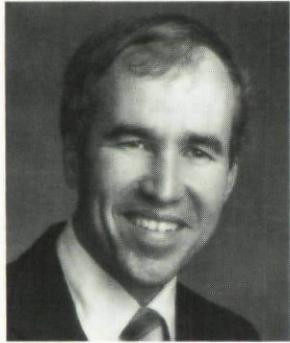
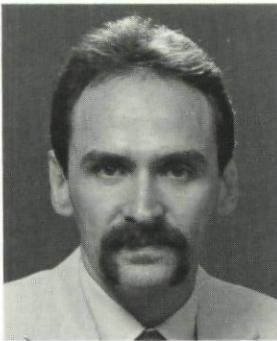


LANGUAGE, SENTENCE, AND STRUCTURAL VARIATIONS IN PRINT ADVERTISING

WILLIAM H. MOTES
CHADWICK B. HILTON
AND
JOHN S. FIELDEN



1.



2.



3.

1. WILLIAM H. MOTES is professor of marketing at The University of Alabama. He received his Ph.D. from The University of South Carolina. 2. CHADWICK B. HILTON is associate professor of management communication at The University of Alabama. He received his Ph.D. from The University of Tennessee. 3. JOHN S. FIELDEN is University Professor of Management Communications at The University of Alabama. He received his Ph.D. from Boston University.

Throughout the twentieth century, the question of what makes a successful print ad has occupied researchers and practitioners alike (Aaker and Myers, 1982; Hanssens and Weitz, 1980; Hendon, 1973). Researchers have examined virtually every aspect of an ad from a number of angles, and the diversity of all this effort is apparent in the very titles of the journals publishing the results. Nonetheless, despite all this effort, there is still no definitive answer to what makes an ad successful, and there are, in fact, still many aspects of print advertising which warrant much closer consideration. One such aspect was pinpointed by Larry Percy in a recent article. In discussing the words chosen when creating ad copy, Percy (1988) notes that:

No one doubts the importance of the words chosen in verbal communication in determining just how effective that communication is likely to be. And while attention may be paid to insuring that descriptions or attributes within a target message reflect those things most likely to be meaningful to the target receiver, very little consideration seems to go into possible interactions among those descriptions or attributes, and even less to grammatical considerations.

Study Objectives and Contribution

Even though the lexical, syn-

tactical, and layout elements of ads have been researched, it is apparent, as Percy's comment indicates, that more study is needed. Particularly, there exists a need to better understand the potential synergistic effects of each element in a print ad context. Consequently, we determined to study how significant changes in copy language, sentence structure, textual layout, and illustration (our independent variables)—independently and interactively—affect an ad reader's perceptual assessments of a print ad. With regard to our dependent variables, we were particularly concerned with how (a) interesting, (b) appealing, (c) believable, (d) clear, and (e) informative each ad was perceived to be. Also, we attempted to assess each subject's (f) overall reaction to the ad itself and his or her (g) likelihood of using the advertised service.

Background

First, it must be recognized that in the last 50 years virtually every aspect of print advertising has been probed by researchers. They have focused on the role of

The authors gratefully acknowledge the support and cooperation of Mr. Don Reichardt, director, and Mr. Noel Spicer, marketing analyst, of Bell South Services Advertising and Ms. Beverly Barze, marketing analyst for Tucker Wayne/Luckie & Company. We also thank Bill Cook and anonymous JAR reviewers for their helpful comments and suggestions.

mechanical factors (see Hanssens and Weitz, 1980; Hendon, 1973; Holbrook and Lehmann, 1980; Percy, 1988; Rossiter, 1981a; Soley and Reid, 1983b; Valiente, 1973 for a few examples) along with such broad topics as copy testing (Furse and Stewart, 1982; Keon, 1984; Soley and Reid, 1983a), sex-role stereotypes (Baker and Churchill, 1977; Courtney and Lockeretz, 1971), general content analysis (Harmon, Razzouk, and Stern, 1983; Madden, Caballero, and Matsukubo, 1986; Stern, Krugman, and Resnik, 1981), and the imagery effects of verbal and pictorial content (Edell and Staelin, 1983; Hirschman, 1986; Holbrook and Moore, 1981; Lutz and Lutz, 1977; Percy and Rossiter, 1982; Rossiter, 1981b; Rossiter and Percy, 1978). The language of print advertising, *per se*, has also received considerable attention, and excellent overviews of the research on the effects of advertising language may be found in Percy (1983); Gelb, Hong, and Zinkhan (1985); and Harris, Sturm, Klassen, and Bechtold (1986).

It is the recent research on language in print ads which has the most direct relevance to our study, particularly that concerned with the psycholinguistic aspects of ad language. The work of Rossiter and Falsetta (1979) and of Percy and Rossiter (1980) essentially set the stage for the consideration of the psycholinguistic effects of advertising language. Their various research is particularly significant for establishing a model by which to evaluate the effects of ad language on readers (Percy and Rossiter, 1980) and with which to guide the actual writing of ads, particularly in terms of such elements as word choice, semantics, negation, and syntax (Percy, 1981, 1988). Their work has further been important in

generating subsequent research such as that of Soley and Reid (1983a, 1983b). These authors essentially replicate, with similar results, Rossiter's (1981a) study, which found that the number of words, nouns, verbs, and simple determiners—along with the use of the product name as subject or object of the sentence, the use of personal references, and interrogative and imperative sentence structures—significantly affect lower-order advertising response measures but not higher-order measures. Also prompted by the work of Rossiter and Percy (1978), Holbrook (1982) considers psycholinguistic-visual linkages and suggests that tactile and emotional responses are too much neglected when considering the effect of an ad. In a more conceptual vein, Harris et al. (1986) argue that psycholinguistic theory and methodology (from cognitive psychology), as applied to advertising, could be a very effective tool for researching information processing.

Ad language, then, as well as mechanical factors such as layout and illustration, has received substantial attention. However, it must be noted that while psycholinguistic studies have concentrated substantially on ad headlines, too little attention has been directed to ad text. Second, as Percy (1988) notes, very little attention has been accorded either the interactive effects of the linguistic elements of ad copy or the interactive effects of ad copy and mechanical elements. This study, therefore, will address both of these issues by concentrating on ad copy and by assessing how that copy interacts with both the pictorial and layout elements of an ad.

Method

Ad Creation. For added realism and practical relevance, the

source for our ad variations was an original print ad developed by Tucker Wayne/Luckie & Company for South Central Bell, a Bell South company. The ad was to be part of a subsequent Bell South ad campaign directed specifically at college students for the purpose of introducing a new campus service called the "RightTouch." Since this ad had not been seen by anyone outside South Central Bell or its advertising agency, respondent reactions could not have been pre-conditioned or biased by any previous exposure to it.

From this original ad, we created 24 different variations (copies of all ads are available upon request). These ads, subdivided across two separate and distinct studies, exhibited the combinations shown in Table 1.

The topic of language diversity (i.e., word choice) has been researched both extensively and from a variety of perspectives. One of the most significant areas of this research has centered on what is called the "vividness" effect. The common assumption is that vivid language—language that is relatively colorful and concrete—will prove more interesting, memorable, appealing, etc., to readers than nonvivid language. Most interesting, however, is the fact that the bulk of this research contradicts such an assumption. In eight studies (most in a nonadvertising context) which tested the effects of concrete versus abstract language, only one study revealed a significant effect for concrete, colorful language over its opposite (Taylor and Thompson, 1982). The finding that vivid language may be no more effective than less vivid language in producing desired perceptual and behavioral reactions among readers is not only interesting but is quite important because it runs contradictory to the assumptions

on which many print ads are based. Thus, it provides the impetus not only to extend the study of lexical diversity to an advertising context but in particular to examine its manipulation in terms of vivid or so-called colorful language.

The language makeup of our ads was varied in terms of the presence or absence of colorful words and phrases and personal pronouns such as *you* and *your*. Consistent with both the vividness and the communication literature (see, e.g., Fielden, 1982; Fielden, Fielden, and Dulek, 1984; Kisielius and Sternthal, 1979; Taylor and Thompson, 1982), the ads we labeled colorful included vivid words and phrases and modifiers and figurative language, which were excluded from the ads we labeled colorless. The personal pronoun *you* and its possessive counterpart *your* were heavily embedded in our personal ads, yet clearly absent in our impersonal ads.

Sentence type became our second independent variable. From persuasion and linguistics studies (see Crystal and Davey, 1969), we would argue that copywriters may influence reader reactions through their control of the syntactical or sentence structure elements of a text. In other words, messages can be "engineered" to produce desired reader effects through the use of active or passive sentences and by the use or avoidance of imperatives. To extend this to an advertising context, we created ads which used either an active or passive sentence structure. The ads which we labeled active made extensive use of imperatives and the active voice. The passive ads, in contrast, avoided the imperative and made extensive use of passive sentence structure.

Textual layout and the pres-

Table 1
Variations of "Right Touch" Ad

Study 1: Illustration context			
Ad	Language variation	Sentence variation	Layout variation
#1	personal-colorful	active	nonblock
#2	personal-colorful	active	block
#3	personal-colorless	active	nonblock
#4	personal-colorless	active	block
#5	personal-colorful	passive	nonblock
#6	personal-colorful	passive	block
#7	personal-colorless	passive	nonblock
#8	personal-colorless	passive	block
#9	impersonal-colorful	active	nonblock
#10	impersonal-colorful	active	block
#11	impersonal-colorless	active	nonblock
#12	impersonal-colorless	active	block
#13	impersonal-colorful	passive	nonblock
#14	impersonal-colorful	passive	block
#15	impersonal-colorless	passive	nonblock
#16	impersonal-colorless	passive	block
Study 2: No illustration context			
Ad	Language variation	Sentence variation	Layout variation
#17	personal-colorful	active	nonblock
#18	personal-colorful	active	block
#19	personal-colorless	active	nonblock
#20	personal-colorless	active	block
#21	personal-colorful	passive	nonblock
#22	personal-colorful	passive	block
#23	personal-colorless	passive	nonblock
#24	personal-colorless	passive	block

ence or absence of an illustration served as our third and fourth independent variables, respectively. The contention that changes in the physical structure of a message may affect how one perceptually responds to that message is supported by the communication and persuasion literature (Almaney, 1972; DeVillier, 1972; Roloff and Miller,

1980; Thompson, 1960). For example, Fielden, Fielden, and Dulek (1984) argue that "high impact" messages (i.e., those that use brief paragraphs, indentation, and itemization) are more likely than "low impact" messages (i.e., those that use longer paragraphs, avoid indentation, and itemization) to demand attention and, thereby, influence

. . . copywriters may influence reader reactions through their control of the syntactical or sentence structure elements of a text.

how a reader reacts to what is being said. We tested this assertion by varying textual layout through the use of, or avoidance of, longer paragraphs and by indentation and itemization. Specifically, we refer to those layouts as block (one long paragraph, no indentation, and no itemization) or nonblock (several shorter paragraphs, indentation, and itemization).

Sample, Experimental Design, and Procedure. With their almost \$10 billion in annual discretionary income (Reilly, 1989), college students are indeed perceived, and rightfully so, by ad agencies and other businesses alike as legitimate consumers about whom added insight and an increased understanding are needed. In fact, as a legitimate focus for advertising research, there are obvious instances where student samples are not only appropriate but should in fact be used instead of nonstudent samples (e.g., “. . . students would be adjudged appropriate when there is a priori theoretical or empirical justification for their use, or when they are the population to which the findings are intended to apply . . .” [Gordon, Slade, and Schmitt, 1986]. Such is the case here.

As noted by Schiffman and Kanuk (1991) and further illustrated by Bell South's Right-Touch campaign, “college students are an important family subgroup.” They unquestionably provide substantial markets for such products and services as

clothes, fast food, recreational equipment, computer hardware and software, educational supplies, cosmetics, etc. (Reilly, 1989; Schiffman and Kanuk, 1991). In fact, “many consumer goods firms are eager to obtain shelf space in college bookstores, and even to establish networks of students to represent them and their products on campus—e.g., AT&T has on-campus representatives to offer their long-distance services” (Schiffman and Kanuk, 1991).

Hence, it is for added realism and appropriate generalizability, and not simply for purposes of convenience and expediency, that our sample was comprised of a representative cross section of students ($n = 720$) of a major state university whose profile matched that of students at a number of other regional universities where Bell South planned to promote the advertised new service. The sample then is a very appropriate one in that the study's advertised service is one that is specifically directed at students. Therefore, as part of this study, students are not being used as a surrogate group for other consumers; they are being looked upon by Bell South as a viable, consumer market.

A $2 \times 2 \times 2 \times 2$ between-subjects, factorial design was used for both study 1 (factors: personal-impersonal, colorful-colorless, passive-active, block-nonblock in an illustration context) and study 2 (factors: colorful-colorless, passive-active, block-nonblock, illustration-no illustration). For enhanced efficiency of operation owing to a limited budget, study 2 constituted only a partial extension of study 1 in that personalization of presentation was not manipulated in study 2 as it was in study 1 (i.e., all ads in study 2 were personal—there were no impersonal presentations).

For analysis purposes, the eight conditions in study 2 were then compared and contrasted with their identical counterparts in study 1 with the *only* difference being the presence or absence of the illustration. This approach allowed us to view the presence or absence of the illustration as a manipulated fourth variable in study 2 and to assess its interactive role with the other language, sentence structure, and text layout components.

Except for this slight design difference, the procedure for each study was identical. Subjects, after having been randomly assigned to conditions, were given a packet of material containing 1 of the 24 test ads, a 35-item questionnaire (8 of the 35 items were measures of our dependent variables while other items were simply filler questions or items aimed at determining how well we disguised our study), and the following instructions:¹

The contents of this packet are for your eyes only and are not to be shown to or discussed with any other individual. With this in mind, please follow these steps in sequence: (1) Turn to the ad on the next page. After you have read it, please turn the ad over and place it face down. Do not refer back to the ad as you go to step 2. (2) Complete the questionnaire. Please be sure to respond to all questions. To insure confidentiality, do not sign your name. (3) After you have completed the questionnaire, “paper clip” all items and return them.

¹Subsequent chi-square analysis showed no significant relationship between subject profile characteristics and the condition to which subjects were randomly assigned.

For our eight dependent variables, subjects were asked to respond to questions that were structured around a 5-point, Likert-type scale. For each of the lower-order dependent variables (e.g., *interesting, appealing, believable, clear, and informative*), our response categories ranged from strongly agree to strongly disagree while very favorable to very unfavorable (applied to *overall reaction to ad*) and very likely to very unlikely (applied to *likelihood of reading ad* and *likelihood of using service*) were used for the three remaining higher-order variables.

Manipulation and Content

Checks. The illustration-no illustration manipulation was so obvious and straightforward that subjects in the pretest had little or no difficulty in identifying this particular difference when exposed to a no-illustration versus illustration ad. The remaining three manipulations, however, were somewhat more subtle.

The basis upon which we decided whether or not our language, sentence structure, and textual layout changes were significant and, therefore, worked as intended centered on the question whether such changes create stylistically (i.e., how or the way a message is expressed as opposed to what is being said) and visually different presentations. Simply altering a text's format or simply adding or deleting a few vivid words or phrases, or employing a few active and passive sentences, are in and of themselves of limited informational value—unless the ads embodying those changes are seen as different.

To test whether or not our changes were significant, we set up ad pairs of different language, sentence structure, and textual layout profiles (e.g., personal, *colorful*, active, *block*, ver-

sus personal, *colorless*, active, *nonblock*). A 7-point Likert-type scale (ranging from strongly agree to strongly disagree) was then used to ask more than 80 pretest subjects to address the following statements about each matched pair:

1. What is being said to you (the basic message or significant information contained in the text) in both ads A and B is essentially the same.
2. The writing in both ads A and B is essentially the same in terms of how or the way the message is expressed.
3. The information contained in the body of ad A is displayed in such a way that its ideas stand out more than the ideas expressed in ad B.

Statements 1 and 2 were based upon the idea that language and sentence structure changes are arguably components of message style and can be manipulated in such a way to alter a reader's perception of *how or the way* a message is being expressed while maintaining a consistent perception of *what is being said* or message content (see Milic, 1965). Text layout, on the other hand, is a function of text formatting and is, consequently, a structural and presentational factor. Significant layout variations should, therefore, affect the degree to which one feels that the ideas of a presentation stand out.

Our manipulations, according to the results of our various checks, worked as intended. We found, for example, that 93 percent of our subjects perceived the content of the ads to be essentially the same regardless of language, sentence structure, or layout variation. Furthermore, the proportion of subjects viewing the colorful-colorless, active-passive, personal-impersonal,

and block-nonblock ads as being different in terms of "how" the message was presented and layout, respectively, was significantly higher than what would have been expected to occur by chance.

Results

Our study focuses on several critically important issues facing ad copywriters. Specifically,

1. How valid is the common assumption of many copywriters that certain styles of writing are far more appropriate or effective than other styles? Many copywriters (as well as educators) feel strongly that a personal-colorful, active style of writing is not only highly appropriate for most print ad situations but is very effective in generating positive perceptions among readers; hence, impersonal-passive styles are to be avoided.
2. What role do structural variations (e.g., changes in text layout and/or the presence/absence of illustrations) play in this process? Are the effects of stylistic variations attenuated by structural changes in text layout or the inclusion of an illustration or both?

To shed some light on answers to these questions, two separate studies were undertaken.

Study 1: Language, Sentence, and Structural Variations in an Illustration Context. Table 2 presents a general overview of mean responses to each experimental ad across each of our eight assessment dimensions. Two findings are particularly notable:

1. There is a noticeable absence of extreme response scores for any of the 16 ads regard-

Table 2
General Overview of Mean Responses to Each Experimental Ad in Study 1¹

Assessment dimension	Print ad variations ²															
	Personal, Colorful				Personal, Colorless				Impersonal, Colorful				Impersonal, Colorless			
	Active		Passive		Active		Passive		Active		Passive		Active		Passive	
	B	NB	B	NB	B	NB	B	NB	B	NB	B	NB	B	NB	B	NB
Appealing	3.67 (0.66)	3.93 (0.58)	3.60 (0.77)	3.70 (0.75)	3.67 (0.76)	3.97 (0.62)	3.13 (1.11)	3.70 (0.99)	3.77 (0.57)	3.50 (0.86)	3.67 (0.88)	3.53 (1.07)	3.43 (0.86)	3.70 (0.88)	3.57 (0.82)	3.80 (0.76)
Believable	3.53 (0.78)	3.43 (1.01)	3.53 (0.97)	3.80 (0.81)	3.70 (0.95)	3.63 (0.93)	3.90 (0.71)	3.90 (1.06)	3.67 (0.92)	3.50 (1.01)	3.57 (1.10)	3.50 (1.14)	3.67 (0.96)	3.53 (1.07)	3.60 (0.77)	3.83 (0.75)
Clear	3.87 (0.68)	3.53 (0.82)	3.20 (1.06)	3.60 (1.00)	3.63 (0.89)	3.33 (0.96)	3.07 (1.17)	3.33 (1.21)	3.47 (0.94)	3.40 (1.00)	3.37 (0.99)	3.27 (1.36)	3.67 (0.96)	3.73 (1.01)	3.57 (1.14)	3.70 (0.95)
Informative	4.17 (0.65)	4.00 (0.74)	4.00 (1.05)	3.97 (0.89)	3.83 (1.09)	3.97 (0.76)	4.03 (0.67)	3.87 (0.86)	4.03 (0.81)	3.90 (0.84)	3.90 (0.76)	3.77 (1.04)	3.83 (0.91)	3.90 (1.09)	3.97 (0.81)	4.03 (0.67)
Attractive	3.43 (0.57)	3.43 (0.77)	3.30 (0.88)	3.37 (0.76)	3.67 (0.84)	3.80 (0.76)	2.93 (1.11)	3.60 (1.00)	3.47 (0.78)	3.63 (0.81)	3.40 (0.97)	3.40 (1.19)	3.03 (1.13)	3.43 (0.77)	3.40 (0.97)	3.80 (0.76)
Overall reaction	3.57 (0.57)	3.83 (0.38)	3.47 (0.82)	3.57 (0.82)	3.73 (0.74)	3.90 (0.55)	3.30 (0.88)	3.57 (0.90)	3.43 (0.82)	3.47 (0.78)	3.50 (0.73)	3.37 (1.03)	3.37 (0.93)	3.73 (0.64)	3.60 (0.67)	3.73 (0.69)
Likelihood of reading	3.53 (1.01)	3.37 (1.19)	3.30 (1.24)	3.47 (0.90)	3.67 (0.96)	4.10 (0.55)	2.83 (1.26)	3.63 (1.24)	3.77 (1.04)	3.07 (1.17)	3.27 (1.11)	3.20 (1.45)	3.20 (1.09)	3.80 (0.85)	3.63 (0.99)	3.70 (1.09)
Likelihood of using	3.70 (0.95)	3.77 (1.14)	3.07 (1.34)	3.43 (1.07)	3.10 (1.37)	3.67 (1.29)	3.03 (1.30)	3.77 (1.27)	3.73 (1.11)	3.17 (1.29)	3.20 (1.27)	3.30 (1.18)	3.37 (1.19)	3.63 (1.37)	3.43 (1.07)	3.80 (1.09)

¹ Responses range from 1 to 5 inclusive. For "Appealing," "Believable," "Clear," "Informative," and "Attractive," 1 = Strongly Disagree, 2 = Disagree, 3 = Neither Agree nor Disagree, 4 = Agree, and 5 = Strongly Agree. For "Overall Reaction to the Ad," 1 = Very Unfavorable, 2 = Unfavorable, 3 = Neither Favorable nor Unfavorable, 4 = Favorable, and 5 = Very Favorable. For "Likelihood of Reading the Ad" and "Likelihood of Using the Service," 1 = Very Unlikely, 2 = Unlikely, 3 = Neither Likely nor Unlikely, 4 = Likely, and 5 = Very Likely.

² B = Block Text Layout; NB = Nonblock Text Layout. Standard deviations appear in parentheses. N = 30 for each ad variation.

less of which assessment dimension is being viewed. For example, responses for the most part fall within the 3.00–4.00 range signaling slight rather than strong agreement-disagreement on ad *appeal*, *believability*, *clarity*, etc.

2. Even with this massing of scores in the middle range, there still seem to be, for some of the ads, noticeable perceptual differences across at least seven of the eight assessment dimensions. The only exception appears to be in terms of perceived *informativeness*. Here the responses are tightly bunched (ranging from a high of 4.17 to a low of only 3.77), thus signaling that each ad (regardless of its copy language, sentence structure, and layout compo-

sition) is viewed as being just as informative as any other.

Whether or not these findings as well as other preliminary assessments from Table 2 are afforded statistical support is our next focus.

MANOVA was first applied, then followed by univariate ANOVA.² Our MANOVA find-

²As pointed to by Marks and Totten (1990) and, in large part, supported in the advertising literature, readers' perceptions of ad interest, appeal, clarity, believability, informativeness, and attractiveness are arguably linked to overall attitudes toward the ad as well as to intentions to act. Since evidence of treatment group effects may be overlooked for such situations when using univariate ANOVA alone (ANOVA focuses on each lower-order as well as higher-order dependent variable in isolation rather than as a composite set),

ings suggest rather clearly for study 1 that respondent perceptions as a composite set were indeed influenced by alterations in language, sentence structure, and text layout. This influence was the result of a significant four-way personal-impersonal, colorful-colorless, passive-active, block-nonblock interaction ($F = 4.26, df = 9/456, p < .001$).

As seen in Table 3, the use of

MANOVA (which is an extension of the univariate ANOVA case) is often first performed followed by univariate ANOVA (Hair, Jr., Anderson, and Tatham, 1987). Here univariate ANOVA (or in some cases multiple or canonical discriminant analysis) is used as a means of identifying more clearly the effects of each independent variable on each dependent variable in situations where the MANOVA results suggest significant vector mean differences across groups, as was the case here.

univariate ANOVA helped us identify several interesting and potentially valuable patterns. Specifically,

1. No significant four-way interactions (and only a few three-way interactions) were found for any of our individual assessment dimensions; two-way interactions dominated.
2. Lower-order as well as higher-order assessment dimensions were not significantly influenced by a single, standardized language, sentence structure, text layout composition. Personalization by sentence structure, for example, significantly influ-

enced perceived ad *appeal* ($F = 4.442, df = 1/464, p = .036$) as well as readers' *overall reaction to the ad* ($F = 5.733, df = 1/464, p = .017$) yet had very little effect on perceived *believability, clarity, informativeness, etc.* Furthermore, perceived *informativeness* was neither affected by language, sentence structure, or layout individually or in combination, while language alone marginally affected perceived *believability* ($F = 3.210, df = 1/464, p = .074$).

What these findings suggest is that copywriters must draw up a

clearer tactical focus on which assessment dimensions are to be influenced and determine how best this is to be done. A more precise view of such tactics is presented in Figure 1.

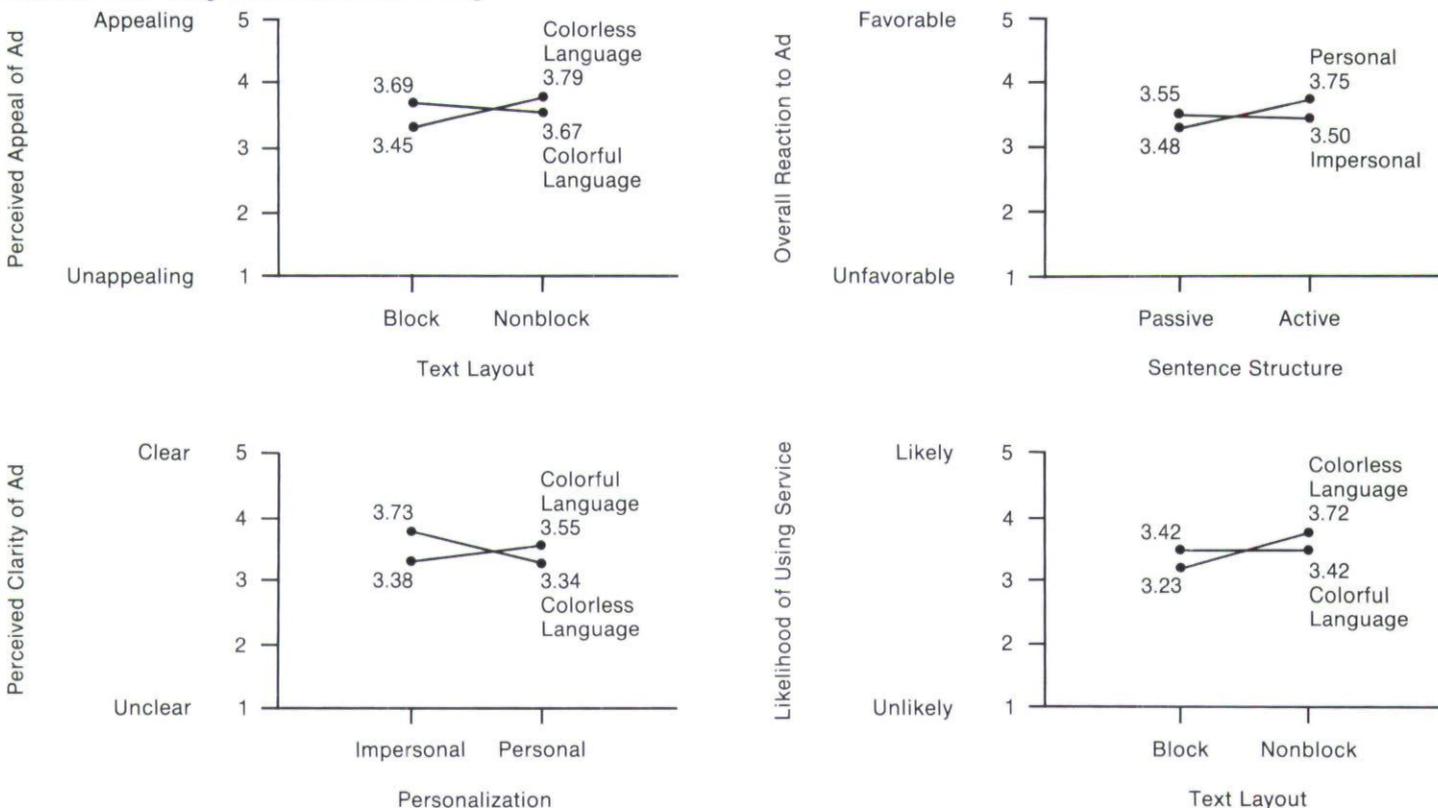
As Figure 1 shows, the synergistic effects of language, sentence structure, and text layout readily influence both lower-order and higher-order responses. Perceived *appeal*, for example, is influenced by such language-text layout combinations as colorless-nonblock (3.79), colorful-block (3.69), and colorful-nonblock (3.67), with colorless-nonblock perhaps being the best combination. Ads containing colorless language are made more appeal-

Table 3
Summary of Major Findings: Study 1

Assessment dimension	Main-interaction effects found for each dimension	Sum of squares	DF	F	Significance
Appealing	Text Layout	3.333	1	4.922	.027
	Text Layout × Language	3.675	1	5.426	.020
	Personalization × Sentence Structure	3.008	1	4.442	.036
Believable	Language	2.852	1	3.210	.074
Clarity	Sentence Structure	4.408	1	4.219	.041
	Sentence Structure × Text Layout	3.333	1	3.190	.075
	Personalization × Language	7.500	1	7.178	.008
Attractive	Text Layout	6.302	1	7.867	.005
	Text Layout × Language	3.502	1	4.372	.037
	Personalization × Sentence Structure	4.602	1	5.745	.017
	Personalization × Sentence Structure × Language	5.852	1	7.305	.007
Informative	None	—	—	—	—
Overall reaction to the ad	Text Layout	2.700	1	4.643	.032
	Personalization × Sentence Structure	3.333	1	5.733	.017
Likelihood of reading ad	Language	4.800	1	4.039	.045
	Language × Text Layout	13.333	1	11.219	.001
	Language × Personalization × Sentence Structure	6.533	1	5.497	.019
Likelihood of using service	Text Layout	6.769	1	4.593	.033
	Text Layout × Language	7.252	1	4.921	.027

Figure 1

Select Two-Way Interactions: Study 1



ing simply by moving from a block to a nonblock text layout. On the other hand, in a colorless language ad, reversing this process, i.e., moving from a nonblock (3.79) to a block layout (3.45) detracts substantively from perceived *appeal*. A similar pattern emerges for *likelihood of using the service*. Yet, as reflected by mean responses, one might argue that in terms of desirability colorless language-nonblock layout (3.72) is the only acceptable combination.

In terms of perceived *clarity*, language again comes to the forefront, yet now in combination with personalization rather than text layout. As seen in Figure 1, some rather interesting patterns emerge pointing further to the underlying complexities of trying to combine language components to influence lower-order cognitive responses among read-

ers. For example, when colorless language is used, moving from an impersonal to a personal presentation detracts from perceived *clarity*. This is not so when colorful language is used. It would thus appear that added clarity may best be achieved through both impersonal-colorless and personal-colorful presentations, with impersonal-colorless being a bit more effective.

As for readers' *overall reactions to the ad*, sentence structure and personalization combined to provide the most significant influence. Interestingly, overall reactions were not significantly influenced for impersonal presentations simply as a result of changing from passive to active sentence structure. The same was not true, however, for personal presentations. Here overall favorable impressions were dramatically enhanced by the use

of active rather than passive sentences.

In addition to these two-way interactions just discussed, somewhat more complex three-way interactions also emerged. For both perceived *attractiveness* and *likelihood of reading the ad*, personalization, colorfulness of language, and sentence structure combined to play a significant role. This finding, particularly as it relates to perceived attractiveness, is in and of itself quite interesting and beyond what we may have generally predicted. As an influencer of ad attractiveness, prose-related factors such as language and syntax might ordinarily be thought of as taking a backseat to the more pronounced and visually identifiable structural variations; yet such was not the case here.

When our ad copy took on a personal rather than impersonal

Table 4
General Overview of Mean Responses to Each Experimental Ad in Study 2¹

Assessment dimension	No Illustration ²								Illustration ²							
	Personal, Colorful				Personal, Colorless				Personal, Colorful				Personal, Colorless			
	Active		Passive		Active		Passive		Active		Passive		Active		Passive	
	B	NB	B	NB	B	NB	B	NB	B	NB	B	NB	B	NB	B	NB
Appealing	3.23 (0.97)	3.30 (0.91)	3.37 (0.99)	3.63 (0.85)	3.47 (1.07)	3.13 (1.17)	2.93 (1.17)	3.13 (1.04)	3.67 (0.66)	3.93 (0.58)	3.60 (0.77)	3.70 (0.75)	3.67 (0.76)	3.97 (0.62)	3.13 (1.11)	3.70 (0.99)
Believable	3.60 (0.89)	3.30 (1.05)	3.70 (0.84)	3.83 (0.95)	3.87 (0.94)	3.73 (0.69)	3.73 (0.69)	3.80 (0.89)	3.53 (0.78)	3.43 (1.01)	3.53 (0.97)	3.80 (0.81)	3.70 (0.95)	3.63 (0.93)	3.90 (0.71)	3.90 (1.06)
Clear	3.40 (1.13)	3.20 (1.06)	3.07 (1.23)	3.63 (1.07)	3.30 (1.18)	3.40 (1.00)	2.90 (1.15)	3.00 (1.23)	3.87 (0.68)	3.53 (0.82)	3.20 (1.06)	3.60 (1.00)	3.63 (0.89)	3.33 (0.96)	3.07 (1.17)	3.33 (1.21)
Informative	3.73 (0.94)	3.73 (0.83)	3.87 (0.94)	4.23 (0.50)	4.03 (0.96)	3.87 (0.97)	3.80 (0.80)	3.96 (1.00)	4.17 (0.65)	4.00 (0.74)	4.00 (1.05)	3.97 (0.89)	3.83 (1.09)	3.97 (0.76)	4.03 (0.67)	3.87 (0.86)
Attractive	2.83 (1.08)	3.00 (0.87)	2.73 (1.17)	3.33 (0.92)	2.96 (1.00)	3.20 (1.03)	2.87 (0.82)	3.10 (1.06)	3.43 (0.57)	3.43 (0.77)	3.30 (0.88)	3.37 (0.76)	3.67 (0.84)	3.80 (0.76)	2.93 (1.11)	3.60 (1.00)
Overall reaction	3.10 (0.99)	3.20 (0.76)	3.13 (1.04)	3.60 (0.72)	3.43 (1.01)	3.53 (0.77)	2.87 (0.78)	3.20 (1.03)	3.57 (0.57)	3.83 (0.38)	3.47 (0.82)	3.57 (0.82)	3.73 (0.74)	3.90 (0.55)	3.30 (0.88)	3.57 (0.90)
Likelihood of reading	3.07 (1.17)	3.07 (1.26)	2.80 (1.27)	3.53 (1.19)	3.43 (1.45)	3.36 (1.16)	2.67 (0.99)	3.00 (1.20)	3.53 (1.01)	3.37 (1.19)	3.30 (1.24)	3.47 (0.90)	3.67 (0.96)	4.10 (0.55)	2.83 (1.26)	3.63 (1.24)
Likelihood of using	3.57 (1.22)	3.17 (1.20)	2.97 (1.19)	3.26 (1.34)	3.60 (1.19)	3.36 (1.24)	3.30 (1.29)	3.17 (1.17)	3.70 (0.95)	3.77 (1.14)	3.07 (1.34)	3.43 (1.07)	3.10 (1.37)	3.67 (1.29)	3.03 (1.30)	3.77 (1.27)

¹ Responses range from 1 to 5 inclusive. For "Appealing," "Believable," "Clear," "Informative," and "Attractive," 1 = Strongly Disagree, 2 = Disagree, 3 = Neither Agree nor Disagree, 4 = Agree, and 5 = Strongly Agree. For "Overall Reaction to the Ad," 1 = Very Unfavorable, 2 = Unfavorable, 3 = Neither Favorable nor Unfavorable, 4 = Favorable, and 5 = Very Favorable. For "Likelihood of Reading the Ad" and "Likelihood of Using the Service," 1 = Very Unlikely, 2 = Unlikely, 3 = Neither Likely nor Unlikely, 4 = Likely, 5 = Very Likely.

² B = Block Text Layout; NB = Nonblock Text Layout. Standard deviations appear in parentheses. N = 30 for each ad variation. The eight "Illustration" ads were taken from Study 1 (see Table 2). They form the basis against which the "No Illustration" ads of Study 2 are compared and/or contrasted.

characterization, the patterns of influence were remarkably similar. Here perceived *attractiveness* and *likelihood of reading the ad* were both enhanced by combining colorless language with active sentences. On the other hand, for impersonal ads, colorless language seems better matched with passive sentences. This particular finding is not only interesting but quite atypical in that it does not support the general feeling that passive sentence structure should always be avoided.

Study 2: Language, Sentence, and Structural Variations in a No-Illustration Context. Unlike study 1, which focused primarily on the interactive workings of both prose style and text layout,

we introduced in study 2 a second structural factor: the presence or absence of an illustration. Here, two key questions are addressed. First, along each assessment dimension, will prose and text layout factors operate in a similar fashion to what was observed in the illustration-only context of study 1? Second, what specific role does the presence or absence of an illustration play in this process?

Table 4 presents a general overview of mean responses to each of our no-illustration ads used in study 2, along with their identical illustration ad counterparts of study 1. Quite noticeably, for many of the ads, differences in mean responses do appear to emerge along each and

every dimension with perhaps the exception of perceived *informativeness*. This finding is particularly interesting simply because it is a seemingly generalizable consistency found also in study 1. Furthermore, generally observed are lower mean scores for the no-illustration ads versus higher scores for ads with illustration. Not surprisingly, then, the presence or absence of an illustration does appear, at least at first glance, to play a substantive role in influencing reader reactions. How then does this factor (i.e., the presence or absence of an illustration) operate in conjunction with stylistic prose and text layout?

As a two-step sequence toward addressing this question,

Table 5
Summary of Major Findings: Study 2

Assessment dimension	Main-interaction effects found for each dimension	Sum of squares	DF	F	Significance
Appealing	Illustration	18.802	1	22.182	.000
	Language	3.169	1	3.738	.054
	Text Layout	3.852	1	4.545	.034
	Language × Sentence Structure	4.219	1	4.977	.026
Believable	Language	4.408	1	5.532	.019
	Sentence Structure	3.675	1	4.612	.032
Clarity	Illustration	5.208	1	4.593	.033
	Language	4.408	1	3.888	.049
	Sentence Structure	6.533	1	5.762	.017
	Sentence Structure × Text Layout	8.008	1	7.063	.008
Attractive	Illustration	22.969	1	26.566	.000
	Text Layout	8.269	1	9.564	.002
	Language × Sentence Structure	2.522	1	2.952	.086
Informative	None	—	—	—	—
Overall reaction to the ad	Illustration	15.408	1	23.073	.000
	Text Layout	6.075	1	9.097	.003
	Sentence Structure	4.800	1	7.188	.008
	Sentence Structure × Language	5.633	1	8.435	.004
Likelihood of reading ad	Illustration	16.502	1	12.599	.000
	Text Layout	9.352	1	7.117	.008
	Sentence Structure	10.502	1	7.992	.005
	Sentence Structure × Language	11.719	1	8.918	.003
	Sentence Structure × Text Layout	6.302	1	4.796	.029
	Illustration × Text Layout × Language	5.419	1	4.124	.043
Likelihood of using service	Sentence Structure	7.008	1	4.635	.032
	Illustration × Text Layout	9.075	1	6.002	.015

MANOVA was again applied, followed by univariate ANOVA. The results of the MANOVA analysis point to a marginally significant four-way interaction ($F = 1.780$, $df = 9/456$, $p = .07$) between language, syntax, and the two structural factors of text layout and illustration. Again, this is generally consistent with what we found in study 1, yet

for a slightly different composition of independent variables (see experimental design).

Motivated by this finding of significance for the composite set of dependent variables, we then took a further look at how each assessment dimension was individually affected. These results are summarized in Table 5. Again, our use of univariate

ANOVA made several findings stand out:

1. Similar to study 1, four-way interactions were nonexistent. Isolated main effects and two-way interactions seemed to prevail.
2. Perceived *believability* was not influenced by the presence or absence of the RightTouch

Table 6
Summary of Recommended Tactics Based on Study 1

Communication goal: To enhance/increase	Individual and/or combined factors that should be emphasized in order to achieve stated goal	Recommended tactics for ads in which the given constant is an illustration ¹
Ad appeal	(a) Text Layout + Language	(a) For nonblock layouts, use colorless language; for block layouts, use colorful language.
	(b) Personalization + Sentence Structure	(b) For both active and passive sentence structures, use personal presentations.
Ad believability	(a) Language	(a) Use colorless language.
Ad clarity	(a) Text Layout + Sentence Structure	(a) For block layouts, use active sentence structure; for nonblock layouts, use active or passive sentence structure.
	(b) Personalization + Language	(b) For impersonal presentations, use colorless language; for personal presentations, use colorful language.
Ad attractiveness	(a) Text Layout + Language	(a) For nonblock layouts, use colorless language; for block layouts, use colorful language.
	(b) Personalization + Sentence Structure + Language	(b) For personal presentations, use active sentence structure with colorless language; for impersonal presentations, use passive sentence structure with colorless language or active sentence structure with colorful language.
Ad informativeness	(a) None found	(a) Use any layout, language, personalization, and sentence combination.
Overall reaction to ad	(a) Text Layout	(a) Use nonblock layout.
	(b) Personalization + Sentence Structure	(b) For personal presentations, use active sentence structure; for impersonal presentations, use active or passive sentence structure.
Likelihood of reading ad	(a) Text Layout + Language	(a) For nonblock layouts, use colorless language; for block layouts, use colorful language.
	(b) Personalization + Sentence Structure + Language	(b) For personal presentations, use active sentence structure with colorless language; for impersonal presentations, use passive sentence structure with colorless language.
Likelihood of using service	(a) Text Layout + Language	(a) For nonblock layouts, use colorless language; for block layouts, use colorful language.

¹ These recommended tactics should be viewed as independent options. As suggested by the absence of significant 4-way interactions, the combining of these tactics will not necessarily enhance the probability of achieving the stated goal. For example, *combining* colorful language-block layout *with* a personal presentation-active sentence structure will not necessarily enhance the perceived "appeal" of the ad.

illustration. We might have logically reasoned that the inclusion of a visual would enhance believability (i.e., "what they say must be true; I can certainly see that the machine exists") while its absence might serve as a detractor. Yet, this simply was not the case.

3. And perhaps most surprisingly, the illustration factor appeared to operate independently of language, sentence structure, and text layout for

the lower-order assessment dimensions. However, this was not so for several of the higher-order categories. Pointed to then is a clear and recognizable dichotomy between lower- and higher-order reader reactions that ad copywriters and researchers alike may not have previously taken note of.

For at least one higher-order assessment dimension, language and text layout operated differ-

ently depending on whether or not an illustration was present. With an illustration present, for example, subjects reported that they were much *more likely to read* a colorless language ad as we moved from a block to a nonblock layout. But for colorful language, a change in textual layout had no noticeable effect. Furthermore, a somewhat different pattern emerged for ads with no illustration. Here a colorful language-nonblock layout appeared to be the most effective

Table 7
Summary of Recommended Tactics Based on Study 2

Communication goal: To enhance/increase	Individual and/or combined factors that should be emphasized in order to achieve stated goal	Recommended tactics for ads in which the given constant is a personal presentation ¹
Ad appeal	(a) Text Layout	(a) Use a nonblock layout.
	(b) Illustration	(b) Include an illustration.
	(c) Language + Sentence Structure	(c) With colorful language, use active or passive sentence structure; with colorless language, use active sentence structure only.
Ad believability	(a) Language	(a) Use colorless language.
	(b) Sentence Structure	(b) Use passive sentence structure.
Ad clarity	(a) Language	(a) Use colorful language.
	(b) Illustration	(b) Include an illustration.
	(c) Text Layout + Sentence Structure	(c) For nonblock and block layouts, use active sentence structure.
Ad attractiveness	(a) Text Layout	(a) Use nonblock layout.
	(b) Illustration	(b) Include an illustration.
	(c) Language + Sentence Structure	(c) Use colorless language with active sentence structure only.
Ad informativeness	(a) None found	(a) Use any layout, language, sentence structure, and illustration combination.
Overall reaction to ad	(a) Text Layout	(a) Use nonblock layout.
	(b) Illustration	(b) Include an illustration.
	(c) Language + Sentence Structure	(c) With colorful language, use active or passive sentence structure; with colorless language, use active sentence structure only.
Likelihood of reading ad	(a) Text Layout + Sentence Structure	(a) For nonblock layouts, use active or passive sentence structure; for block layouts, use active sentence structure only.
	(b) Language + Sentence Structure	(b) With colorless language, use active sentence structure only; with colorful language, use active or passive sentence structure.
	(c) Text Layout + Language + Illustration	(c) For illustration ads, use a nonblock layout with colorless language; for ads without an illustration, use a nonblock layout with colorful language.
Likelihood of using service	(a) Sentence Structure	(a) Use active sentence structure.
	(b) Text Layout + Illustration	(b) Use a nonblock layout and include an illustration.

¹ These recommended tactics should be viewed as independent options. As suggested by the absence of significant 4-way interactions, the combining of these tactics will not necessarily enhance the probability of achieving the stated goal. For example, *combining* a nonblock layout with colorful language-active sentence structure will not necessarily enhance the perceived "appeal" of the ad.

combination with colorful-block being the least effective.

Discussion

Advertisers and copywriters should find our results interest-

ing for a number of reasons. First, they substantiate the largely intuitive assertion of most advertising textbooks that language, sentence structure, text layout, and illustration changes do not generally operate

independently of each other. Thus, it is clear that tactical decisions aimed at influencing the perceptions of readers must incorporate synergistic rather than nonsynergistic approaches. However, the literature, as Percy

(1988) so astutely points out, is unfortunately less than clear on just how this can be done. This is where this particular study (and those that will follow) makes a *substantive contribution by providing more detailed insight into just how these particular factors interact and how such interactions can be more effectively used to shape reader perceptions.*

Managerial Implications. Studies of the complexity and magnitude of these require rather detailed analyses to help unravel just what has been found. Hopefully, we have successfully done this in our discussion. Now it is critically important that we clearly and concisely communicate these findings in terms of their potential value as an aid to strategy and tactical planning. Tables 6 and 7 offer some suggested guidelines.

When a copywriter sits down to plan an ad strategy, much depends not only upon which lower- and higher-order goals are targeted but also upon the context of the ad. As seen across studies 1 and 2, the actual components (sentence structure, word choice, and layout) which influence reader reactions along these various assessment dimensions may be identical yet may require different tactics to achieve desired goals. For example, ad *clarity* may be improved for personal ads regardless of the presence or absence of an illustration by combining active sentences with block or non-block layouts. For illustration ads—regardless of whether or not the presentation is personal or impersonal—an alternative choice between the use of active or passive sentences is equally acceptable, particularly for non-block layouts. Admittedly then, the task of appropriately and effectively combining these various ad components to achieve greater ad *appeal, believability, or*

whatever it is that one wishes to achieve, is far from simple.

As shown by Tables 6 and 7, we can point to no one standardized language-sentence structure combination of writing or textual/illustration format that will favorably influence each and every assessment dimension. Yet, many advertising agencies continue to use words, sentences, and textual formats that over the years have been established as “standardized fare,” regardless of the very real possibility that other less-used and generally shunned combinations (e.g., impersonal-colorless-passive presentations) may interactively improve lower-order ad assessments among many readers. In fact, as evidenced by the vast preponderance of ads, advertising copywriters, in general, clearly appear to operate under certain assumptions:

1. Certain language/sentence structure combinations of writing are more acceptable than are other combinations.
2. Desired reader perceptions of the ad and the product or service it is designed to promote and sell are really very much dependent on the prose usage or text/illustration format that an advertiser chooses to use.
3. It is generally safer to use colorful language and active sentence structure in an indented, itemized, illustrated format than other possible variations.³

³To support these points, all one has to do is compare advertisements in the general press and in popular magazines with those one finds in specialized journals aimed at narrow audiences. In general, you will see that ads selling “hydrofoil mixers, inverted steam traps, or liquid/solid filtration systems” are lexically and syntactically the same as ads designed to sell automobiles or financial services, not so much in terms of what is said but how things are said. Further-

. . . advertising agencies continue to use words, sentences, and textual formats that over the years have been established as “standardized fare,” . . .

Quite interestingly, our findings suggest that these assumptions are not necessarily true.

Future Research. We have elsewhere laid the groundwork not only for this study—which is the fourth in a sequence of such studies—but also for future efforts (1) by showing that copywriters, through their control of word usage, can engineer specific reader perceptions of an ad text (see *Journal of Business Communication*, 1989), (2) by challenging the common assumptions about the importance of word choice and its effect on reader reactions to an ad (see *Journal of Direct Marketing*, 1989) and, finally, (3) by extending these previous efforts to a broader range of conditions (see *Journal of Business and Technical Communication*, forthcoming). Interestingly, and perhaps quite importantly from a validation standpoint, some consistent response patterns among readers are beginning to emerge from one study to the next. Yet, there is still much more to accomplish and, not unlike the authors of most other studies, we must pursue this and related topics in a deliberate and well thought-out fashion. Only by doing this can we adequately report and build upon what we have previously done.

Obviously, then, to better understand the interactive work-

more, these presentations are generally presented in an indented, itemized format (i.e., nonblock).

ings of the language, sentence structure, text layout, and illustration components of print ads, we must expand beyond the present context to include additional product/service scenarios as well as additional target groups. Since the RightTouch Center is a service intended specifically for college students, student reactions to our test ads provide valuable information for those marketing to this group. Nevertheless, we would not try to argue that students are the general public. Rather they are a very specific market segment whose reactions may well differ from those of readers who either never attended college or who attended many years ago. Consequently, we see these two studies as part of a programmatic sequence designed to ultimately provide a comprehensive understanding of the functioning of language in print ads across the entire spectrum of possible readers. The RightTouch studies have paved the way for subsequent work which will give us a better feel for the expansive applicability of much of what we have found. Given the vast differences in characterization that exist for many of our products and services (e.g., technical versus nontechnical, durable versus nondurable, high involvement versus low involvement, etc.), the research possibilities for extended, systematic replications are quite numerous, but potentially well worth the effort. With careful planning and a clearly defined focus, the payoff for advertisers, advertising copywriters, and educators alike can be sizable to say the least. ■

References

Aaker, D. A., and G. Myers. *Advertising Management*. Englewood Cliffs, NJ: Prentice-Hall, Inc., 1982.

Almaney, A. "The Effect of Message Treatment on Feedback in Business Communication." *Journal of Business Communication* 9, 3 (1972): 19-23.

Baker, M. J., and G. A. Churchill, Jr. "The Impact of Physically Attractive Models on Advertising Evaluations." *Journal of Marketing Research* 14, 4 (1977): 538-55.

Courtney, A. E., and S. W. Lockeretz. "A Woman's Place: An Analysis of the Roles Portrayed by Women in Magazine Advertisements." *Journal of Marketing Research* 8 (1971): 92-95.

Crystal, D., and D. Davy. *Investigating English Style*. Bloomington, IN: Indiana University Press, 1969.

Devillier, J. L. "Communication Effects of Variations in Organization and Format." *Journal of Business Communication* 9, 3 (1972): 5-17.

Edell, J. A., and R. Staelin. "The Information Processing of Pictures in Print Advertisements." *Journal of Consumer Research* 10, 1 (1983): 45-61.

Fielden, J. S. "What Do You Mean You Don't Like My Style?" *Harvard Business Review* 60, 3 (1982): 128-40.

———; J. D. Fielden; and R. E. Dulek. *The Business Writing Style Book*. Englewood Cliffs, NJ: Prentice-Hall, Inc., 1984.

Furse, D. H., and D. W. Stewart. "Standards of Advertising Copytesting: A Psychometric Interpretation." *Journal of Advertising* 11, 4 (1982): 30-38.

Gelb, B. D.; J. W. Hong; and G. M. Zinkhan. "Communications Effects of Specific Advertis-

ing Elements: An Update." *Current Issues and Research in Advertising* 2 (1985): 75-99.

Gordon, M. E.; L. A. Slade; and N. Schmitt. "The 'Science of the Sophomore' Revisited: from Conjecture to Empiricism." *Academy of Management Review* 11, 1 (1986): 191-207.

Hair, Jr., J. F.; R. E. Anderson; and R. L. Tatham. *Multivariate Data Analysis*. New York: Macmillan Publishing Company, 1987.

Hanssens, D. M., and B. Weitz. "The Effectiveness of Industrial Print Advertisements Across Product Categories." *Journal of Marketing Research* 17, 3 (1980): 294-306.

Harmon, R. R.; N. Y. Razzouk; and B. L. Stern. "The Information Content of Comparative Magazine Advertisements." *Journal of Advertising* 12, 4 (1983): 10-19.

Harris, R. J.; R. E. Sturm; M. L. Klassen; and J. I. Bechtold. "Language in Advertising: A Psycholinguistic Approach." *Current Issues and Research in Advertising* 1, 1 (1986): 1-26.

Hendon, D. W. "How Mechanical Factors Affect Ad Perception." *Journal of Advertising Research* 13, 4 (1973): 39-46.

Hirschman, E. C. "The Effect of Verbal and Pictorial Advertising Stimuli on Aesthetic, Utilitarian, and Familiarity Perceptions." *Journal of Advertising* 15, 2 (1986): 27-34.

Holbrook, M. B. "Some Further Dimensions of Psycholinguistics, Imagery, and Consumer Response." In *Advances in Consumer Research* 9, A. A. Mitchell, ed.

- Pittsburgh, PA: Association for Consumer Research, 1981.
- , and D. R. Lehmann. "Form versus Content in Predicting Starch Scores." *Journal of Advertising Research* 20, 4 (1980): 53-59.
- , and W. L. Moore. "Feature Interactions in Consumer Judgments of Verbal Versus Pictorial Presentations." *Journal of Consumer Research* 8, 1 (1981): 103-13.
- Keon, J. W. "Copy Testing Ads for Imagery Products." *Journal of Advertising Research* 23, 6 (1983): 41-48.
- Kisielius, J., and B. Sternthal. "Detecting and Explaining Vividness Effects in Attitudinal Judgments." *Journal of Marketing Research* 21, 1 (1984): 56-64.
- Lutz, K. A., and R. J. Lutz. "Effects of Interactive Imagery on Learning: Application to Advertising." *Journal of Applied Psychology* 62, 4 (1977): 493-98.
- Madden, C. S.; M. J. Caballero; and S. Matsukubo. "Analysis of Information Content in U.S. and Japanese Magazine Advertising." *Journal of Advertising* 15, 3 (1986): 38-45.
- Marks, R. B., and J. W. Totten. "The Effects of Mortality Cues on Consumers' Ratings of Hospital Attributes." *Journal of Health Care Marketing* 10, 3 (1990): 4-12.
- Milic, L. T. "Theories of Style and Their Implications for the Teaching of Composition." In *Contemporary Essays on Style*, G. A. Love and M. Payne, eds. Glenview, IL: Scott, Foresman & Co., 1965.
- Percy, L. "Psycholinguistic Guidelines for Advertising Copy." In *Advances in Consumer Research* 9, A. A. Mitchell, ed. Pittsburgh, PA: Association for Consumer Research, 1981.
- . "A Review of the Effect of Specific Advertising Elements Upon Overall Communication Response." *Current Issues and Research in Advertising*, 2 (1983): 77-118.
- . "The Often Subtle Linguistic Cues in Advertising." In *Advances in Consumer Research* 15, M. Houston, ed. Provo, VT: Association for Consumer Research, 1988.
- , and J. R. Rossiter. *Advertising Strategy: A Communication Theory Approach*. New York: Praeger Publishing Co., 1980.
- , and ———. "Effects of Picture Size and Color on Brand Attitude: Responses in Print Advertising." In *Advances in Consumer Research* 10, R. P. Bagozzi and A. M. Tybout, eds. Ann Arbor, MI: Association for Consumer Research, 1982.
- Reilly, P. "College Magazines—The Next Generation." *Advertising Age*, February 1989.
- Roloff, M. E., and G. Miller. *Persuasion: New Directions in Theory and Research*. Beverly Hills, CA: Sage Publications, 1980.
- Rossiter, J. R. "Predicting Starch Scores." *Journal of Advertising Research* 21, 5 (1981a): 63-68.
- . "Visual Imagery: Applications to Advertising." In *Advances in Consumer Research* 9, A. A. Mitchell, ed. Pittsburgh, PA: Association for Consumer Research, 1981b.
- , and K. I. Falsetta. "Reliability of Psycholinguistic Analysis of Advertising." Working paper no. 182-A, Columbia Graduate School of Business, 1979.
- , and L. Percy. "Visual Imaging Ability As A Mediator of Advertising Response." In *Advances in Consumer Research* 5, H. Keith Hunt, ed. Ann Arbor, MI: Association for Consumer Research, 1978.
- Schiffman, L. G., and L. L. Kanuk. *Consumer Behavior*. Englewood Cliffs, NJ: Prentice-Hall, Inc., 1991.
- Soley, L. C., and L. N. Reid. "Predicting Industrial Ad Readership." *Industrial Marketing Management* 12, 1 (1983a): 201-206.
- , and ———. "Industrial Ad Readership as a Function of Headline Type." *Journal of Advertising* 12, 1 (1983b): 34-38.
- Stern, B. L.; D. M. Krugman; and A. Resnik. "Magazine Advertising: An Analysis of Its Information Content." *Journal of Advertising Research* 21, 2 (1981): 39-44.
- Taylor, S. E., and S. C. Thompson. "Stalking the Elusive Vividness Effect." *Psychological Review* 89, 2 (1982): 155-181.
- Thompson, E. "An Experimental Investigation of the Relative Effectiveness of Organizational Structure in Oral Communication." *Southern Speech Journal* 26, 1 (1960): 59-69.
- Valiente, R. "Mechanical Correlates of Ad Recognition." *Journal of Advertising Research* 13, 3 (1973): 13-18.



Copyright of Journal of Advertising Research is the property of Cambridge University Press / UK and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.