Re-Inquiries

Visual and Verbal Rhetorical Figures under Directed Processing versus Incidental Exposure to Advertising

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This re-inquiry examines the robustness of research showing that rhetorical figures such as rhyme and metaphor can have a positive impact on consumer response to advertising. Prior empirical research explicitly directed subjects to process the ads and generally examined either visual or verbal rhetoric, but not both. We embedded ads containing visual and verbal figures in a 32-page magazine designed to be interesting to subjects and manipulated directed processing or incidental exposure to the ads. Ads with figures were recalled more often and liked better. Visual figures were more effective regardless of processing condition, whereas verbal figures performed better only when subjects were directed to process the ads.

Over the past 15 years a growing stream of scholarship has contributed new insights on rhetorical figures, an aspect of advertising style that includes rhyme, antithesis, pun, and metaphor, among others (e.g., Deighton 1985; Dingena 1994; Durand 1987; Forceville 1994; Howard 1990; Leigh 1994; McGuire 2000; McQuarrie 1989; McQuarrie and Mick 1992, 1996, 1999; Mothersbaugh, Huhmann, and Franke 2002; Munch and Swasy 1988; Phillips 1997; Scott 1994; Stern 1989; Swasy and Munch 1985; Tom and Eves 1999; Toncar and Munch 2001). Findings have shown that rhetorical figures can enhance ad recall and produce more positive attitudes. However, throughout this research stream subjects have been explicitly instructed to examine and evaluate the ads.

It is unfortunate that the performance of rhetorical figures under conditions of incidental exposure to ads has not yet been investigated. This omission is crucial in light of the theoretical explanations offered for the positive impact of figures. It has been argued that rhetorical figures invite elaboration because their style is based on artful deviation, that is, a swerve from expectations (McQuarrie and Mick 1996). This heightened elaboration is presumed to create multiple cognitive pathways back to the originating message, which then increases the probability of ad recall. Similarly, elaboration on the meanings set in play is expected to foster a pleasurable aesthetic experience, which then improves the attitude toward the ad.

The argument that figures achieve their impact by inviting elaboration assumes that consumers will choose to allocate the necessary processing resources in response to this invitation, that is, that a rhetorical figure, once encountered, can motivate additional processing. Clearly, it is not possible to evaluate this argument with an experimental design that explicitly directs subjects to process the ads. Rather, a more comprehensive test requires an incidental-exposure condi-

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tion in which subjects have not been told to process the ads and there are appealing alternative stimuli to which processing resources can be applied, for example, articles in a magazine context. Accordingly, this re-inquiry was designed to test the robustness of prior research under conditions of incidental exposure versus directed processing.

METHOD

Stimulus Development

Magazine. We created a mock magazine containing editorial content relevant to our intended subjects. Called *College World,* it consisted of 32 pages, 8 1/2 inches × 11 inches in size, that were laid out by a professional artist, spiral bound, and produced in multiple copies using a color laser printer. It contained 16 pages of ads (eight test and eight filler), along with 16 other pages that comprised 10 articles, plus front and back covers, and a table of contents. In keeping with a typical magazine layout, there were multipage and part-page articles, ads and articles were interspersed, and some ads appeared in between the pages of multipage articles. The test ads appeared between pages 8 and 27, and filler ads preceded, intermixed with, and followed the test ads. Eight different orders of ad presentation were arranged via eight versions of the magazine in order to implement the experimental design and to control for primacy and recency effects.

The articles were edited versions of material that had appeared in print or Web-based magazines targeted to a youthful audience. A range of topics, of the sort normally found in such magazines (e.g., health, food, and travel), was included. In a pilot test ($N = 52$), 67% of the subjects asked to browse the magazine reported that they had read some of the articles, 75% rated the articles as more interesting than boring, and 92% indicated that at least some of the articles were relevant to their needs and concerns. Thus, the articles appeared to succeed in engaging subjects.

Advertisements. The ads were constructed by a professional artist, according to our instructions, using a scanner and graphics software to transform actual magazine ads into experimental stimuli. Since the project is a re-inquiry, we made design decisions to optimize the comparability of our findings to prior *JCR* articles. Six of the eight target ads (and their respective controls, as described below) were taken from McQuarrie and Mick (1992, 1999), and two others were constructed for the present study (verbal schemes had not appeared in their prior studies; see below and table 1). Each experimental ad had a similar layout, consisting of a pictorial image at the top center of the page, accompanied by a headline and a brand name at the bottom center of the page. Ad layout was held constant to improve internal validity by controlling for extraneous sources of stylistic variation.

Experimental Design

The experimental design incorporated one between-subjects factor (directed processing vs. incidental exposure to the ads) and three within-subjects factors (figure present vs. figure removed, scheme vs. trope figures, and verbal vs. visual figures).

Directed Processing versus Incidental-Exposure Manipulation. For the directed-processing condition, subjects were informed that the Department of Marketing was conducting research on magazine advertising. They were instructed to consider the ads in the magazine carefully and be prepared to answer questions about the ads and the products advertised. The articles were mentioned only in passing, as providing a typical surrounding for ads in a magazine. To cement the focus on advertising, these subjects answered questions about their involvement with magazine advertising prior to looking over the magazine. For the incidental-exposure condition, subjects were told that the Department of Communication was conducting research on a new magazine directed at college students. The instructions led subjects to focus on the articles in the magazine with the stated goal of evaluating the usefulness of the articles for college students, in preparation for subsequent questions. To cement the focus on editorial content, these subjects completed a variety of questions about their interest in, and preferences for, certain magazine topics prior to looking over the mock magazine. No mention was made of the ads appearing in the magazine.

Because prior theory and results imply that rhetorical figures are especially effective at inviting ad processing, the goal of the incidental exposure manipulation was to create a condition in which subjects were free to accept or decline this invitation but were not otherwise constrained relative to the directed-processing condition. Thus, these subjects could be drawn to process any ad to the same depth as subjects who were directed to process ads. Or, they could turn the page.

Figure Treatments. Each of the eight test ads was created in two versions, one version with a focal rhetorical figure present ("treatment") and one with that figure removed ("control"). Subjects saw one version of each of the eight test ads, for a total of four treatment and four control ads. The ads that received the figure treatment for an individual subject varied according to the order of presentation used. See table 1 for a description of the manipulations applied to the ads.

Of the four ads with a figure treatment seen by a subject, two contained a scheme (e.g., rhyme), and two contained a trope (e.g., metaphor). Whether a specific test ad received a scheme or trope figure, so that it was coded as a treatment ad, or did not, so that it was coded as a control ad, varied across orders of presentation (see table 2). For each subject, ads with schemes present were compared with controls with those schemes removed, and likewise trope ads were com-

TABLE 1

TEST ADS AND MANIPULATIONS

Product advertised	Type of figure	Stimulus modality	Description of rhetorical figure	Manipulation to break or remove the rhetorical figure
Motion sickness remedy[a]	Trope	Visual	A visual metaphor: the picture shows a car seat with the package serving as a seat belt buckle.	A buckle was added to the seat belt, and the package was separated from the seat belt and moved further back on the seat.
Almonds[a]	Trope	Visual	A visual pun: the picture shows two plates, each holding a croissant covered by almonds, along with some strawberries. The pun is created by the accidental resemblance between the arrangement of items on the right plate and a smiling face with strawberries for eyes and a croissant for a smile.	The almonds and croissants on the right-hand plate were rearranged so as not to resemble facial features.
Flashlight[b]	Trope	Verbal	A verbal pun is created by "The gift idea that leaves everyone *beaming*." The picture shows a flashlight on the gift wrapping.	The word "happy" was substituted for "beaming."
Strawberry shortcake[b]	Trope	Verbal	A verbal pun is created by *"Berried* Treasure." The picture shows a piece of strawberry shortcake.	"Tasty berries" replaced "berried treasure."
Mascara[a]	Scheme	Visual	A visual rhyme: the picture shows a woman in a fur hat and coat. The rhyme results from the manner in which the contours of the eyelashes and fur ends echo one another.	The fur ends were airbrushed to remove spikiness, eliminating the repetition of contours.
Yogurt[a]	Scheme	Visual	A visual antithesis: the picture shows a shapely woman in a bathing suit with a beach ball beside her waist. Antithesis results from the convex contour of the beach ball juxtaposed with the concave figure of the woman.	The beach ball was cropped to create a beach umbrella with a less-convex profile and was angled away from the woman's waist.
Pistachios[c]	Scheme	Verbal	A verbal rhyme is created by "Can't say *no* to *pistachio*."	"Refuse a" was substituted for "say no to."
Rice mix[c]	Scheme	Verbal	A verbal rhyme is created by "Taste so *great* you can't *wait*."	"Flavor so good" was substituted for "taste so great."

[a]These ad stimuli were adapted from McQuarrie and Mick (1999); the motion sickness and mascara ads are reproduced therein. Used by permission.
[b]These ad stimuli were adapted from McQuarrie and Mick (1992); the flashlight ad is reproduced therein. Used by permission.
[c]These ad stimuli were constructed for the present study by the authors.

pared with their controls, and the comparison of these differences was analyzed as an interaction in the design.

A trope such as a metaphor or a pun rests on a deviant usage that is irregular, or breaks a rule. For example, one of the ads used in the study shows a flashlight lying on gift wrap with the headline, "The gift idea that leaves everybody beaming." This ad delivers a (verbal) trope, a pun in this case, inasmuch as "beaming" has a dual and irresolvable reference to both smiling and the light produced by a flashlight. This ad becomes a trope control ad when, for another subject, the word "happy" is substituted for "beaming," thus removing the pun while keeping the product attribute claim constant (that this flashlight makes a pleasing gift). Yet another ad delivers a (visual) trope, a metaphor in this case, by showing a car seat with a package of a motion sickness remedy serving as the buckle on the seat belt. Packages are not buckles—the irregularity of this trope—but the metaphor invites elaboration on how this remedy might offer security and protection analogous to that provided by a seat belt. This stimulus becomes a trope control ad when the seat belt buckle is restored and the package is placed beside the belt.

A scheme deviates by means of excessive regularity, or too much order. For instance, one ad in the study delivers a (verbal) scheme, a rhyme in this instance, by showing a scattering of nuts with the headline, "Can't say no to pistachio," thus inviting elaboration on the irresistibility of these nuts. It becomes a scheme control ad when the headline is reworded as, "Can't refuse a pistachio." Another ad in the study, for mascara, shows a woman wearing a fur hat and coat. The ends of the fur exactly echo the shape of her eyelashes, so that a (visual) scheme is delivered, a rhyme in this case, one that invites elaboration on the theme of how the rich softness of eyelashes can be brought out by this mascara. This stimulus becomes a scheme control ad when the fur ends are blurred into a smooth contour. (See table 1 for descriptions of the remaining four test ads.)

TABLE 2

ORDERS OF PRESENTATION

Position in test ad sequence	Order A	Order B
Ad 1	Pistachio, treatment, verbal scheme	Motion sickness, control, visual trope
Ad 2	Pistachio, control, verbal scheme	Motion sickness, treatment, visual trope
Ad 3	Almonds, treatment, visual trope	Almonds, control, visual trope
Ad 4	Rice, control, verbal scheme	Rice, treatment, verbal scheme
Ad 5	Flashlight, treatment, verbal trope	Flashlight, control, verbal trope
Ad 6	Yogurt, control, visual scheme	Yogurt, treatment, visual scheme
Ad 7	Mascara, treatment, visual scheme	Mascara, control, visual scheme
Ad 8	Shortcake, control, verbal trope	Shortcake, treatment, verbal trope

NOTE.—Two of the eight orders are reproduced here to provide specific examples of how the figure, trope, and visual treatments were encountered by a subject. The other six orders consist of three pairs similar in structure to A and B, but assigning different positions to specific ads, with an eye to controlling for order effects. Each subject saw four of the ads with a figure present and four with that figure removed (see table 1). Note that in the study, articles and filler ads preceded, intermixed, and followed the test stimuli. "treatment" or "control" indicates treatment or control version of the ad, respectively.

According to McQuarrie and Mick (1996), tropes are characteristically more deviant than schemes, and, as a result, they appear more capable of motivating additional elaboration. A recent archival study of 854 ads confirmed that Starch Read Most scores were higher for ads that had a trope in the headline as compared with ads that had a scheme, and also that ads featuring either type of figure scored higher than ads with no figure in the headline (Mothersbaugh et al. 2002). Under incidental exposure, however, it is conceivable that tropes might underperform schemes, since tropes demand more resources in order to support additional elaboration, and these resources may not be available when subjects are not directed to process ads.

For each subject, one scheme treatment was delivered verbally, via the headline, and one was delivered visually, via the illustration; the same procedure was used for the two trope ad treatments. Each visually or verbally manipulated ad could function as either a treatment ad or a control ad, depending on the order of presentation. As with schemes and tropes, for each subject visual treatments are compared with visual controls, and verbal treatments to verbal controls.

Although McQuarrie and Mick (1999) showed that visual figures behaved in accordance with their framework as developed from analyzing verbal figures (McQuarrie and Mick 1996), visual and verbal figures have not been simultaneously examined for comparative assessment. Given the well-known picture superiority effect (Childers and Houston 1984; Edell and Staelin 1983), we conjectured that visual figures might outperform verbal figures, especially in the incidental-exposure condition.

Overall, the experimental design corresponds to the procedures used in McQuarrie and Mick (1992, 1999). Treatment contrasts are implemented across a mix of product categories (serving as replicates) for each subject. The arrangement of ads takes advantage of a predominantly within-subjects design that both reduces the impact of individual differences and, perhaps more important, minimizes the impact of any extraneous features of the individual ads (see table 2). This design is optimized for investigating the impact of the presence or absence of a rhetorical figure. Scheme and trope figures—in both visual and verbal modes—were included to align this re-inquiry more closely with prior work.

Sample and Procedure

Data were collected from 242 undergraduate students who were enrolled in marketing principles courses at two universities and whose first language was English. Subjects were predominantly juniors and seniors, mostly 20–22 years old, and nearly equally split on gender (males 52%). Depending on the university, subjects volunteered in return for either a cash payment or course credit. Subjects were processed in small groups of 13 or less in empty classrooms or library study halls. Since they worked at their own pace and the magazine and answer booklets reflected different orders of ads and measures (and a subsequent surprise memory test), special care was taken so that subjects were sufficiently separated and could not glimpse others' materials.

On arrival, subjects received a copy of the mock magazine with instructions clipped to the front. These instructions introduced the study and effected the processing manipulation described above (processing directed onto articles or onto ads). When subjects had finished looking through the magazine, they returned it to the experimenter and received an answer booklet that contained (1) the manipulation checks, (2) the A_{AD} measures, (3) some additional measures not discussed here,[1] (4) the aided recall measure, and (5) demographic and miscellaneous measures. By the time subjects undertook the recall task, 10 or more minutes had passed since the magazine had been removed, substantially clearing short-term memory.

Manipulation and Confound Checks

On the first page of the answer booklet, prior to completing any of the measures of dependent variables, subjects indicated where they had focused their attention on an 11-point scale, with "1" labeled by "mostly attended to the ads,

[1]These included alternative manipulation checks, whose results were consistent with those reported, and two measures of individual differences, style of processing (Childers, Houston, and Heckler 1985) and need for cognition (Cacioppo, Petty, and Kao 1984). The individual difference measures did not interact with the figure treatment and, hence, are not discussed here. They did, however, serve to delay the recall measure until short-term memory had cleared.

mostly ignored the articles," and "11" labeled by the reverse. This measured the extent to which the instructions succeeded in directing the focus of subjects' processing onto either the ads or the articles. On a second 11-point scale, anchored by "0% effort" and "100% effort," subjects indicated how much effort they had put into reviewing the mock magazine. This item was included to ensure that the manipulation of processing focus was not confounded with variations in the overall amount of processing effort allocated to the experimental task itself.

Dependent Variables

Attitude-toward-the-ad, or ad liking, was measured by the sum of three semantic differential scales, anchored by "liked-disliked," "unpleasant-pleasant," and "enjoyed–did not enjoy" (alpha = .91). Aided recall was measured using the procedure of McQuarrie and Mick (1992), modified as necessary to accommodate visual as well as verbal figures. We presented the eight product categories corresponding to the test ads as prompts and asked subjects to write down whatever they could recall concerning the ads for those products, with separate columns for headline recall and picture recall. Two judges, blind to the treatments applied to a subject, independently scored these protocols. For the ads where the verbal content was manipulated, judges noted whether the protocols contained any of the key words altered by the figure treatment (e.g., for the flashlight ad, "beaming" [treatment ad] vs. "happy" [control ad]). For ads where the visual content was manipulated, judges noted whether there was any mention of the visual elements altered by the treatment (e.g., for the motion sickness remedy, any discussion of the seat belt). The judges agreed in 97.6% and 94% of cases, respectively. Disagreements were resolved by discussion.

The reasoning behind this approach to measuring ad recall is as follows. Each pair of treatment and control ads is identical except for the word or picture change that manipulates the presence or absence of a rhetorical figure. The argument for a figurative advantage presupposes that when "beaming" is present in a flashlight ad and used in a sentence as a synonym for "happy," a pun is set up. As argued earlier, this pun should invite elaboration and cause a greater number of memory traces to be laid down for "beaming," relative to the number laid down when the word "happy" is substituted. Hence, subjects who saw the treatment ad containing "beaming" should retrieve the word "beaming" more often than subjects who saw the control ad would retrieve the word "happy." This is what the recall coding task measures. The same argument applies to visual alterations. Thus, subjects who saw a treatment ad where the package for the motion sickness remedy served as the seat belt buckle should retrieve a description of the ad picture that refers to seat belts more often than do subjects who saw the control ad in which the package was placed beside the seat belt.

In both the visual and verbal cases, the treatment and control stimuli have an a priori equal opportunity for retrieval of content that would be scored as a hit. For instance, the same basic seat belt depiction appears in both the treatment and the control ad for the motion sickness remedy. If the seat belt is mentioned in the recall records from figurative treatments more often than those from the controls, this is taken as evidence of more memory traces being laid down when the seat belt was incorporated into a visual metaphor, in keeping with the fundamental argument that the effectiveness of figures results from increased elaboration.

RESULTS

Manipulation and Confound Check

The processing manipulation was successful in directing subjects toward either the ads or the articles, with the latter constituting the incidental-ad-exposure condition (M_{directed} = 4.60, $M_{\text{incidental}}$ = 7.62, $t(240) = 9.82$, $p < .001$). The confound check indicated no differences in the level of effort committed to the experimental task (M_{directed} = 71.7%, $M_{\text{incidental}}$ = 72.4%, $t(240) < 1$), providing some assurance that the manipulation of processing focus was not confounded with the overall amount of processing effort expended.

Ad Recall

Because the recall variable is dichotomous, we report a series of loglinear analyses using the same design factors as the basic ANOVA approach to be applied to the A_{AD} responses. To test whether a factor contributes to the recall of a manipulated element, backward elimination is employed to determine whether interactions involving the added factor make a significant contribution. Because of the nature of loglinear models, the lowest order effects of interest are the two-way interactions that include the recall variable. Chi-square measures of partial association are the test statistics reported.

There was a significant interaction between recall and processing condition ($\chi^2(1) = 104.66$, $p < .001$), such that overall ad recall declines—as naturally expected—when processing is not directed onto the ads (recall directed = 29.3%, recall incidental = 11.1%). However, the model also shows a significant interaction between recall and the figure treatment ($\chi^2(1) = 43.05$, $p < .001$), such that recall was about twice as likely for ads with figures (24.9% vs. 13.5%, see table 3). Moreover, the three-way interaction between recall, the figure treatment, and processing condition was not significant ($\chi^2(1) < 1$), indicating that the memory advantage conferred by rhetorical figures is robust across processing conditions, that is, figures improved recall regardless of whether subjects were directed to process the ads or only incidentally exposed (see table 3).

There was a significant three-way interaction between the figure treatment, the trope treatment, and recall ($\chi^2(1) = 22.7$, $p < .001$), such that tropes led to higher levels of ad recall than schemes, relative to their respective controls (see table 3). However, the four-way interaction with processing condition was not significant ($\chi^2(1) < 1$), indicating that the

TABLE 3

TEST ADS AND MANIPULATIONS

	Directed processing (N = 108)		Incidental exposure (N = 134)	
	Treatment (%)	Control (%)	Treatment (%)	Control (%)
All figures	37.7	20.8	14.6	7.6
Tropes	44.0	15.7	15.7	4.1
Visual	68.5	23.1	29.1	7.5
Verbal	19.4	8.3	2.2	.7
Schemes	31.5	25.9	13.4	11.2
Visual	55.6	48.1	26.9	22.4
Verbal	7.4	3.7	.0	.0

NOTE.—For the trope and scheme treatments, and also visual and verbal treatments, the absolute values of the proportions shown are immaterial, inasmuch as the trope-scheme and visual-verbal manipulations were executed in different ads for different product categories. The analysis focuses on the relative size of the treatment vs. control differences within and across conditions.

trope advantage was also robust across both processing conditions (table 3).

Tests of visual versus verbal modalities are complicated by the marked discrepancy between recall results for visually manipulated elements (whether figure or control) and verbally manipulated elements (31.1% vs. 4.8%, respectively, $\chi^2(1) = 311.7$, $p < .001$). As we speculated earlier, however, there was also a significant interaction of modality with processing condition ($\chi^2(1) = 7.44$, $p < .01$), such that the picture superiority effect was accentuated in the incidental-exposure condition. Further inspection showed that recall for verbally manipulated elements was nearly nil under incidental exposure (four hits out of 536 opportunities). Hence, although there was no significant interaction between modality and either the figure treatment or the trope treatment (suggesting that the recall advantage of figures and of tropes was robust across verbal and visual modalities), this finding has to be interpreted cautiously.

In fact, the poor recall performance for verbally manipulated ads raises the possibility that the memory results reported earlier were unduly influenced by a floor effect that occurred across the verbal half of the test stimuli and that was particularly evident in the incidental-exposure condition. Hence, we repeated the analysis using only the visual ads (where all the treatment cells have recall hit rates of 25% or greater). This alternative analysis showed no change in the pattern of results: visual figures were better recalled than their controls, and visual tropes achieved a greater advantage, relative to their controls, than visual schemes, relative to their controls (p's $< .05$).

Returning to the verbal figures, a single exposure to figurative language in a magazine context appears insufficient to overcome the generally low level of processing given to ad language under the incidental-exposure condition created in this study. But what of the directed-processing condition, where subjects had been instructed to evaluate the ads and products? Some prior work has reported that verbal figures can enhance recall under such conditions (e.g., McQuarrie and Mick 1992). Examining only the verbal figures in the directed-processing condition (N = 108), a significant interaction between the figure treatment and recall emerges ($\chi^2(1) = 7.67$, $p < .01$), with recall for ads with verbal figures about twice as likely as for control ads, paralleling results for the sample as a whole (13.4% vs. 6.0%, see table 3). Thus, both verbal and visual figures appear to offer a memory advantage over their controls, but verbal figures less so, particularly when subjects are exposed incidentally and only once to the ads.

Attitude toward the Ad

A three within-subjects, one between-subjects ANOVA was applied to the A_{AD} results, corresponding to the figure, trope, and visual treatments in conjunction with the processing manipulation. As was true in the case of ad recall, the figure treatment had a definite positive impact on A_{AD} ($F(1, 240) = 22.95$, $p < .001$, $\text{eta}^2 = .09$). Moreover, the two-way interaction with processing condition was not significant ($F < 1$). Thus, in parallel with the recall findings, rhetorical figures were liked better than their controls, regardless of whether subjects had been directed to process the ads.

However, other aspects of the A_{AD} findings did not initially seem to match the ad recall findings. For instance, we noted a significant four-way interaction involving the processing manipulation and all three within-subjects treatments. However, this interaction may not be interpretable, inasmuch as the ANOVA fails Box's test for equality of covariance matrices across the processing conditions ($M = 51.4$, $p < .001$). The Box's test result may reflect the disproportion between the number of subjects who failed to recall any test ads in the incidental-exposure condition (66 of 134), and the number who failed to recall any ads in the directed-processing condition (six of 108). This disproportion is relevant in light of research that suggests that subjects with impoverished recall of ad content constitute a population whose A_{AD} judgments may be generated by a distinctively different process (see, e.g., Kardes et al. 1993). That is, when recall has been demonstrated, subjects' A_{AD} judgments are more likely to be based on retrieval of affective reactions that occurred during ad processing. By contrast, an absence of recall suggests that minimal ad processing occurred and that subsequent attitude

TABLE 4

A_{AD} RESULTS FOR VISUAL FIGURE TREATMENTS AMONG SUBJECTS WHO HAD DEMONSTRATED RECALL

	Directed processing (N = 101)		Incidental exposure (N = 68)	
	Treatment	Control	Treatment	Control
All visual figures	4.61	4.07	4.43	3.95
Visual tropes	4.81	4.10	4.52	3.72
Visual schemes	4.40	4.04	4.33	4.17

NOTE.—The 73 subjects who showed no recall for any visually manipulated ad were removed prior to this analysis. For the trope and scheme treatments, the absolute values of the means shown are immaterial, inasmuch as the trope and scheme manipulations were executed in different ads for different product categories. The analysis focuses on the relative size of the treatment vs. control differences within and across conditions.

judgments have to be generated at the time of measurement (Kardes 1988).

In light of the above, the figure treatment should have no impact on A_{AD} for the no-recall subjects. An ANOVA using the 72 subjects who demonstrated no recall for any manipulated element of the eight test ads showed, in fact, that the main effect of the figure treatment on A_{AD} essentially disappeared ($M_{treatment}$ = 4.13, $M_{control}$ = 4.04, $F(1, 71) = 1.64$, $p = .20$) and that there were no significant interactions between the figure treatment and the trope or visual treatments (all F's < 1). The preceding analyses suggest that to achieve trustworthy findings with respect to A_{AD} effects requires that subjects be qualified according to their recall performance. Following this logic, we conducted two further analyses on the recall-partitioned data that examined the visually manipulated ads separately from the verbally manipulated ads.

Visual Rhetoric with Demonstrated Recall. We repeated the initial ANOVA using the visually manipulated ads only and subjects who recalled one or more visually manipulated elements (N = 169). This partition satisfies Box's test ($M = 8.9$, $p > .50$), indicating equivalence of covariance matrices across the directed-processing and incidental-exposure conditions. Overall, as table 4 reports, attitudes toward the test ads containing the visual figure treatment were significantly more positive than their respective controls ($M_{treatment}$ = 4.53, $M_{control}$ = 4.02, $F(1, 167) = 19.4$, $p < .001$), eta^2 = .10), indicating that processing a visual rhetorical figure in an ad promotes more positive feelings toward the ad. Most important, the interaction between the figure treatment and processing condition was not significant ($F < 1$), indicating that the presence of a visual rhetorical figure improves A_{AD} regardless of whether processing was initially directed onto the ads.

The analysis also revealed a significant figure treatment × trope treatment interaction ($F(1, 167) = 5.3$, $p < .05$, eta^2 = .03), suggesting an advantage for trope treatments as compared with scheme treatments. The three-way interaction involving processing condition was nonsignificant ($F < 1$), indicating that the visual trope advantage is parallel across both processing conditions. The consistency of these A_{AD} results with the ad recall results suggests that when rhetorical figures succeed in motivating additional processing (as evidenced by ad recall), they also tend to provide pleasure (as evidenced by A_{AD}), with the impact of tropes greater than that of schemes.

Verbal Rhetoric under Directed Processing. Only 32 subjects in the sample of 242 had any recall for a verbally manipulated element, and the distribution across processing conditions was very lopsided, with 28 of these in the directed-processing condition. These results make it infeasible to duplicate exactly the analysis of visually manipulated ads just reported. As an alternative, and in keeping with the goals of this re-inquiry, we conducted an analysis of A_{AD} effects for verbal figures within the directed-processing condition only. This condition is similar to those in previous experiments (e.g., McQuarrie and Mick 1992), with two advantageous exceptions: first, the test ads are not only embedded among filler ads but also surrounded by absorbing articles; and second, the A_{AD} measures are taken after all the ads have been viewed rather than ad by ad. Hence, the directed-processing condition offers a modest replication and extension of prior work on the attitudinal impact of verbal figures.

For this test we used demonstrated recall for a verbally manipulated element as a blocking variable; this design satisfies Box's test ($M = 11.9$, $p > .30$). A significant main effect for the verbal figure treatment was observed ($F(1, 106) = 4.04$, $p < .05$, eta^2 = .04), showing that A_{AD} was higher for ads containing verbal figures as compared with their controls (see table 5). There was also a figure treatment × trope treatment interaction that approached significance ($F(1, 106) = 3.44$, $p < .07$, eta^2 = .03), indicating that verbal tropes produced a more positive A_{AD} than schemes, relative to their respective controls. These findings for verbal figures in the directed-processing condition are quite comparable with those reported above for visual figures in both processing conditions. Taken together, the results suggest that while verbal rhetoric may be less effective than visual rhetoric at inviting elaboration under incidental-

TABLE 5

A_{AD} RESULTS FOR VERBAL FIGURE TREATMENTS AMONG SUBJECTS IN THE DIRECTED-PROCESSING CONDITION

	Recalled one or more ads (N = 28)		No ad recall (N = 80)	
	Treatment	Control	Treatment	Control
All verbal figures	4.81	4.34	4.45	4.33
Verbal tropes	5.37	4.55	4.79	4.48
Verbal schemes	4.25	4.13	4.11	4.18

NOTE.—For the trope and scheme treatments, the absolute values of the means shown are immaterial, inasmuch as the trope and scheme manipulations were executed in different ads for different product categories. Similarly, the absolute values of the means in table 4 compared with those in table 5 are immaterial, inasmuch as the visual and verbal manipulations were executed in different ads for different product categories. The analysis focuses on the relative size of the treatment vs. control differences within the data partition shown.

exposure conditions, verbal rhetoric may still favorably influence attitude judgments if consumers sufficiently process the ads, with tropes again outperforming schemes.

DISCUSSION

Our goal in this re-inquiry was to examine the robustness of prior research on the effectiveness of rhetorical figures by putting these stylistic devices to a more severe test under conditions of incidental exposure where subjects were not directed to process the ads. The results showed that rhetorical figures can have a positive impact on consumer response, independent of instructions to focus on the advertising or on the editorial matter that surrounds it. Even within a single-exposure design involving a cluttered magazine containing several interesting articles and numerous filler ads, treatment ads with rhetorical figures present enhanced ad recall and ad attitudes, relative to paired control ads in which those rhetorical figures had been removed. The ad recall results indicated that rhetorical figures have the capability to motivate additional processing of ads. The A_{AD} results showed that if there was evidence that subjects had processed the ads (per the recall results), then the presence of a rhetorical figure also tended to produce a favorable response. In the case of both ad recall and A_{AD}, tropes appeared to have an advantage over schemes, consistent with past research (McQuarrie and Mick 1999; Mothersbaugh et al. 2002). Moreover, visual figures appeared to have a greater impact than verbal figures, especially under conditions of incidental exposure. Finally, insofar as they can be compared, effect sizes in the present study appear to be only slightly smaller than in previous studies (cf. McQuarrie and Mick 1992, 1999), despite conditions of incidental exposure and a more cluttered presentation.

In sum, the findings in the incidental-exposure condition offer clear support for the robustness of prior theory and evidence regarding the positive impact of rhetorical figures. The results also replicate the picture superiority effect, for the first time in a rhetorical figures study, through a comparison of visual and verbal figures.

LIMITATIONS AND FUTURE RESEARCH

All of the ad stimuli (test and filler ads) used the same basic layout, including an absence of body copy. However, one objective of incorporating a rhetorical figure into the headline or picture of an ad might be to draw the consumer into processing the body copy, wherein arguments in favor of the brand are usually developed (Phillips 2000). Future research might thus incorporate different ad layouts as well as body-copy alterations (e.g., weak vs. strong arguments) and test whether rhetorical figures can motivate additional processing of the entire ad under directed-processing or incidental-exposure conditions.

Another limitation of this study stems from exposing the ads only once. Ad repetition could potentially alter results in a variety of ways, depending on the impact of wear-in and wear-out (Pechmann and Stewart 1988). One line of thinking would suggest that schemes, being on average less deviant and perhaps less captivating than tropes, may require more than one exposure to produce a stable effect, that is, have a longer wear-in. In contrast, tropes are, on average, more deviant, complicated, and alluring than schemes and seem to wear in more quickly. As such, it could also be the case that tropes wear out more quickly than schemes. That is, once the consumer solves the puzzle of the pun or metaphor, the trope may yield less pleasure on subsequent exposures. Schemes, by contrast, with their more sensory character (such as a catchy rhyme), may produce a more durable aesthetic pleasure that strengthens with repetition. Of course, these are only speculations at this point, and their investigation will require visual and verbal figures, multiple levels of repetition, and conditions of incidental exposure as well as directed processing.

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