# OPEN AND CLOSED ADVERTISEMENTS: MODERATING EFFECTS OF COMPREHENSION ON APPRECIATION


Final Revision April 2004

Ketelaar, P. E., Gisbergen, M. S., & Bosman, J. A. M. (2004). Open and closed advertisements: Moderaring effects of comprehension on appreciation.
Title of conference book will soon be available

## Contact

P. E. Ketelaar, Assistant Professor of Communication, University of Nijmegen, Department of Communication, phone: +31243612722, e-mail: p.ketelaar@mailbox.kun.nl. M. S. van Gisbergen, Assistant Professor of Communication, University of Nijmegen, Department of Communication, phone: +31243611812, e-mail: m.vangisbergen@maw.kun.nl. J. A. M. Bosman, Associate Professor of Communication, University of Nijmegen, Department of Communication, phone: +31243227120, e-mail: j.bosman@maw.kun.nl. All researchers are from the University of Nijmegen, P.O. Box 9104, 6500 HE Nijmegen, The Netherlands, Fax: +31243613073.

The research was supported by a grant from NWO (the Netherlands Organization for Scientific Research). We wish to thank Thijs Komen and Tommy Roelofs for their work as research assistants and the Institute for the Car Branch and Management (IVA) in the Netherlands for allowing their students to participate in our study.

## ABSTRACT

This article investigates differences in the appreciation of open and closed advertisements. Ad openness refers to the amount of guidance towards a certain message in an advertisement. An open ad is defined as one which provides minimal guidance towards a certain message. Building on Phillips' research (2000), we studied whether the preference that she found for closed ads might be moderated or even reversed if Need for Cognition and comprehension of the ad are taken into account. We investigated appreciation for open and closed ads under conditions relatively favourable for processing open ads, using participants who are more motivated and able to interpret the ads than average. The results show that closed ads are still appreciated more than open ads, mainly because they are easier to understand. The expectation that Need for Cognition influences ad appreciation was not confirmed.

## INTRODUCTION

In the last decades there has been a shift towards ads with less guidance towards a specific message (Dingena 1994; Gisbergen, Ketelaar and Beentjes 2004; Warlaumont 1995). Different terms have been used to denote these ads, for instance, complex image ads (Phillips 1997, 2000), implicit ads (Dingena 1994), and ambiguous ads (Warlaumont 1995). We will use the terms 'open' and 'closed' ads, as these terms include all of these denotations. Open ads have the common characteristic that consumers are not manifestly directed toward a certain message. Compared to traditional ‘closed’ ads, the message in these open ads is relatively complex, implicit, and ambiguous. In this article, we will focus on the possibility that open ads yield more appreciation than closed ads.

## THEORY

Given the increasing appearance of open ads in the media, advertisers obviously expect to influence consumers. For instance, the self generated interpretations caused by open ads might be more persuasive than the cut and dried arguments offered in closed ads (Petty and Cacioppo 1981). Also, open ads might enhance attention because they deviate from consumers' expectations about ads (Heckler and Childers 1992). According to Smit and Neijens (2000) and Schreurs (2001), the current ad overload, the repetitious nature of ads and their obvious content, causes consumers to judge the commonly used closed ads as obtrusive and as an assault on their intelligence. It is possible that open ads do not suffer this fate, but only if consumers derive pleasure from searching for a plausible interpretation in open ads (McQuarrie and Mick 1999). Of course, the eventual discovery of a satisfactory interpretation seems conditional for positive ad appreciation (McQuarrie and Mick 1999).

However, contrary to these conjectures about the possible positive effects of ad openness on ad appreciation, Phillips (2000) found that consumers prefer closed ads to open ones. Phillips compared ad appreciation for three completely visual ads (open ads) with appreciation for the same ads with a headline giving away a part of the clue of the visual part of the ad (moderate closure) or most of it (complete closure). A path-analysis showed the main determinant of ad appreciation to be ease of comprehension. In other words, open ads are liked less than closed ads because they are harder to understand. There was just a small hint in Phillips’ analysis that open ads have positive effects on ad appreciation: a small negative beta (-.11) for the direct effect of complete closure upon appreciation. On the one hand, complete closure enhanced comprehension (beta = .21) and thereby appreciation; on the other hand complete closure “decreased the participants’ pleasure because it was unnecessary” (Phillips 2000, p. 22). This last mentioned effect was, however, small, and the net result of these two competing effects was that completely closed ads were liked more than moderately closed ones. Moreover, Phillips suggests that the negative effect of complete closure was the result of the fact that she employed ads that were relatively easy to comprehend, implying that this apparent positive effect of openness was actually due to the redundancy of closing the ads completely.

Another argument in favour of closed ads is that Phillips’s experiment was relatively favourable for open ads, and that even then the results favoured closed ads: In an experimental setting, participants were invited to scrutinize the ads and were probably motivated to spend more time on them than the average three seconds estimated for real life scanning of magazine ads (Lohse 1997; Pieters,

Warlop and Wedel 1999; Rosbergen, Pieters and Wedel 1997). In the short period of time that is spent on ads in real life, the chances of arriving at a satisfactory interpretation are much smaller and thus – according to McQuarrie and Mick's (1999) proposal that the derivation of satisfaction is dependent upon finding an interpretation – the positive effects of ad openness should be even more apparent. Thus, Phillips's research suggests that the increasing use of open ads is misguided. The average consumer is not motivated by the challenge of open ads but prefers easily interpretable ads.

However, questions may be raised about the generalisability of Phillips's results. Phillips's student population might not have been particularly interested in the products advertised in the test-ads (toothpaste, racquets and athletic clothing). It is possible that open ads are appreciated more by specific groups of consumers. For instance, whereas the general audience may not be very interested in the advertiser's message and may be reluctant to spend much time or energy extracting the meaning from the ad (O'Donohue 2001), it seems reasonable to suggest that advertisements fare better when consumers are involved in the product category, for instance because they are in the market for the advertised product. More generally, following Petty and Cacioppo's Elaboration Likelihood Model (1981), the likelihood that consumers elaborate upon an (open) ad and find an interpretation depends upon their motivation and capacity to interpret the ad. If, as suggested by McQuarrie and Mick (1999), appreciation of open ads is contingent upon the search for and the discovery of meaning in an ad, appreciation for these ads should be higher for consumers who are motivated and capable of interpreting the ad.

Furthermore, still following Petty and Cacioppo (1981), the chances of finding an interpretation might also be affected by the consumer's Need for Cognition (NfC), an individual's tendency to enjoy and engage in the process of thinking. Need for Cognition is doubly effective as it enhances the chance that consumers engage in a (successful) search for meaning and the likelihood that they will enjoy the exercise, and hence develop a more positive attitude towards the ad. Research applying NfC with ads which we would classify as open (Martin, Lang and Wong 2003; Stayman and Kardes 1992), yielded results favouring open versus closed ads.

Finally, in Phillips's model, 'ease of comprehension' is used to explain why open ads are appreciated less. If her model is correct, open ads should always be appreciated less than closed ads as they are always harder to understand than closed ads. However, it is quite possible that the strong correlation between ease of comprehension and ad appreciation that she found was confounded by the fact that participants who failed to find a (satisfactory) interpretation obviously rated the ads both hard to interpret and dislikeable, and that participants failed to arrive at a (satisfactory) interpretation for a larger proportion of the open ads than of the closed ones. If these participants were excluded from the analysis, it is possible that those who did comprehend the ad would show a higher level of appreciation. In other words, the advantage of open ads may be conditional upon finding an interpretation.

The aim of our study was to investigate whether Phillips's conclusion that open ads are less liked than closed ones still holds when the conditions for finding a positive effect of open ads are optimal: when motivation and capacity of the participants are high, when their Need for Cognition is high, and when the participants actually do succeed in finding an interpretation.

## METHOD

### Participants

We investigated car ads in combination with 148 first year students of the Institute for the Car Branch and Management (IVA) in Driebergen, the Netherlands as participants. The effects of motivation and capacity are closely related to the topic of the ad. These students may be assumed to be motivated and capable of interpreting car ads. As the participants were pre-selected in this way, no data can be presented to gauge the effects of motivation and capacity. All we can do is check if the preference for closed ads that Phillips reports still holds under these favourable circumstances. The ages of the participants ranged from 18 to 26, and all were male. Questionnaires were administered to six different classes during regular class hours. The students were invited to participate but no incentive was offered. None of them refused.

### Material

Three existing full page, full colour ads for Mercedes, Volkswagen and Volvo were selected to create the experimental ads (see appendix). The selection was based on two criteria: (1) in order to avoid 'mere exposure' effects, the ad had never appeared in Dutch magazines; (2) as the difference between open and closed ads is the amount of guidance towards a certain message, the image part of the ad had to suggest a certain interpretation, and 'closing' the ad with a headline had to be possible.

*Manipulation*

As in Phillips (2000), the original copy in the ads was removed. Open and closed conditions were created by adding non-explanatory (open condition) or explanatory headlines (closed condition). The headlines contained approximately the same amount of words and were all placed in the same position below the image. The non-explanatory headlines did not relate to the image and were – except for the brand name – identical for Mercedes and Volkswagen: 'Brand X is there'. Because we did not want respondents in the open conditions to be exposed to exactly the same open headlines, the headline for Volvo was: 'Drive Volvo'. The explanatory headlines were derived from the results of a pre-test in which 4 judges determined the most likely interpretation(s) of the ads (as in McQuarrie and Mick, 1996). The most frequently occurring interpretations led to the following headlines: 'The Mercedes is unique,' 'Volkswagen for life,' and 'Volvo protects you.'

### Measurements

Because ad appreciation is a multi-dimensional concept, we measured it in three ways (Brown and Stayman, 1992). We used a 10-point overall grade (ranging from 'don't like the ad at all' to 'like the ad very much'); four five-point semantic differentials (like/not like; irritating/not irritating; appeals/does not appeal; pretty/ugly; Cronbach's alpha = .86); and a measurement based on the thought-listing procedure, where participants were requested to write down their thoughts while inspecting the ad. Three judges coded these thoughts as negative (1), neutral (2) or positive (3), (average Kendall's Tau-b = .77). The scores of the three judges were averaged and rounded to negative, neutral or positive. Correlations between the first two measures were high for each of the three brands (average .82) and moderate between these measures and the thought-listing measure (average .44).

*Need for Cognition*

Need for Cognition was measured with a ten item scale, a slightly shortened version of Pieters, Verplanken and Modde's (1987) translation of Cacioppo, Petty and Kao's (1984) original scale.

*Comprehension*
In order to measure comprehension, participants were asked what they thought the intended message was. The answers were coded as 1) 'no interpretation' when the participants did not answer the question or explicitly stated they were not able to form an interpretation, as 2) 'doubtful' when the researchers were unable to identify the mentioned connection between the ad and the advertised product, and as 3) 'interpretation' when the connection was clear.

**Procedure**

Two booklets were compiled, each with three experimental ads and a dummy-ad (a textual BMW ad) to mask the purpose of the study. The first booklet contained the open ads for Mercedes and Volvo and the closed ad for Volkswagen. The second booklet contained the closed ads for Mercedes and Volvo, and the open ad for Volkswagen. Participants were alternately assigned one of the two booklets. Separate booklets – matching the order of the ads – contained the questions, so that participants could fill out the questionnaire while inspecting the ads. Before proceeding, participants were asked to list their thoughts, in order to prevent knowledge about the questions that were going to be asked affecting their responses. After having listed their thoughts, participants were asked to interpret the first ad and indicate their degree of appreciation. Next, the same questions were asked about the other ads. The questionnaire concluded with the NfC items. Different questions were printed on different pages and participants were instructed when to turn the page, thus controlling the amount of time they spent on each of the questions. The main reason for this was to ensure that all participants finished the questionnaire in approximately the same time and to prevent turmoil in class. Participants were given two minutes to list their thoughts, and another two minutes to generate an interpretation.

## RESULTS

**Manipulation check**

The results show that the messages in the ads with explanatory headlines matched the interpretations most frequently mentioned by participants in the open-ad conditions. In this sense, our ads with explanatory headlines can be considered as closed. In addition, the manipulation seemed valid because, following Mick and McQuarry (1996), the open-ad conditions elicited more different interpretations than the closed conditions. However, the manipulation check showed that the open Mercedes-ad did not yield more different interpretations than the closed ad, suggesting that – even without an explanatory headline – the open Mercedes-ad directed the participants to a specific interpretation as much as the closed ad did. In other words, the interpretation of the open Mercedes-ad was relatively easy and obvious.

**Effects of openness**

Table 1 presents the averages of the three measures of appreciation for each of the three brands for both open and closed conditions. There were no significant

**Table 1**
**Mean Ad Appreciation on Three Measures for Open and Closed Ads by Car Brand**

| | *One-item Measure* | | | | | *Semantic Differential Scale* | | | | *Thought-Listing Procedure* | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Ad Type* | *n* | *M* | *DF* | *t* | *P (2-tailed)* | *M* | *DF* | *t* | *P (2-tailed)* | *M* | *DF* | *t* | *P (2-Tailed)* |
| Mercedes Open | 73 | 5.73 | 146 | 1.39 | .165 | 4.10 | 146 | .10 | .919 | 1.89 | 146 | .40 | .689 |
| Mercedes Closed | 75 | 6.15 | | | | 4.08 | | | | 1.93 | | | |
| Volkswagen Open | 73 | 5.65 | 146 | 3.47 | .001 | 4.06 | 146 | 2.90 | .004 | 1.95 | 146 | 2.11 | .037 |
| Volkswagen Closed | 75 | 6.74 | | | | 4.76 | | | | 2.19 | | | |
| Volvo Open | 73 | 4.68 | 142 | 5.33 | .000 | 3.52 | 146 | 4.31 | .000 | 1.86 | 146 | 3.67 | .000 |
| Volvo Closed | 75 | 6.73 | | | | 4.80 | | | | 2.29 | | | |

differences in appreciation between the open and closed versions of the Mercedes ads, but for the Volkswagen and Volvo ads, all three measures showed significantly more appreciation for the closed version (see Table 1).

**Effects of Need for Cognition**

**C**ontrary to our expectation that participants high in NfC spend more time and effort trying to find an interpretation and would therefore be more likely to find one, we found that they were slightly less likely (not significant) to find an interpretation, compared to those low in NfC. Also contrary to our expectation**,** participants high in NfC did not appreciate the effort needed to interpret open ads. Analysis of variance with or without NfC as a covariate did not alter the preference of our participants for closed ads. If anything, participants high in NfC appreciated the open ads less than those low in NfC.

**Effects of comprehension**

**W**e performed t-tests to investigate the effects of comprehension on ad appreciation. Table 2 shows the average appreciations of the participants for each level of understanding ('full', 'doubtful' and 'none') for all three brands and for both the open and the closed conditions.

Almost without exception, the ads were appreciated least when participants could not come up with an interpretation, and highest when participants arrived at a satisfactory interpretation. Doubtful answers scored in between: apparently these interpretations were not quite satisfactory to the participants either. All differences between full understanding and the two lower levels of understanding combined are significant for both the open and the closed conditions of the Volvo and Volkswagen ads, except for the thought-listing measure regarding the open ad for Volvo ($p = .09$). These results underscore the importance of understanding for ad appreciation. Compared to the results for all participants, the differences in appreciation of the open and the closed ads are somewhat smaller for participants with 'full' understanding. Nevertheless, t-tests reveal that these differences are still significant for both Volkswagen and Volvo, except for the thought-listing measure for Volkswagen. In sum, closed ads are appreciated more than open ads. There is an obvious hint in Table 2 why this might be so. The numbers of participants not arriving at a (satisfactory) interpretation indicate that the open Mercedes ad was the easiest to understand and the open Volvo ad the hardest. Correspondingly, the differences between the open and the closed conditions are

**Table 2**
**Mean Ad Appreciation on Three Measures and Levels of Comprehension for Open and Closed Ads by Car Brand**

| | *Levels of Comprehension* | *One-item Measure* | | *Semantic Differential Scale* | | *Thought-Listing Procedure* | | *N of Corresponding Cells* | |
|---|---|---|---|---|---|---|---|---|---|
| *Ad Type* | | Open | Closed | Open | Closed | Open | Closed | Open | Closed |
| | Total | 5.7 | 6.2 | 4.1 | 4.1 | 1.9 | 1.9 | 73 | 75 |
| | None | - | - | - | - | - | - | 0 | 0 |
| Mercedes | Doubtful | 3.8 | 3.0 | 3.3 | 2.4 | 1.6 | 1.5 | 5 | 2 |
| | Full | 5.9 | 6.2 | 4.2 | 4.1 | 1.9 | 1.9 | 68 | 73 |
| | | | | | | | | | |
| | Total | 5.7 | 6.7 | 4.1 | 4.8 | 2.0 | 2.2 | 73 | 75 |
| | None | 3.2 | - | 2.1 | - | 1.2 | - | 5 | 0 |
| Volkswagen | Doubtful | 5.1 | 1.0 | 3.8 | 1.0 | 1.7 | 1.0 | 10 | 1 |
| | Full | 6.0 | 6.8 | 4.3 | 4.8 | 2.0 | 2.2 | 60 | 72 |
| | | | | | | | | | |
| | Total | 4.7 | 6.7 | 3.5 | 4.8 | 1.9 | 2.3 | 73 | 75 |
| | None | 3.4 | 3.7 | 3.2 | 2.7 | 1.6 | 2.0 | 14 | 3 |
| Volvo | Doubtful | 3.8 | 4.0 | 2.8 | 3.5 | 1.8 | 2.0 | 16 | 1 |
| | Full | 5.4 | 6.9 | 3.9 | 4.9 | 1.9 | 2.3 | 43 | 71 |

smallest for the Mercedes ad and largest for the Volvo ad, which can be seen in all three measures of ad appreciation in both Table 1 and Table 2. This strongly suggests that the disadvantage that open ads have is not only related to finding a (satisfactory) interpretation, but even more - as implied by Phillips's results (2000) - the ease with which such an interpretation is arrived at.

## CONCLUSION AND DISCUSSION

**W**e started this article with the observation that open ads have become increasingly common in the the last decades. Evidently, advertising practitioners expect them to have advantages over traditional, more closed ads. One of the reasons for such an advantage might be that consumers appreciate open ads more, as suggested by McQuarrie and Mick (1999), because they enjoy extracting the meaning from open ads. Contrary to this line of reasoning, Phillips (2000) found that closed ads are liked better than open ads, and that the effects of open versus closed ads are mediated by their ease of interpretation. Closed ads are easier to interpret and are therefore more appreciated. The aim of this study was to determine whether Phillips' (2000) conclusion that open ads are liked less than closed ads still holds when the open ads are presented in optimal conditions: when the participants are motivated and capable, when NfC is high, and when the analyses are restricted to participants who actually succeed in finding a (plausible) interpretation. By investigating car ads among students in the automobile branch, we ensured high levels of motivation and ability.

Despite these optimal conditions, we must conclude that open ads are liked less because they are harder to understand. When they are not harder to understand, differences in appreciation disappear. The finding that consumers prefer closed ads seems to be robust. T-tests for all participants showed a significant preference for closed ads for all three measures of ad appreciation for two of our three test ads. Selecting motivated participants who are able to interpret the ads is apparently not enough to reverse or moderate Phillips's finding that closed ads are appreciated more: closed ads are still liked better. Unexpectedly, there was no association between NfC and the differential appreciation of open and closed ads, or between NfC and the likelihood of finding an interpretation. Apparently, closed ads are preferred even by those who – according to the NfC measure – enjoy the process of unravelling such ads. A plausible explanation might be that the selection of highly motivated subjects might have overshadowed the potential effects of different levels of NfC. Perhaps, future research should use participants who are members of the target group of the advertised products (for instance, car ads among car owners or people looking for a new car), but who are not as motivated as the respondents in this study. Finally, although ad comprehension had a clear impact on ad appreciation, restricting the t-tests to participants who found a satisfactory interpretation did not change the results significantly. For both Volkswagen and Volvo, the closed ads were still liked significantly more, mainly because they were easier to understand. In sum, our search for circumstances under which the use of open ads might be beneficial was not successful, and Phillips' conclusion that consumers appreciate closed ads more than open ads was supported. Our study corroborates Phillips' finding that the effects of open and closed ads on appreciation of the ads are mediated by the ease with which the ads are understood.

One might wonder if the open headline of Volvo, which was formulated differently from the open headlines of the Volkswagen and Mercedes ads, accounts,

at least in part, for the difference in appreciation between the open and closed Volvo ads. However, the open headline in the open Volvo ad ("Drive Volvo") is a little more directive than the open headline in the Volkswagen and Mercedes ad ("Volkswagen is there" and "Mercedes is there"). In view of this, we would have expected a relatively minor difference in appreciation between the open and closed versions of the Volvo ad. On the contrary, the differences remained significant. So, the different headline of the open version of the Volvo ad is not responsible for differences in appreciation which were found.

There are some limitations to the study presented here. A rather serious limitation concerns the manipulation of our test ads to create open and closed conditions. As we described, the same image was used in both versions; ads were closed by adding an explanatory headline. Of course, the open ads could have been created by leaving out the headline altogether. However, a previous study (Gisbergen and Ketelaar 2003) showed that the presence or absence of a headline affects the amount and the direction of attention for the ad, and we decided to add a non-explanatory headline in order to create conditions as comparable as possible. In hindsight – and confirmed by an inspection of the interpretations that were offered - this manipulation may have caused some participants to search for a non-existent correspondence between image and headline in the open versions. Because a headline usually contains a certain clue about the ad's message, the non-explanatory headline may have had a negative effect on ad appreciation. A future study should use a version without a headline in order to estimate the size of this problem. Furthermore, the choice of participants may have affected the results. The students of the car academy may have judged the car ads from the perspective of potential customers.Their negative evaluation of open ads could be because they judge these ads as inappropriate for communicating with customers, rather than an expression of their personal like or dislike. And finally, we did not incorporate a measure to determine the ease with which participants interpreted the ad. That might have provided a more objective measure of 'ease of comprehension' than relying on judges to determine the plausibility of participants' interpretations. Apparently, consumers prefer ads to be direct and easily digestible and do not respond very well to advertisements whose messages take time and energy to unravel. Basically, consumers do not seem to like open ads unless these open ads are so easy to interpret that they can hardly be described as open any more. Nevertheless, the effectiveness of open ads deserves further study.

## REFERENCES


Brown, Steven. P. and Douglas, M. Stayman (1992), "Antecedents and Consequences of Attitude toward the Ad: A Meta-analysis," *Journal of Consumer Research*, 19 (June), 34-51.

Cacioppo, John T. and Richard, E. Petty (1982), "The Need for Cognition," *Journal of Personality and Social Psychology*, 42 (1), 116-131.

_____ and _____ and Chuan F. Kao (1984), "The Efficient Assesment of Need for Cognition," *Journal of Personality Assessment*, 48 (3), 306-307.

Dingena, Marian (1994), "*The Creation of Meaning in Advertising: Interaction of Figurative Advertising and Individual Differences in Processing Styles,"* Amsterdam: Thesis.

Gisbergen van, Marnix S. and Paul E. Ketelaar (2003), "*Attention towards Open Advertisements,"* Paper presented for "The Society for Consumer Psychology Summer Conference," August, Toronto: Canada.

_____ and Paul E. Ketelaar and Hans Beentjes (2004), *"Changes in Advertising Language? A Content Analysis of Dutch Print Ads from 1980 and 2000,"* Proceedings of The Second International Conference on Research in Advertising, 1( june)

Heckler Susan E. and Terry E. Childers (1992), "The Role of Expectancy and Relevancy in Memory for Visual and Verbal Information: What is Incongruency?," *Journal of Consumer Research*, 18 (March), 475-492.

Lohse, Gerald. L. (1997), "Consumer Eye Movement Patterns on Yellow Pages Advertising," *Journal of Advertising*, 26 (1), 61-73.

Martin, Brett, A., Bodo Lang, and Stephany Wong (2003), "Conclusion Explicitness in Advertising,*" Journal of Advertising"*, 32 (4), p. 57-65.

McQuarrie, Edward.F., and David G. Mick (1996), "Figures of Rhetoric in Advertising Language," *Journal of Consumer Research*, 22(4), 420-434.

_____ and _____ (1999), "Visual Rhetoric in Advertising: Text-interpretative, Experimental and Reader-response Analysis," *Journal of Consumer Research*, 26 (1), 37-54.

O'Donohoe, Stephanie (2001), "Living with Ambivalence: Attitudes to Advertising in Postmodern Times," *Marketing Theory*, 1 (1), 91-108.

Petty, Richard E. and John T. Cacioppo ( 1981), "*Attitudes and Persuasion: Classic and Contemporary Approaches,"* Dubuque, Iowa: Wm. C. Brown.

Philips, Barbara J. (1997), "Thinking into it: Consumer Interpretation of Complex Advertising Images," *Journal of Advertising*, 26 (2), 77-87.

_____ (2000), "The Impact of Verbal Anchoring on Consumer Response to Image Ads," *Journal of Advertising*, 29 (1), 15-24.

Pieters, Rik G. M., B. Verplanken. and J.M. Modde (1987), "Neiging tot Nadenken: Samenhang met Beredeneerd Gedrag (The Tendency towards Reflection: Connection With Reasoned Behaviour)," *Nederlands Tijdschift voor de Psychologie*, 42 (2), 62-66.

_____ and L. Warlop and Michel Wedel (1999), *"The Influence of Advertisement Familiarity and Originality on Visual Attention and Brand Memory."* Research Report Katholieke Universiteit Leuven.

Rosbergen, Edward, Rik, G.M. Pieters and Michel Wedel (1997), "Visual Attention to Advertising: a Segment-Level Analysis," *Journal of Consumer Research*, 24 (3), 305-314.

Schreurs, Wilbert (2001), "Geschiedenis van de Reclame in Nederland (History of Advertising in The Netherlands)," Utrecht: Het Spectrum.

Smit, Edith G. and Peter, C. Neyens (2000), "Segmentation Based on Affinity for Advertising," *Journal of Advertising Research*, 40 (4), 35-44.

Stayman, Douglas M., and Frank R. Kardes (1992), "Spontaneous Inference Processes in Advertising Effectiveness," *Journal of Consumer Psychology*, 1(2), 125-142.
Warlaumont, Hazel, G. (1995), "Advertising Images: From Persuasion to Polysemy," *Journal of Current Issues and Research in Advertising*, 17 (1), 19-31.

## APPENDIX

**Figure 1**
**Advertisement Mercedes Benz**

**Figure 2**
**Advertisement Volkswagen**

**Figure 3**
**Advertisement Volvo**