



The Piecemeal Approach to Comparative Advertising

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Abstract

When attempting to portray the attractiveness of a brand vis-à-vis its competitors, an ad may make global claims about superiority or specific claims about one or more attributes. A special case of latter is the piecemeal ad in which the advertised brand is compared to a competitor on one attribute, a different competitor on a second attribute, another competitor on a third attribute, and so on. The present research demonstrates the effectiveness of this technique and explores the parameters of its influence. We find that piecemeal messages are persuasive because they make seemingly strong claims in a believable manner. Consumer skepticism appears to arise only when conditions for scrutiny are very favorable.

Key words: comparative advertising, deception, inference

Comparative advertising has long interested students of marketing. Recently, interest has been directed toward the potential deceptive effects of comparative ads (e.g., Pechmann 1996; Barone and Miniard 1999). In the present research we investigate the deceptive potential of a particular form of comparative advertising known as the “piecemeal report.”

1. Theoretical Development

In a piecemeal ad, the sponsor brand is compared to one competitor on a particular dimension, a second competitor on a different dimension, a third competitor on yet another dimension, and so on. The danger to consumers lies in the tendency to believe that the sponsor is superior in an overall sense, as would be true if the sponsor were being compared to competitors that truly excel on each dimension. In fact, the sponsor may

score next-to-last on each dimension, surpassing only the lone identified competitor. Thus, an erroneous conclusion may be drawn from literally true assertions.

When a firm's messages are deliberately structured to foster misinterpretation, the potential for deception arises (see Harris and Monaco 1978). Consumers may fall prey to such deception for at least three reasons. First, there are strong conventions that govern communication. For example, the most obvious meaning of a message should be the correct one and, more generally, messages should be informative, relevant, and truthful (Grice 1975). Unless led to believe otherwise, consumers may assume that these conventions are being followed in commercial messages. Second, irrespective of conversational norms, a fundamental bias of the cognitive system is to assume that comprehended information is veridical (Gilbert 1991). Disbelief, in contrast, requires a subsequent and deliberate effort. When considered in the context of pragmatic implication, this bias suggests two additional barriers to accurate interpretation: (i) Attempts to disbelieve must be made quickly because verbatim memory for a linguistic expression may be fleeting (see Alba and Hasher 1983). (ii) Disbelief will be especially unlikely when processing is constrained. Thus, consumers may explicitly assess the believability of a message only when prompted by skepticism-inducing cues in the message or environment. Finally, proper interpretation of an utterance can be exceedingly difficult—even when the normal conventions are abandoned and one deliberately attempts to assess the veracity of a statement. Research performed across a variety of domains, including advertising, has demonstrated the relative ineffectiveness of forewarning and training on consumers' ability to discriminate between literal assertions and the pragmatic implications of those assertions (Harris 1977; Harris, Teske, and Ginns 1975). Taken together, these characteristics of linguistic processing suggest that consumers may be very vulnerable to the effects of misleading piecemeal messages.

1.1. Objectives

The following experiments have two objectives. The first objective is to document the persuasive power of piecemeal messages. Although prior research has examined various forms of pragmatic implication, the specific case of the piecemeal format has largely been ignored. Experiment 1 examines the impact of a piecemeal ad relative to both a noncomparative ad and a traditional comparative ad in which a brand compares itself to a competitor on several common dimensions. The second objective is to explore the role that believability may play in the effectiveness of piecemeal comparisons. Given the seductive nature of pragmatic implication, we hypothesize that disbelief will occur when consumers are prompted by the strength and source of the message to question the implication and have the opportunity to do so. Experiments 2 and 3 explore the role of believability by manipulating both the format of the message and the source of the information. Experiment 3 also varies the opportunity to process the meaning of the message.

2. Experiment 1

2.1. Method

2.1.1. Subjects. Subjects were 120 business undergraduates from a major international university who participated in the experiment in exchange for extra course credit.

2.1.2. Product Category. We sought a product category in which subjects possessed a reasonable level of familiarity but not high expertise. Based on a pretest in which subjects rated their knowledge of several product classes, the category of automobiles was chosen. A second pretest revealed greater subject familiarity with Japanese brands than American or European brands. A third pretest assessed subjects' overall liking for several brands of Japanese cars as well as their beliefs concerning the brands' standing in terms of safety, power, roominess, and gas mileage.

We chose four brands in the same price range that varied in terms of subjects' beliefs concerning the four attributes. Suzuki Swift, Mazda Funtop, Mitsubishi Lancer, and Nissan Sunny were rated worse than the other three brands in terms of power, roominess, safety, and gas mileage, respectively. Of these, Nissan Sunny received the best rating in terms of overall liking. These four brands were used as the comparison brands. Consistent with prior research (e.g., Barone and Miniard 1999; Harris 1977; Johar 1995), a fictitious name (Ambassador) was used for the focal brand to control for prior brand beliefs.

2.1.3. Design and Stimuli. Message format was the only factor manipulated in the study. There was a noncomparison condition, a single-comparison condition, and a piecemeal comparison condition. In the noncomparison condition, the message asserted that the focal brand (Ambassador) offers "Great Safety, Great Roominess, Exceptional Power, and Great Mileage." The single-comparison condition refers to a traditional comparison ad in which a focal brand compares itself to a single competitor on one or more dimensions. Within the present single-comparison condition, there were four replication groups; each group received a message containing a single but different brand as the comparison brand. In each of the four groups, the focal brand was portrayed as superior to the comparison brand in terms of safety, power, roominess, and gas mileage. For example, one version of the ad stated: "Compared to the Suzuki Swift, the Ambassador offers Greater Power, More Room, Superior Safety, and Better Mileage." The piecemeal ad was constructed such that the focal brand was described as superior to the brand that was judged in the pretest to be the *worst* in terms of each attribute of comparison. Thus, the advertisement was constructed to be consistent with the possibility that the focal brand was next-to-worst on each dimension of comparison—thereby offering a conservative test of the piecemeal format that is also consistent with its potential to deceive.

The actual ads were concise and largely informational. For each stimulus, the ad began with puffery-like statements regarding the attractiveness of the product. The specific attribute information followed directly afterward. All information was verbal in nature.

2.1.4. Procedure. Subjects were run in groups of less than twenty. Random assignment was achieved by running all conditions within the same experimental session. At the

outset, subjects were told that the study involved copy-testing of an advertisement for a new car that was soon to be introduced in the region. Subjects were given four minutes to process the contents of the advertisement. After they processed the advertisement page, subjects responded to a questionnaire that measured their evaluation of the focal brand on three fifteen-point scales anchored by “like least” and “like most,” “extremely negative” and “extremely positive,” and “worst brand” and “best brand.”¹

2.2. Results

The mean of the three evaluation scales ($\alpha = 0.86$) served as the main dependent variable. Because there were no differences among the four versions of the single-comparison ads ($F < 1$), the evaluations in the four replicates were averaged. The mean evaluation scores in the noncomparison, single-comparison, and piecemeal comparison conditions were 8.49, 9.12, and 10.81, respectively. A one-factor (three levels of message type) ANOVA revealed a significant effect ($F_{2,117} = 12.35$, $p < 0.01$). Additionally, we performed two planned contrasts. A contrast between the noncomparison group and the combined comparison groups (single-comparison group and the piecemeal comparison group) was significant ($F_{1,117} = 13.28$, $p < 0.01$). More important, the contrast between the single-comparison group and the piecemeal comparison group was significant ($F_{1,117} = 16.96$, $p < 0.001$).

A second ANOVA compared the piecemeal comparison condition to the single-comparison replicate containing the brand that received the highest overall evaluation in the pretest (Nissan Sunny). The difference was significant (9.63 versus 10.81; $F_{1,40} = 5.84$, $p < 0.03$). Thus, the (unflattering) piecemeal comparison produced higher evaluations of the focal brand than did comparison to the best liked of the four brands that appeared in the piecemeal ads.²

2.3. Discussion

These results argue that the piecemeal format can be more persuasive than the traditional comparative format commonly observed in the natural environment and frequently studied in the laboratory. Moreover, although the piecemeal ad was not technically deceptive due to the use of a fictitious focal brand, brand evaluations did not reflect suspicion regarding potential deception.

As noted, there is a bias to accept the conclusion implied by a piecemeal message due to linguistic conventions, the difficulty of discriminating implication from assertion, and the primacy of belief over disbelief. In Experiments 2 and 3 we focus on the latter. We argue that a piecemeal message is more believable than an explicit expression of its pragmatic implication and that the tendency to accept the implication of a piecemeal message will prevail unless strong cues prompt consideration of its validity.

3. Experiment 2

3.1. Rationale

Previous research has examined the relative believability of comparative and noncomparative ads (see Grewal et al. 1997). Because our focus is on pragmatic implication, Experiment 2 is restricted to comparative messages and examines whether a piecemeal ad is perceived as more believable than an explicit statement of the piecemeal ad's pragmatic implication and, if so, whether the difference in believability can account for the persuasive effect of the former. Specifically, we hypothesize that the effectiveness of piecemeal ads is attributable in part to their ability to make seemingly strong claims without arousing the suspicion that might accompany explicit expression of the implication of the message. An explicit assertion that the focal brand is better than several well-known comparison brands on several dimensions may not be believable, especially when the message emanates from an advertisement for the focal brand. Piecemeal ads suggest overall superiority without explicitly making such a strong claim.

Believability is determined not only by the strength and overtness of a claim but also by its source. Very strong explicit claims may be as persuasive as implied claims if the source possesses high integrity. In Experiment 2, both the message format (piecemeal versus explicit) and message source (advertisement versus a consumer magazine) are manipulated. We predict that any advantage of a piecemeal ad will obtain only when the source is not highly credible.

3.2. Method

3.2.1. Subjects. The experiment was conducted at major universities in Asia ($N = 108$) and Europe ($N = 119$). Subjects were undergraduate marketing students fulfilling a course requirement.

3.2.2. Stimuli and Design. Automobiles again served as the product category. The brand names were adjusted for local compatibility. As in Experiment 1, the focal brand carried a fictitious name. In Asia the same focal brand name, "Ambassador," and the same comparison brands were used as in Experiment 1. In Europe, the focal brand was named "Malegro," and the comparison brands were four European mid-sized sedans (VW Passat, Opel Vectra, Ford Mondeo, and Renault Laguna). The comparison attributes were the same in both countries.

A 2 (message format) by 2 (message source) between-subjects design was used. The message format was either explicit assertion or piecemeal comparison. In the assertion condition, the advertisement stated that the focal brand was better than all of the four comparison brands in terms of gas mileage, safety, roominess, and power. The piecemeal advertisement was similar in structure to the one used in Experiment 1. However, because our goal was different, the nature of the specific comparisons was altered. In Experiment 1 we wished to demonstrate not only that piecemeal messages are persuasive but also that

they may be deceptive. Consequently, the focal brand was compared to the competitor that fared most poorly on each dimension of comparison. In the present experiment the objective was to examine the relative influence of different message formats that convey the same truth. Thus, the piecemeal message favorably compared the focal brand to the brand in the set that was perceived to perform best on each dimension as determined by pretests and independent evaluations. The resultant message may be viewed as semantically equivalent to the assertion ad in terms of both the strength and meaning of the claims.

The second factor manipulated was the message source. Approximately half of the subjects in each of the message-format conditions were told that the message was an excerpt from a print advertisement to be released by the manufacturer of the focal brand. The remaining subjects were told that the information appeared in a story featured in a forthcoming issue of a high-credibility consumer magazine (*Choice* magazine in Asia and *Test Purchase* in Europe). After reading the information in either a piecemeal or explicit-assertion form, subjects responded to a questionnaire that measured their evaluation of the focal brand via the same scales described in Experiment 1. We also measured believability of claims on a fifteen-point scale.

3.3. Results and Discussion

As before, the mean of the three evaluation scales ($\alpha = 0.84$) served as the primary dependent variable. The evaluation data were submitted to a three-way ANOVA in which country was added to the two experimental factors. Country exerted a main effect ($F_{1,219} = 34.1$) but importantly did not interact with the experimental factors.

There was a main effect of source ($F_{1,219} = 8.63$, $p < 0.01$), which suggests that our manipulation was successful. More important, the message-by-source interaction was significant ($F_{1,219} = 5.25$, $p < 0.03$). Descriptively, the means comport with our hypothesis (see Table 1). The lowest evaluations were obtained when the focal brand made an explicit assertion about superiority over all named competitors. A follow-up analysis revealed that when the source was the focal brand, the message format had a significant effect on the evaluations ($F_{1,219} = 6.37$, $p < 0.02$). Specifically, the piecemeal comparison message resulted in a *more favorable* evaluation than did the assertion type of message. However, when the source was a highly credible consumer magazine, the message type did not influence the evaluation of the focal brand ($F < 1$).

Subjects' assessment of the believability of the claims served as a check of the source manipulation. As expected, subjects in the consumer magazine condition rated the

Table 1. Means (and Standard Deviations) for Experiment 2

| Source | Message Type | Evaluation | Believability |
|-------------------|--------------|--------------|---------------|
| Advertisement | Assertion | 8.51 (2.41) | 5.91 (2.97) |
| Advertisement | Piecemeal | 9.52 (2.78) | 6.79 (3.19) |
| Consumer Magazine | Assertion | 10.02 (1.99) | 8.28 (3.15) |
| Consumer Magazine | Piecemeal | 9.71 (2.05) | 7.67 (3.38) |

believability of the claims more highly than did subjects in the advertisement condition ($F_{1,219} = 21.31, p < 0.001$). However, this main effect was qualified by a significant source-by-message interaction ($F_{1,219} = 4.46, p < 0.04$). Follow-up tests revealed that when the source was a company-sponsored ad, subjects considered the piecemeal comparison to be more believable than an explicit assertion ($F_{1,219} = 3.23, p < 0.08$). Thus, piecemeal ads influence consumer evaluations even when they are from a source of relatively low credibility. In contrast, there was no difference between the message types when the source was the more credible consumer magazine ($F_{1,219} = 1.36, p > 0.24$). It is unlikely that these believability results were contaminated by the evaluation measures inasmuch as confidence measures were taken between the evaluation and believability measures and showed no carryover (see Note 1).

It is important to note that the piecemeal message and explicit assertion message offered comparison to the same set of competing brands along a common set of product attributes. Thus, mere favorable comparison to familiar brands cannot account for the present results. Rather, the pattern of means suggests that believability plays a central role.

3.3.1. Mediation Analysis. To investigate the mediating role of believability on attitude, we examined the three criteria proposed by Baron and Kenny (1986). First, the independent variable(s) should have a significant effect on the dependent variable. Second, the independent variable(s) should have a significant effect on the presumed mediator. Third, when both the independent variable(s) and the mediator are included in the model, the mediator should have a significant effect on the dependent variable but the effect of the independent variable(s) should be reduced.

The tests strongly supported the mediational hypothesis. When believability was included in the model, the simple effect of message format in the company-sponsored ad condition was reduced to nonsignificance ($F_{1,218} = 2.60, p > 0.10$). The message mean square declined from 30.74 to 10.73, a reduction of approximately 65%. The effect of the presumed mediator remained highly significant ($F_{1,218} = 36.5, p < 0.001$). Thus, believability acted as a mediator of the effect of message format on focal brand evaluation when the source of the message was the focal brand.

4. Experiment 3

4.1. Rationale

The results of Experiment 2 suggest that consumers are less suspicious of piecemeal claims than explicit assertions. In the present experiment we manipulated factors that vary in the amount of skepticism they produce—all within the context of the piecemeal format. Specifically, we manipulated processing opportunity and information source. We hypothesized that sensitivity to the piecemeal format would be greater when processing is relatively unconstrained, particularly when the source of the information is a firm (rather than a more credible consumer magazine).

To heighten sensitivity further, a known brand was substituted for the neutral referent used in the preceding studies. The product class in Experiment 3 consisted of indoor paint and the focal brand was Walmart. Walmart is a discount brand that is less specifically associated with paint than the specialty brands used as comparisons.

4.2. Method

4.2.1. Subjects. Subjects were 134 business undergraduates at a major university in the United States who received extra course credit in exchange for their participation.

4.2.2. Design and Manipulations. Piecemeal comparison was the only form of message. The experiment used a 2 (source) by 2 (processing opportunity) between-subjects design. Source was manipulated more subtly than in Experiment 2. For all subjects, the information was described as an excerpt from a Walmart ad. In the *Consumer Reports* conditions, the ad stated that the information regarding brand comparisons was taken from *Consumer Reports* magazine. In the alternative conditions, no mention was made of *Consumer Reports* or the source of the information. By default, attribution of the claims is made to Walmart. Thus, the difference between the conditions was not whether the information was couched within an ad but rather whether reference was made in the ad to a highly credible source. Note, however, that a misleading message may be crafted from data provided by a credible source, and therefore the absolute truth value of message is unaffected by source.

To manipulate processing, two factors were intentionally confounded to maximize differences between conditions. Subjects in the low-opportunity condition were asked to review the information as though they were glancing at an advertisement in a magazine. In addition, they were asked to proceed to the next task as soon as they finished reviewing the information. In the high-opportunity condition, subjects were asked to review the information carefully and think about its meaning. Further, they were asked to take their time before proceeding further and were allowed to revisit the ad when responding to the dependent measures.

4.2.3. Materials and Procedure. In all conditions the message claimed that the Walmart brand was superior to Glidden, Sherwin Williams, Lucite, Benjamin Moore, and Dutch Boy in terms of protection against fading, stain resistance, hiding of old coats, ease of application, and protection against humidity, respectively. These assertions reflected actual *Consumer Reports* assessments.

Subjects in all conditions reviewed the piecemeal information and responded to a questionnaire that measured evaluation of the focal brand and believability of the ad on fifteen-point scales.

4.3. Results and Discussion

The evaluation scales were again highly consistent ($\alpha = 0.91$). Focal brand evaluations were submitted to a two-way (source \times opportunity) ANOVA. Table 2 presents evaluations in different conditions. The results revealed that the source-by-opportunity interaction approached significance ($F_{1,130} = 2.93$, $p < 0.09$). A follow-up analysis revealed that the effect of source was significant under high processing opportunity ($F_{1,130} = 5.91$, $p < 0.01$) but not under low processing opportunity ($F < 1$). Under high processing opportunity, evaluation was significantly lower when the source of the comparisons was the firm than when the source was *Consumer Reports*.

The believability scores corresponded to expectations and generally corresponded to the evaluation scores, although only the main effect of source was significant ($F_{1,130} = 3.85$, $p < 0.05$). The ads were most believable when reference was made to a highly credible source and opportunity to process the information was constrained; ads were least believable when Walmart was the only source associated with the message and opportunity to process was relatively unconstrained. A mediational test of believability on evaluation was conducted on the significant simple effect of source at high processing opportunity. The inclusion of this mediator in the model caused a nearly 65% reduction in the effect of source (mean square reduced from 45.02 to 17.20), although the effect was still marginally significant ($F_{1,129} = 2.84$, $p < 0.10$). The effect of the mediator remained highly significant ($F_{1,129} = 21.70$, $p < 0.001$).

The results indicate that piecemeal-based persuasion can be moderated but only modestly and only under extreme conditions. Consumers may become somewhat less pliant when processing is unconstrained, the comparisons are attributed to the sponsoring firm, and the claims of superiority are made about a brand that is less persuasive in the category than the comparison brands. We speculate that these conditions are rarely met in combination.

Interestingly, the effect of message source—a peripheral cue—was greater when opportunity to process was high. This result is inconsistent with models of persuasion that argue that peripheral cues are most effective when processing constraints inhibit analysis of the message content (e.g., Petty, Unnava, and Strathman 1991). Our explanation is that the subtlety of the piecemeal format is revealed only upon close inspection. In the present case, close inspection occurred only when prompted by skepticism regarding the claim and enabled by the environment.

Table 2. Means (and Standard Deviations) for Experiment 3

| Source | Processing Opportunity | Evaluation | Believability |
|------------------|------------------------|--------------|---------------|
| Walmart | Low | 10.24 (3.09) | 8.38 (2.70) |
| Walmart | High | 9.11 (2.51) | 7.44 (3.40) |
| Consumer Reports | Low | 10.24 (2.73) | 9.15 (3.34) |
| Consumer Reports | High | 10.75 (2.66) | 8.73 (2.60) |

5. General Discussion

The present studies illustrate the effectiveness of the piecemeal format across various contexts and subject populations. Experiment 1 showed that a piecemeal message is more persuasive than either a noncomparative message or a comparison message involving only one comparison brand. This result is consistent with the argument that piecemeal messages are effective in part due to the number of favorable comparisons they make to specific competitors (cf. Kardes 1993). Although such a process may be operative, the effect obtains even when the competitors are fictitious (see Note 2). Hence, a frequency or numerosity rationale may play a role such that assessment of the focal brand is based on the number of wins it compiles against its competition (Alba and Marmorstein 1987). However, inasmuch as piecemeal messages are more persuasive than single-comparison ads, the explicit number of comparisons cannot uniquely account for the results. Pragmatic inference also seems to play a role. Consumers may infer that the focal brand is being compared to the competitor that performs best on each dimension and therefore assume that the focal brand is best overall. Such an inference is tantamount to inferring wins against all competitors on all dimensions. Thus, a piecemeal ad implies a larger number of implicit “wins” against the competition than does a comparable single-comparison ad.

However, the persuasiveness of piecemeal comparisons arises not only from their ability to prompt unwarranted inferences. The piecemeal format also appears to inhibit the discounting responses produced by semantically equivalent assertions in which the number of “wins” is explicitly stated (Experiment 2). Discounting of a piecemeal message itself may occur in the rare instance in which consumers possess prior beliefs about the quality of a questionable brand and process information more intensively from a source that is relatively less credible (Experiment 3). All discounting effects appear to be mediated by the perceived believability of the piecemeal comparison.

These results are consistent with recent research on comprehension and highlight consumer vulnerability to piecemeal messages. Gilbert’s (1991) “Spinozan” view of comprehension holds that an utterance is accepted as true upon initial comprehension and must be effortfully disbelieved if it has dubious validity. Insofar as pragmatic inferences are naturally drawn, we should expect piecemeal ads to be effective in situations that do not provoke deep skepticism.

Future research should focus on further elucidating the process(es) through which piecemeal messages influence consumer judgment. In addition, some attention should be devoted to mapping the boundaries of the effect. For example, piecemeal messages may backfire if consumers have specific knowledge about poor performance of competing brands on the dimensions of comparison. Whereas Experiment 3 demonstrates that heightened vigilance may reduce vulnerability, so too may expertise.

Notes

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1. In this and the following experiments, subjects also were asked to rate their purchase intention and confidence in their evaluation. The results from the purchase intention measure largely mimicked those from the evaluation measure. The confidence scores showed that subjects in the piecemeal condition of Experiment 1 were more confident of their evaluations than were subjects in the other conditions. In the remaining experiments, confidence was equal across all experimental conditions. Thus, subjects who were most misled by the piecemeal format were no less confident in their assessments.
2. The robustness of these results is evidenced by two replication experiments conducted in the United States. Subjects were exposed to a piecemeal or single-comparison ad for natural skin lotions in which the comparison brands were given neutral labels (i.e., brand A, brand B, etc.). In both instances, the evaluations in the piecemeal condition were higher than in the single-comparison condition ($p < 0.05$). A third follow-up experiment examined robustness by comparing the piecemeal format against an incomplete comparison ad, wherein a nonspecific comparison is made to the competition (e.g., "Car X offers more gas mileage"). The meaning of the comparison is ambiguous, although the implication is one of brand superiority. Prior research has shown incomplete comparisons to be persuasive (Johar 1995). In this study, the piecemeal condition was as described in Experiment 1. In the incomplete-comparison condition, the focal brand was described as better on each attribute with no reference to any competitor. Results showed that the piecemeal message produced higher brand evaluations than did the incomplete-comparison message ($p < 0.02$).

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