SUBLIMINAL ADVERTISING TECHNIQUES

by

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INTRODUCTION

In 1957, a book by Vance Packard caught the imagination of the American Public. The Hidden Persuaders[1] was an "expose" of the advertising industry, demonstrating how insidiously people were being manipulated through the application of the principles of psychology to buy consumer products. In 1972, Wilson Bryan Key shocked another generation of Americans with his Subliminal Seduction: Ad Media's Manipulation of Not So Innocent America,[2] in which he claimed that consumers were being "programmed" not only through conscious communications but through subconscious messages as well.

Although Mr. Key wrote two more books expanding on his theory, the furor over what he called subliminal messages has abated considerably, helped in equal measure by the outraged response of advertisers and psychologists and by the apathy of the public.

The purpose of this paper is to investigate the claims and counterclaims concerning subliminal advertising; to examine what validity, if any, remains to the notion that the human subconscious can be unknowingly manipulated; and finally to suggest the kinds of techniques which may be successful, and the directions for further research in the area.

REVIEW OF LITERATURE

I. EARLY SUBLIMINAL STUDY

Despite the shock value of the books by Packard and Key, psychologists had been studying the subconscious since Freud, and had attempted to measure stimulation of the subconscious since at least the late 1800's. In 1931 Joseph Bressler [3] referred to studies by J. McK. Cattell and G. S. Fullerton in 1892, [4] Knight Dunlap in 1900, [5] and E. B. Titchener and W. H. Pyle in 1907, [6] on subliminal visual stimulation.

Dunlap showed subjects the classic optical illusion consisting of two lines of equal width, but with one line having "wings" at the ends of the line. Depending on whether the wings are pointed inward or outward, the normal observer will "see" the second line as either shorter or longer than the first.

In this experiment, however, Dunlap replaced the visible wings with wings which were at the distance observed invisible to the subjects. Enough of the subjects reacted to the subliminal stimuli to cause a small difference in the reaction from those subjects who had observed only the visible lines, but Dunlap cautiously attributed the difference to irrelevant and inconsequential causes.

Bressler performed a variation on Dunlap's experiment

by using colors of varying shades of darkness, and discovered that the differences, although slight, increased in direct proportion to the increase in darkness of the paper used.

In 1951, Richard S. Lazarus and Robert A. McCleary of Johns Hopkins University reported on studies involving tachistoscopic stimuli, or visual stimuli at speeds too rapid for conscious recognition. [7] Reactions were measured by galvanic skin response, or the minute electric current generated by the skin. They found that the subjects were able to react to the stimuli, and to discriminate between stimuli. They called this level of perception "subception."

II. THE IMPACT OF PACKARD

In a survey conducted in 1983 by Eric J. Zanot and others, subjects were asked whether they had ever heard of subliminal advertising, or could remember after prompting, and were further asked if they knew four names.[8] Two, Vance Packard and Wilson Bryan Key, were real persons; the other two were fictitious. Almost 30 years after his book was published, Packard's name was recalled by almost three times as many subjects as those who could remember Key, whose third book was written just three years before.

Vance Packard articulated for the first time to a mass market in the United States the fact that advertisers and marketers were using the science of psychology to know the mind of the consumer and to find out the best way to influence the consumer's buying decisions. Much of the "manipulation" which Packard revealed was no more insidious than that found in any other area in which people influence one another: Parents with children, wives with husbands, and managers with employees, to give only a few examples. Nevertheless, just as a husband would resent being told that he was being manipulated by his wife, so the American public felt betrayed by the advertising industry. Packard described the pervasiveness of what he called

"MR" -- motivational research -- in all aspects of American life, including religion, politics and business. Most disturbing, however, was his revelation that Madison Avenue was using sex to sell everything from cars to toothpaste, and was capitalizing on the hopes, fears, dreams and fixations of the public.

Most of Packard's book had to do with appeals to the conscious mind, but he did briefly mention "subthreshold stimulation," [9] and referred to a 1956 London Sunday Times report of a movie house in New Jersey which flashed split-second ice cream ads on the screen, resulting in an otherwise unaccountable increase in ice cream sales. While much of what Packard reported has lost its sting in the intervening years, as the American public has become more sophisticated in the field of motivation (including self motivation), it is probably fair to say that his early work began the impetus for more responsible advertising, resulting among other things in "Truth in Advertising" legislation.

As for most of the rest, "forewarned is forearmed". To a certain extent, Packard uttered a self-fulfilling prophesy when he said:

> "we still have a strong defense available against such persuaders: we can choose not to be persuaded. In virtually all situations we still have the choice, and we cannot be too seriously manipulated if we know

what is going on. It is my hope that this book may contribute to the general awareness. As Clyde Miller pointed out in The Process of Persuasion, when we learn to recognize the devices of the persuaders, we build up a 'recognition reflex'".[16]

III. SUBLIMINAL COMES OF AGE

Although Packard and Key are the names most remembered in connection with subliminal advertising, Walter Weir in 1984 reported that the term was first used in 1957 by one Jim Vicary, the subject of the Sunday Times article referred to in Packard's book. [11] Thereafter, works published by psychologists and advertising professors alike uniformly settled on "subliminal" rather than "subconscious", "unconscious", "subception" and "discrimination without awareness".

In 1959, Franklin H. Goldberg and Harry Fiss concluded from studies of tachistoscopic stimulation that the possibility of "discrimination without awareness" had not been conclusively demonstrated when the subject is unaware of the stimuli. [12] They suggested that unreported partial awareness could have accounted for those results which tended to show discrimination.

In 1964, J. Steven Bevan [13] gave an extensive review of the literature over the previous five-year period, and described the difficulty of defining subliminal stimulation. In some experiments, they said, the stimuli were clearly below the limits of detectability, while in others they were masked by extraneous elements, and in still other experiments the stimuli were perceptible but outside the

field of attention. Another phenomenon observed during the period of review was the progressive lowering of the threshold of perceptibility, with the resulting concern as to whether the stimuli were in fact subliminal when presented.

IV. S - E - X

Everyone knows that sex sells. Wilson Bryan Key's first message to the nation [14] was that sex sells unconsciously as well as consciously.

Although Key devotes some of his book to tachistoscopic stimuli, he is mainly preoccupied with "embeds" or visual words or symbols hidden or obscured in illustrations. His first example is a Gilbey's Gin advertisement in which the bottle is a phallic symbol, the reflection in the glass table-top is a vaginal symbol, and the three ice cubes in the glass have ingeniously crafted letters "S", "E", and "X". [15]

According to Key, there are certain symbols which, although presented in a way which can be perceived with one meaning consciously, but have an entirely different meaning to the subconscious. For example, neckties, arrows, cigarettes, automobiles and candles are phallic symbols; and round or elliptical shapes, such as lips, eyes, belt buckles and eggs, are vaginal symbols. Death symbols include depictions of wars, police actions, nationalistic symbols such as the eagle (or the Russian bear or the British lion) and flags, and even athletic contests (as culturally acceptable substitutes for armed conflict and killing).

As Key sees it, these symbols are effective when used alone, but are reinforced by embeds such as the word "sex" or taboo words with sexual connotation.

Key is convinced that the symbols or words are embedded into illustrations by skillful airbrushing or retouching of photographs, and by use of overlays and other artful manipulation in order to make the stimuli appear just below the threshold of conscious perception.

Key says that once subliminal information becomes apparent to the conscious mind, its effectiveness as a subconscious stimulus is destroyed. He also says that, contrary to the earlier study by Bressler, [16] the stimulus loses its effectiveness the closer it gets to the threshhold of conscious awareness. Bressler found just the opposite effect in his study involving the use of progressively darker colored paper.

Key's Media Sexploitation, published in 1976, [17] was a continuation of the theme begun in Subliminal Seduction [18] but extended to encompass media coverage and marketing in general. There was, however, an interesting chapter on "Subliminal Rock", [19] in which he found subconscious references not only to sex but to drugs, rebellion and death as well.

V. REACTION TO KEY

Compared to some later commentary, the early reaction to Wilson Bryan Key's "revelations" was surprisingly muted.

In a 1979 issue of Journal of Advertising, J. Steven Kelly, an associate professor of marketing at DePaul University, recounted an experiment designed to determine whether subliminal embeds affect brand recall. [20] In Kelly's experiment, a group of college students were given dummy magazines and were asked to read a particular short story, and were told that when they were finished they could just thumb through the magazine at their leisure. The students were given ample time to enable them to finish the story and be exposed to several advertisements, which were copies of some of those which Key had determined contained subliminal embeds. A control group was shown identical magazines containing advertisements which did not have subliminal embeds. The subjects were asked immediately following their review of the magazines, and again one week later, whether they had remembered any of the brand names or any of the illustrations.

Kelly found that the experiment did not "support the hypothesis that subliminal embeds generate significant influence of brand or illustration recall." [21] He emphasized, however, that the experiment left some questions

unanswered. Referring to Herbert E. Krugman [22] and Key, [23] he pointed out that while visual stimuli are received by the left brain, the subjects in his experimnent were required to communicate the results verbally, through a right-brain function; and that "to ask a person to recall what he was exposed to in a visual medium may not measure what is truly stored in the subject's memory. [24]

Another assistant professor, Joel Saegert of the University of Texas at San Antonio, [25] commenting on an experiment by L. H. Silverman [26] in 1977, which found behavior modification to have resulted from subliminal stimuli, suggested that Silverman's results might be useful in further research into tachistoscopic stimulation.

In 1982, Professor Timothy E. Moore, at York University in Toronto, reviewed to that point the developments in the area of subliminal advertising. [27] Quoting N. F. Dixon, he defined the term "subliminal perception" as comprising the following situations:

> "(a) The subject responds to stimulation the energy or duration of which falls below that at which he <u>ever</u> reported awareness of the stimulus in some previous threshold determination.
> (b) he responds to a stimulus of which he pleads total unawareness.
> (c) he reports that he is being stimulated but denies any awareness of what the stimulus was." [28]

The above definition is distinguished from those situations, such as embeds like the letters in Key's ice cubes, [29] where the subject is unaware of the stimulus until his attention is called to it.

Moore discussed the practical difficulties inherent in empirically proving or disproving Key's claims. The first problem is the existence of individual differences in the threshold of conscious perception, and then there is the virtual impossibility of duplicating the conditions under which the experiments are conducted.

Moore also discussed the differences between tachistoscopic messages, using visual stimuli, and subaudible messages. [30] The brain can perceive and retain visual images which are presented in tiny "bits," but if auditory stimuli are presented in this same manner the brain does not have time to process them. Further, the presentation of sounds below the volume of normal perception would be masked by the audible sounds intruding at the same time.

Moore concluded by suggesting that the most that could be expected from subliminal advertising, at least to that point, would be a "potentially positive affective response to a subliminal stimulation." [31]

In 1984, William E. Kilbourne, Scott Painton and Danny

Ridley reported an experiment involving sexual embeds.[32] They point out, as did Dixon, [33] that, strictly speaking, embeds are not really subliminal in the sense that they cannot be perceived at the conscious level; indeed, once the hidden words or pictures are pointed out to the subject they are normally found on subsequent observations.

The experiment involved 424 undergraduate students who were shown two magazine advertisements. The first was for Marlboro Lights cigarettes, and had embedded a representation of male genitalia. The other ad was for Chivas Regal whiskey, and contained an imbedded image of a nude female. A control group was presented ads which did not contain the "subliminal" embeds. The subjects were told to evaluate the two ads they were shown, independently and not in competition with each other.

Kilbourne et al. found that the embeds did have an effect on the evaluation of the ads by the students, with the version containing the embeds producing the higher evaluation.

A subgroup of the students was also measured for galvanic skin response (GSR). The following table shows the means for GSR measurements with respect to the two ads: [34]

	Marlboro Light		Chivas Regal	
	Male	Female	Male	Female
With embed	.568	.693	.666	.667
Without embed	.473	.608	.573	.571

Kilbourne et al. concluded that the ads with embeds produced greater believability than those without, although the results were not the same with both products. As seen in the table, the Chivas Regal ad (with the nude famale form) elicited a higher response than did the Marlboro Light ad. They proposed that additional studies be made to determine the differences in effect of male versus female sexual images, and the appropriateness of the images to the picture and the product being advertised.

In 1985, however, John R. Vokey and J. Don Read reported on their own experiments with embeds of the word "sex" and with backward messages. [35] In neither case were they able to achieve results which were significantly greater than chance.

VI. THE HUCKSTERS

While the psychologist community by and large viewed the subliminal advertising controversy reasonably objectively, the reaction of the advertisers and marketers ranged from polite skepticism to outraged innocence. A notable exception was a study by Martin P. Block and Bruce G. Vanden Bergh. [36]

Following up on the report by Zanot et al. [37] which found that over 80% of the American public believed that subliminal messages were used in advertising, Block and Vanden Bergh looked into the public's perception of subliminal messages as a form of self-help. In a telephone survey, a representative sample of 330 adults responded to questions concerning their attitude toward a system, similar to one which was then actually being marketed, by which a customer's home computer flashed "subliminal" messages such as "quit smoking" or "lose weight" on the customer's television screen.

Block and Vanden Bergh found that regardless of whether subliminal techniques were used for self-help or for selling products, consumers were still concerned about being manipulated into doing things they don't want to do. The study also revealed that consumers are more skeptical about the usefulness of subliminal self-help techniques than

they are about the prevalence of subliminal advertising. The other contrast between this study and that of Zanot and his colleagues was that in the earlier study those most concerned with subliminal advertising tended to be white, well-educated and affluent, while in this case the respondents most receptive to subliminal self-help were less educated with "family problems."

Another objective article by marketing scholars was that of Ronnie Cuperfain and T. K. Clarke. [38] Taking note of studies that had indicated insufficient evidence of the ability of subliminal advertising to persuade people to buy things, Cuperfain and Clarke said that "if, however, this conclusion has been drawn because researchers have focused thier attention in the wrong areas of subliminal perception, or have made demands that are greater than normally expected of even supraliminal advertising, then a problem may indeed exist".

Referring to Moore's paper, [39] with its conclusion that subliminal advertising can at best provide a potentially positive response, Cuperfain and Clarke point out that much of advertising is directed toward just that end, to "image creation, preference, or some other objective short of actual purchase".

In attempting to determine whether <u>some</u> impact is

gained from subliminal stimulation, they conducted an experiment with the help of college student volunteers. The students were shown a short "training film" on the washing of woolen products, in which the clothes were washed with soap in a plain white package. Roughly one-third of the students were presented tachistoscopic images of Woolite brand soap, another third a local (Canadian) brand, Zero, and the remainder an "undoctored" film. After the film was shown, the subjects were shown pictures of five different soap products (including Woolite and Zero) and were asked to rank them in order of appropriateness for washing fine washables.

It was determined from the experiment that subliminal stimulation "can have an impact on stated preference". While preferences for Woolite (which was not a well-known brand locally) were affected but very little, the ranking of Zero was significantly higher in three out of four categories, and measurably higher in the fourth, by those who had been given subliminal presentations of pictures of Zero.

The "popular" advertising press -- presumably intended for the day-to-day practitioners of the art rather than scholars -- has been the most skeptical of subliminal advertising claims. A rash of articles on the subject

appeared in 1984 and 1985 in Advertising Age.

Jack Haberstroh, a professor of mass communications at Virginia Commonwealth University, reported in March of 1984 [40] that he had sent a questionnaire to 30 of his colleagues around the country concerning Key's [41] claims. Of the 22 who responded, 77% said they had discussed Key's theories in class, but none of the respondents thought that his claims were believable. However, only 54.5% thought that agency ads did not contain deliberately placed embeds.

Walter Weir of Temple University [42] reported that Joe Vicary, the creater of the "eat popcorn" and "buy Coke" subliminal messages to movie audiences reported in the London Sunday Times and referred to in Packard's [43] book, and who according to Weir had coined the term "subliminal advertising, had later confessed that his test was a hoax designed to bolster his failing consulting business. Weir said:

> "Mr. Key's books offer no evidence that subliminal advertising exists or is practiced as widely as he claims. If subliminal advertising did exist there certainly would be textbooks available on how to practice it. There would be many artices in Ad Age on the subject and countless news items about subliminal campaigns. There are no secrets in advertising." [44]

Along the same line, Theodore Schulte, an associate professor of journalism at the University of Kentucky, [45]

said, after assuming for the sake of argument the pervasive existence of sexual embeds in advertising:

> "So what? What's the measurable effect? Do we sell more, even one unit more, of anything because of our carefully contrived sexy subliminals? If so, prove it (And lots of luck. We have enough troubles trying to prove how advertising works on a conscious level to effect sales, much less worrying about the subliminal.)"

Also writing in Advertising Age, Sidney Weinstein, a communications consultant in Connecticut, raised the alarm of proposed legislation requiring embedded media content to include a public disclosure of the subliminal content. [46] In pointing out the practical impossibility of defining subliminality, Weinstein told of a study which he had conducted, showing 100 persons blank sheets with messages like "buy" imprinted (presumably subliminally) on them. Although none of the subjects could identify the messages, ads printed on those sheets "produced statistically significant brain wave indices of greater interest than the same ads printed on control paper. They also produced positive ratings and actual purchase behavior".

Weinstein went on to say:

> "If laws are promulgated to forbid advertising procedures that may enhance purchasing behavior, then the next to be condemned may well be package designs which impart feelings, loss leaders, etc. Paranoia may soon be as normal as apple pie. But wait: Doesn't that apple pie shape make you think of something else?"

DISCUSSION

Vance Packard and Wilson Bryan Key both had bestselling books because they struck a nerve with the American public. People like to feel they are in control of their lives. The ordinary person begins life as a child who must obey his or her parents (for convenience, I will hereafter use the masculine gender to include the feminine as well), then he has to do what he is told by his teachers, and when he goes to work he must follow his boss's orders. In the sanctity of his own home, however, he considers himself in charge, but he finds himself and his children bombarded by cleverly crafted advertisements urging him to buy. To use sports metaphors, he knows he is up against a much more talented and better equipped opponent, but at least he thinks he is on a level playing field. Then he hears someone tell him that no matter how cagy or callous he may be, there is no way he can prevent his subconscious from being manipulated.

An early commentary in The Nation said:

> "How do you like that (subliminal advertising)? How would Tom Paine or Oliver Wendell Holmes or Clarence Day's father have liked it? The advertising people are reassuring. They say that this sort of suggestion won't work on people not disposed to accept the advice. ...But who wants to be diddled subconsciously into doing even those things he rather likes to do, and how do we know someone can't persuade us to mortgage our insurance and buy a sports car with the ill-gotten cash? We like sports cars".[47]

As is the case with most controversial subjects, there is truth and reason on both sides of the subliminal advertising issue, but each side has difficulty seeing the other side's truth or reason. Key, for example, either built a well documented case for his theories (he did in fact include an extensive reference section), or he advanced wild claims without any empirical evidence whatsoever, depending on the viewpoint of the commentator.

In fact, both statements are correct. As the above review of the literature reveals, there are empirically proven instances, dating to the last century, of stimuli below the threshold of conscious perception being perceived by the subconscious mind. In some of those experiments, behavior modification resulted from the subliminal stimuli.

On the other hand, Key is especially susceptible to criticism for his finding the word "sex", taboo sex words, and phallic and vaginal symbols in everything from baby food ads to Ritz crackers. One could just as easily find such symbols lying on one's back looking up at clouds on a hot summer day.

Key's preoccupation with sexual embeds (which he has no difficulty perceiving, by the way, making one wonder about their subliminal nature) is reminiscent of the old story about the man who took an inkblot test. After each

card was shown the psychologist asked the man what the inkblot meant to him, and each time he replied, "sex." When the psychologist suggested that the man was perhaps preoccupied with sex, he replied, "What do you expect when you show me all those dirty pictures?"

Two points should be considered in analyzing the effect of subliminal advertising:

First, it has been over thirty years since Packard's book was published, and seventeen years since Key's first book appeared; but there has yet to be a single documented instance of an advertising campaign using "subliminals" which resulted in significant consumer response. The reason could be the difficulty in ascertaining the results of such a campaign, but it could also be due at least in part to my second point.

The second point is the serious ethical question raised by the possibility of manipulating human responses by subconscious means. Both Federal and State governments even now are spending billions of dollars protecting citizens from the predatory practices of "big business". Even though some of those predatory activies are the result of nothing more than the ignorance or stupidity of the consumer, the government considers that it has a legitimate role in protecting the weak --whether in intelligence,

sophistication or economic strength -- from the strong. But the one thing which probably has most inhibited the marketing and advertising communities from implementing subliminal programs is the fear that in regulating one perceived evil the government will decide to regulate other aspects of their business as well, or impose extensive reporting requirements which could greatly increase their cost of doing business, for a return that is still open to question.

As Weir pointed out, [48] there are no secrets in the advertising business, nor in any other business or government as well. So if the advertisers and marketers cannot afford to be caught doing a subliminal campaign, it will be left to the academic community to lead the way, "purely in the name of science".

CONCLUSION

I am convinced that subliminal advertising, though quiescent for the last several years, is not dead, for two reasons: First is the challenge of advancing the frontiers of knowledge, both by scholars and practitioners; the second is the profit motive, or greed if you prefer.

Although it appears that the best results, in terms of achieving the unconscious attention of the consumer to the product being promoted, might be achieved by visual tachistoscopic presentations, that is just the type of "pure" subliminal manipulation that is most likely to cause howls of protest and eventual regulatory, or even punitive, legislation.

I believe the breakthrough, if there is any, in subliminal advertising will come with embeds, even though that technique is the one which Key found to be so reprehensible. (Of course, all of this is academic if Key is right and sexual embeds are already permeating American advertising.) In the beginning, since strictly speaking embeds are only subliminal to the extent they are obscured by their surroundings, it can be argued with some degree of logic that it is not the subconscious but perhaps the barely conscious mind that is being stimulated.

In order for such a campaign to be accepted by the

public, however, the embeds which Key sees everywhere will have to be "sanitized." While other stimuli may not be as effective as sex in getting the attention of the consumer, they are much more likely to be acceptable to the anti-subliminal activists who will doubtless arise. Perhaps some day someone will discover how to distill the essence of God, country, mother and apple pie into a subliminal embed.

Finally, if the advertisers are not too greedy, a gradual use of subliminal advertising, on a limited basis, can slowly raise the threshold of what is acceptable from both a moral and ethical standpoint. After all, why should the consumer worry about exposure to a little subliminal sex when he is already bombarded in movies, television and the print media with ever more explicit sex. As for the ethical question, we have seen from the work with genetic engineering that what was once considered an abomination is slowly being accepted.

The next area which could be the vanguard for subliminal advertising is digitally synthesized music. Bits of sound which conjure up pleasant memories, or evoke strong emotions of any kind, can be easily woven into any kind of music; whether they can then be recognized, either subliminally or supraliminally, and whether the desired

response will take place, will be determined by the next generation of experiments by psychologists, marketers and advertisers, and of course musicians.

Like it or not, subliminal advertising will be here to stay, if it already isn't.

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