Two studies explored how and why the camera angle used to photograph products in ads may affect viewers' product evaluations. The findings suggest that such camera angle effects are likely to emerge when viewers' motivation to process ad information is either low or moderate rather than high. When processing motivation was low, evaluations were most favorable when the viewer seemed to be looking up at the product, least favorable when he or she looked down at the product, and moderate when the product was at eye level. However, when processing motivation was moderate, eye-level shots produced the most favorable evaluations. The authors suggest that the use of different processing heuristics may be responsible for these camera angle effects.

Getting an Angle in Advertising: The Effect of Camera Angle on Product Evaluations

Most marketers and academic researchers are likely to agree that it is both common practice and often advisable for ads to include a picture or “beauty shot” of the promoted product. Accordingly, interest in the consequences of presenting such visual elements in ads has spawned a sizable body of research (e.g., Edell and Staelin 1983; Holbrook and Moore 1981; Meyers-Levy 1989). Nonetheless, little theoretical or systematic research has been devoted to understanding influences associated with the particular nature of the perceptual display, such as the visual angle used to portray the product. Marketers currently rely on any number of intuitive theories in selecting a camera angle at which to photograph an advertised product, but lack a scientific theory that details how or why various camera angles may affect viewers' product judgments.

Only a few researchers (Kraft 1987; Mandell and Shaw 1973; Tiemens 1970) have examined the camera angle issue empirically and explored how the camera angle at which an object is viewed in a film or photograph can affect viewers’ judgments of that object. These researchers found that when the item (e.g., a person or a box) was photographed from a low camera angle such that the viewer would seem to be looking up at it, the object was judged more positively (e.g., larger, stronger, bolder) than when a high camera angle was employed, whereby the viewer would seem to be looking down on the object. When the object appeared to be at eye level, viewers' judgments were between the two extremes.

Whether such camera angle effects generalize to relatively complex advertising contexts is currently unclear, though some evidence supporting this possibility is suggested by Kraft's (1987) finding that camera angle effects emerged for not only social (persons) but also nonsocial (boxes) objects. In addition, the process responsible for such camera angle effects is uncertain. Finally, the conditions that may moderate these purported camera angle effects are unknown.

Our research explored these and related questions. In experiment 1 we simply examined whether camera angle effects can occur in advertising contexts. In experiment 2 we sought evidence of camera angle effects for a different product. However, we went beyond simply demonstrating camera angle effects by investigating the moderating factors that influence camera angle effects and by exploring when and why the effects occur, distinguishing between two possible explanations for such effects.
EXPERIMENT 1

Subjects

Thirty-two students who were enrolled in marketing classes participated in the study for extra course credit. Subjects were run in groups of about five people and were randomly assigned to all treatments.

Stimuli

Informal discussions revealed that personal computers were a product of interest to students. Therefore, an Evrex 386/20 personal computer served as the focal product for the study. Slides were taken of this personal computer from three camera angles. The product was photographed from a high and a low camera angle (approximately 40 degrees above and below eye level, respectively) and at eye level. In all cases, the personal computer was on a desk that was about three feet away. The influence of preexisting brand perceptions on evaluations was limited by masking all identifying brand characteristics of the product.

To ascertain that the three shots were equivalent in terms of the amount of information they contained and their typicality, a group of 122 subjects viewed the product from one of the three camera angles and rated it on four 7-point “information” scales. These scales measured the amount of relevant product information the shot provided, the amount of product knowledge communicated, the aid the shot offered in making valid judgments, and its aid in portraying the details of the product (M = 3.15, α = .85). Four “typicality” scales also were included, assessing the degree to which the shot was unusual, typical of ad photos, different from photos seen in ads, and might be expected in ads for this product (M = 3.25, α = .65). Significant differences were absent in the amount of information the shots conveyed (F = .44) and the typicality of the shots (F = .12).

An advertising message for the personal computer was developed by combining claims from a variety of computer ads. The message alluded to the product as the computer of the 1990s and then went on to highlight the computer’s many benefits.

Procedure

Subjects were told that the purpose of the study was to obtain their judgments about a new product that might be introduced in the marketplace. To emulate typical advertising conditions in which ad exposure is fairly limited, we told subjects that they would be allowed to examine briefly some ad materials for a new product. Subjects then were allotted 30 seconds to view a slide depicting the product either from a high camera angle, from a low camera angle, or at eye level and to read the advertising copy.

Evaluations were obtained on 12 7-point scales that assessed the product’s general goodness, value, overall superiority, worth, appeal, capacity, processing speed, flexibility, technology, power, performance, and ease of use. Because these items loaded on a single factor and formed a reliable scale (α = .94), they were averaged to form a single evaluation index. Though the first five scale items were general and the remaining seven were more specific, separate analyses of the two item types revealed no differences.

Results

An analysis of treatment effects for the three levels of camera angle revealed a main effect of camera angle (F[2,29] = 14.48, p < .001) like that observed in previous research (Kraft 1987). Specifically, when the personal computer was viewed at eye level it was evaluated less favorably (M = 4.51) than when it was depicted from a low camera angle looking up (M = 5.49; F[1,29] = 6.58, p < .02), but it was judged more favorably than when it was depicted from a high camera angle looking down (M = 3.61; F[1,29] = 8.28, p < .01).

Discussion

Our findings suggest that the camera angle at which a product is shown in advertising can affect product evaluations. When observed at eye level, the product was regarded less favorably than when it was viewed from a low camera angle (looking up at the product) but more favorably than when it was observed from a high camera angle (looking down at the product).

These findings are informative as they suggest that camera angle effects can generalize to advertising contexts. However, why these effects occur and when they will or will not emerge remain open questions. Kraft (1987) has suggested two possible explanations for camera angle effects. In the next section we examine these explanations and develop some predictions that are implied by these views and allow them to be distinguished.

EXPLAINING CAMERA ANGLE EFFECTS

One explanation for camera angle effects is that variations in the camera angle at which a product is viewed might alter the type of information actually visible or available about the product (Kraft 1987). For example, Gaunt and Petzold (1968) suggest that high angle shots, which look down on products, display features that are unflattering and cause the object to appear top heavy, whereas upward-looking low angle shots display features that emphasize the stability and grace of the object. Consequently, looking down at a product from a high camera angle might afford the viewer insight into less flattering product features, whereas looking up at a product from a low camera angle may make visible highly positive product features. If so, people would be expected to evaluate products more favorably when they view the products from a low rather than a high camera angle. We refer to this explanation as the differential information hypothesis.

This view that the display of different product features underlies camera angle effects seems to imply that the effects may be due to viewers’ attentiveness to and care-
ful analysis of the perceived product information. Hence, camera angle effects like those observed in experiment 1 should become stronger as people's motivation to process the pictorial advertising material extensively is heightened. In other words, this view predicts that the previously observed pattern of camera angle effects should be strongest under high processing motivation conditions, attenuated under moderate motivation conditions, and weak or eliminated under low processing motivation conditions.

A second explanation for camera angle effects, referred to as the heuristic processing hypothesis, leads to a very different set of predictions. This explanation holds that camera angle effects on judgments may be due to the use of simple decision rules or heuristics (Kraft 1987). Substantial theory and evidence suggest that when people are highly motivated to process message information in detail, they form judgments by carefully weighing the perceived true merits of the issue or product (e.g., Petty, Cacioppo, and Schumann 1983) and possibly organizing the message information in a highly differentiated, well-integrated schema (Borgida and Howard-Pitney 1983; Howard-Pitney, Borgida, and Omoto 1986). However, judgments are rendered in a considerably less analytic manner when processing motivation is low. Indeed, under these conditions, people often render product judgments on the basis of experientially derived inferences or simple decision rules that relate to certain contextual cues, such as the appeal or attractiveness of the communicator (Chaiken 1980; Pallak 1983; Petty, Cacioppo, and Schumann 1983) or the favorableness of the message frame (Maheswaran and Meyers-Levy 1990).

This heuristic processing hypothesis posits that people may interpret camera angles heuristically. That is, our experience with the natural visual world may give rise to a simple decision rule or heuristic whereby objects that we visually look up to (e.g., our parents when we are children) generally are viewed positively, whereas those that we visually look down on (e.g., younger siblings) are viewed negatively or as subordinate. This relationship is supported by research in proxemics and language (Ellis and Beattie 1986; Lakoff and Johnson 1980) and by some photographers who advise against employing downward-looking high camera angles (Curl 1979). Thus, perhaps people come to assume very generally that objects that are high or above eye level tend to be relatively dominant, powerful, and superior, whereas those that are low or below eye level are subordinate, weak, and inferior.

The prediction that follows from this heuristic processing hypothesis is that the pattern of camera angle effects observed in experiment 1 should emerge strongly when viewers lack the motivation to perform a detailed, thoughtful analysis of the ad materials. However, when people have heightened motivation to analyze such ad information extensively, these camera angle effects should be eliminated.

Though the outcomes anticipated by this heuristic processing hypothesis are relatively clearcut when processing motivation is either low or high, they are less so when processing motivation is moderate. One possibility is that moderate processing motivation may result in attenuated camera angle effects, reflecting a balance of the competing detailed and heuristic processing tendencies that people in such situations presumably use when forming judgments (Chaiken and Stangor 1987). A second possibility is that people's mixed tendencies to engage in detailed as well as heuristic processing under moderate processing motivation may prompt the use of a qualitatively different heuristic decision rule—one that better captures the spirit of performing more detailed or analytic processing of the information. Because each of these predictions is plausible, no firm hypothesis is offered.

In experiment 2, we attempted to distinguish between the different overall predictions made by the differential information hypothesis and the heuristic processing hypothesis.

**EXPERIMENT 2**

**Stimuli**

To rule out the possibility that the camera angle effects observed in experiment 1 were unique to the product examined, we used a different product in experiment 2. Because discussions with students indicated that bicycles were of interest to them, a Trek racing bicycle was chosen for use in this study.

The bicycle was photographed from the same three angles as were employed in experiment 1: a high camera angle, eye level, and a low camera angle. Each shot was taken in an outdoor setting from approximately seven feet away, and all identifying brand markings on the product were masked. Also, as in experiment 1, the three shots were perceived equally in terms of the amount of information they contained ($F = .29; M = 3.18$, scale $\alpha = .83$) and their typicality ($F = .34; M = 3.25$, scale $\alpha = .85$) as measured on the same 7-point scales previously employed; 122 subjects rated the shots on these dimensions. (Note that the shots' equivalence in the amount of information presented does not preclude differences in the type of information presented, which is suggested by the differential information hypothesis).

The ad message for the bike was developed by combining claims from different ads. Photos of the bicycle taken from the three camera angles and the ad copy appear in the Appendix.

**Procedure**

Participants in the study were 118 students who were enrolled in marketing classes and who received extra course credit for their participation. Subjects were run in small groups and were randomly assigned to all treatments.

Two procedures were employed that measured or varied subjects' likelihood of processing the ad materials
extensively. One procedure explicitly manipulated subjects’ motivation to engage in extensive processing of the ad materials. It entailed varying subjects’ expectations for winning a lottery in which a model of the featured brand of bicycle was to be awarded. Subjects in the high processing motivation condition were told that only five small classes of students were participating in the lottery. As purportedly they had a “good chance” to win, subjects were encouraged as they viewed the ad materials to consider which particular bike model (e.g., racing bike, dirt bike) they might want. In the low processing motivation condition, subjects were informed that students from at least 100 large classes were competing in the lottery. As they had “some chance” to win, they simply were told that they were free to consider which model of the bike they might choose.

A second procedure entailed measuring the extent to which subjects had a natural propensity to think extensively about issues and enjoyed engaging in cognition. Cacioppo, Petty, and Kao’s (1984) version of the need for cognition (NFC) scale was employed for this purpose. The median scale value (98) was used to categorize subjects as high or low in NFC. The average scores of high (M = 108) and low (M = 82) NFC subjects differed significantly from one another (F1,115 = 214.88, p < .01).

The overall study procedure entailed first presenting to subjects the lottery description that was intended to manipulate their processing motivation explicitly. Then subjects viewed a slide of the bicycle shot from one of the three manipulated camera angles and advertising copy for the bike. Subjects were allowed 30 seconds to view these materials.

Subjects then evaluated the bicycle on 12 7-point scales anchored by slow/fast, retiring/aggressive, tame/racy, bad/good, bumpy ride/smooth ride, clumsy/sleek, boring/exciting, overall inferior/superior product, flimsy/solid frame, not worthwhile/worthwhile purchase, inferior/superior engineering, and slow/quick to respond. Because these items loaded on a single factor and formed a reliable scale (α = .95), they were averaged to form a single bicycle evaluation index. Next, subjects’ recollection of the product was assessed. They were asked to briefly describe the bike they had seen.

After completing each of the preceding tasks, subjects were administered the NFC scale. Then, because of time constraints, a subset of 21 subjects filled out several processing motivation manipulation check items. All subjects completed several product interest/knowledge questions. The manipulation check questions asked subjects whether they devoted little/much attention to the ad materials, whether they completed them quickly/carefully, and to what extent they found the materials both interesting and involving. Because these items loaded on a single factor and formed a reliable scale (α = .80), a motivation index was formed by averaging the component scales. Finally, in an open-ended question, subjects were probed for their beliefs about the purpose of the study. They also were asked whether and how the particular angle at which they had viewed the product presented previously might have affected their judgments. Subjects generally denied that camera angle might have affected their evaluations and offered no evidence that they had guessed the true purpose of the study.

Results

Data were analyzed as a 3 (camera angle: high, eye level, low) by 2 (processing motivation: high, low) by 2 (NFC: high, low) factorial design. Treatment means for all measures are listed in Table 1, and all significant treatment effects are reported.

Manipulation check. Subjects’ responses on the motivation (manipulation check) index were examined first and revealed main effects of both processing motivation (F1,19 = 7.46, p < .01) and NFC (F1,19 = 19.33, p < .01). Overall, subjects reported being more motivated to process the ad materials in the high (M = 5.81) than in the low (M = 4.80) processing motivation condition and when they were high (M = 5.92) rather than low (M = 4.60) in need for cognition.

Evaluations. Analysis of subjects’ evaluations of the bicycle revealed main effects of camera angle (F2,106 = 7.00, p < .001) and processing motivation (F1,106 = 3.78, p < .05) such that evaluations were more favorable when the product was featured in an upward or eye-level shot rather than a downward shot and when processing motivation was higher. In addition, two-way interactions of camera angle and processing motivation (F2,106 = 3.83, p < .03) and camera angle and NFC (F2,106 = 6.03, p < .003) emerged, each suggesting that the previously observed camera angle effects were more likely when either processing motivation or NFC was low rather than high. Each of these effects was qualified, however, by a significant three-way interaction of camera angle by processing motivation by NFC (F2,106 = 8.95, p < .001), which is illustrated in Figure 1.

Because the extent to which subjects were motivated to analyze the bicycle ad materials thoroughly and in detail should be influenced by both the processing motivation manipulation and subjects’ NFC, we combined these factors and categorized subjects into three relevant (processing) motivation groups to aid understanding of the three-way interaction. One group, referred to as being in the extremely high motivation condition, comprised high NFC subjects who received the high processing motivation manipulation. A counterpart group, referred to as being in the extremely low motivation condition, comprised low NFC subjects who received the low processing motivation manipulation. Finally, a third group consisted of low NFC subjects who received the high processing motivation manipulation and high NFC subjects who received the low processing motivation manipulation. Because these subjects’ mixed heuristic/detailed processing motivation influences seemed likely to average out at a moderate level, we refer to this group as being in the moderate motivation condition.
Table 1
EXPERIMENT 2 TREATMENT MEANS AND STANDARD DEVIATIONS FOR EVALUATION AND MEMORY MEASURES

<table>
<thead>
<tr>
<th></th>
<th>Low processing motivation</th>
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<th>High processing motivation</th>
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<td></td>
<td>Low need for cognition</td>
<td>High need for cognition</td>
<td>Low need for cognition</td>
<td>High need for cognition</td>
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<tr>
<td></td>
<td>Camera angle</td>
<td>Camera angle</td>
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<td>Camera angle</td>
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<tr>
<td></td>
<td>Low eye level</td>
<td>High eye level</td>
<td>Low eye level</td>
<td>High eye level</td>
</tr>
<tr>
<td>Bicycle evaluation index</td>
<td>5.12 (4.14) 3.16</td>
<td>3.94 (5.34) 4.31</td>
<td>4.20 (5.21) 4.30</td>
<td>4.51 (4.74) 4.85</td>
</tr>
<tr>
<td>Overall number of descriptive responses</td>
<td>2.75 (2.54) 2.00</td>
<td>3.56 (3.33) 2.73</td>
<td>3.91 (3.11) 2.91</td>
<td>5.50 (5.63) 4.60</td>
</tr>
<tr>
<td>Proportion of positive</td>
<td>.48 (.24 .06)</td>
<td>.22 (.29 .40)</td>
<td>.33 (.16 .28)</td>
<td>.35 (.40 .46)</td>
</tr>
<tr>
<td>Proportion of neutral descriptive responses</td>
<td>.42 (.35 .32 .36)</td>
<td>.38 (.35 .46)</td>
<td>.43 (.72 .58)</td>
<td>.52 (.46 .44)</td>
</tr>
</tbody>
</table>

Figure 1
THREE-WAY INTERACTION OF CAMERA ANGLE, PROCESSING MOTIVATION, AND NEED FOR COGNITION

The data appear to support the heuristic processing hypothesis rather than the differential information hypothesis. Specifically, the pattern of camera angle effects on evaluations observed in experiment 1 occurred only in the extremely low motivation condition (low processing motivation/low NFC treatment; $F_{2,109} = 13.65, p < .001$), such that subjects who viewed the bicycle at eye level evaluated it less favorably than those who looked up to it from a low camera angle ($F_{1,109} = 7.71, p < .01$) but more favorably than those who looked down on it from a high camera angle ($F_{1,109} = 6.29, p < .01$). Further, camera angle effects were entirely absent in the extremely high motivation condition (high processing motivation/low NFC treatment; $F = .37$).

Interestingly, significant effects of camera angle also emerged in the moderate motivation condition ($F_{2,109} = 9.82, p < .001$). However, subjects in this condition evaluated the bike more favorably when it was viewed at eye level than when it was viewed from either a high camera angle ($F_{1,109} = 11.93, p < .001$) or a low camera angle ($F_{1,109} = 17.80, p < .001$). These findings are examined further in the General Discussion.

Descriptions of the product. Subjects’ descriptions of the bicycle were coded into four categories: the overall number of responses and the proportions of responses that mentioned product features in a positive manner (“It seemed to have a strong, rugged frame”), a negative manner (“It appeared to be cheap”), or a neutral manner (“It was a 10-speed bike with standard features”). Two judges who were blind to the treatments coded the data reliably (92%) and resolved any inconsistencies through discussion.

Analysis of the overall number of descriptive responses subjects offered revealed main effects of camera angle ($F_{2,106} = 6.83, p < .002$), processing motivation ($F_{1,106} = 53.34, p < .001$), and NFC ($F_{1,106} = 45.97, p < .001$). More responses were generated when the camera angle was low ($M = 3.80$) or at eye level ($M = 3.54$) than when it was high ($M = 3.07$), and the number of responses subjects generated was related positively to both processing motivation and NFC. In addition, a two-way interaction of processing motivation and NFC was significant ($F_{1,106} = 8.43, p < .004$). This interaction revealed that, as might be expected, the greatest number of descriptive responses was generated in the high processing motivation/low NFC condition ($M = 5.19$), the fewest emerged in the low processing motivation/low NFC condition ($M = 2.47$), and values between these extremes were found in the high (low) processing motivation/low (high) NFC conditions ($M = 3.32$ and 3.17).

Because responses that described product features in a positive, negative, or neutral manner were calculated
as proportions of the overall number of responses generated, these data were subjected to arc sin transformations for analysis. No treatment effects on the proportion of neutral responses emerged \((p > .20)\). However, the three-way interaction of camera angle by processing motivation by NFC approached significance for positive responses \((F_{2,106} = 1.94, p < .15)\) and was significant for the negative ones \((F_{2,106} = 3.17, p < .05)\). The only other significant effect on these measures was a two-way interaction of camera angle and NFC \((F_{2,106} = 3.54, p < .03)\), which emerged on the proportion of positive responses.

The three-way interactions were examined further by categorizing subjects into the same three motivation groups that were employed in the analysis of subjects' evaluations: the extremely low motivation group (low processing motivation/low NFC), the moderate motivation group (low/high processing motivation/high/low NFC), and the extremely high motivation group (high processing motivation/high NFC).

In the extremely low motivation condition, camera angle had a significant effect on both positive \((F_{2,109} = 4.72, p < .01)\) and negative responses \((F_{2,109} = 3.13, p < .05)\). These effects generally paralleled the observed effects of camera angle on subjects' evaluations. That is, subjects who observed the bicycle at eye level produced fewer positive descriptive responses \((F_{1,109} = 4.09, p < .05)\) and nonsignificantly more negative descriptive responses \((F = .13)\) than did subjects who seemingly looked up at the bike from a low camera angle. Subjects who viewed the bike at eye level also showed a nonsignificant tendency to produce more positive responses \((F = 1.07)\) and fewer negative responses \((F_{1,109} = 3.93, p < .05)\) than did subjects who seemingly looked down at the bike from a high camera angle. Subjects in the extremely high and moderate motivation conditions revealed no significant camera angle effects for positive or negative responses.

**GENERAL DISCUSSION**

The findings from experiment 2 suggest that the heuristic processing hypothesis is a more plausible explanation for camera angle effects than the differential information hypothesis. As implied by the heuristic processing hypothesis, camera angle did not appear to affect subjects' judgments of products significantly when subjects were extremely motivated to process advertising material in detail. Rather, under such conditions, subjects presumably rendered judgments on the basis of the perceived true merits of the product (Chaiken 1980; Petty, Cacioppo, and Schumann 1983), perhaps aided by their formation of a complex schema that organizes the message information (Borgida and Howard-Pitney 1983; Howard-Pitney, Borgida, and Omoto 1986). However, the camera angle at which a product was displayed appeared to be used as a heuristic-implying cue when processing motivation was less extreme.

When processing motivation was extremely low, subjects generally appear to have interpreted camera angle in terms of a simple, experientially derived decision rule that ascribes generally positive characteristics to objects viewed from below, negative characteristics to objects viewed from above, and neutral characteristics to objects viewed at eye level. Subjects' product evaluations were consistent with this premise and their descriptions of product characteristics provided additional supportive evidence.

Though the pattern of the camera angle effects observed in the moderate motivation condition was not explicitly predicted, it too can be interpreted in terms of the heuristic processing hypothesis. Like the low motivation subjects, subjects in this condition also seem likely to have relied on a heuristic decision rule when rendering evaluations. However, consistent with their balanced heuristic/analytic processing mode, they presumably used one based on a more analytic, well-reasoned logic than that guiding low processing motivation subjects.

Certain research affords insight into what this seemingly more analytic heuristic might be. Most people appear to agree that deriving well-informed, thoughtful judgments is enhanced by the accessibility of clear and valid information (Anderson 1985). Indeed, in our culture, clarity, directness, and accuracy of information are regarded as the universals of thoughtful, analytic deliberation (Brembeck and Howell 1976). Further, photographers concur that the use of eye-level shots "makes it easier to focus on [access] the important parts of the subject" (Gaunt and Petzold 1968, p. 25).

It seems plausible that people are sensitive to the fact that though all critical information may be available in high and low angle shots, it is less easily accessed or grasped in these shots than in eye-level shots. On the basis of this experience, people may develop a seemingly analytic heuristic rule, which holds that objects are more favorable when observed at eye level than when viewed from either a high or a low camera angle because eye-level shots provide easier access to the available visual information. Hence, we suggest that people who experience moderate levels of processing motivation may embrace this ostensibly more analytic heuristic decision rule and evaluate products more favorably when they are viewed at eye level than when they are viewed from either a high or a low camera angle.

This proposition, that people who process information under low versus moderate processing motivation conditions use different heuristic decision rules, is particularly intriguing. The reason is that, though much research has established that people use heuristics when processing motivation is low (Chaiken 1980; Petty, Cacioppo, and Schumann 1983), little attention has been given to people's processing under moderate motivation conditions in which a combination of heuristic and detailed processing is fostered. The observation that individuals who are moderately motivated to process information may use a seemingly more analytic decision rule is not only intuitively plausible, but also consistent with
theory, which suggests that such people will employ a mixed heuristic/detailed processing basis of evaluation (Chaiken, Liberman, and Eagly 1989). Nonetheless, more research is needed to explore the validity of this explanation.

Our findings contribute to marketing theory by suggesting not only how certain camera angles commonly used in photographing products for advertising can affect people's product evaluations, but also when and why these effects occur. People who are highly motivated to process ad information extensively are unaffected by camera angles, apparently because they base their evaluations on the perceived true merits of the product. In contrast, people who have either low or moderate processing motivation appear to be sensitive to camera angle cues and use them in distinctively heuristic, albeit different, ways.

Our findings also yield important managerial implications. They suggest that it might be advisable for marketers to employ low camera angles that look up at a product when viewers' motivation to process ads is likely to be modest (e.g., billboard advertising). When viewers' processing motivation is likely to be moderate (e.g., when ads appear in TV shows that invite moderate thought or problem-solving cognitions, such as Columbo), eye-level product shots might be more appropriate. The findings also may have implications for misleading advertising if, per the expansion implication (Preston 1977), certain camera angles are viewed as falsely increasing or exaggerating the value of a product attribute (e.g., if a low camera angle exaggerates a product's size).

Future research should explore more carefully the processes that are operating. Though the notions we outline, based on the elaboration likelihood model (Petty, Cacioppo, and Schumann 1983), offer a general account of which cues people with varying degrees of processing motivation may use in rendering judgments, they may be amplified by more specific accounts. For example, because pictures are more perceptually salient than message copy, individuals with low processing motivation may rely on photographic cues almost exclusively when forming judgments (Bordiga and Howard-Pitney 1983). Alternatively, an anchor-and-adjust (Einhorn and Hogarth 1986) account of the process suggests that low motivation individuals may determine their judgments by anchoring on the more easily processed picture without expending the additional resources to adjust judgments by using copy information. These possibilities should be examined.

Also warranting future inquiry is the possibility that under certain conditions, the heuristic rule observed under low motivation would lead to reversed camera angle effects. For example, for products in which small size or childlike charm is a benefit (e.g., miniature television sets, teddy bears), evaluations might be more positive when the camera is angled down rather than up at the product. These and other important issues pertaining to camera angle effects must be explored.
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