IGNORING THE OBVIOUS:
VISUAL COMMUNICATION IN ADVERTISING

Jef I. Richards, Department of Advertising, The University of Texas at Austin, 1 University Station, A1200, 512-471-8118, 512-471-7018 (fax), jef@mail.utexas.edu
Jodi Lisa Smith, Department of Advertising, The University of Texas at Austin, 1 University Station, A1200, 512-471-1101, jodilisa@aol.com

ABSTRACT

Literature from psychology suggests the mind processes words and pictures differently, so the study of advertising – a highly visual discipline – should not neglect the importance of pictures and what they can mean to the consumer. This study was conducted as a step toward greater understanding of the visual elements of modern advertising. Through a content analysis, this report looks at the predominance of the visual component of print advertising over a twelve year period and compares it to the verbal. While little has changed, clearly advertising continues to be an overwhelmingly visual form of communication.

INTRODUCTION

Flipping through almost any magazine today, it is common to see large, colorful, advertisements with beautiful illustrations and very little text. Few ads seem to contain much verbal information, unless legally mandated. It appears advertisers use most of this costly space to display pictures and design elements. Visual matter clearly plays a big role in modern advertising.

The Federal Trade Commission (FTC), the regulator of advertising in the United States, seems all but blind to the visual content of ads [17]. Pollay and Mainprize [15] have argued ad researchers are guilty of the same myopia; an allegation supported by others [16]. But neither regulators nor researchers entirely have overlooked visual content in ads. The FTC's famous Campbell Soup case [4], for example, involved the use of glass marbles in ads to exaggerate the volume of meat and vegetables in the soup, and the Colgate-Palmolive [6] case fooled viewers into thinking they were witnessing a razor shaving sandpaper. There likewise are examples of researchers exploring this aspect of ads, such as Percy and Rossiter [12], Mitchell [10], and Unnava and Burnkrant [20], among others.

Still, we know too little about the non-verbal parts of advertisements, but a body of literature is beginning to emerge [8]. The purpose of this paper is to look at visual elements in ads over a twelve year period, compared to the "verbal" aspects. It is probable that consumer perceptions are affected not only by an ad's text but its totality. The visual component(s), then, may be just as important as the verbal, though the effects may be wholly distinct.

PICTURES ARE DIFFERENT

Verbal and visual content differs. Paivio [11] found that people process them in different ways, and proposed that distinct psychological processes are invoked. Vandenberghe et al. [21] discovered that while some physiological processes are common to both words and pictures, "modality-specific activations unrelated to semantic processing occurred in the left inferior parietal lobule for words and

the right middle occipital gyrus for pictures." The precise relationship and differences in semantic processing continue to be debated, but there seem to be real and important distinctions.

For example, visual imagery can lead to a "picture superiority effect," whereby pictures are more easily remembered than text [5] [2]. The presence of pictures also may affect how verbal information is remembered [20]. And in addition to memory effects, pictures clearly are superior at grabbing consumers' attention [13], and affect attitude differently [10]. Pictures even may affect cultural perceptions [3], and can provide something of a universal language that can be understood across cultures. Even the illiterate can "read" pictorial content. But pictures also can be subject to multiple interpretations, with the potential to convey *multiple* messages simultaneously to different audiences.

Visual components also may have disproportionate effects on consumer inferences [18]. McQuarrie and Phillips [9] discovered that an indirect metaphorical claim in the form of a picture is more likely to lead to spontaneous positive inferences at the time of ad exposure than if made verbally. And, of course, pictures can "prove" verbal claims, affecting consumer beliefs [7]. In short, visual ad content has broad and potentially significant effects.

It has been argued that the use of visual/pictorial elements in ads has increased. Based on a content analysis of ads over 80 years, Pollay [14] suggested that during the 20th century there was an evolution in print advertising causing verbal content to shrink, replaced by pictorial material. If so, the need to better understand the role of visual communication via advertising likewise has grown.

The object of the present study was modest: to obtain a descriptive snapshot of the relative balance of verbal and visual content of today's ads. It tests the common sense assumption that ads are largely pictorial, catalogs some details of contemporary art direction, and assesses whether the trend found by Pollay continues today. It was designed to look more closely at, and provide a few more insights into, the use of visual matter in magazine advertising. Obviously, television and internet ads offer their own unique challenges for a study of this sort.

METHOD

The inspiration for this study began in 1986, with a very small content analysis using a single coder designed to explore the visual/verbal relationship in ads, out of mere curiosity. A follow-up study using multiple coders was conducted in 1991, but the results never were put in writing. In the fall of 2003 it was revisited with some different goals and research questions to address. The original 1991 magazines had been retained, allowing for the same ads to be re-coded and compared to a similar sample taken 12 years later. A new set of magazines was collected, and analysis was done during the Summer 2004.

Sample

Sampling magazines for this study was problematic. A random sample of all magazines could select magazines that most U.S. citizens have never seen. Pollay [14] solved this by choosing the ten best selling magazines for each decade he studied, thereby studying ads that had the greatest reach and the most public influence. However, the best selling have significant overlap in content, meaning the same ads may appear in several magazines. In the first half of 2003, the top 10 included 4 women's magazines [1], so those 10 would over-represent the ads seen by that one segment of the population. To correct for this, in the current study a slightly modified approach was used.

Consequently, magazines representing varied content appeared preferable, so categories and circulation figures were drawn from the 1991 Leo Burnett Media Guide, used by advertising media planners, and covered publications in these categories: (1) news and business, (2) entertainment guides, (3) women's, (4) men's, (5) fashion and bride, (6) home service, (7) sports and automotive, and (8) mechanics/science. Also, (9) the largest circulation newspaper-insert magazine was selected. The selection was further limited to those magazines available newsstands, since one large circulation magazine required membership in the American Association of Retired Persons.

The first sample for this study was collected in 1991. To ensure comparability the same selection of magazines was chosen for the 2003 sample, and most were still at the top of their category (see sample in Table 1). The earlier sample was purchased the third week of July 1991 and the later sample was bought the third week of November 2003. There was no theoretical basis for assuming seasonality effects, so the difference in months was assumed to be trivial. It was decided *a priori* that only ads of ¼ page or larger would be included in the study, to avoid classified and less professional executions. Analysis included 989 ads. The number of ads in each magazine can be seen in Table 1.

Table 1

Magazine	# Ads (1991)	# Ads (2003)	TOTAL
Time	23	39	62
Playboy	43	55	98
Better Homes & Gardens	69	130	199
Glamour	98	80	178
Family Circle	76	74	150
Popular Science	30	84	114
TV Guide	25	57	82
Sports Illustrated	31	47	78
Parade	11	17	28
TOTAL	406	583	989

Coding

Qualifying ads were identified by the authors prior to coding, and numbered for the coders to see. Five coders were trained and given detailed instructions to code both the 1991 and 2003 ads. Two coders failed to complete the work, and were dropped from the analysis. Three coders analyzed all 989 ads. Ads were coded for numerous content factors, like ad size, space occupied by copy, space occupied by pictures, number of pictures, whether the pictures were photos or artist renderings, etc.

RESULTS

Results appear as percentages and may not total 100%, thanks to rounding error and, in a few cases, coder error. Intercoder reliability was based on intraclass correlation within each coding variable.

Ad sizes appear in Table 2. Ad size was the proportion of a page used by the ad, including white space, rounded to the nearest category. Mail-in cards bound into a magazine with an ad were added to both the ad and page space. Space occupied by written copy is shown in Table 3, calculated much the same way except that it was the proportion of the ad dedicated to verbal text. It was possible for an entire ad to be covered with both written copy and a picture, if text was superimposed over the illustration.

Table 2: Ad Sizes						
YEAR	¼ page	1/3-½ page.	2/3-¾ page.	Full page	2 page	More
1991	1.9	15.7	4.3	56.9	17.7	3.4
2003	1.5	15.9	2.1	65.2	11.6	3.6

Intercoder Reliability = 0.97

Table 3: Space Occupied by Words						
YEAR	None	< ¼ ad	¼ ad	½ ad	¾ ad	full ad
1991	0.7	24.3	31.1	28.6	14.0	1.4
2003	0.8	37.5	29.1	19.3	11.5	1.5

Intercoder Reliability = 0.90

The space dedicated to pictures appears in Table 4. This is not directly comparable to Table 3, since picture space was the portion of a *page* rather than a portion of an *ad*. So Table 4a looks at the most common ad size (full page) and the picture sizes within that group.

Table 4: Picture Space						
YEAR	<¼ pg	1/3-1/2 pg	2/3-3/4 pg	Full page	2 page	More
1991	11.0	28.3	38.0	18.7	1.6	0.5
2003	12.9	28.3	35.5	18.0	1.7	1.0

Table 4a: Space in Full Page Ads Used for Pictures				
YEAR	<¼ pg	1/3-1/2 pg	2/3-3/4 pg	Full page
1991	8.7	25.3	44.2	21.2
2003	11.5	24.3	40.6	22.5

Intercoder Reliability = 0.85

A breakdown of the number of words in the ads can be seen in Table 5. Because one large typeface word could occupy 100% of ad space, the number of words in an ad provided a cross-check of verbal predominance. All words, including "fine print," were counted. The number of pictures used in the ads is shown in Table 6. Both photos and artist renditions were counted. This was a check on visual predominance, as well as the complexity of the visual message(s) and volume of information conveyed.

Table 5: Number of Words Per Ad				
YEAR	< 10	<100	<1000	>1000
1991	3.2	78.7	15.9	1.6
2003	6.9	73.9	14.8	3.9

Intercoder Reliability = 0.86

Table 6: Number of Pictures Per Ad					
YEAR	0	1	2	3	More
1991	2.1	43.3	29.9	10.8	13.7
2003	2.1	36.8	30.7	11.9	17.6

Intercoder Reliability = 0.88

Looking at art direction trends, the use of color versus black and white illustrations was included. Coders were told to indicate whether pictures were color, black & white, or a "mixed" combination. Table 7 depicts the results. Finally, the difference of photos and artists renderings was documented. Basically, the question was whether the illustration came from a camera or was created by an artist. It was discovered that, particularly in 2003, the quality of artists' photo-realism made it sometimes impossible to determine. Coders were instructed to code a picture as a photograph if they were unable to distinguish it from the work from a camera. The results appear in Table 8.

Table 7: Color vs. B&W			
YEAR	Color	B&W	Mixed
1991	78.8	16.1	3.0
2003	84.3	7.7	5.3

Intercoder Reliability = 0.81

Table 8: Photo vs. Artist Rendering			
YEAR	Photo	Drawing	Both
1991	87.4	5.8	4.8
2003	86.3	5.1	5.2

Intercoder Reliability = 0.72

DISCUSSION

Ad size consistency across 12 years is surprising. This may reflect magazines' styles and policies as much as advertiser desires. For example, ad space pricing may make purchase of a small ad a bad deal. About ¾ of the ads in both years were full page or larger. This may reflect only the 9 publications rather

than an industry trend. However, the lack of ad size change from 1991 to 2003 effectively removes this as a variable that might explain a change in visual/verbal content.

Space dedicated to *verbal* content appears to have decreased a bit. Only the smallest category increased markedly from 1991 to 2003, with most categories decreasing. There was a slight increase in the full page category, representing only 1/10 of 1% of the ads. This might offer some tentative support to a continuation of Pollay's suggested trend, but the *visual* space barely changed, arguing against that trend. Factoring in the number of words per ad, it is difficult to conclude there is any such shift. While the "less than 10 words" category more than doubled, supporting a trend toward use of fewer words, the "more than 1000 words" category more than doubled, too. The number of pictures used in each ad also changed little. Overall, no meaningful shift in the balance of words and pictures was found. But it was interesting that in 2003 fully 2/3 of ads dedicated only ¼ of the ad space *or less* to text, while 87.4% of full-page ads dedicated over ¼ of ad space to pictures, compared to 90.7% in 1991.

The remaining data looks at art direction trends. The 1991 magazines were published before the Internet became a fully functional marketing tool, while the second set was published after the dot.com boom and bust [19]. The purpose was to discover whether the dramatic changes in the advertising field might correspond to changes in the visual orientation of ads. There was a small shift away from black & white toward more color in the pictures. Whether it is a meaningful shift requires more research. But the number of photos versus artists' work was virtually identical in the two samples. This represents only a few pieces of a large puzzle, those pieces do suggest that in at least some ways our use of visual content in magazine ads changed very little over this dozen years.

CONCLUSION

While Pollay's trend was not apparent here, it's possible that trend reached its ceiling, given the disproportionate allocation of space already given to words and pictures. Why verbal is so overwhelmed by visual is a matter of speculation. Perhaps advertisers believe "a picture is worth a thousand words," or maybe magazine ads command so little viewer time that, like billboards, only limited wording will reach them. Or maybe pictures are just better at grasping attention. Whether pictures are more effective, or ad professionals *believe* they are, or just that pictures might contribute to winning creative awards, the end result is that advertisers are paying more of their money to publish pictures than words. We too often take a gross approach to studying advertising, not dissecting its components. Burke, Starch, and other measures may help decide ad effectiveness, they do not tell us whether it is words or pictures in the ad that contribute most to that effectiveness. They fail to dissect the ad and determine whether it is a particular word, or juxtaposition of words, or a model, or a background setting, or some combination of elements that eventually seals the deal. An ad is a complex mix of elements, but the predominance of visual content makes it foolhardy not to dedicate significant research to looking at the pretty pictures.

BIBLIOGRAPHY

[1]   Advertising Age (2004). *Fact Pack 2004 Edition: 2nd Annual Guide to Advertising & Marketing*. New York, NY: Crain Communications.
[2]   Bryce, Wendy J., and Richard F. Yalch (1993). Hearing versus Seeing: A Comparison of Consumer Learning of Spoken and Pictorial Information in Television Advertising. *Journal of Current Issues and Research in Advertising*, 15(1), pp. 1-20.

[3]   Callow, Michael, and Leon Schiffman (2002). Implicit meaning in visual print advertisements: a cross-cultural examination of the contextual communication effect. *International Journal of Advertising*, 21, pp. 259-277.

[4]   Campbell Soup, 77 F.T.C. 664 (1970).

[5]   Childers, Terry L., and Michael J. Houston (1984). Conditions for a Picture-Superiority Effect on Consumer Memory. *Journal of Consumer Research*, 11, p. 643-654.

[6]   Colgate-Palmolive Co. v. FTC, 380 U.S. 374 (1965).

[7]   Dickson, Peter R., Robert E. Burnkrant, Paul W. Miniard, and Hanumantha R. Unnava (1986). If It Isn't A Duck Then Why Did It Quack? Competing Explanations For An Observed Effect of Illustrations In An Advertisement. *Advances in Consumer Research*, 13(1), pp. 153-158.

[8]   McQuarrie, Edward F., and David Glen Mick (1999). Visual Rhetoric in Advertising: Text-Interpretive, Experimental, and Reader-Response Analyses. *Journal of Consumer Research*, 26 (June), pp. 37-54.

[9]   McQuarrie, Edward F., and Barbara J. Phillips (2005). Indirect Persuasion in Advertising. *Journal of Advertising*, 34(2), pp. 7-20.

[10]   Mitchell, Andrew A. (1986). The Effect of Verbal and Visual Components of Advertisements on Brand Attitudes and Attitude Toward the Ad. *Journal of Consumer Research*, 13, pp. 12-24.

[11]   Paivio, Allan (1971). *Imagery and Verbal Processing*, New York: Holt, Rinehart & Winston.

[12]   Percy, Larry, and John R. Rossiter (1983). Effects of Picture Size and Color on Brand Attitude Responses in Print Advertising. *Advances in Consumer Research*, 10, pp. 17-20.

[13]   Pieters, Rik, and Michel Wedel (2004). Attention Capture and Transfer in Advertising: Brand, Pictorial, and Text-Size Effects. *Journal of Marketing*, 68(2), pp. 36-50.

[14]   Pollay, Richard W. (1985). The Subsiding Sizzle: A Descriptive History of Print Advertising, 1900-1980. *Journal of Marketing,* 49(3), pp. 24-37.

[15]   Pollay, Richard W., and Steve Mainprize (1984). Headlining of Visuals in Print Advertising: A Typology of Tactical Techniques. *Proceedings of the American Academy of Advertising*, pp. 24-28.

[16]   Pracejus, John W., G. Douglas Olsen and Thomas C. O'Guinn (2003). Nothing Is Something: The Production and Reception of Advertising Meaning Through the Use of White Space. *Advances in Consumer Research*, 30, p. 174

[17]   Richards, Jef I., and Richard D. Zakia (1981). Pictures: An Advertiser's Expressway Through FTC Regulation. *Georgia Law Review*, 16, pp. 77-134.

[18]   Smith, Ruth Ann (1991). The Effects of Visual and Verbal Advertising Information on Consumers' Inferences. *Journal of Advertising*, 20(4), pp. 13-24.

[19]   Strain, Rachel, John H. Murphy, and Jef I. Richards (2003). Did Poor Advertising Contribute to the Crash of Pure-Play Dot.Com Companies? *Proceedings of the 2003 Conference of the Western Decision Sciences Institute*.

[20]   Unnava, H. Rao, and Robert E. Burnkrant (1991). An Imagery-Processing View of the Role of Pictures in Print Advertisements. *Journal of Marketing Research*, 28(2), pp. 226-231.

[21]   Vandenberghe, R., C. Price, R. Wise, O. Josephs, and R. S. J. Frackowiak (1996). Functional anatomy of a common semantic system for words and pictures. *Nature*, 383(6597), 254-256.