions than in the autobiographical retrievals not encouraged conditions (6.9 vs. 5.1; t = 7.5, p < .001), supporting H2. There was also a main effect for argument strength, with higher ad evaluations in the strong arguments conditions (6.4 vs. 5.6; t = 3.5, p < .01). No other effects were significant.

Hypotheses 7 and 8

The affect transfer mechanism hypothesized to underlie brand judgments suggests that product argument strength should not affect brand judgments when autobiographical memories are retrieved (H2; since affect transfer rather than analysis of product features is used), but that it should affect those judgments in the absence of such memories (H3; since there will be greater reliance on product information). In addition to significant main effects for autobiographical retrieval (t = 7.9, p < .001) and argument strength (t = 4.7, p < .01), there was, as expected, a significant autobiographical retrieval by argument strength interaction (t = 2.6, p < .05). Argument strength did not affect brand judgments in the context of autobiographical retrievals (7.2 vs. 6.8 for strong vs. weak arguments; t = 1.4, n.s., supporting H2). On the other hand, argument strength did significantly affect brand judgments when autobiographical retrievals were not encouraged (6.1 vs. 4.6 for strong versus weak arguments; t = 5.2, p < .001), supporting H5.

Hypotheses 9 and 10

A more complete form of the autobiographical affect transfer mechanism predicts the dominance of affect transfer over product feature analysis for making brand judgments when both types of thought are relatively accessible. This version predicts that when autobiographical retrievals are encouraged, attention directed to product information enhances recall of that information to a greater extent than when autobiographical retrievals are not encouraged (H6). However, despite the potentially enhanced availability of product information in this situation, it was predicted that brand judgments would not be affected by strong versus weak product arguments (H6).

In addition to significant main effects for autobiographical retrievals (t = 4.4, p < .001) and attention (t = 5.5, p < .001), and consistent with H6, there was a significant autobiographical retrievals by attention interaction on recall (t = 2.2, p < .05). There was a simple main effect for attention in the autobiographical retrieval encouraged conditions (3.5 vs. 2.0 for directed attention vs. no attention; t = 5.4, p < .001). This effect for attention was also significant in the autobiographical retrievals not encouraged conditions, but the effect was not nearly as large (3.9 vs. 3.3 for directed attention vs. non-directed attention; t = 2.4, p < .05). An opposite pattern of results emerged for the proportion of thoughts related to personal memories. Hence, there was support for H6.

Finally, comparison of the conditions in which autobiographical retrievals were encouraged versus not encouraged, given directed attention, showed that recall was...

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4 A regression for brand evaluation similar to that in footnote 2 indicated that when autobiographical retrievals were encouraged, the correspondence between brand evaluation and net affect (recall) was stronger (weaker) compared to when autobiographical retrievals were not encouraged. This result is thus consistent with the correlational evidence, except that there were no moderating effects of argument strength.

5 A regression analysis for ad evaluations similar to that in footnote 2 indicated that there were no significant differences in the effect of net affect on attitude toward the ad across conditions.
not significantly lower in the autobiographical retrievals encouraged conditions compared with the conditions in which autobiographical retrievals were not encouraged (3.5 vs. 3.9, t = -1.6, n.s.). Therefore, product information was available in both the autobiographical retrievals encouraged and not encouraged conditions when attention was directed.

Despite this increased availability of product information in the autobiographical retrievals encouraged, directed attention conditions, brand judgments were not affected by the strength of this information. The difference in brand evaluation for strong versus weak arguments in the autobiographical retrievals encouraged, directed attention condition was insignificant (7.1 vs. 6.8; t < 1.0, n.s.), supporting H10.

**STUDY 2 DISCUSSION**

The results of Study 2 confirm and extend the results of Study 1. Study 2 provided greater support for the dominance of affect transfer over product feature analysis when autobiographical retrievals were encouraged. In particular, Study 2 demonstrated that strength of product arguments does not affect brand judgments when autobiographical memories are retrieved but does affect those judgments in the absence of autobiographical retrievals. Furthermore, Study 2 demonstrated that subjects apparently continue to rely more on affect transfer than product feature analysis when both types of thoughts (autobiographical memories and product attributes) are relatively accessible. This dominance of affective inputs when autobiographical affect is present and linked to the brand was particularly evidenced in the autobiographical retrieval encouraged, attention directed conditions. In these conditions, even though product feature recall was enhanced, brand and ad judgments continued to show a correspondence with net affect rather than product features. In addition, brand judgments were not affected by the strength of product arguments in those conditions.

However, it is important to acknowledge an alternative interpretation to the dominance of affective inputs. Specifically, one might suggest that attention to product features was enhanced sufficiently to boost recall but that impacting evaluations required even greater levels of attention to product features. Therefore, at more elevated levels of attention to product features, the dominance of affective inputs in the context of autobiographical retrievals may not hold.

**GENERAL DISCUSSION**

**Summary of Findings**

The two studies provide evidence for the affective nature of autobiographical memories and begin to characterize conditions under which and the mechanisms by which this affect is transferred to ad and brand judgments. Specifically, we demonstrate that increased accessibility of autobiographical memories in the context of product information results in higher levels of feelings and reduced analysis of and memory for product attributes. Furthermore, when an ad cues positively evaluated personal memories, the affect associated with the remembrance is readily and spontaneously transferred to the ad, resulting in enhanced ad evaluations. However, the degree of influence of autobiographical affect on brand judgments depends on forging a direct link in the ad between the brand and the personal memory, and brand evaluations are especially enhanced in the presence of such a link (Study 1). The within-cell correlational analysis conducted in Study 1 further corroborated affective rather than feature-based inputs to judgments in the presence of autobiographical memories. There was significant correspondence between net affect and brand judgments and no correspondence between feature recall and brand judgments in the autobiographical conditions. For the autobiographical retrievals not encouraged conditions, brand judgments appeared to depend on both net affect and feature recall, though not in any fixed pattern.

Study 2 provided more evidence for this affective nature of inputs into judgments in the context of autobiographical retrievals. Strength of product arguments was manipulated, and brand evaluations did not differ between strong and weak argument conditions when the retrieval of autobiographical memories was encouraged. In addition, evidence was obtained for the dominance of affective inputs when both autobiographical affect and product arguments were relatively accessible from memory. When autobiographical affect was present and linked to the brand, attention directed to product information enhanced product feature recall. However, brand and ad judgments continued to show a correspondence with net affect rather than remembered product features. Also, final brand judgments were still unaffected by the strength of product arguments even though this information was found to impact judgment in the absence of such affect. Overall, then, it appears that the affective nature of autobiographical memories can serve as a powerful influence on consumer ad and brand judgments.

**Theoretical and Managerial Implications**

This research has substantial implications for the autobiographical memory literature. This literature has by and large examined the nature of autobiographical memories (i.e., their vividness, the perspective from which they are recalled, and their affective qualities). The link between autobiographical memories and information processing, and especially the link to proposed judgment processes, is new. This work also greatly extends the original work of Baumgartner, Sujan, and Bettman (1992) by examining the conditions and mechanisms for affective transfer from the retrieved memory to the ad and brand.

Our research also has implications for the broader stream of research on self-referencing. Specifically, our research provides additional evidence that in a persuasion context referencing the self may actually hurt learning about the ad or brand, but can still enhance ad and
brand evaluations if the self-related knowledge structure has affect associated with it (as in the case of autobiographical memories) and the object of judgment is closely linked to the self.

Our research also has implications for research on persuasion in general and research on nostalgia in advertising in particular. It suggests that in the absence of strong arguments it is appropriate to introduce autobiographical prompts because either strong arguments or autobiographical prompts can enhance judgments of the advertised brand, and autobiographical retrievals can focus attention away from weak arguments. In fact, advertising using autobiographical prompts or “nostalgia” is on the rise (Advertising Age 1990). However, there has been no systematic examination of ad properties and their relationship to generating nostalgia or of the conditions and mechanisms necessary to transfer the nostalgic feelings to the ad and brand. Our research suggests that ad properties can be manipulated to systematically enhance (or depress) the accessibility of autobiographical memories. Besides explicitly urging an individual to recall the last time he or she had a particular experience (as in our studies), ads could increase the accessibility of autobiographical memories through choice of format (e.g., slice of life rather than announcement ads) or execution (e.g., ads that resemble old home movies). Also, links between the brand and memory can be enhanced by suggesting how the brand may heighten or help relieve a special past experience (as in our studies) or by directly reminding consumers of past pleasant experiences with the brand (a strategy available to established brands). However, in real-world nostalgia-type ads, direct links between nostalgic feelings and the brand may or may not be made. Our research suggests that for nostalgia to really impact brand judgment, direct links need to be forged between the nostalgic experience and the brand, otherwise the autobiographical affect may be discounted in making brand evaluations. Also, real-world nostalgia-type ads often combine both product information and emotion, whereas our research suggests that product information may well be overlooked for making brand judgments if affect from past memories is present and linked to the brand.

Limitations and Future Research

The product chosen for study—wine—may have been particularly amenable to being linked to autobiographical episodes, and judgments of wine may be particularly influenced by available affect rather than product features. Hence, the processes described may not operate for a product that is more fundamentally “cognitive” in character. For such a product (e.g., appliances), the link to autobiographical affect may be more difficult to forge; even in the presence of such a link, the dominant influence on brand judgments might be an analysis of product features.

Furthermore, in the studies reported, the product information provided was relatively neutral (neutral in Study 1; in Study 2 the weak arguments were perceived as neutral in character and the strong arguments as positive). In the presence of highly diagnostic negative product information, the judgment process might be more feature-based than affective. In our studies the link to the autobiographical memory also was made at the brand level rather than at the product feature level. However, as a result of, for example, processing directions embedded in the communication, it is possible that self-relevant elaborations may intertwine the advertised product features with elements of the retrieved memory. This may focus attention on product features and improve product feature recall, even as affect transfer occurs. This outcome—enhanced information recall given autobiographical retrievals—is consistent with the stream of work that shows improved memory for events that are encoded in relation to the self (Roger, Kuiper, and Kirker 1977; Greenwald and Banaji 1989).

Finally, in our studies the stimulus brand (Callaway) was a real brand, but unknown to subjects. For more established brands, the impact on brand evaluations may be direct, as the brand can serve as the cue to autobiographical memories, and therefore no explicit linkage through the ad might be required. Hence, there may be a variety of conditions that enhance or dampen the reliance on autobiographical affect and product feature analysis for ad and brand judgment, and future research should attempt to delineate these conditions.

Another issue to consider is the notion that affect can have its impact through various forms of cognitive mediation (e.g., Mackie and Worth 1989). This was alluded to earlier when we referred to conditions that might intertwine autobiographical remembrances with product features, but cognitive heuristics other than feature analysis might also be used. In our research, we support affect transfer as the process by which autobiographical retrievals influence judgment and provide evidence against judgment strategies based on detailed feature recall. However, we do not rule out other cognitively oriented strategies. Specifically, one might argue that positive affect induces individuals to use simple cognitive heuristics (Mackie and Worth 1989) and that these simple heuristics (e.g., “the information was all generally favorable”) influence judgments (Bless, Mackie, and Schwarz 1992). Therefore future research examining detailed processing issues, and especially the interplay of affective and cognitive mediation, is clearly warranted.

It is also important to clarify that the nature of the personal episode to be retrieved was fairly well-defined in this study—a pleasant romantic evening. The effects of retrieving other types of autobiographical memories may well be different. In particular, the effects of retrieving negative autobiographical memories may not be symmetric with the effects of retrieving positive autobiographical memories. Some ads intentionally cue unpleasant memories and position their brand as a problem solution. However, there is also potential for inadvertently cueing negative memories when encouraging auto-
biographical retrievals in mass communication. The effects of negative memories are likely to be fairly complex and variable. Negative affect may serve as a mobilizer, motivating individuals to seek solutions (Taylor 1991); this may involve more systematic processing (Mackie and Worth 1989). Alternatively, negative affect may grab attention, focusing attention on itself and away from other information (Fiske 1980). Negative affect may serve as an informational cue coloring judgments (Schwarz 1990), even unrelated ones (Johnson and Tversky 1983), rendering unnecessary the link to the object of judgment that we found important in the case of positive memories. Again, examining the information processing effects of a range of autobiographical memories would be useful both to test further the conceptual model proposed and allow detailed managerial implications to be drawn. Finally, it would be important to validate these effects using real ads and methods outside the lab.

In sum, our research suggests an intriguing influence on consumer judgments and provides one example of a model of consumer information processing that includes “hot” emotions as well as “cold” cognitions. It also suggests several questions for future research that appear challenging and useful both theoretically and managerially.

REFERENCES


