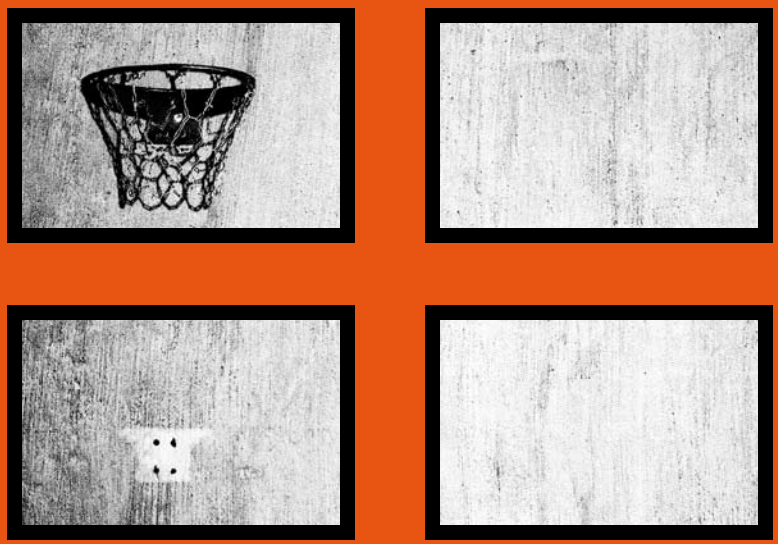
Openness

In Advertising



Occurrence and effects of open advertisements in magazines

Paul Ketelaar and Marnix Van Gisbergen

Openness in Advertising

Openness in Advertising

Occurrence and effects of open advertisements in magazines

Een wetenschappelijke proeve op het gebied van de Sociale Wetenschappen

Proefschrift

ter verkrijging van de graad van doctor
aan de Radboud Universiteit Nijmegen
op gezag van de Rector Magnificus prof. dr. C.W.P.M. Blom
volgens besluit van het College van Decanen
in het openbaar te verdedigen op dinsdag 19 december 2006
om 14.00 uur precies

door

Paul Edwin Ketelaar
geboren op 11 april 1960
te 's-Gravenhage

en

Marnix Sebastiaan Van Gisbergen
geboren op 21 juni 1974
te Nijmegen

Promotor	: Prof. dr. J.W.J. Beentjes
Copromotor	: Dr. J.A.M. Bosman
Manuscriptcommissie	: Prof. dr. P.L.H. Scheepers
	: Prof. dr. J.A.L. Hoeken
	: Prof. dr. P.C. Neijens (Universiteit van Amsterdam)

This dissertation was supported by a grant from The Netherlands Organisation for Scientific Research (NWO, projectnumber: 425-42-001).

Omslagontwerp	: Element ontwerp & uitvoering
Druk en vormgeving	: BENDA drukkers, Wijchen

Openness in Advertising. Occurrence and effects of open advertisements in magazines / Paul Ketelaar & Marnix Van Gisbergen
Sociale Wetenschappen, Radboud Universiteit Nijmegen, Proefschrift.
ISBN-13: 978-90-9021254-8

Voorwoord

Onze dissertatie is afgerond! Dat je uiteindelijk een proefschrift niet alleen schrijft, geldt zeker voor ons. Eind vorige eeuw kreeg Paul het idee om het effect te bestuderen van advertenties waarvan de boodschap niet in één oogopslag duidelijk was. Paul schreef onder begeleiding van Leo van Snippenburg een voorstel voor subsidie dat gehonoreerd werd door de Nederlandse Organisatie voor Wetenschappelijk Onderzoek (NWO), waarna Marnix kon worden aangesteld. Met twee man sterk gingen we vervolgens de uitdaging aan. Graag richten wij een woord van dank aan alle personen die aan dit resultaat hebben bijgedragen.

Als eerste bedanken wij onze promotor Hans Beentjes, voor zijn consciëntieuze en persoonlijke begeleiding en het in ons gestelde vertrouwen. Je hebt ons beider gebruiksaanwijzingen goed weten te doorgronden. Van jou als vakman hebben we tijdens de vele inspirerende gedachtenwisselingen 'het ambacht' geleerd. Co-promotor Jan Bosman bedanken we voor zijn altijd uiterst scherpzinnige commentaar. Het feit dat je (bijna) altijd gelijk had in je kritiek, heeft een belangrijke bijdrage geleverd aan de kwaliteit van ons proefschrift. We zijn ook veel dank verschuldigd aan Leo van Snippenburg die de eerste jaren onze promotor was. We weten allemaal hoe belangrijk de eerste stapjes zijn. Je hield onze hand goed vast maar gaf ons ook de ruimte voor dartele sprongetjes tussendoor. Leo, bedankt voor je geloof in dit project.

Onze dank gaat uit naar Barbara Phillips. Zij inspireerde ons door haar publicaties en onze gezamenlijke presentaties op internationale congressen. "Barbara, it was you who inspired us to drive eight hundred miles through the desert of Saskatchewan, 'just' to talk about openness in advertising at your university."

Dank aan onze collega's van Communicatiewetenschap en in het bijzonder onze collega-promovendi voor jullie belangstelling en meedenken, en jullie meeleven tijdens de eindspurt. Onze lunchclub inspireerde ons regelmatig, meestal om 13:00 uur, vooral door het juist niet te hebben over werk. Felix, dank voor de kopjes cappuccino die je vaak ongevraagd op jouw vertrouwde wijze kwam aanbieden: binnenstormend zonder kloppen. Alfred: ook jij kwam vaak ongevraagd uit de lucht vallen, en liet altijd een blijvend positieve indruk achter. Carlo en Addy, dank voor jullie scherpzinnige kritiek, het fungeren als klankbord en motiverende woorden, van begin tot eind van dit project. Gerard Marsman was onze inspiratiebron voor het onderwijs dat we in de afgelopen periode gaven. Gerard, bedankt voor je wijze lessen, je vertrouwen in ons en je vechtlust waarmee je ons beiden aan een onderwijsaanstelling hebt geholpen. Jij hebt ons geleerd op een open manier te communiceren, hoewel jouw opmerkingen zelden voor meerdere interpretaties vatbaar waren. Het kloppend hart van de sectie, Susanne Samuelsz en Michelle Camps, met Annemiek

Heijsen van het Faculteitsbureau (fsw), danken we voor hun organisatorische hulp en de gezelligheid. Ook bedanken we de Research-technische Ondersteuningsgroep (RTOG), met name Pieter van Groenestijn voor de technische ondersteuning bij het analyseren van de data van onze experimenten, en voor de tips die je aan de door ons begeleide studenten gaf.

De Masterclass 'Open advertenties' betekende voor ons een geslaagde synergie tussen onderwijs en onderzoek en een inspiratiebron voor onze dissertatie. Dank aan de studenten die we hebben mogen begeleiden bij hun afstudeerproject voor hun bijdrage aan ons onderzoek. Jullie verzamelden een schat aan informatie, fungeerden menigmaal als klankbord en hielden ons scherp. We bedanken, in chronologische volgorde van afstuderen: Jacqueline Kleijn, Kim Reek, Ilse Vogelzang, Gabine Fokkens, Roderick Martens, Thijs Komen, Tommy Roelofs, Deborah Pete Németh, Merijn Pieters, Janneke van Pelt, Myriam Heinsen, Anniek van Dooren, Martijn Gunther, Bente Bollman, Marijke Postel, Elvira Dorssers, Annemarieke Stoop, Floor Oosterhoff, Elske Schoenmakers, Floor Migo, Dennis Jansen, Mark Jansen, Maartje Verheijen, Ilse Schriever, Aleksandra Arent, Elke van Doorn, Marlena van Arkel, Eliëtte Vaal, en Elske de Jong. En de lijst groeit nog steeds.

Ook van buiten de universiteitsmuren hebben wij onmisbare steun mogen ontvangen. Als eerste een woord van dank aan NWO, die deze studie mede mogelijk heeft gemaakt. Zonder medewerking van het bedrijfsleven zou het niet gelukt zijn om onze experimenten vorm te geven zoals wij dat voor ogen hadden. Wij danken onderzoeksbureau Verify voor hun medewerking aan drie van onze experimenten waarbij we gebruik hebben mogen maken van hun eye-tracking instrumentarium en hun indrukwekkende database. In het bijzonder bedanken we Lucas Hulsebos voor zijn medewerking. Lucas, dank voor je vertrouwen in ons en voor de perfecte samenwerking. Al vanaf de start van ons project heb je je ingezet om dit resultaat mogelijk te maken. Onze dank gaat uit naar TNS NIPO voor hun medewerking aan een serie manipulatiechecks en het slotexperiment waarbij we gebruik hebben mogen maken van het TNS NIPO consumentenpanel. Speciale dank gaat uit naar Felix Hentenaar en Marijke Postel voor hun bemiddelende rol daarbij, Edward Hermans voor het in ons gestelde vertrouwen, en Michel Reijmerink voor het programmeren van de vragenlijst en het panklaar aanleveren van de datasets. Pieter Desmet van de TU Delft danken we voor het ontwikkelen van de non-verbale emotie-meter PrEmo die we hebben ingezet bij ons slotexperiment. De heren Vermei en Smid danken we voor hun participatie vanuit de IVA Driebergen, Instituut voor Autobranche en Management. Altijd als we een onderzoeksvraag hadden, konden we snel bij jullie terecht en zodoende zijn veel studenten van de IVA als respondent bij onze studie betrokken geweest. We danken De Vos & Jansen Marktonderzoek voor het mede mogelijk maken van deze publicatie en de kans om het effect van openheid verder te onderzoeken. Onze bijzondere erkentelijkheid gaat uit

naar de firma Coty Prestige, met name in de persoon van Gerard Ruiter, voor het mede financieren van de drukkosten van het manuscript en onze jarenlange vruchtbare samenwerking bij de realisatie van afstudeerprojecten op het gebied van Marketingcommunicatie.

Ten slotte richten we een woord van dank tot onze naasten. Met name bedanken wij onze ouders. Jullie hebben ons gestimuleerd om te gaan (door)studeren. Mede door jullie zijn we geworden wie we nu zijn. Voor die vreemde mix van liefde, geld, wijze- en eigenwijze raad, blijven we jullie altijd dankbaar. Een speciaal woord van dank ook aan onze schoonfamilie. Paul bedankt in het bijzonder zijn schoonvader Gerrit Snip. Gerrit, bedankt voor je oprechte interesse, je bevestigende en geruststellende woorden en je volste vertrouwen in mij, altijd weer. Onze vrienden danken we voor hun steun, interesse en relativerende woorden. Dank aan onze dochters, Joline, Marlotte, Minne en Luna. Vanaf nu heeft pappa meer tijd voor jullie en is hij minder vaak boven op zolder aan het werk. Ook richten we ons op het einde van de rit nog even tot elkaar. Je gaat met elkaar in zee voor lange tijd. Complementaire kwaliteiten, vertrouwen in elkaar, hechte vriendschap en een flinke dosis galgenhumor hebben geleid tot een magistrale samenwerking van begin tot eind. We bedanken elkaar voor deze waardevolle en leerzame periode. We eindigen met een woord van dank, in vele opzichten, aan onze partners Karoline Snip en Susan Burgers waar we zoveel van houden. Lieve Karoline en Susan, jullie hebben ons alle ruimte gegund om ons te laten doen wat we zonodig moesten doen. Onze missie zit erop. Aan jullie dragen wij ons boek op.

Paul Ketelaar en Marnix Van Gisbergen
Nijmegen, juli 2006

Voor Karoline en Susan

Introduction

An ad usually has an unambiguous purpose: to sell or promote a product or service. If this goal is not realized, the ad has failed. Various strategies are used to maximize the persuasive impact of an ad. In this dissertation we focus on the question whether it is better to precisely lead the consumer towards an intended interpretation, or whether it is better to suggest an interpretation, leaving more room for consumers to create their own interpretations. We use the label 'openness' to describe differences in the amount of guidance towards a certain interpretation. A high level of openness means there is little guidance towards an intended interpretation, making an ad more susceptible to a variety of interpretations. Magazines nowadays seem to contain an increasing number of open ads. For instance, Lexus featured a print ad that contained a prominent but vague pictorial, without verbal copy to explain the meaning of the pictorial (Figure 1). Consumers had to scrutinize the ad to identify the pictorial as an unfolded hairpin and figure out the connection between the hairpin and a car. We regard the Lexus ad as an open ad, although we realize that no ad is completely open or closed.

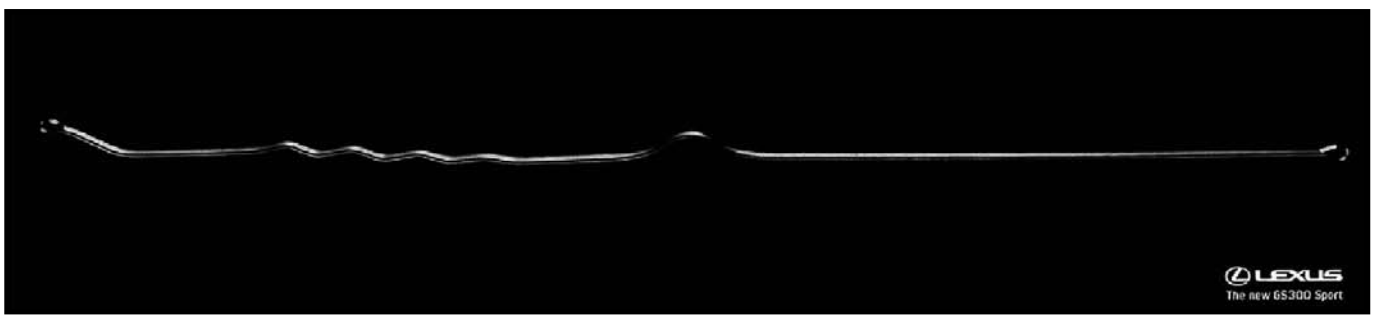


Figure 1. *Open ad for the car-brand Lexus*

At first sight, the choice for an open strategy seems odd because advertisers have always stressed the importance of straightforwardness and clarity in ads (Burton & Purvis, 1996). Because it is in the interest of advertisers to be understood as intended, they strive to communicate obvious and clear-cut messages. However, this is not the case when advertisers decide to use an open strategy. When confronted with an open ad, consumers need to make a cognitive effort in order to be able to create an interpretation. It is not unlikely that consumers will avoid this effort. That would mean that open ads do not hold consumers' attention and that the ads' messages are overlooked. Even

when consumers are motivated to search for meaning in ads, the open strategy seems risky because consumers might not understand its intended message, which, subsequently, may lead to negative feelings towards the ad. Considering these possible negative effects of openness in advertising, why would ad-makers make use of such a dangerous advertising strategy? Why not rely on clear and obvious messages which were central in ads for so long?

Advertisers obviously expect benefits from the open strategy. Closed ads, containing clear and manifest messages, may cause irritation among the present generation of ad-wise consumers who feel that their intelligence is being underestimated. Inspired by poetry, art, photography, and cinema, advertisers must have thought that consumers do not want everything spelled out for them. Why not create more subtle and imaginative ads that challenge consumers to solve a visual riddle, creating their own interpretations? Because open ads stimulate elaboration, they may hold consumers' attention and increase recall of the ad. Whatever the reasons behind the advertiser's choice for an open or closed strategy, it is unclear whether openness is a rewarding strategy.

The main goal of this dissertation is to clarify the concept of openness in advertising, to examine the occurrence of openness in magazine ads, and to determine the effect of openness on consumers' attention, recall, interpretation, and attitude towards the ad. This dissertation is structured as follows.

The first research objective is to clarify the concept of openness. In *Chapter 1* we describe and define the term openness. Although openness is a well-known term in semiotics, introduced by Eco (1979), only a few researchers have referred to openness in an advertising context. In the advertising literature, the term 'open' is somewhat obscure because it is used for ads that are open to multiple interpretations but also for ads that are understandable as intended. We discuss how openness is characterized in a semiotic context and explain how the concept of openness might best be translated to the field of advertising. Subsequently, we determine what characteristics of openness can be distinguished. The chapter ends with a description of different kinds of open ads. In our empirical studies, we focus on magazine ads of the open 'riddle' kind. Openness in these ads is primarily caused by the pictorial, although we realize that openness might be moderated by the visual or verbal content, or by a combination of both. An adaptation of Chapter 1 is forthcoming as a book chapter in McQuarrie and Phillips (Ketelaar, Van Gisbergen, & Beentjes, in press).

Our second research objective is to determine whether the incidence of openness in advertising has increased over time. Media analysts have speculated about an increase in openness, but to date no research has investigated this trend for magazine ads. In order to verify the expected trend towards openness, we conducted a content analysis of magazine ads between 1980 and 2000 across different product categories and in different magazines.

Chapter 2 describes this content analysis. An adaptation of this study appeared as a bookchapter in Neijens, Hess, van den Putte, and Smit (Van Gisbergen, Ketelaar, & Beentjes, 2004).

Our final research goal is to study the effects of openness on consumers. *Chapter 3* discusses possible benefits and drawbacks of openness for consumers, building on previous advertising research that incorporated ads that can be considered as open. The chapter is divided into three sections. The first section discusses possible effects of openness on attention and recall. The chapter continues with a section that focuses on the effects of openness on interpretation. The third section addresses the effects of openness on attitude towards the ad.

Chapter 4 reports five experiments that investigate the effects of openness in ads on consumers. The chapter starts with three experiments (Experiments 1, 2 and 3) that explore the effects of openness on attention and recall. In these experiments infrared eye-tracking was used to determine whether openness affects attention to the ad and the brand. An adaptation of Experiments 1, 2 and 3 is submitted for publication in the Journal of Advertising (Ketelaar, Van Gisbergen, Bosman, & Beentjes, 2006). The chapter proceeds with two experiments (Experiments 4 and 5) that focus on the effects of openness on interpretation and attitude. An adaptation of Experiment 4 appeared as a bookchapter in Neijens, Hess, van den Putte, and Smit (Ketelaar, Van Gisbergen, & Bosman, 2004). In three of these experiments (Experiments 2, 4 and 5) we explored the effects of openness in relation to individuals' need for cognition. Need for cognition refers to individual differences in the tendency to engage in and enjoy effortful cognitive activities. This characteristic may influence the effect of openness on attention, interpretation, and attitude towards the ad.

Finally, we draw conclusions in *Chapter 5*. We discuss the limitations of our experiments and the theoretical and practical implications of our findings. The chapter ends with suggestions for future research.

Chapter 1 | Openness

1.1 Introduction

The goal of this chapter is to discuss the concept of openness, in order to establish its usefulness in an advertising context. Nowadays, advertising seems to have become more open, providing little guidance towards a specific interpretation. For example, a Dutch travel company advertises with people sitting in the water on the edge of a waterfall, without giving any comment about this peculiar situation, except for the caption: "What is your story?" (Figure 1.1). Another example is a print ad for a deodorant: the consumer has to figure out why a nun is pictured with a clothespin on her nose (Figure 1.2). Verbal copy that explains how this picture is related to the product or brand is missing; hence the ad does not explicitly guide the consumer towards a specific message. These are just some examples of open ads that elicit questions about their desired interpretation.

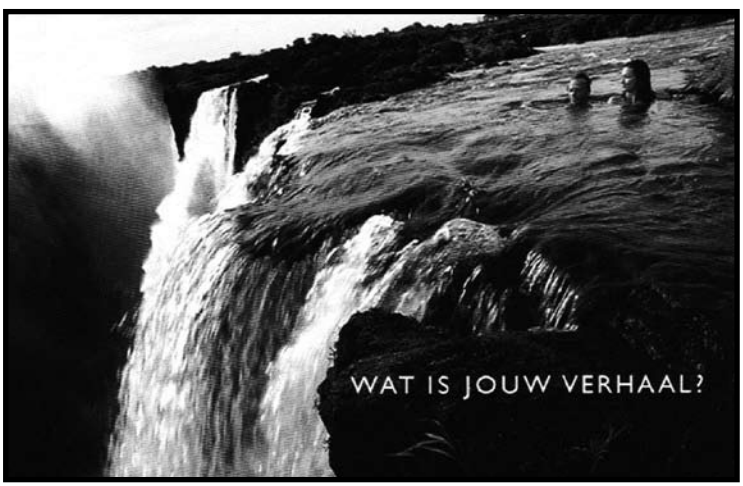


Figure 1.1. *Open commercial for a travel-company (NBBS)*

Figure 1.2. *Open ad for a deodorant (Axe)*

In this chapter we explain what the concept of openness means and show its usefulness for advertising. Section 1.2 describes openness from a semiotic viewpoint. In semiotics, the term openness was used by Eco (1979) to differentiate between various 'texts'. Section 1.3 explains how the concept of openness can be applied to an advertising context. In Section 1.4 we discuss how various researchers have transferred the concept of openness from semiotics to advertising. We will show that some researchers have used the label 'open' whereas others have employed the label 'closed' to

characterize the same type of ad, although all authors refer to Eco's description of openness. On the basis of Eco's descriptions of openness, we examine the confusion regarding the distinction between open and closed ads, whereupon we make a case for the use of the label 'open ads' to refer to ads that provide little guidance towards a certain interpretation. Section 1.5 presents an overview of different terms used in advertising research that are related to openness (e.g., ambiguous and indirect ads). This overview makes it possible to base our hypotheses concerning the effects of openness on an extensive range of previous advertising research. In Section 1.6 we identify the characteristics of openness: the presence of a prominent visual, the presence of undercoded rhetorical figures, the absence of verbal anchoring, the absence of the product, and low brand anchoring. Section 1.7 discusses the possibility that different types of open ads exist as a result of different advertising goals. Considering recurring patterns in a large number of open ads, we propose four different types of open ads: riddle ads, story ads, issue ads, and aesthetic ads. A differentiating characteristic of the riddle ad is that it contains a specific message that the consumer has to figure out. This feature explains our choice for open riddle ads as the material for our experiments. The final section (1.8) provides an overview of the chapter.

1.2 Opera Aperta

In his book, 'The Open Work', originally published as 'Opera Aperta' in 1962, Eco (1979) proposes the concepts of 'openness' and 'open work'. To illustrate the concept of openness, Eco uses examples of open and closed texts and works, not only from art and literature, such as the writings of James Joyce, but also from popular culture such as James Bond novels and comic books. Eco uses the term 'works' as well as 'texts' when explaining openness. He explains that works turn into texts when the reader is about to use and interpret them. Eco characterizes open texts in two ways. First, a text is open when the 'product' itself is unfinished. Eco refers to these products as 'works in movement'. This is the case when the product is made in collaboration with the reader, for instance when a musician is free to choose how long to hold a note. Hence, the musical performance is never the same. Second, a text, although completed, is labeled open "on account of its susceptibility to countless different interpretations . . ." (Eco, 1979, p. 49). In this latter sense, Eco explains openness in two ways.

On the one hand, Eco describes openness as something intended by the author. An open text proposes a range of interpretative possibilities and, therefore, allows a number of possible readings. In open texts, the author wants the reader to have several choices of how to interpret the text. This means that open texts leave more initiative and freedom for readers to create their own interpretations. On the other hand, Eco explains openness in terms of possible effects on the reader. Confronted with an open work, the reader has to participate actively in the interpretation process. Eco uses several terms to describe the different possibilities a reader has to interpret a text, such as different interpretations (p. 49), meanings (p. 51), solutions (p. 52), (emotional) responses (p. 62), or readings (p. 63). For instance, when discussing medieval poetics, Eco (1979) writes, "The reader of the text knows that every sentence and every trope is open to a multiplicity of meanings" (p. 51). It is left to readers to choose their own point of view, their own guidelines and associations, in order to create a certain interpretation. Readers, therefore, can create different interpretations of the same text.

According to Eco, the interpretation of a text should be seen as the cooperation between the reader and the text itself. To create an interpretation, readers use their own frame of reference, but at the same time they have to follow guidelines imposed by the text's lexical and syntactical structure. Hence, Eco argues that the experienced openness is affected by the reader as well as by the text. Readers are free to choose their own interpretations, but only within a range of possible meanings that is determined by the interplay of both the reader's and the work's features. The terms open and closed should, therefore, be interpreted as illustrating the reciprocal relations between the work and the interpreter.

The difference between an open and a closed text is described in terms of its aim. Unlike an open text, a closed text aims to predetermine a reader's interpretations and allows far less choice in the interpretation process. Eco reasons that the author can close a text by anticipating a 'model reader', that is a reader that is able to interpret the text as intended by the author. In other words, the author has to make sure that the addressed reader shares the author's 'codes'. Such closed texts intend to elicit a specific interpretation, and are "pulling the reader along a predetermined path" (Eco, 1979, p.8). For instance, texts with a practical function, such as road signs or instructions, demand obviousness and need to be interpreted 'univocally', without any possibility of misunderstanding or individual multiple interpretations. Eco views these examples as closed forms of communication. In semiotics, it is common to describe closed texts as those that strongly encourage a particular interpretation (e.g., Bondanella, 1997; Chandler, 2002; Moriarty, 1996).

Eco argues that the theoretical concepts 'open texts' and 'closed texts' must be seen as the abstract ends on a continuum (texts with one meaning versus texts with an infinite number of possible meanings) rather than as a dichotomy. We should therefore regard texts not as open or closed, but rather as 'more open' or 'more closed'. For reasons of convenience and simplicity of expression, we continue to use the terms open and closed to differentiate between ads that differ in amount of guidance.

1.3 Openness in advertising

In order to illustrate the concept of openness in mass media texts, Eco analyzed contemporary advertising for brands such as Volkswagen, Camay (soap), and Knorr (soup) concluding that "Every [advertising] message only repeats what the listener already expected and already knew" because consumers are aware of the ideology of consumption and persuasion behind advertising (Eco in Bondanella, 1997, p. 77). In other words, the goals in advertising are more clearly defined than in most other texts. Some open texts, such as music, can be regarded as unfinished texts; the author seems less concerned about how readers use the text or about the interpretations that readers infer from the text (Eco, 1979). In contrast, ads always communicate two central messages: (a) this is an ad for brand x, and (b) this ad conveys a positive claim about that brand (Tanaka, 1992). Consumers are aware of these goals (Forceville, 1996; McQuarrie & Mick, 1996; Mick, 1992; Phillips, 1997; Warlaumont, 1995) and adjust their expectations of advertising messages accordingly, thus reducing their potential openness: "The very fact that we know that what we see is an ad. . . considerably helps shape our expectations about what it will communicate" (Forceville, 1996, p. 67). In sum, the very fact that the text is an ad, reduces its openness.

The openness of ads is restricted not only by the expectations of consumers, but also by the intentions of the advertisers. Advertisers do not try to reach the maximum of openness that some artists attempt with their paintings or music. Instead, advertisers will ensure that their codes are as clearly communicated as possible (Barthes, 1977), and understood by the consumer (Warlaumont, 1995).

1.4 Conflicting use of the terms open and closed in advertising research

Since the 1980s, the terms 'open' and 'closed' have been used in advertising research to characterize ads (in chronological order: Sawyer, 1988, Mick & Politi, 1989, Sawyer & Howard, 1991; McQuarrie & Mick, 1992; Dingena, 1994; Warlaumont, 1995; McQuarrie & Mick, 1999; Boutlis, 2000; Chebat, Charlebois & Gelinas-Chebat, 2001; McQuarrie & Phillips, 2005). Remarkably, some researchers have used the label 'open' whereas others have employed the label 'closed' to characterize the same type of ad, although all authors refer to Eco's description of openness.

On the one hand, some authors in the field of advertising use the term 'open' to characterize ads that leave ample room for different interpretations. For instance, Sawyer (1988) uses the term 'open' to describe ads that do not provide consumers with a clear-cut conclusion: "The open ad tries to benefit from people reaching a conclusion by themselves or telling themselves a conclusion without having it supplied by the advertiser" (p. 161). Likewise, other authors (Boutlis, 2000; Chebat, Charlebois & Gélinas-Chebat, 2001; McQuarrie, 1989; McQuarrie & Phillips, 2005; Moriarty, 1996; Warlaumont, 1995) describe ads that are prone to multiple alternative interpretations as open. Clearly, this usage of the term 'open' in the sense of 'openness to interpretation' is in line with Eco's concept.

On the other hand, other researchers have used the label 'open' to describe ads that are understood as intended by the advertiser. Mick and Politi (1989), referring to Eco, argue that an open ad has the intention to clearly communicate a message to a target group. In their own words: "Advertisers construct their messages to be 'open' texts, that is, understandable as intended by a select group of individuals" (p. 86). Likewise, McQuarrie and Mick (1992, 1999) state that in an open ad the advertiser helps the consumer to create an intended meaning: ". . . a true open text that assists the reader towards meanings that have been strategically predisposed" (1992, p. 193). These authors describe closed ads, and not open ones, as tending to cause different interpretations among consumers. This description of closed ads has been incorporated by Pieters and Van Raaij (1992) and by Dingena (1994). Referring to the work of Mick and Politi, Dingena claims that indirect communication styles are equivalent to closed texts.

Mick and Politi (1989) and Dingena (1994) argue that the usage of the term 'open' to refer to ads that are susceptible to different interpretations is more common in everyday language. They argue that the colloquial use of the term 'open' opposes the semiotic use. "The term 'openness' in its everyday sense. . . is more similar to Eco's notion of closed text rather than open text" (Mick & Politi, 1989, p. 89). However, in colloquial language, the word 'open' is used ambiguously. Expressions such as 'to leave the matter open' or 'a movie with an open ending', for example, address something that is not completely defined. Similarly, 'open-ended questions' allow for more outcomes. On the other

hand, there are phrases that use the term 'open' to indicate more guidance, such as 'let's get it all into the open' which means that one leaves no space for doubts or vagueness, or that 'a person's mind is like an open book' which indicates that one's thoughts are transparent and evident to all. Therefore, the word open is ambiguous in both colloquial and advertising language.

The terminological confusion can be traced back to one of Eco's paradoxical sentences, in which he argues that no writer can completely determine the interpretation of the reader. Eco reasoned that even a closed text can lead to unforeseeable interpretations: "Those texts that obsessively aim at arousing a precise response . . . are in fact open to any possible 'aberrant' decoding. A text so immoderately 'open' to every possible interpretation will be called a '*closed*' one (Eco, 1979, p. 8). This sentence is cited by Mick and Politi (1989) to point out that a closed text is susceptible to different interpretations. However, as noted by Osimo, the quotation of Eco should not be interpreted as a literal description of a closed text: "Eco says that closed texts are the most 'open': it is a play on words of course, a little provocation. The stiffer a set of rules is, the greater the possibility to transgress" (Osimo, 2004). In other words, the more strictly an advertiser aims at a precise response, the greater the chance that consumers create an 'aberrant' interpretation, one that differs from what the advertiser envisaged. Therefore, we will use the term 'open ad' to refer to ads that provide relatively little guidance towards an interpretation, whereas ads that provide relatively strong guidance will be called 'closed'.

Despite the terminological confusion, both usages of the terms 'open' and 'closed' are based on the same basic thought. Both groups of researchers stress the importance of the notion of openness for advertising, and acknowledge that ads can differ in their susceptibility to different interpretations.

1.5 Related concepts in advertising

Relatively few advertising researchers use the terms 'open' or 'closed'. However, several terms in advertising research are related to openness. Although these terms are not always synonyms for openness, they all refer to ads that provide less guidance towards a certain interpretation. Therefore, the effects of openness have been studied under various names.

The label open-ended has been used (e.g., Boutlis, 2000; Sawyer, 1988, Sawyer & Howard, 1991), as has open-conclusion (e.g., Chebat, Charlebois & Gélinas-Chebat, 2001). Sawyer and Howard (1991) use the labels 'closed-ended ad' and 'open-ended ad' to differentiate ads with several explicitly formulated arguments that either provide or do not provide the consumer with a conclusion. Other researchers (e.g., Chebat, Charlebois & Gélinas-Chebat, 2001) use the terms open-conclusion and closed-conclusion ads to refer to the same types of ads. These terms are related to openness because they all refer to the amount of guidance towards a certain interpretation.

A number of other terms related to openness do not include the word 'open': indirect advertising (e.g., Dingena, 1994; Kardes, 1988; McQuarrie & Phillips, 2005), implicit advertising (e.g., Dingena, 1994; Messaris, 1997), figurative advertising (e.g., Dingena, 1994; Martin, Lang & Wong, 2003; McGuire, 2000), ambiguous advertising (e.g., Perrachio & Meyers-Levy, 1994; Warlaumont, 1995; Young-Won Ha & Hoch, 1989), polysemic advertising (e.g., Warlaumont, 1995), unframed advertising (e.g., Edell & Staelin, 1983), abstract advertising (e.g., Babin & Burns, 1997; Morgan & Reichert, 1999), and undercoded advertising (e.g., McQuarrie & Mick, 1996). Again, all these terms point to differences in the amount of guidance towards an interpretation. These terms indicate that research on the effects of openness is not restricted to studies that explicitly refer to openness; this research can provide insight into the possible effects of openness on consumers.

We regard 'openness' as a term that represents a common dimension of the terms mentioned above. A common term makes visible how several terms that at first sight refer to different types of ads are in fact closely related to each other. Besides being based on theoretical notions, openness is especially suited for advertising research because it is defined in terms of guidance towards a certain interpretation.

1.6 Characteristics of openness

In this section, we discuss characteristics of ads that contribute to openness in ads. Although we are aware that it is not possible to establish the actual amount of guidance a consumer experiences, "we can identify the textual characteristics that make polysemic readings possible" (Fiske, 1987, p. 394). We will argue that openness is affected by the following characteristics: (a) presence of a prominent visual, (b) presence of certain rhetorical figures, (c) absence of verbal anchoring, (d) absence of the product, and (e) absence of brand anchoring. An ad does not have to contain all five characteristics to be experienced as open.

1.6.1 Presence of a prominent visual

The presence of a prominent visual is likely to indicate openness of that ad, although, of course, an ad containing a prominent visual is not necessarily an open ad. Several researchers have pointed out that images are open to a multitude of interpretations (e.g., Barthes, 1977; Eco, 1979). According to Eco, messages in pictures are often more open to multiple interpretations than similar messages in words. This does not mean that verbal copy is not susceptible to different interpretations. However, as Messaris (1997) notes, whereas verbal language contains words and structures that can be used to make explicit connections or causalities (e.g., 'because of' or 'due to'), visual images lack such "an explicit syntax for expressing analogies, contrasts, causal claims, and other kinds of propositions" (p. xi). Hence, several researchers (e.g., Messaris, 1997; Moriarty, 1996) claim that visuals are more indeterminate and more open to viewer's interpretations than verbal copy: "... Attempts to express arguments through the images themselves in either TV or print ads must necessarily fall short of complete explicitness" (Messaris, 1997, p. xviii). When two elements are placed in one visual, their causality is only suggested, whereas in verbal language this causality can be made more explicit because it can be spelled out (Messaris, 1992). Moreover, most pictures in ads contain cues ('open communication codes') that can be interpreted in different ways (Moriarty, 1996).

Although visuals have the ability to indicate openness in an ad, they differ in their effect on openness. Certain types of images, such as non-realistic or absurd images, are more likely to indicate openness than others. For instance, Arias-Bolzmann, Chakraborty, and Mowen (2000) studied visual absurdity in ads. They describe visually absurd ads as illogical, ambiguous, and open to different interpretations.

1.6.2 Presence of undercoded rhetorical figures

Some authors describe rhetorical figures as artful deviations from expectations (e.g., McQuarrie & Mick, 1996, 2003b; Phillips & McQuarrie, 2004) that suggest several meanings (McQuarrie & Mick, 1996). Because rhetorical figures are susceptible to different interpretations, they indicate openness. However, rhetorical figures can differ in guidance towards these alternative meanings (Stern, 1989). Several researchers have tried to categorize rhetorical figures in ads (e.g., McQuarrie & Mick, 1996, 2003b; Phillips & McQuarrie, 2004). These categorizations suggest that the presence of certain types of rhetorical figures in ads is likely to indicate openness.

McQuarrie and Mick (1996, 2003b) categorize rhetorical figures into tropes and schemes. They claim that schemes (such as a rhyme or antithesis) are excessively ordered and overcoded, and that tropes (e.g., metaphor, irony, and pun) are disordered and undercoded. Schemes are 'overcomplete' and superficial, because they contain redundant information and instructions how consumers should interpret them. Tropes are incomplete, lack closure, and can be interpreted in different ways (McQuarrie & Mick, 1996, 2003b). McQuarrie and Mick (1996, 2003b) distinguish between substitution tropes (such as hyperbole and metonym) and destabilization tropes (such as metaphors and puns). When advertisers use substitution tropes, they say something else than what they mean, whereas when they use destabilization tropes they mean more than what they say, creating parallel meanings without making explicit which of these meanings is intended. Hence, tropes indicate openness in ads.

Another categorization of rhetorical figures is provided by Phillips and McQuarrie (2004). They focus on visual rhetorical figures instead of verbal rhetorical figures. Phillips and McQuarrie differentiate visual rhetorical figures according to their visual structure (arrangement of visual figure elements) and meaning operation (instructions for inference). They claim that the visual structure dimension affects the experienced complexity (processing demands) and that the meaning operation affects the amount of experienced ambiguity (number of possible interpretations). Although all nine categories within these dimensions seem to imply openness, the typology suggests that visual rhetorical figures range "from relatively simple and readily interpretable figures to highly complex figures open to a wide range of interpretations" (Phillips & McQuarrie, 2004, p. 127). Hence, the typology created by Phillips and McQuarrie indicates that ads with visual rhetorical figures are more open than ads without visual rhetorical figures, and that the experienced openness is affected by the type of visual rhetorical figure present in the ad.

1.6.3 Absence of verbal anchoring

In most ads, visuals are accompanied by verbal copy that guides the reader in the identification and interpretation of the visual elements, a technique called 'verbal anchoring' (Barthes, 1977). Every verbal element (e.g., the headline or body copy) can constrain the interpretation of an image: "The text directs the reader among various signifiers of the image, causes him to avoid some and receive others. . . it remote-controls him towards a meaning chosen in advance (Barthes, 1977, p. 37-38). Other authors put the same idea into other words. According to Hall (1997), verbal anchoring directs consumer's attention to meaningful parts in the image and instructs consumers how the image must be read. Phillips (2000) argues that verbal anchoring helps consumers to interpret the message in the ad, guiding the reader towards the visual's "presumably intended interpretation" (Forceville, 1996, p. 75). In doing so, verbal anchoring reduces the openness of a pictorial in an ad. Consequently, when verbal anchoring is absent, consumers have more options for choosing an interpretation, which indicates openness in an ad.

Although Barthes describes anchoring in terms of verbal copy that explains the interpretation of the image, it is not always the image that needs to be 'anchored' (Forceville, 1996). An image can be used to anchor ambiguous verbal copy (Chandler, 2002) or a puzzling caption (Dyer, 1982; Forceville, 1996). However, for print ads it is probably more common that verbal copy is used to anchor an image (Chandler, 2002). The concept of verbal anchoring is used to explain the relationship between verbal copy and rhetorical figures. For instance, McQuarrie and Phillips (2005) use the term verbal anchoring when the meaning of a rhetorical figure in the picture or headline is spelled out in literal terms in the body copy.

In the advertising literature, different terms are used to describe anchoring or the idea that verbal copy can be used to interpret the image. Several authors (Dingena, 1994; Edell & Staelin, 1983) use the term 'verbal reference point' or 'verbal labeling' to depict verbal copy that gives direction to the interpretation of the image in an ad. The same authors use the term 'framing' to describe the correspondence of visual and verbal messages in advertising. In framed pictures, the message in the visual is restated in the verbal copy.

1.6.4 Absence of the product

Absence of the advertised product also indicates openness in an ad. When the product features are not verbally described or visually depicted, the ad becomes more susceptible to different interpretations (Barthes, 1977; Loef, 2002; Phillips, 1997). "In advertising, the exclusion of products . . . gives subjects the impression that they are free to produce a meaning for themselves" (Williamson, 1978, p. 71). Depiction or description of the product guides the interpretation of the ad. For instance, the image of a sports car with all of its features signifying speed (e.g., aerodynamic design, spoiler, big exhaust pipe) makes it more obvious for consumers that the car is fast, even for consumers who are not familiar with the car or brand. The ad becomes more susceptible to different interpretations when the product is absent. Because consumers use product information to interpret advertising images, absence of the product in the ad can be characterized as absence of product anchoring. When a product is included in the ad, consumers use product schemas that contain information about attributes of a product class as a whole to infer interpretations (Loef, 2002). For instance, consumers are aware that car ads often address safety, and this product schema directs the interpretation of the ad.

1.6.5 Low brand anchoring

Whether in the form of a logo, verbal copy, or picture, most ads contain some reference to a brand. Without the brand, it is difficult to recognize the text as an ad (except for those ads that advertise a product class as a whole, or 'teaser ads' that postpone brand presence). A brand restricts the openness of a text, because it makes consumers aware that positive claims about a certain product are being communicated. Moreover, just as we argued for the advertised product, brand associations or brand schemas can affect the amount of guidance towards a certain interpretation as well. Several researchers claim that brand information helps consumers to understand the ad's message, because the brand provides a context for interpreting the ad and guides the reader towards meaningful elements in it (Curlo & Chamblee, 1998; Forceville, 1996; MacInnis & Jaworski, 1989; Warlaumont, 1995). Brand schemas or associations represent consumers' knowledge about brands, such as knowledge about brand benefits and drawbacks, about the image of a brand, about its users, and how the brand is positioned relative to other brands within a product category (Loef, 2002). Consumers can use the emotions, beliefs and values that they have learned to associate with certain brands to create interpretations of an open ad. This process may be referred to as brand anchoring.

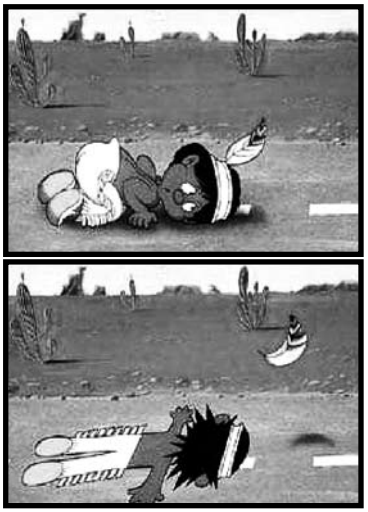


Figure 1.3. *Picture of an Indian used in a car ad (Mitsubishi)*

Consider, for instance, the image used in an ad for Mitsubishi (see Figure 1.3). Once the consumer is aware that a car is being advertised, the image may guide the reader towards the message that the car is fast (the cartoon character is hit by a car because the car was so fast that he had no time to leave the road) or that the car has a silent engine (the cartoon character is hit because he could not hear the car). Both interpretations of the image seem plausible. However, when the image is accompanied by a brand that is strongly associated with speed (for instance Porsche) or silence (for instance Toyota Prius), it is likely that consumers will infer an interpretation associated either with speed or silence. In this sense, the brand anchors the image because it suggests how the image must be read. Consumers who are not able to form an interpretation based on visual or verbal elements in the ad may even create an interpretation exclusively based on brand associations (Forceville, 1996; MacInnis & Jaworski, 1989). In sum, an ad for a brand that already evokes strong associations is likely to decrease openness. On the other hand, ads for new or fictitious brands are often used in experiments, and these brands will obviously lack strong associations, suggesting that the ads will be more open. However, as argued before, the presence of any brand is likely to increase guidance as it directs consumers towards a positive message. We showed the ad on the cover of this manuscript (without a depiction of the logo and the brand) to 31 first-year students, and the same ad on the first page (including the logo and the brand) to 29 students of the department of Communication Science (Radboud University Nijmegen). We asked them to describe the intended interpretation. Only a few students successfully interpreted the ad when the brand was omitted. However, most students were able to retrieve the intended interpretation of the ad when it included the brand ("Nike makes you jump higher"). Therefore, the mere insertion of a brand in a picture limits the number of possible interpretations.

1.7 Variety of open ads

Open ads have in common that they provide little guidance towards an interpretation. However, openness in print ads is manifested in different ways, possibly related to different advertising goals. We examined a large number of ads that appeared on face value to be open, collected over a period of five years from Dutch magazines, advertising yearbooks (e.g., *Art Directors Annual, and Advertising Annual*), and online magazine databases (e.g., *Lürzer's Int'L Archive*). Next, we selected those ads that best met the characteristics of openness in ads mentioned in the previous section (presence of a prominent visual, presence of an undercoded rhetorical figure, absence of verbal anchoring, and absence of the product). We were able to divide the majority of these ads into four different, although not mutually exclusive, categories: riddle ads, story ads, issue ads, and aesthetic ads.

The *riddle* ad contains a hidden interpretation reflecting the advertiser's intention. The verbal or visual elements in the ad create a puzzle. The hidden interpretation is the solution of the riddle, which the consumer must discover. Whereas various elements in the ad seem unrelated to the advertised brand, they point the way to a certain solution (McQuarrie & Mick, 1996; Toncar & Munch, 2001). The ad invites and challenges consumers to solve the riddle and discover the intended interpretation. Although the riddle ad does not explicitly guide consumers towards an intended interpretation, the advertiser wants consumers to know that the ad contains a concrete (intended) interpretation, and, of course, they want consumers to discover this interpretation.

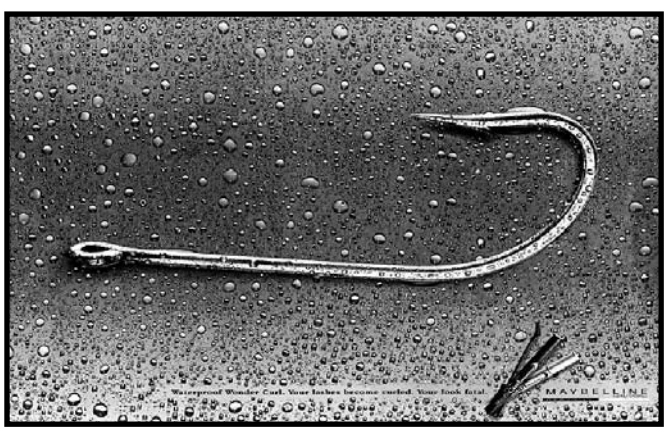


Figure 1.4. *Riddle ad for a mascara (Maybelline)*

Figure 1.5. *Riddle ad for a car (Volkswagen Beetle)*

The *story* ad shows only part of a story or event. The story ad, in Eco's (1979) terms, has an open narrative structure because it does not guide consumers towards a specific ending. Because just a part of the story is shown, as in a movie with an open end, the ad gives rise to questions such as: what is happening, and how does this story end, or how did it start? Consumers are challenged to make up their own story. Although the ad suggests certain outcomes, the story ad leaves room for the consumer to imagine various possible outcomes. Consumers must create part of the story on the basis of the advertised product and their personal experience and fantasy. Because the story ad leaves room for several narrative possibilities, the story ad is susceptible to a multitude of possible interpretations.

Figure 1.6. *Story ad for shoes (dr. Adams)*

Figure 1.7. *Story ad for backpacks (Eastpak)*

The *issue* ad communicates messages that are not related to the product that is advertised, and in so doing reduces the guidance towards a specific message. The issue ad breaks with the 'overcoded rule' (Eco, 1979) that an ad has to communicate something about the product advertised. Instead, the issue ad invites the consumer to think and form an opinion about an important political, social or philosophical matter. Often, this message is communicated in an indirect manner, using shocking and taboo-breaking images. The campaigns for Benetton are good examples of issue ads.

Figure 1.8. *Issue ad for clothing (Benetton)*

Figure 1.9. *Issue ad for jeans (Meatblink)*

The *aesthetic* ad is intended as 'art to look at', from which consumers should derive feelings of aesthetic pleasure. Compared to the other open ad types, the aesthetic ad is less intended to invite consumers to construct a desired interpretation. The aesthetic ad, often seen for fashion and perfume products, resembles open texts such as poetry and music. The ad does not create the feelings of tension and the need to create an interpretation as much as in other open ad types, so consumers will not feel as inclined to explain the ad or to create interpretations.

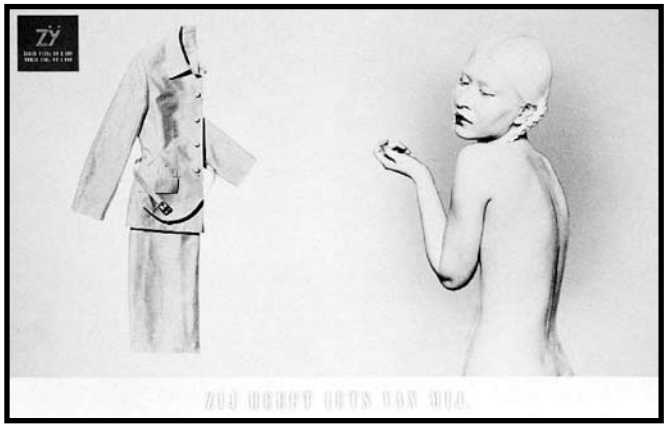


Figure 1.10. *Aesthetic ad for clothing (WE)*

Figure 1.11. *Aesthetic ad for perfume (Diesel)*

Examination of a large number of open ads showed that open ads are diverse in character. In the following chapters, we will focus our attention primarily on open riddle ads, because advertisers seem to pursue different advertising goals with riddle ads compared to issue, story, and aesthetic ads. What primarily distinguishes riddle ads from story, issue and aesthetic ads is their relatively strong tendency to prod consumers to search for a specific intended message about the advertised product. Story ads, instead, propose a range of interpretative possibilities, and aesthetic ads communicate a less concrete interpretation. Although issue ads seem to communicate an intended message, these messages are not explicitly related to the advertised product. Hence, from an advertiser's point of view, the riddle ad, more than other types, would probably not be experienced as successful unless consumers reach the intended interpretation.

1.8 Summary chapter 1

The focus of this chapter was on the concept of openness in advertising. In semiotics, the term openness was extensively dealt with by Eco (1979), who used openness to differentiate between various types of texts. Eco defined open texts as those that are susceptible to different interpretations. Openness is viewed not as a feature of a particular text, but rather as the result of an interactive process between text and reader. Because of the apparent usefulness of the concept of openness, some advertising researchers have transferred this concept from semiotics to advertising. Although this transfer has led to some terminological confusion, all of these authors use the concept of openness to refer to the amount of guidance towards the intended message of the ad. No ads are completely open or closed; ads all differ in the amount of guidance towards a certain interpretation. Openness can be unintentional, for instance when consumers unexpectedly create different interpretations from the one intended by the advertiser. On the other hand, openness can be deliberate (Warlaumont, 1995), when an ad is created in such a way that it is susceptible to different interpretations.

We provided an overview of various terms that have been used, which, though not synonymous, are highly related to the concept of openness. Analyzing these related terms, we found that they all imply less guidance towards an intended message. These related terms show that the effects of openness in advertising have been more broadly studied than the number of studies explicitly referring to openness would suggest. Besides, these related studies helped us to formulate the characteristics that make an ad more open: presence of a prominent visual, presence of undercoded rhetorical figures, absence of the product, absence of verbal anchoring, and low brand anchoring. Finally, through discussion of recurring patterns in a large number of open ads collected over a period of five years, we distinguished four categories of open ads: riddle ads, story ads, issue ads and aesthetic ads. In our experiments (Chapter 4) we examined the effects of one type of open ad: riddle ads.

Despite the fact that many researchers argue that openness has increased in magazine ads (Faier & Unger, 1987; Leigh, 1994; McQuarrie & Mick, 1992), it is unclear whether there actually has been a tendency towards more openness in magazines ads during the past decades. Several advertising practitioners claim that there is a trend towards more prominent images and less verbal copy that, in turn, may increase openness. For instance, Lafermeyer and van den Bergh, working for the ad-agency BBCW, claim not to have seen pure 'copy-ads' for a long time (personal communication, 2001). According to them, nowadays, the visual tells the whole story; ads without body copy are the trend. As openness in ads increases, the importance of research into the effects of openness increases. In Chapter 2, we will discuss a content analysis conducted to verify whether magazine ads have indeed become more open.

Chapter 2 | Changes in openness?

In recent years, media analysts have speculated about an increase in openness in ads. In open ads less guidance is provided towards a certain message. The goal of the study presented in this chapter is to investigate this trend empirically for Dutch magazine ads between 1980 and 2000. The trend towards openness is interesting for several reasons. First, openness seems to break with the rule that an ad's message should be as clear as possible. It is therefore not surprising that advertising that does not conform to this rule has met with severe criticism (e.g., Franzen, 1997; Kroeber-Riel & Esch, 2000; Ogilvy, 1983; Rossiter & Percy, 1983). Second, openness in ads is likely to have consequences for the way ads are processed by consumers. Although we cannot simply conclude that the use of openness leads to more positive or negative advertising effects, openness has been shown to lead to changes in attitude towards the ad, and recall of the ad or of product claims (see Chapter 3). Systematic content analysis of trends in advertising is useful for two reasons. First, content analysis enables us to confirm impressionistic observations of trends. Second, because systematic content analysis demands unambiguous operationalization of variables, this type of research presses the researcher to specify exactly what is meant by these trends.

2.1 Introduction

Several researchers perceived a number of changes in ads that may indicate a trend towards more openness, because these changes all seem to imply less guidance towards a specific message, requiring more effort on the part of the consumer to construct an interpretation. An increase in more ambiguous (i.e., open) ads was mentioned by Berger (2001), Warlaumont (1995) and Nicholson (1998). Ambiguity in ads was defined in terms of 'open to multiple interpretations' (Warlaumont, 1995) or 'deficit of meaning' (McQuarrie & Mick, 1992). Several researchers perceived a number of changes in ads that may indicate a trend towards more openness. These changes all seem to imply less guidance towards a specific message, requiring more effort on the part of the consumer to construct an interpretation. The first change noted is the increase in visual prominence (e.g., Berger, 2001; Cook, 2001; Dyer, 1982; Houston, Childers & Heckler, 1987; Kroeber-Riel & Esch, 2000; Schreurs, 2001; Warlaumont, 1995). Although pictures always played an important role in advertising (Edell & Staelin, 1983), nowadays ads seem to focus less on verbal copy and more on visuals (Pollay, 1985). The second change noted is the increased use of rhetorical figures, particularly those that require closure such as puns and metaphors. An increase in the use of such rhetorical figures was noted by Forceville (1996) and Scott (1994). The third change noted is the increase of ads in which the product is not depicted or described (Leiss, Kline & Jhally, 1990; Warlaumont, 1995; Williamson, 1978). The fourth change, observed by Berger (2001) and Stern (1992), is the increase of ads that do not provide verbal anchoring (i.e., verbal explanation of the ad's message), therefore allowing the consumer more freedom to interpret the message.

Previous research

According to some studies, ads between 1985 and 1991 already contained elements causing openness. For instance, Leigh (1994) conducted a content analysis on 2183 print ads from 1986 and 1988, and concluded that 74% of all ads with a headline contained a rhetorical figure in the headline. McQuarrie and Mick (1992) analyzed 1286 print ads from 1990-1991, and concluded that 15% contained resonance (e.g., ads with wordplay in the headline and an accompanying pictorial reinforcing the wordplay). Faier and Unger (1987) analyzed 162 print ads from 1985 and 1986, and concluded that 45% needed closure, because these ads contained something unfinished or ambiguous.

In addition, a small number of studies analyzed *changes* in form and style in magazine ads over time. Although the main goals in these studies were not the same as ours, some of the results are relevant to our question about trends in openness in magazine ads. Relevant to our purpose are, first, studies that address visual prominence in magazine

advertisements. In order to identify trends in styles and strategies of magazine ads, Pollay (1985) analyzed 2000 ads drawn from the 10 largest magazines in the US, for each decade from 1900 to 1970. The results showed, among other things, that since 1930, the majority of ads (60% or more) consisted predominantly of artwork (photographs and paintings). In addition, whereas ads got relatively bigger, verbal-copy volume declined. A decline of verbal copy was also shown in a Canadian content analysis by Leiss, Kline and Jhally (1990), who examined ads for specific product categories (cigarettes, cars, clothing, food, personal-care, alcohol, and corporate services) in two general interest magazines (*Maclean's and Chatelaine*) in the period from 1910 to 1980. The researchers found an overall decline in the amount of words and in the proportion of the total ad surface devoted to copy (an average of 50% in 1910 versus 30% in 1970). Leiss, Kline and Jhally concluded that visuals in ads became more prominent during that period. However, because they failed to produce a detailed description of either the sampling procedure or the data, it is impossible to evaluate their conclusions. A study by Dingena (1994) provided further evidence for a change in visual/verbal prominence in magazine ads. Dingena conducted a content analysis on 300 ads (quarter page and larger) drawn from two Dutch magazines, a general interest magazine (*Panorama*) and an opinion magazine (*Elsevier*) that appeared in 1978 and 1988. Among other things, three coders judged whether an ad was mainly pictorial or mainly verbal. The results showed an increase in 'mainly pictorial' ads (15% in 1978 versus 40% in 1988) and a decrease in 'mainly verbal' ads (13% in 1978 versus 7% in 1988).

A second indication of openness is the presence of various rhetorical figures that require closing. Dingena (1994) distinguished two categories of rhetorical figures that relate to openness: 'suppression' and 'substitution'. The suppression category contained figures in which something was missing in the message that readers had to supply themselves. "Examples of pictorial suppression are advertisements in which (several parts of) products, product users, or brands are left out" (Dingena, 1994, p. 19). The substitution category contained two figures: metaphor and metonymy. Because suppression, metaphor and metonymy are likely to diminish the amount of guidance towards a specific meaning, their presence may be considered as an indication for openness. For suppression, Dingena found no significant differences between 1978 and 1988 (4.7% in 1978 and 4% in 1988). Ads with metaphor or metonymy, however, had increased, although only significantly for metonymy (metaphor from 12.7% in 1978 to 20.7% in 1988 and metonymy from 8.7% in 1978 to 26.7% in 1988). In addition, the presence of rhetorical figures was analyzed in a more recent study by Phillips and McQuarrie (2002). The researchers conducted a content analysis in order to examine trends in the use of rhetorical figures from 1954 to 1999. They selected 816 ads from a general magazine (*Time*). Two coders analyzed the headline and the picture for the presence of rhetorical figures, and, if present, examined the body

copy for rhetorical figures. The coders then categorized rhetorical figures in the headline, picture, and body copy as either schemes or tropes. Phillips and McQuarrie defined schemes as figures that deviate from expectation by excessive regularity (e.g., rhyme, antithesis), whereas tropes were defined as those deviating from expectation due to lack of order and requiring closure by their readers (e.g., metaphor, pun, and metonym). The presence of tropes may therefore be considered as a possible indication for openness. The results showed a general increase in the use of tropes in ads, from 32.9% in 1954-1974 to 41.3% in 1975-1999.

A third indicator for openness is product absence, because a product that is mentioned or depicted is likely to reduce the amount of possible interpretations (Leiss, Kline & Jhally, 1990; Warlaumont, 1995; Williamson, 1978). Product depiction was examined in the aforementioned studies by Pollay (1985) and Dingena (1994). Pollay assessed whether the product was portrayed in ads between 1900 and 1970. The results showed that the product was depicted in approximately 85% of the ads for each decade from 1910 to 1970. Dingena found a decline in product portrayal in ads between 1978 and 1988, although only significant for business-to-business ads.

Phillips and McQuarrie (2002) assessed a fourth indication for openness: the absence of verbal anchoring. Verbal anchoring took place when the meaning of a rhetorical figure in the headline or picture was spelled out in literal terms in the body copy. The results showed a decline in verbal anchoring over time, from 41.5% in 1954-1974 to 22.6% in 1975-1999. Phillips and McQuarrie (2002, p. 6) concluded: "Advertisers have ... moved from telling consumers how to interpret rhetorical figures to showing them the figures and leaving the interpretation up to them". In sum, previous research provides a number of indications of changes in openness: (a) an increase in visual prominence, (b) an increase in rhetorical figures that require closing, (c) a decrease in product presence, and (d) a decrease in verbal anchoring. Although visuals were predominant in most ads from 1930 to 1970 (Pollay, 1985), the percentage of 'mainly pictorial ads' increased between 1978 and 1988, whereas the verbal-copy volume declined (Dingena, 1994; Leiss, Kline & Jhally, 1990; Pollay, 1985). Ads with rhetorical figures requiring closure increased (Dingena, 1994; Phillips & McQuarrie, 2002). Product portrayal was constant in ads from 1910 to 1970 (Pollay, 1985), but showed a slight decrease (in business-to-business ads) between 1978 and 1988 (Dingena, 1994), and ads with verbal anchoring decreased (Phillips & McQuarrie, 2002).

Research goals

Previous research suggests an increase in openness in magazine ads. However, previous research was not specifically designed to examine changes in openness. In order to remedy this, we designed a content analysis comparing ads over

time focusing on openness. We decided to compare ads from 2000 with those from 1990 and 1980, because magazine ads seem to have become more open since the beginning of the 1980s (Berger, 2001; Schreurs, 2001).

Previous authors have not examined the generality of the increase in openness. Several researchers expect that changes in openness will differ between different magazines. For instance, Phillips and McQuarrie (2002) argued that ads in women's fashion magazines always contained little verbal copy.

In addition, several researchers believe that openness will vary between ads for different products (Cook, 2001; Leiss, Kline & Jhally, 1990; Mick & Politi, 1989; Phillips, 2000). Mick and Politi (1989) argued that especially ads for 'highly symbolic products' are often open. Examples of such products are liquor, jewelry, automobiles, perfume and fashion (Mick & Politi, 1989). They were less convinced that open ads can be found for products that are not considered as highly symbolic, such as kitchen appliances. In addition, openness is likely to be seen in ads for appearance products. Warlaumont (1995) claimed that ambiguity is seen most often in ads for fashion and perfume. Finally, openness is likely to be found in ads that advertise criticized products. As argued by Dyer (1982), it is difficult to argue against something that is not explicitly formulated. Examples of criticized products are alcoholic beverages and cigarettes. Leiss, Kline and Jhally (1990) argued that tobacco and alcoholic products always contain less verbal copy than, for instance, ads for banks or insurance companies that are likely to contain much verbal copy. In addition, Phillips (2000) claims that ads for alcohol and cigarettes tend to use more rhetorical figures. Because these products are frequently criticized, advertisers may want to avoid clear messages and, instead, rely on an open communication style (Dyer, 1982; Pollay, 1985; Tanaka, 1992). Because criticism of these products is not new, it is possible that, due to a ceiling effect, an increase in openness between 1980 and 2000 does not exist for these products. According to Dyer (1982), people have always spoken figuratively when communicating a disapproved or forbidden desire. We formulated the following hypotheses and questions:

H1: Magazine ads show an increase in openness.

R1: Do changes in openness vary by magazine type?

R2: Do changes in openness vary by product type?

2.2 Method

Because the study was designed to compare magazine ads in 1980, 1990 and 2000, we selected magazines that were published in those years, and that had not substantively changed their target groups. We used four different Dutch magazines: an opinion magazine (*Elsevier*), a general interest magazine (*Panorama*), a magazine targeted at women (*Margriet*), and finally a magazine targeted at men (*Autovisie*). We selected magazines with a female and male readership because advertisers might use different types of ads for male and female audiences (Phillips & McQuarrie, 2002). The selected magazines were high-circulation magazines and contained ads for different brands and products. The car magazine *Autovisie* was selected because car ads have a relatively high degree of verbal copy (Cook, 2001; Leiss, Kline & Jhally, 1990). We used all full page ads and spreads (ads covering two full opposing pages) in the issues published in February, April, August, and October in 1980, 1990 and 2000. Different seasons were selected to ensure a heterogeneous mix of products and brands; an ad for ice cream, for example, is more likely to appear in the summer (Phillips & McQuarrie, 2002). Different ads for the same brand were all selected, but the same ad for the same brand was only selected once (relatively few ads, 0.8%, appeared more than once in the magazines). The 1980 sample contained 325 (different) ads, the 1990 sample contained 231 ads, and the 2000 sample contained 212 ads. Of the total ad sample (N = 768), 24% appeared in *Panorama* (n_{1980} = 98, n_{1990} = 61, and n_{2000} = 26), 42% appeared in *Elsevier* (n_{1980} = 101, n_{1990} = 103, and n_{2000} = 116), 22% appeared in *Margriet* (n_{1980} = 99, n_{1990} = 31, and n_{2000} = 38), and 12% appeared in *Autovisie* (n_{1980} = 27, n_{1990} = 36, and n_{2000} = 32).

In order to examine possible differences in openness between product categories, we compiled the following five product categories: *Alcohol*, *Tobacco*, *Appearance*, *Care* and *Cars*. Each product category had to contain at least 25 ads per year. The product category Alcohol included all ads for alcoholic beverages such as wine, beer, and whiskey. *Tobacco* included such products as cigarettes, tobacco and tobacco-pipes. The product category *Appearance* included ads for perfume, jewelry, and clothing. The *Care* sample contained ads for bodily care such as moisturizers, anti-ageing creams, cleansers and other skin and sun care products. Finally, the product category *Cars* contained ads for cars.

Because our selection of ads did not lead to 25 ads per product category, we added ads for these product categories. Besides the ads that were included in our primary selection, we selected ads that appeared in all the monthly editions of 1980, 1990 and 2000. In addition, in order to obtain at least 25 different ads for the product categories *Alcohol* and *Care*, we included all ads for these product categories that appeared one year later (1981, 1991 and 2001) in the selected magazines (Table 2.1.1).

Table 2.1.1
Number of Ads by Product Category and Year

	Year			
Product	**1980**	**1990**	**2000**	***n***
Alcohol	32	29	28	89
Tobacco	33	32	27	92
Appearance	37	33	33	103
Care	32	30	33	95
Cars	33	32	30	95

Note. The product categories *Alcohol* and *Care* also included ads that appeared one year later (i.e., 1981, 1991, and 2001).

Coding Scheme

We distinguished five verbal components: headline, subhead, body copy, pay-off and 'address/coupon'. The latter component included coupons, addresses of the company, phone numbers, references to websites, and other copy that was not part of the other verbal components. Visuals were photographs, illustrations, product images, charts and all other images, excluding the company logo. In order to measure openness, we used the following nine indicators of which the first four measures were labeled as signs for visual prominence.

Presence of verbal and visual components. Coders were instructed to check the presence of each verbal component and to check whether a visual (regardless the type of visual) was present (0 = *component absent*, 1 = *component present*).

Surface of visual and verbal components. Coders were instructed to measure the percentage of the ad's surface taken up by the visual and verbal components (if present), using the intervals 1-25%, 26-50%, 51-75%, and 76%-100%. To measure the surface size of the image and copy, the coders used a scaled transparency. In order to calculate the average percentage of the ad surface taken up by the visual and taken up by the verbal components, we used the midpoints of the intervals (e.g., the midpoint of the interval 1-25% was 12.5).

Number of words. Coders counted the number of words in the ad and for each verbal component.

Absence of the advertised product in the visuals and verbal copy. Coders indicated whether the product was visualized (0 = *not visualized* and 1 = *visualized*) and mentioned in the verbal components (0 = *product not mentioned*, 1= *product mentioned*). In case the ad was for an intangible product, such as a service company, the product was considered depicted whether a job-related or service-related picture was shown, e.g., an airplane for an airline (following Pollay, 1985). In case the brand was mentioned but the product was not depicted or referred to in the verbal copy, coders scored that the product was not mentioned and visualized.

Cropping. 'Cropping' refers to the unusually incomplete depiction of the user or the advertised product in the visual components of the ads. Because cropped images are incomplete, they create ambiguity (Peracchio & Meyers-Levy, 1994), thus requiring closure by the reader. Coders checked whether cropping was present in the ad (0 = *cropping absent* and 1 = *cropping present*).

Verbal anchoring. In some ads, visuals are accompanied by verbal copy that explains how readers should interpret the visual (and thus the ad), a technique called 'verbal anchoring' (Barthes, 1977; Phillips, 2000). Verbal anchoring closes the ad, by guiding the reader towards a certain interpretation of the image. Coders indicated whether verbal anchoring was present in the headline, body copy, and pay-off (0 = *verbal anchoring absent*, 1 = *verbal anchoring present*). Verbal anchoring was present in the ad when at least one of the verbal elements guided the reader towards an interpretation of the image.

Obviousness of the message. One question pertained to the obviousness of the message in the ad: "To what extent does the ad guide towards a specific interpretation of the message?" (0 = *little guidance*, 1 = *much guidance*).

Realism of the situation. Because unrealistic images make interpretation more difficult, coders were instructed to indicate whether the visual components of the ad depicted an unrealistic situation (0 = *unrealistic situation* and 1 = *realistic situation*).

In several ways the coding scheme for openness in the present study was more elaborate than those used in previous studies. We measured the surface and counted the words not only for the total ad but also for each component. We did not only score whether the product was displayed, but also whether it was mentioned in the verbal elements. Verbal anchoring was not only measured in the body-copy but also in the headline and pay-off. Finally, we considered two characteristics of openness that have not been addressed in previous studies, namely the realism of the situation in the image and the obviousness of the message. Although we argued that specific rhetorical figures (e.g., metaphors and metonyms) indicate openness, we only counted the presence of cropping, because it was hard to obtain intercoder reliability for the presence of other rhetorical figures.

Coding Procedure

Intercoder reliabilities were calculated for ten percent of the final data set (n = 105). Average inter-coder reliabilities were measured using Cohen's kappa, which corrects for agreement due to chance. Agreement between judgments of the two coders, two graduate students who had been trained beforehand, ranged from κ = .65 to κ = .95. Variables with

scores below .70 were recoded until satisfactory scores were obtained. The interpretative questions regarding openness in ads (questions regarding cropping, realism, verbal anchoring, and obviousness of the message) were coded for the total data set (1028 ads) by both coders. Each measurement was judged by two coders. Agreement scores between the coders concerning cropping, realism, verbal anchoring presence (in headline, body copy, and pay-off), and obviousness of the ad's message, were all above the recommended standard of .70 (Leigh, 1994).

2.3 Results

Presence of openness for ads in general

Almost every ad contained an image (96% in 1980, 98% in 1990, and 95% in 2000) as well as verbal copy (99% in all three years). So, on the most general level, presence of visual and verbal copy remained almost invariant. We found significant changes, however, in more specific verbal and visual components, indicating more openness, because these changes showed an increase in visual prominence.

First, there was an increase in the surface taken up by the image. The results showed that the relative surface taken up by the image was smaller in 1980 (53%) and 1990 (57%) compared to 2000 (63%) for ads that contained a picture ($F(2, 738) = 7.52$, $p < .01$). Second, the presence of one verbal component in ads decreased (Table 2.1.2). We observed a decline of ads with a headline from 97% in 1980 to 92% in 1990 and 2000. No significant changes were found for subhead, body copy, and address/coupon. However, ads using a pay-off increased between 1980 and 1990 and decreased between 1990 and 2000. Third, the results showed a decline in the average surface taken up by verbal copy from 34% in 1980 to 27% in 1990 and 21% in 2000 ($F(2, 768) = 29.08$, $p < .01$). The decline in verbal copy surface was due to a decline in the relative surface taken up by the body copy and address/coupon. The relative surface taken up by the body copy decreased from 21% in 1980 to 15% in 1990 and 11% in 2000 ($F(2, 647) = 30.40$, $p < .01$). The relative surface taken up by address / coupon decreased from 7% in 1980 to 4% in 1990 and 2000 ($F(2, 471) = 5.11$, $p < .05$). No significant changes in surface size were found for headline, subhead and pay-off. Finally, the average number of words used in an ad decreased from 212 in 1980, to 160 in 1990 and 111 in 2000 (Table 2.1.3). The decline was seen in the pay-off but most evidently in the body-copy, where the average amount of words was almost cut in half between 1980 and 2000.

Table 2.1.2
Percentage of Ads (Per Year) in which the Verbal Component was present in 1980, 1990, and 2000

Verbal Component	1980 (*n* = 325)	1990 (*n* = 231)	2000 (*n* = 212)	*F* (*df* = 2)	*p* (*one-tailed*)
Headline	97%$_b$	92%$_a$	92%$_a$	3.42	< .05
Subhead	30%$_a$	24%$_a$	28%$_a$	1.13	.16
Body copy	85%$_a$	87%$_a$	80%$_a$	2.43	.05
Pay-off	54%$_a$	70%$_b$	58%$_a$	7.63	< .01
Address/ coupon	65%$_a$	56%$_a$	61%$_a$	2.51	.08

Note. Percentages in the same row that do not share subscript differ significantly *($p < .05$)* in the Scheffé least significant difference test.

Table 2.1.3
Mean Number of Words in Ads by Verbal Component in 1980, 1990, and 2000

Verbal Component	1980	1990	2000	*n*	*F* (*df* = 2)	*p* (*one-tailed*)
Headline	8.8_a	8.0_a	8.0_a	722	2.41	.05
Subhead	8.6_a	7.2_a	8.0_a	210	1.79	.08
Body copy	184.8_a	142.9_b	96.8_c	647	23.45	< .01
Pay-off	5.9_a	6.5_a	4.6_b	460	5.96	<. 01
Address/ coupon	61.6_a	39.1_a	36.0_a	471	2.22	.05
Total ad	212.0_a	160.0_b	111.0_c	768	23.15	< .01

Note. Means in the same row that do not share subscript differ significantly ($p < .05$) in the Scheffé least significant difference test. Means are based on the number of ads using the given verbal component.

Another indication for more openness was found in the increased absence of the advertised product in the visuals and verbal copy. A decline in visual product depiction was observed, from 89% in 1980, to 84% in 1990 and 67% in 2000 ($F(2, 738) = 21.24$, $p < .01$). In addition to this decline, the results (Table 2.1.4) showed a decline in ads in which the advertised product was explicitly mentioned in the verbal copy from 93% in 1980 to 88% in 1990 and 84% in 2000 ($F(2, 765) = 4.34$, $p < .01$), although this decline is not consistent for all verbal components.

Table 2.1.4
Presence of Product in Verbal Components in 1980, 1990, and 2000

Verbal Component	1980	1990	2000	*n*	F^1	p^2
Headline	$44\%_a$	$25\%_b$	$23\%_b$	722	15.85	< .01
Subhead	$43\%_a$	$33\%_a$	$41\%_a$	210	0.75	.43
Body copy	$92\%_a$	$85\%_b$	$85\%_b$	647	4.56	< .01
Pay-off	$39\%_a$	$26\%_b$	$25\%_b$	460	5.01	<. 01
Address/ coupon	$51\%_a$	$22\%_b$	$33\%_b$	471	16.78	< .01
Total ad	$93\%_a$	$88\%_{ab}$	$84\%_b$	765	4.34	< .01

Note. Percentages in the same row that do not share subscript differ significantly ($p < .05$) in the Scheffé least significant difference test. Percentages are based on the number of ads using the given verbal component per year. [1] $df = 2$. [2] p = one tailed.

More indications of openness were found in the visual components of ads. The results showed an increase in cropped images from 3% in 1980 to 7% in 1990 and 10% in 2000 ($F(2, 738) = 6.25$, $p < .01$), and unrealistic images from 6% in 1980 to 22% in 1990 and 2000 ($F(2, 738) = 20.64$, $p < .01$). An additional indication of openness was the decline of verbal

copy to help consumers interpret the implicit meanings of images in ads (verbal anchoring). As can be seen in Table 2.1.5, the results showed a general decrease of verbal anchoring in the total ad, from 93% in 1980, to 77% in 1990 and 69% in 2000. Our findings showed the same pattern for the body copy; verbal anchoring in the body copy decreased significantly between 1980 and 2000.

Finally, the obviousness of the message decreased. An increase in ads with little guidance towards an interpretation was observed, from 1% in 1980 to 13% in 1990 and 15% in 2000 ($F(2, 768) = 20.15$, $p < .01$).

Table 2.1.5
Presence of Anchoring in Verbal Components in 1980, 1990 and 2000

Verbal Component	1980	1990	2000	*n*	*F*[a]	*p*[b]
Headline	56%$_a$	26%$_b$	30%$_b$	694	29.63	< .01
Body copy	96%$_a$	84%$_b$	74%$_c$	622	23.60	< .01
Pay-off	38%$_a$	11%$_b$	18%$_b$	451	19.17	< .01
Total ad	93%$_a$	77%$_b$	69%$_c$	733	26.31	< .01

Note. Percentages in the same row that do not share subscript differ significantly ($p < .05$) in the Scheffé least significant difference test. Percentages are based on the number of ads using an image and the given verbal component per year. [a]$df = 2$. [b]p = one tailed.

Presence of openness: no differences between magazines and between product categories

Compared to the total ad sample, the different magazines basically showed the same patterns of changes in openness. Although some differences between the magazines were found, all significant differences over time were in the same direction as in the total ad sample (Table 2.1.6).

As can be seen in Table 2.1.7, the results for the product categories resembled the findings for the total ad sample. All significant differences over time were in the same direction as in the total ad sample, except the amount of guidance that increased significantly between 1980 and 2000 for Care products.

Table 2.1.6
Changes in Openness Indicators by Magazines and Period

Openness Indicators	1980-2000					1980-1990					1990-2000				
	Total	Elsevier	Panorama	Margriet	Autovisie	Total	Elsevier	Panorama	Margriet	Autovisie	Total	Elsevier	Panorama	Margriet	Autovisie
Guidance	<*	<*	<*	<*	<	<*	<*	<*	--	<	<	<	<	<*	<
Verbal surface	<*	<*	<	<*	<*	<*	<*	<	--	<*	<*	<	<	<*	<
Verbal anchoring	<*	<*	<*	<*	<*	<*	<*	<*	--	<	<*	<	>	<*	<
Words (number)	<*	<*	<*	<*	<*	<*	<*	<*	>	<*	<*	<*	<	<*	<
Product presence	<*	<*	<*	<*	<	<	<	<	>	>	<*	<*	<*	<*	<*
Image surface	>*	>*	>	>	>*	>	>*	--	--	>	>*	>*	--	>	>
Cropping	>*	>*	>*	>	>	>*	>	>*	>	<	>*	>	>	<	>
Unrealistic image	>*	>*	>	>*	>	>*	>*	>*	>*	<	--	>	<	>	>

Note. > = Increase; < = Decrease; -- = Unchanged. *$p < .05$, one-tailed using the Scheffé least significant difference test.

Table 2.1.7
Changes in Openness Indicators by Product and Period

Openness Indicators	1980-2000						1980-1990						1990-2000					
	Total	Alcohol	Tobacco	Appear.	Care	Cars	Total	Alcohol	Tobacco	Appear.	Care	Cars	Total	Alcohol	Tobacco	Appear.	Care	Cars
Guidance	<*	<	<*	<	>*	<*	<*	<*	<*	<	>	<	<	>	<	<	--	<
Verbal surface	<*	>	<*	<	<	<*	<*	<	<*	<	--	<	<*	>	>	<	<	<
Anchoring	<*	<	<*	<	>	<	<*	<	<*	<*	<	<	<*	>	--	>	>	<
Words (number)	<*	<	<*	<	<*	<*	<*	<	<*	<	--	<	<*	<	<	<	<*	<
Product presence	<*	<	<	<	--	<	<	>	<	<	--	--	<*	<	<	<	--	<
Image surface	>*	<	>*	<	>	>	>	>	>*	>	>	>	>*	<	>	<	>	>
Cropping	>*	>*	>	<	>	<	>*	>	>	>	>	<	>*	>*	<	>	>	>
Unrealistic image	>*	>	>	>*	>	>	>*	>	>	>*	>	<	--	>	<	>	<	>

Note. > = Increase; < = Decrease; -- = Unchanged; *$p < .05$, one-tailed using the Scheffé least significant difference test.

2.4 Discussion

Comparing magazine ads from 1980, 1990, and 2000, content analysis showed an increase of all general indicators of openness (total ad) over time, as well as an increase of most specific indicators of openness (separate components). The results support our expectation regarding the trend towards increased openness (H1), extended previous research results for the years 1980, 1990, and 2000, and strengthened previous indications because of the more specific measures used. The increase in openness was found not only in the total sample, but also in each of the four magazines selected for this study (R1), and, additionally, in each of the five product types that we extracted from our sample of ads (R2). Our finding that the trend towards openness is general across four magazines and four product types is not self-evident, because advertisers might be expected to address different target groups in different ways (Cook, 2001; Leiss, Kline & Jhally, 1990). Considering the overall trend towards openness in ads, as shown in this study, open ads should not be overlooked in future research.

Although not evident in all visual and verbal components, an increase in openness in magazine ads was indicated by an increase in visual prominence (an increase in visual surface area and a decline in verbal copy), by a decrease in both visual product depiction and verbal references to the product, an increase in cropped and unrealistic images, a decline in verbal anchoring, and a decrease in guidance towards an interpretation. These findings corroborate previous studies (Dingena, 1994; Leiss, Kline & Jhally, 1990; Pollay, 1985) that identified a trend towards visual prominence based on an increase of 'mainly pictorial ads' and a decline in the amount of verbal copy. In addition, our findings are in accordance with previous studies (Dingena, 1994; Phillips & McQuarrie, 2002) that suggested a trend towards more openness based on a decline in product portrayal in magazine ads between 1978 and 1988, an increase of rhetorical figures requiring closure, and a decline in verbal anchoring.

Our findings suggest that the trend towards more openness is general and not confined to specific magazines, though they may be stronger or weaker for specific magazine types. For example, this trend might be particularly strong in trendy magazines, which are generally highly visually oriented.

The trend towards openness may be tied to specific brands like Calvin Klein, Diesel and Benetton (Boutlis 2000; Schreurs 2001; Warlaumont 1995). Although it is possible that ads for different brands differ in degree of openness, it is not likely that any specific brand shows an opposite trend (i.e., towards less openness). Our sample did not include enough ads for specific brands to allow us to check this notion.

A limitation of the present study is that it involved only full page ads and spreads. It is possible that the trend found in the present study is less obvious when smaller ads are included, as space limitations may make these ads less suitable for visual advertising.

Although this content analysis was carried out with Dutch magazines, the fact that visual advertising is often used as a global technique (Berger, 2001) makes it plausible that the observed trend is not confined to the Netherlands. Advertising in the Netherlands is highly influenced by advertising in the US, and many ads used in the US are also used in the Netherlands (Dingena, 1994; Schreurs, 2001).

Why would advertisers want to increase the experienced openness of an ad, presuming that openness is not accidental but also intended? First, some advertisers and trend watchers claim that visual media are increasingly dominating society. Consumers who have grown up with visual media can be expected to make sense of visuals without the help of verbal copy. An important facilitator of the trend towards openness in magazine ads is the development in computer-graphics software (Dingena, 1994; Leiss, Kline & Jhally, 1990; Phillips & McQuarrie, 2002). New technologies make it easier for advertisers to create pictures that are more complex or unrealistic and thus more open (Dingena, 1994; Leiss, Kline & Jhally, 1990; Phillips & McQuarrie, 2002). Another reason for the increase in openness may be that advertisers like to impress their professional peers (Phillips & McQuarrie, 2002). Open ads seem to be appreciated in the advertising field, perhaps because open ads deviate from what is expected. Many open ads have won international advertising awards and open ads are often selected and discussed in advertising magazines (e.g., *Lürzer's Int'l Archive*).

In addition to societal and technological developments, and a desire to impress the field, the trend towards openness might be explained by the fact that some advertisers expect open ads to be more effective. One argument is that less open ads, in which the message is spelled out, may cause irritation among the present generation of ad-wise consumers who might feel that their intelligence is being underestimated. Advertisers hope that openness in ads not only reduces irritation, but also increases ad appreciation when the search for meaning is rewarded. Another argument is that, because of the increased cognitive effort that consumers spend on these ads when searching for an interpretation, they devote more attention to the ads, they have better retention, and they do not engage in counter argumentation so readily (Berger, 2001; Leiss, Kline and Jhally, 1990; McQuarrie and Mick, 1992; Phillips, 2000). These claims about the effects of open ads have hardly been addressed in empirical research, and are discussed in Chapter 3, whereas the empirical basis of these claims will be the central focus in the experiments presented in Chapter 4.

Chapter 3 | Theory and previous research

The goal of this chapter is to discuss possible effects of openness. It is likely that the trend towards more openness in ads is inspired, at least partially, by the thought that open ads do a better job than closed ads. In this chapter we discuss several arguments in favor and against a positive effect of openness on (a) maintaining consumers' attention, (b) recall of (elements in) the ad, (c) creating an interpretation, and (d) the attitude towards the ad. We will evaluate these arguments on the basis of previous research of ads that differed in amount of guidance towards an interpretation. Chapter 3 is divided into three sections. Section 3.1 discusses the effects of openness on maintaining consumers' attention to the ad, and recall of (elements in) the ad. Because attention and recall are strongly related, they are discussed in the same section. The chapter continues with Section 3.2 that focuses on the effects of openness on interpretation. We discuss the possibility that openness in ads may lead to more consumers that are unable to create the intended interpretation or any interpretation at all, and that openness may result in alternative interpretations besides the intended interpretation. Section 3.3 addresses the effects of openness on attitude towards the ad. We argue that openness may lead to a more positive as well as to a more negative attitude towards the ad.

3.1 Attention and recall

Attention of consumers is an essential requisite for an ad to be effective (Bock & Von Rath, 1997; Franzen, 1997; Pieters, Warlop & Wedel, 2002). No attention means no effects. Advertisers, therefore, will go to great pains in order to attract and hold consumers' attention. Due to the current ad-overload, attention to magazine ads is hard to get (Franzen, 1997; Pieters, Warlop & Wedel, 2002; Rosbergen, 1998). "With the possible exception of those of us who have a professional interest in the subject, most people do not actively seek out exposure to advertising" (Messaris, 1997, p. 5). And when advertisers do succeed in attracting attention, consumers do not spend much time on print ads; no longer than three seconds of viewing time on average (Kroeber-Riel & Esch, 2000). Therefore, it is not surprising that advertisers seek new ways to attract and hold attention. One way is the use of open ads. However, mere attention is not sufficient. Besides attention, recall of the ad, the brand, the message, or the product is important because it may guide purchase behavior. Because open ads require more elaboration to create an interpretation, openness may lead to better recall of the ad or advertised product, provided that consumers are willing to invest the effort. Although attention correlates with elaboration and recall (Bock & Von Rath, 1997; Krugman, 2000; Morrisson & Dainoff, 1972; Rosbergen, Pieters & Wedel, 1997), it is possible that elaboration occurs separate from attention, for instance when people think about an ad they have seen before.

3.1.1 Possible effects of openness on attention

In this section we discuss how openness may affect consumers' attention to the ad. We presuppose that openness affects attention only in the sense that it may *maintain* consumers' attention. It is less likely that openness *attracts* consumers' attention to the ad. Elements in an ad that attract attention are, unlike the level of guidance, easily identifiable and require effortless processing (Heath, 2001). Examples are bright colors and erotic or shocking pictures (Andresen, 1987; Franzen, 1997; Olshavsky, 1994).

Arguments in favor of a positive effect of openness on attention

Several researchers expect that openness, or characteristics of openness, such as absence of verbal anchoring or presence of certain rhetorical figures, will increase the duration of attention that consumers devote to the ad (Arias-Bolzmann, Chakraborty & Mowen, 2000; Macinnis, Moorman & Jaworski, 1991; McQuarrie & Mick, 1992; Morgan

& Reichert, 1999; Mothersbaugh, Huhmann & Franke, 2002; Peracchio & Meyers-Levy, 1994; Phillips & McQuarrie, 2004; Toncar & Munch, 2001; Warlaumont, 1995, 1997). Warlaumont (1997) suggested that advertisers deliberately apply ambiguity in ads to increase the time that consumers look at an ad. In the advertising literature we found four reasons why openness might sustain consumers' attention to open ads: (1) open ads are experienced as relatively difficult to interpret ('experienced interpretation difficulty'); (2) openness is experienced as relatively incongruent with expectations of advertising ('experienced scheme incongruity'); (3) openness increases experienced uncertainty ('experienced interpretation uncertainty'); and (4) openness makes consumers pay attention to the brand.

First, openness may maintain attention because consumers' have to search for a plausible interpretation or choose between possible interpretations. Several authors argued that consumers experience *difficulty* when interpreting open ads (Peracchio & Meyers-Levy, 1994; Tanaka, 1992; Warlaumont, 1995). Several researchers argued that complexity in ads is likely to maintain consumers' attention (Chamblee, Gilmore, Thomas & Soldow, 1993; Macinnis, Moorman & Jaworski, 1991; Morrisson & Dainoff, 1972). Morrison and Dainoff (1972), who claimed to be the first that used viewing time to evaluate the effectiveness of ads, showed an increase in viewing time because of an increase in experienced difficulty when interpreting ads.

Second, attention may increase because open ads are experienced as novel or *schema-incongruent*. Schema-incongruent ads do not match with information present in consumers' memory about ads in general or about ads in a certain [product] category (Warlaumont, 1997). Several researchers expect that consumers are more likely to pay attention to ads that are schema-incongruent (Arias-Bolzmann, Chakraborty & Mowen, 2000; Goodstein, 1993; Heckler & Childers, 1992; Macinnis, Moorman & Jaworski, 1991; McQuarrie & Mick, 1996; Morrisson & Dainoff, 1972; Pieters, Warlop & Wedell, 2002; Warlaumont, 1995, 1997). This expectation is supported by several studies that showed an increase in viewing time because of new information, unexpected objects in pictures, the absence of expected objects, or unfamiliar words (for an overview see Rayner, 1978, or Warlaumont, 1997). Advertising research showed similar results: an increase in viewing time towards ads and their brands when ads became more incongruent with expectations (Goodstein, 1993; Olney, Holbrook & Batra, 1991; Pieters, Warlop & Wedel, 2002). An open ad may be experienced as incongruent with expectations because of the low guidance towards an interpretation, or because of elements present or absent in the ad that stimulate openness (See also Section 1.6). Warlaumont (1997), for instance, showed that when the product was not described or depicted in the ad, the ad was experienced as more incongruent with expectations of advertising.

Third, attention might increase because openness increases experienced *uncertainty* about the accuracy of the created interpretation (McQuarrie & Mick, 2003a). It is possible that consumers, after having created an interpretation

of an open ad, are still motivated to look at the ad in search for elements that they can use to verify their created interpretation. Because open ads often lack elements that communicate the intended message, such as the product or verbal copy that anchors the image, consumers might be uncertain whether their interpretation is correct.

Finally, openness may result in more attention to elements that describe or depict the advertised *brand*. This argument differs from the three previous ones because it does not pertain to the ad as a whole but to the brand. McQuarrie and Mick (2003a) argued that attention is motivated by stimuli that are experienced as ambiguous or produce feelings of uncertainty. To resolve the ambiguity and reduce the experienced uncertainty, consumers are likely to direct and focus their attention to specific elements of the stimulus that may be of use for creating a plausible interpretation. Consumers tend to use the brand to create interpretations when confronted with an ad (Curlo & Chamblee, 1998; MacInnis & Jaworski, 1989; Warlaumont, 1995; Wedel & Pieters, 2000). MacInnis and Jaworski (1989) argued that when consumers spend more attention to the brand, they become more aware of the brand's features and benefits that help consumers to determine the ad's message. Pieters, Warlop and Wedel (2002) argued that the brand holds attention, especially when the ad challenges the consumer to understand its message. Hence, openness increases viewing time towards the brand as consumers need the brand to create an interpretation.

Arguments against a positive effect of openness on attention

Openness might affect attention negatively because consumers are likely to *avoid* investing cognitive effort in ads (Chamblee, Gilmore, Thomas & Soldow, 1993; Franzen, 1997). Consumers might not be motivated to devote their attention to ads in general, because they know they are dealing with persuasive messages (Kroeber-Riel & Esch, 2000; Messaris, 1997; Peracchio & Meyers-Levy, 1994; Toncar & Munch, 2001; Warlaumont, 1995, 1997). Tolly and Bogart (1994) argued that ads should contain simple messages that can easily be understood, because once consumers know they cannot create an interpretation quickly, they will stop paying attention to the ad. For the same reason, Kroeber-Riel and Esch (2000) advised advertisers not to make their ads too riddle-like, even when those ads are aimed at highly motivated target groups. Franzen (1997) discussed several studies that showed that commercials demanding substantial cognitive processing, decrease consumers' attention. Franzen suggested that consumers lose interest when it takes too long to create an interpretation. Hence, when open ads are experienced as difficult to understand, they may diminish attention. Searching for a message that is intended to influence a consumer to buy something may not be considered as pleasurable as creating an interpretation when confronted with a crossword puzzle or aesthetic painting. Therefore, the prospect of possible satisfaction of finding an interpretation might not outweigh the negative feeling as a result of the elaboration necessary to find it.

Argument in favor of no effect of openness on attention

Lastly, openness might not yield a beneficial or detrimental effect on attention. Consumers might not be motivated to devote their attention to ads in general, because they know they are dealing with persuasive messages (Kroeber-Riel & Esch, 2000; Messaris, 1997; Peracchio & Meyers-Levy, 1994; Toncar & Munch, 2001; Warlaumont, 1995, 1997). Hence, it is possible that open ads are not processed deep enough to detect the presence of a puzzle.

3.1.2 Possible effects of openness on recall

Arguments in favor of or against a positive effect of openness on recall

As for attention, several authors expect that openness, or characteristics of openness, increases recall of (elements in) the ad (Arias-Bolzmann, Chakraborty & Mowen, 2000; Childers & Houston, 1984; McQuarrie & Mick, 1992; 1999; 2003a, 2003b; Mothersbaugh, Huhmann, & Franke, 2002; Phillips, 2003; Phillips & McQuarrie, 2004; Tanaka, 1992; Toncar & Munch, 2001). The arguments for or against a positive effect of openness on attention also apply to recall. 'Experienced interpretation difficulty', 'experienced scheme incongruity', and 'experienced interpretation uncertainty' might not only increase attention but also enhance recall. In addition, openness might stimulate recall of the advertised brand because consumers use the brand in order to derive an interpretation of the open ad. Finally, as with attention, openness might have a detrimental effect on recall, because consumers might refrain from investing the necessary effort in open ads. The central notion behind the arguments for and against an effect of openness on recall is that openness stimulates a high level of cognitive elaboration that, in turn, improves recall.

3.1.3 Previous research on the effects of openness on attention and recall

Previous research on the effects of openness on attention

To our knowledge, only one study addressed the effect of openness on consumers' attention to ads. McQuarrie and Mick (1992) concluded that openness has no beneficial or detrimental effect on viewing time. In this study, McQuarrie and Mick compared ads with and without a rhetorical figure (a visual/verbal pun). They selected four ads with a pun, and compared each ad with a counterpart condition in which the pun was removed. All ad versions contained a

fictitious brand, a picture and a headline. Participants (112 undergraduate students) were informed that the focus of the study concerned ads, but that they should look at the ads as they would normally do when reading a magazine. The participants were told that they could view the ads for as long as they wanted. Each participant received a booklet that contained two ads with a pun in the headline, two ads in which a pun was removed, and eight filler ads. To measure viewing time, participants had to press a button as long as they were viewing the ad. The results showed no differences in viewing time between the open (with a pun) and closed (without a pun) conditions. Open as well as closed ad conditions were looked at for approximately 12.7 seconds.

We can not be sure that identical results would be found under more normal viewing conditions. In more natural circumstances consumers are more likely to focus on editorial copy instead of ads, and probably spend less time viewing open as well as closed ads. Previous research showed that consumers, on average, looked at ads for less than three seconds (e.g., Kroeber-Riel & Esch, 2000; Lohse, 1997; Pieters, Warlop & Wedel, 2002; Pieters & Wedel, 2004; Rosbergen, Pieters & Wedel, 1997). Even highly involved consumers did not look longer than 5 seconds at an ad (Kroeber-Riel & Esch, 2000). Moreover, repeated confrontation with the same ad decreased the amount of viewing time (Pieters, Rosbergen & Wedel, 1999). In sum, it is not clear whether openness has any effects on attention under more normal circumstances, that is when the ads are shown in magazines, consumers do not have to press a button while viewing an ad, and consumers are not informed that the focus of research is advertising.

Previous research on the effects of openness on recall

Previous research suggests only favorable effects of openness on recall: (elements in) open ads are better recalled or recognized than (elements in) closed ads. In these studies openness was indicated by the presence of rhetorical figures (Gail &Eves, 1999; McQuarrie & Mick, 1992, 2003b; Toncar & Munch, 2001).

A study conducted by Gail and Eves (1999) suggested that brands were better recalled for ads with (verbal or visual) rhetorical figures than for ads without rhetorical figures. However, because Gail and Eves compared ads that differed on more features than the presence of a rhetorical figure alone, their conclusions may be erroneous. Toncar and Munch (2001) found similar results for product-claim recall, but only for consumers with low involvement. The results showed no significant effects for high-involvement consumers. Their research showed that product claims were better remembered when the experimental ad, featuring a picture of a bike and a fictitious brand, contained (six) verbal tropes instead of (six) concrete verbal arguments.

McQuarrie and Mick (1992) showed that consumers' aided recall of verbal copy was better when ads contained a trope, i.e. a verbal pun with a picture that created or reinforced the pun. They showed the product category that was advertised in the experimental ad to 112 undergraduate students. Subsequently they asked them to write down all they could remember about the ad. Recall was measured after participants saw all ads in a booklet and subsequently completed a questionnaire and filler tasks. Next, judges scored whether participants mentioned the key words in the headline (that is the original word in the ad without a trope versus the altered word in the ad with a trope). Headline recall was better for ads containing tropes, even after controlling for viewing time. A second experiment that used an adult population (N = 107) instead of students showed similar results: better recall of headlines for ads with tropes, although the difference in recall was not significant when the ad with a trope was experienced as more difficult, as was the case for one ad. In a later study, McQuarrie and Mick (2003b) again examined the effects of trope presence on recall. This time, however, they instructed 108 of the 242 undergraduate students to process the ads, and instructed the remaining students to process the articles in a magazine. In addition to headline recall, the same procedure was used to measure aided recall as in their previous study. Besides, judges scored whether participants mentioned the key visual elements. Verbal and visual copy were better remembered in ads containing (visual or verbal) tropes than in ads without these rhetorical figures, regardless whether participants were instructed to process the ads or the editorial copy.

3.2 Interpretation

How openness may affect the creation of an interpretation of open ads may be illustrated by means of Figure 1 (see p. 1). The Lexus-ad contains a prominent picture with only one visual object. The ad-maker aimed to communicate that 'when driving a Lexus, a hairpin bend feels like a straight road', thus clarifying that Lexus has good roadholding. We showed this ad to 52 first-year students of the department of Communication Science (Radboud University, Nijmegen) and asked them to write down what they thought the intended interpretation was. Possibly surprising for the ad-maker, only a few students created the intended interpretation. Instead the students created alternative interpretations, such as: Lexus is a thrifty car; Lexus is the best car for sporty drivers; Lexus deals with bumps easily; Lexus is not a standard product; even with a hairpin, burglars won't be able to break this car open; Lexus is a streamlined car; and Lexus has low air resistance. Some students were not able to create any interpretation at all, because they did not recognize the object as a hairpin, did not know that Lexus was a car-brand, or did not understand the relation between the hairpin and the Lexus. The example of the Lexus-ad shows that openness can affect consumers' ability to create (1) any interpretation, (2) the intended interpretation, and (3) alternative interpretations next to the intended one.

3.2.1 Possible effects of openness on interpretation

When creating an interpretation of an ad, consumers combine product and brand attributes and their consequences with their personal and social values. For instance, consumers may base their interpretation of an ad for a hairdryer on certain product features (for example the form or color of the depicted hairdryer), or on the consequences of the product (e.g., getting a nice hair-style), linking these consequences and features to personal values (e.g., looking good) and social values (for instance being attractive for the opposite sex). When consumers interpret ads, they make use of the elements in the ads in combination with stored information such as cultural knowledge about the meaning of rhetorical figures, their knowledge about specific brands and products, and their knowledge about advertising in general (Forceville, 1996; Phillips, 1997; 2003; Sperber & Wilson, 1986; Tanaka 1992; Warlaumont, 1995). When interpreting open ads, consumers will have to rely more on their knowledge about ads in general, the advertised product, and the brand.

Being able to create a plausible interpretation is important (Morgan & Reichert, 1999), because otherwise no message is communicated. Besides, not being able to create an interpretation might have a negative effect on the attitude towards the ad.

Creating the intended interpretation is an important advertising effect (Mick & Politi, 1989). According to several researchers as well as ad-makers (Chaiken, 1984; McGuire, 1985; McQuarrie & Phillips, 2005; Mitchell, 1986; Morgan & Reichert, 1999), ads are more effective when consumers interpret them as intended. It is likely that ad-makers will judge an ad as not effective when consumers do not associate the advertised brand with a specific claim, but instead relate the brand to a less *important* claim (Phillips, 2000).

Finally, creating alternative interpretations may be viewed as a positive advertising effect. 'Interpretation diversity' points to the occurrence of one -or more- alternative interpretations next to the intended interpretation. Two types of 'interpretation diversity' might arise when consumers interpret open ads. First, 'interpretation diversity' might relate to a particular consumer who creates a number of interpretations. In that case an ad leads to a diversity of interpretations *within a consumer*. Diversity of interpretations within an individual consumer may increase persuasiveness because it might convince a consumer of the quality of the advertised product, by referring to more arguments to buy the product (Forceville, 1996; McQuarrie & Mick, 1992, 1996; McQuarrie & Phillips, 2005; Petty & Cacioppo, 1996; Phillips, 2000). Second, an (open) ad can elicit alternative interpretations *across consumers* (McQuarrie, 1989; Mick & Politi, 1989; Phillips, 1997). When alternative interpretations are created across consumers, a persuasive advantage may arise because the same ad might appeal to various consumers (Mick & Politi, 1989; Tanaka, 1992), who decide for themselves what interpretation is most relevant. Ad-makers might deliberately use visual metaphors to appeal to a heterogenous audience, because metaphors elicit diverse interpretations (Tanaka, 1992), which render open texts superior to closed ones from a managerial perspective (Zakia, in Mick & Politi, 1989).

Arguments in favor of a positive or negative effect of openness on interpretation

An open ad needs to be elaborated upon, in order to be interpreted. When openness decreases consumers' willingness to invest mental effort, they are less likely to create any interpretation. And even when consumers do decide to elaborate upon open ads, there is a risk that they cannot create a plausible interpretation, because they experience open ads as difficult to interpret. Several researchers (e.g., Kardes, 1988; Mick & Politi, 1989) argued that openness increases the chance that consumers do not create the intended interpretation. In addition, it is questionable whether openness leads to interpretation diversity *within consumers*. When consumers do not expect that advertisers have intended

to communicate several messages with an open ad, they may not be inclined to look longer at the ad in search for additional messages, besides the one created. On the positive side, when consumers elaborate more upon open ads than upon closed ads, there is a chance that they will create more alternative interpretations (Barthes, 1977; Eco, 1979; Forceville, 1996; McQuarrie & Mick, 1996; Mick, 1992; Mick & Politi, 1989; Phillips, 1997, 2003; Sperber & Wilson, 1986; Warlaumont, 1995).

3.2.2 Previous research on the effect of openness on interpretation

Surprisingly few researchers have focused on the interpretations of consumers when they process open ads. Previous research suggests that openness negatively affects the creation of any interpretation (Dingena, 1994; Warlaumont, 1995), as well as the creation of the intended interpretation (Morgan & Reichert, 1999; Phillips, 1997), whereas openness positively affects the creation of alternative interpretations across consumers (Morgan & Reichert, 1999; Phillips, 1997).

Negative effect of openness on the ability to create an interpretation

Two researchers (Dingena, 1994; Warlaumont, 1995) confirmed the notions of a negative influence of openness on consumers' ability to interpret open ads. Dingena (1994) conducted three studies, as part of her thesis, in which the effect of rhetorical figure presence and verbal framing (anchoring) in ads was measured on, besides other variables, interpretation creation. Dingena (1994) determined the occurrence of an interpretation with an open-ended question, asking participants to describe the central message that the advertiser, in their view, was trying to communicate. In two studies graduate and undergraduate students were involved (N = 91, N = 160) whereas in a third study respondents of a consumer panel of a market research agency participated (147 females with either a visual or verbal style of processing). Participants viewed the ads for as long as they wanted. As expected, fewer participants were able to interpret the metaphoric (low guidance) ads compared with the literal verbal (high guidance) ads, although not always significantly. However, it remains unclear whether these results are due to openness alone. The ads differed on more aspects than openness alone, such as the amount of verbal copy, and the number of visual elements.

Warlaumont (1995) compared ten fashion ads (seven ambiguous ads with three unambiguous ads) among undergraduate students (N = 208). All ads had appeared in magazines between 1988 and 1992. In contrast with the

unambiguous ads, the ambiguous ads did not contain a visible product nor verbal copy that guided the reader to specific virtues or benefits of the product. Hence, the ambiguous ads were more open than the non ambiguous ads. Warlaumont found that all respondents were able to interpret the closed ads, but that approximately six percent was not able to interpret the open ads.

Negative effects of openness on creating the intended interpretation

Two studies (Morgan & Reichert, 1999; Phillips, 1997) suggested that openness negatively affects the creation of the intended interpretation.

Phillips (1997) showed that open ads, besides rendering alternative interpretations, are not always interpreted the way their creators intended. She determined how consumers interpreted ads that we would classify as open. In her study, the open ads contained a visual metaphor, for instance a racket-ad that contained a picture of a shark's jaw stressing the aggressive power of the racquet. In order to determine the interpretations of consumers, Phillips selected six existing ads advertising different products: toothpaste, athletic clothing, racquets, fabric softener, personal organizers, and eyedrops. All verbal copy was removed and the brands were replaced by fictitious brands. Forty-nine undergraduate students watched projected slides of the ads. Among other related questions, they answered the following question, (cf., Forceville, 1996; Mick & Politi, 1989): "What do you think the advertiser was trying to communicate with the ad?" Each ad was shown for two minutes per question. Two researchers created categories of similar interpretations. Subsequently, Phillips interviewed the art directors who created the test-ads to compare the interpretations intended by them with the interpretations of consumers. She only succeeded in catching up on the ad-makers of three (out of six) test-ads, because the ad-makers had changed jobs and therefore were hard to find. Respectively 16%, 48% and 68% of the participants had interpreted the three ads as intended by the ad-makers.

Morgan and Reichert (1999) showed that abstract metaphors are less accurately interpreted than concrete metaphors. Abstract metaphors are likely to be experienced as more open than concrete metaphors, because abstract metaphors rely on comparisons between the product and an intangible characteristic that cannot be directly experienced by one of the five sense organs. For instance, the depiction of a teddy bear in an ad promoting a washing detergent (a concrete metaphor), stresses the softness of the fabric. We can feel the softness using our touch sense. However, the swans in an ad for a Dutch airline company KLM (an abstract metaphor) point to gracefulness that cannot be experienced directly by one of the five senses. It can be argued that the KLM ad less obviously guides towards a certain

interpretation than the detergent ad. Morgan and Reichert selected 13 full-page magazine ads for different products that contained visual and/or verbal metaphors. Metaphors were categorized as either abstract (n = 5) or concrete (n = 8) by an expert panel. For each ad, the researchers used one question to examine what the ad had intended to communicate according to the 103 students that participated in the study. The question directed them to the existence of a comparison (e.g., "Why does the jar of this Clinique product have a Band-Aid on it?). The findings indicated that participants' interpretations of concrete metaphors were judged as more valid than their interpretations of abstract metaphors. This result suggests that respondents' interpretations coincided better with the intended interpretation when the ads provided more guidance.

Positive effect of openness on 'interpretation diversity'

One study (McQuarrie & Phillips, 2005) claimed to have demonstrated that openness increases 'interpretation diversity' *within* consumers. Three studies showed that openness can lead to more different interpretations across consumers (Forceville, 1996; Mick & Politi, 1989; Phillips, 1997). In these studies openness was indicated by the presence of a metaphor.

To establish 'interpretation diversity' *within* consumers, McQuarrie and Phillips (2005) compared three conditions of four ads; a verbal literal condition, a verbal metaphor condition, and a visual metaphor condition. For each ad, participants were shown four possible claims (the same claims for each ad condition per brand). Next, 183 undergraduate students were asked whether the ad condition was designed to communicate these claims. The results showed that participants more often agreed that the ad was designed to communicate these claims when the ad contained a (verbal or visual) metaphor than when a metaphor was absent. This result suggests that ads with metaphors (open ads) will lead to more alternative interpretations within consumers. However, McQuarrie and Phillips (2005) drew consumers' attention to the existence of alternative interpretations in the ad, confronting consumers with alternative interpretations that the ads might have elicited. Participants were told "that advertisers strive to combine pictures and words in ads to create a variety of positive meanings (p. 13)". Consequently, 'interpretation diversity' within consumers was *elicited*. It seems to be problematic to register whether individual consumers create alternative interpretations during exposure to open ads. On the one hand, forced awareness of alternative interpretations might point consumers to a phenomenon they would never think of in daily life. On the other hand, not attending consumers to the possible existence of alternative interpretations would reduce the chances that they would actually write down those alternative interpretations, even when they had actually created them during exposure.

To determine 'interpretation diversity' *across* consumers, Mick and Politi (1989) analyzed the interpretations of 17 undergraduate students, using one open ad that contained a visual metaphor, and showed that this ad was interpreted in various ways across consumers. Forceville (1996) determined whether consumers were able to identify visual metaphors and to what extent they agreed in their interpretation of these metaphors. He selected three Dutch billboards that advertised the same product (IBM computers). These billboards could be regarded as open, because they contained little to no verbal copy and communicated the intended interpretation by a visual metaphor. The participants were 18 members of the Faculty of Arts (Vrije Universiteit, The Netherlands) and 25 conference attendees (Poetic and Linguistic conference in Gent). The participants were exposed to the billboards in a classroom and provided answers to open-ended questions that were adapted from Mick and Politi (1989). Forceville (1996) drew the attention of participants explicitly towards the possibility that alternative interpretations existed. Participants could see each ad for the duration of two minutes per question. As individuals and as a group, the respondents created a variety of interpretations for each billboard. In the study that we already discussed in Section 3.2.2, Phillips (1997) found that consumers created alternative interpretations for each of the six ads that contained a visual metaphor. The studies of Mick and Politi (1989), Forceville (1996), and Phillips (1997) show that openness can lead to a variety of interpretations across consumers. However, we do not know whether the variety of interpretations was a distinctive effect of openness, because the open ads were not compared to closed counterparts. In addition, we do not know whether the occurrence of interpretation diversity is an artifact of the forced exposure situation.

3.3 Attitude towards the ad

Mackenzie and Lutz (1989) defined attitude towards the ad as "A predisposition to respond in a favorable or unfavorable manner to a particular advertising stimulus during a particular exposure occasion" (p. 49). Many studies in which open ads are examined, used the label attitude towards the ad (e.g., Arias-Bolzmann, Chakraborty & Mowen, 2000; Brett, Lang & Wong, 2003; Dingena, 1994; McQuarrie & Mick, 1999; Toncar & Munch, 2001). Labels that are often used instead of attitude towards the ad, as from now referred to as A_{ad}, are 'ad liking' or 'likeability' (e.g., McQuarrie & Mick, 1992; Warlaumont, 1995). The terms are often used interchangeably (e.g., Mick, 1992; McQuarrie & Mick, 2003a, 2003b; Phillips, 2000). We prefer the term A_{ad} because Brown and Stayman (1992), who analyzed 47 studies in which A_{ad} was measured, concluded that A_{ad} was most frequently used in advertising research. Moreover, A_{ad} might be of a positive or negative nature, whereas, for instance, likeability mainly suggests positive reactions. In this section we discuss how openness might affect A_{ad}. The importance of A_{ad} in advertising research has been studied extensively over the last few decades. Several investigations have demonstrated that A_{ad} has a strong impact on A_{brand} (for an overview, see Heath & Gaeth, 1994), and that A_{brand} influences purchase intentions (e.g., Haley & Baldinger, 1991; MacKenzie & Lutz, 1989; Mitchell & Olsen, 1981).

3.3.1 Possible effect of openness on attitude towards the ad

Arguments in favor of a positive effect of openness on A_{ad}

Openness in ads may lead to a relatively positive A_{ad} when, (1) consumers experience pleasure in *searching* for an interpretation, (2) when *creating* a plausible interpretation is considered as a reward, (3) when consumers experience openness as pleasantly incongruent with their expectations of advertising, (4) when consumers view openness as an intelligent form of communication that they appreciate, and (5) when openness decreases counterargumentation.

First, openness might lead to a more positive A_{ad} when consumers *like to search for an interpretation* when confronted with an open ad. The pleasure aroused by the activity of trying to create an interpretation can be considered as an intrinsically aesthetic reward (McQuarrie & Mick, 1992; Phillips & McQuarrie, 2004), just as people like to process art or a poetic text (McQuarrie & Mick, 1992, 1999, 2003a, 3003b). This pleasure is described by semioticians as the pleasure of making meanings, of participating in interpretation creation, or enjoying an open text (Barthes, 1977; Eco, 1979).

Ambiguity in ads can offer excitement in a similar way as riddles do (Perracchio & Meyers-Levy, 1994). When an ad is presented in curiously ambiguous codes (e.g., openness), the viewer may become pleasantly involved or stimulated (McQuarrie & Mick, 1999; Warlaumont, 1995).

A second argument in favor of a positive effect of openness on A_{ad}, is that *finding an interpretation is experienced as a reward*. Successfully creating an interpretation is thought to constitute a reward for the delivered cognitive effort of interpreting an ad (McQuarrie & Mick, 1992, 1999; Perrachio & Meyers-Levy, 1994; Phillips, 2000; Phillips & McQuarrie, 2004; Sawyer & Howard, 1991; Tanaka, 1992; Toncar & Munch, 2001; Warlaumont, 1995). This sense of accomplishment and reward may reduce tension and increase feelings of pleasure (Berlyne, 1971, Eco, 1979) that, in turn, may lead to a more positive A_{ad} (McQuarrie & Mick, 1992, 2003a; Mick, 1992). Several researchers argued that consumers will feel a kind of accomplishment (or 'intellectual satisfaction') when they are able to create an interpretation after some decoding effort (Perrachio & Meyers-Levy, 1994; Tanaka, 1992; Warlaumont, 1995). These positive feelings can be compared to the pleasure consumers experience after having solved a puzzle (McQuarrie & Mick, 2003a). In line with this assumption, Phillips (1997) noted that art directors deliberately aim for a certain amount of 'experienced interpretation difficulty', so that consumers experience the created interpretation as a reward for their effort. Note, however, that it is possible that consumers do not regard creating an interpretation as a reward when the text is an ad. Because not all consumers are interested in the persuasive message and because consumers know that the message will always be the same ('buy this product, because...'), consumers might not experience feelings of pleasure after 'unraveling' an open ad (Phillips, 1997; Warlaumont 1995).

Third, when *openness is experienced as (moderately) incongruent*, the attitude towards open ads can become more positive. Previous research suggests that ads that do not match expectations of advertising in general, influence A_{ad} in a positive way, provided that those ads do not strongly mismatch expectations (Berlyne, 1971; Loef, 2002; McQuarrie & Mick, 2003a; Meyers-Levy & Tybout, 1989; Peracchio & Tybout, 1996; Warlaumont, 1995). Consumers will experience open ads as deviating from regular ads because of their lack of guidance towards a certain message. It is likely that a positive effect of openness on A_{ad} is related to consumers' perceptions of an open ad as (moderately) incongruent with their expectations of advertising.

Fourth, openness may lead to a relatively positive A_{ad} when it *appeals to consumers' intelligence*. Several authors assume that consumers are irritated by ads that are too literal, because these ads are over-explaining the message and underestimate the intelligence of consumers (Berger, 2001; Boutlis, 2000). Berger (2001) argued that especially for younger people, "a lot of the information that used to seem essential in ads now just seems too literal and unnecessary"

(p. 246). Because consumers have been exposed to the same advertising messages repeatedly, much guidance towards a certain interpretation becomes redundant (Eco, 1979; Petty & Cacioppo, 1996). Too much guidance causes feelings of irritation (Warlaumont, 1995).

Finally, openness might affect A_{ad} positively when it *reduces the amount of counterarguing*. Open ads may lead to less counterarguing than closed ads for several reasons: (a) consumers are distracted by their effort to create an interpretation and 'forget' to argue against the message (McQuarrie & Mick, 1992; Petty & Cacioppo, 1996); (b) after their interpretive effort, consumers have no energy left to argue against the advertised message or messages (Kardes, 1988; McQuarrie & Mick, 1992; McQuarrie & Phillips, 2005; Phillips, 2003), (c) implicit messages are more difficult to counterargue (McQuarrie, 1989); and (d) self-constructed interpretations are more resistant to counterarguing than interpretations explicitly provided by the advertiser (McQuarrie & Mick, 1992; McQuarrie & Phillips, 2005; Messaris, 1997; Petty & Cacioppo, 1996; Toncar & Munch, 2001).

Arguments in favor of a negative effect of openness on A_{ad}

Despite the arguments that explain how openness might positively affect A_{ad}, a negative effect of openness on A_{ad} is plausible. Examining the advertising literature, we discovered three arguments that explain why openness might negatively affect A_{ad}. A negative effect of openness on A_{ad} is likely (1) when consumers experience difficulty while creating an interpretation, (2) when consumers are not able to create an interpretation, and (3) when consumers experience uncertainty whether the created interpretation is the one intended by the advertiser.

When the amount of guidance towards an interpretation decreases, consumers might experience more interpretation *difficulty*. Several authors argue that consumers do not want, or like, to spend much time and effort in trying to understand what an advertiser wants to communicate (Franzen, 1997; Phillips, 2003; Phillips & McQuarrie, 2004; Toncar & Munch, 2001; Warlaumont, 1995). When confronted with an ad that is difficult to understand, consumers might become irritated, because they do not have the time or energy to create the interpretation themselves (McQuarrie & Phillips, 2005; Nelson & Hitchon, 1995; Perrachio & Meyers-Levy, 1994).

When consumers are *not able* to create an interpretation, a negative effect of openness on A_{ad} can be expected (McQuarrie & Mick, 1999, 2003a; Phillips, 2000, 2003; Sawyer & Howard, 1991; Toncar & Munch, 2001; Warlaumont, 1995). A decrease in amount of guidance towards an interpretation is likely to increase the chance that no interpretation can be created. When consumers, after some decoding effort, are not able to create an interpretation, feelings of frustration or irritation may lead to a more negative A_{ad} (Dingena, 1994; McQuarrie, 1989; McQuarrie & Mick, 1999, 2003a). Several

authors argued that a positive effect of openness on A_{ad} requires that consumers create an interpretation (Kardes, 1988; McQuarrie & Mick, 1992; 1999, 2003a; Mick, 1992; Peracchio & Meyers-Levy, 1994; Phillips, 2000).

Finally, a negative effect is to be expected when openness increases the experienced *uncertainty* of consumers about whether the created interpretation is the one intended by the advertiser. When consumers create an interpretation without knowing whether the created interpretation is the one intended by the advertiser, they might feel dissatisfied. These feelings of dissatisfaction are very much the same as feelings of displeasure that, for instance, arise after completing a verbal riddle without knowing whether the riddle is correctly solved. Peracchio and Meyers-Levy (1994) argumented that when ambiguous ads do not allow consumers to verify their created interpretations, a negative effect on A_{ad} can be expected.

3.3.2 Previous research on the effect of openness on attitude towards the ad

Positive effect of openness on A_{ad}

Three studies, conducted by McQuarrie and Mick (1992; 1999; 2003b), indicated that openness results in a more positive A_{ad}. Although McQuarrie and Mick determined the effects of tropes and schemes, we focus on the results concerning the presence of tropes (puns and metaphors). McQuarrie and Mick argued that schemes contain redundant cues that all point to the same interpretation, whereas tropes are devoid of cues and therefore incomplete, leaving room for different interpretations. Hence, ads with tropes may be considered as more open.

The procedures in the three studies by McQuarrie and Mick were for the most part the same: (a) A_{ad} was measured as the mean score of three items: 'like-dislike', 'pleasant-unpleasant', and 'enjoyable-not enjoyable'; (b) A_{ad} was measured after respondents had seen each ad in a booklet (or fictitious magazine in study three), without restrictions on viewing time; (c) all ads had the same layout; a prominent color picture on top and a headline and fictitious brand at the bottom; and (d) in all three studies a pre-test was carried out to make sure that possible differences in A_{ad} could not be caused by differences in 'experienced interpretation difficulty'.

In 1992 McQuarrie and Mick compared conditions with and without a pun (verbal wordplay with a picture that reinforced the wordplay) of four selected ads, which advertised for a flashlight, a telephone, a diet dessert, and tea. For each ad, the conditions had the same layout except for the headlines that were altered in such a way that the pun was removed. For instance, in the ad containing a picture of a flashlight and some gift wrap, the headline was altered

from 'The Gift Idea That Leaves Everybody *Beaming* [italics added]', into 'The Gift Idea That Leaves Everybody *Happy* [italics added]'. A pretest showed that the ads with a pun were judged as containing more multiple meanings, thus rendering them more open than the ads without a pun. A total of 112 undergraduates participated in the experiment. All participants received the instruction that they should look at the ads as they would normally do in a magazine, and that the study was meant to pretest some ads. The results showed a more positive A_{ad} for the ads with a pun (open condition) compared to their counterparts without a pun (closed condition). In order to generalize the results, McQuarrie and Mick replicated the experiment with 107 adult participants. The results showed, once more, that A_{ad} was more positive for the ads containing a pun. However, McQuarrie and Mick compared ad conditions that were not difficult to interpret. A pretest that used side-by-side comparisons, showed no differences in 'experienced interpretation difficulty' between the pun ads and their counterparts without a pun on a scale that ranged from 1 (*clear at glance*) to 9 (*puzzling*). In order to check whether the positive effect of pun presence on A_{ad} would hold for ads that are more difficult to interpret they included a skiwear ad for which a manipulation check showed that the condition with a pun was (a) more difficult to understand and (b) more confusing than the counterpart condition without a pun. For the skiwear ad, the condition with a pun showed a more negative A_{ad} than the condition without a pun. This result indicated that a negative effect of openness was related to 'experienced interpretation difficulty', although this conclusion was based on one single ad only.

In 1999 McQuarrie and Mick changed the pictorials of four ads to render conditions with and without visual rhetorical figures. McQuarrie and Mick created two conditions for each of the four selected ads, advertising for mascara, yogurt, a remedy for motion sickness, and almonds. One condition contained a visual rhetorical figure (a metaphor or pun), while in the counterpart condition the visual rhetorical figure was removed without changing other elements in the ad. For instance, the motion sickness remedy ad contained a visual metaphor by showing a picture of a seat belt whose buckle was the product package of the motion sickness remedy. McQuarrie and Mick removed the visual metaphor by separating the package from the seat belt and moving it further back on the seat so that it no longer served as a seat belt buckle. A manipulation check showed that the ads with the visual figures were equally difficult to understand as the ads without rhetorical figures. A total of 187 undergraduate students viewed one of the versions and received the same instruction as in the previous study. The results showed that A_{ad} was more positive for the ads containing a trope, compared to their counterparts without a trope.

McQuarrie and Mick (2003b) conducted a third study in which the effects of visual and verbal rhetorical figures (metaphors and puns) in ads were analyzed. However, this time the effects were determined when participants were

instructed to focus on the editorial copy (instead of on the ads as in their previous experiments). Undergraduates (N = 242) were exposed to eight ads, of which six were taken from their previous studies. These ads contained headlines that guided towards the intended message. For each ad McQuarrie and Mick created a condition with and without a rhetorical figure. The results showed, in line with their studies in 1992 and 1999 that ads with rhetorical figures led to a more positive A_{ad}. The positive effect on A_{ad} was shown for participants that were instructed to focus on the editorial copy in the magazines as well as participants that were instructed to focus on the ads. In sum, the studies by McQuarrie and Mick (1992; 1999; 2003b) showed a positive effect of the presence of rhetorical figures on A_{ad}, suggesting a positive effect of openness on A_{ad} (but only when openness is not experienced as more difficult).

Negative effect of openness on A_{ad}

Two studies, conducted by Phillips (2000) and Warlaumont (1995), showed a negative effect of openness on A_{ad}. In these studies openness was realized by the absence of verbal anchoring.

Phillips (2000) established the effects of differences in amount of verbal anchoring for ads that contained a visual metaphor. Because visual metaphors allow different interpretations, visual metaphors indicate openness. However, when visual metaphors are accompanied by verbal copy that anchors the implicit meaning of the visual metaphor, openness decreases. In order to examine the effects of verbal anchoring, Phillips selected three existing color ads (for toothpaste, racquets and sports clothing) that contained a visual metaphor (e.g., the toothpaste ad contained a picture of a string of pearls depicted as a smile). All brands were replaced by fictitious brands. For each ad, three conditions were designed that differed in amount of verbal anchoring. One condition contained no verbal copy (no verbal anchoring), a second condition contained a headline that provided a hint of the message intended by the visual metaphor (labeled as moderate verbal anchoring), and the third condition contained a headline that specified the intended message of the metaphor in the visual (labeled as complete verbal anchoring). For instance, the moderate anchoring headline in the toothpaste ad was expressed as "Flash em", whereas the complete verbal anchoring headline was worded as "Make your teeth pearly white" (Phillips, 2000). A pretest with 26 students showed that the moderate and complete verbal anchoring conditions differed as intended in level of verbal anchoring. The amount of verbal anchoring was measured using two 7-point scales (anchored by *does not tell the meaning of the ad – tells the meaning of the ad* and *does not explain the meaning of the ad – explains the meaning of the ad*). A booklet containing three experimental ads, a different condition for each ad, and two filler ads without a visual metaphor was administered to 96 undergraduates. The undergraduates were instructed to look at the ads as they would normally do in a magazine.

After they had seen the ads, A_{ad} was measured using three items (like/dislike, good/bad, enjoyable/not enjoyable). The results showed that A_{ad} was most negative for the "no verbal anchoring" conditions, followed by the "moderate verbal anchoring" conditions. The highest A_{ad} score was found for the conditions with "complete verbal anchoring". In addition, the results showed that the effect of verbal anchoring was mediated by the difficulty that consumers experienced when they interpreted the ad. A path analysis that established the effect of verbal anchoring on A_{ad} with 'experienced interpretation difficulty' as an intervening variable, showed that the main determinant of A_{ad} was 'experienced interpretation difficulty'. A higher level of verbal anchoring (less openness) decreased 'experienced interpretation difficulty', and thereby enhanced a positive A_{ad}. In addition, Phillips' analysis showed a small negative beta (-.11) for the direct effect of verbal anchoring on A_{ad}. After controlling for the effects of 'experienced interpretation difficulty', A_{ad} was more positive for the 'no verbal anchoring' and 'moderate verbal anchoring' conditions than for the condition with 'complete verbal anchoring' (the 'moderate' and 'no verbal anchoring' conditions did not differ significantly).

In a study by Warlaumont (1995), 208 undergraduate students evaluated seven ambiguous and three unambiguous fashion ads (for a description of the open and closed ads see Section 3.2.2). A_{ad} was measured for each ad on a scale that ranged from 1 (*don't like it at all*) to 5 (*like it very much*). Warlaumont aggregated the mean scores of the ambiguous and unambiguous ads. Her results indicated that the non-ambiguous (closed) ads led to a significantly more positive A_{ad} compared to the ambiguous (open) ads. However, the ambiguous and unambiguous ads advertised for different brands and differed on more features besides ambiguity (e.g., the ambiguous ads featured a black-and-white visual, whereas the non ambiguous ads contained a color visual).

3.4 Summary chapter 3

Overall, advertising theory and research provides arguments both for and against a positive effect of openness on attention, recall, interpretation and attitude towards the ad. Although few of these arguments have been empirically tested, positive effects of openness on attention and recall have been related to the difficulty consumers experience when they have to search for a plausible interpretation, their experienced uncertainty about the correctness of their interpretation, and experienced incongruity with their expectations of advertising, whereas a negative effect of openness on attention and recall has mainly been related to the possibility that consumers avoid making the cognitive effort needed to interpret open ads. There is a risk that consumers do not bother, are not willing, or are not able to create a plausible interpretation; they may create an interpretation that differs from the one intended by the advertiser; they may even form a more negative attitude towards open ads than towards closed ads. On the positive side, when consumers are inclined to elaborate upon open ads, it is possible that open ads leave more room for a diversity of interpretations than closed ads. In addition, when consumers experience pleasure in searching for and creating an interpretation, and when openness is experienced as an intelligent form of communication that is pleasantly incongruent with their expectations of advertising, openness may lead to a positive attitude towards the ad.

Research on indicators of openness has not suggested any effect of openness on attention, though it has shown a positive effect on recall of the ad and its elements; it has also suggested a negative effect on creating any interpretation as well as the intended interpretation, but a positive effect of openness on 'interpretation diversity'. In addition, previous research has suggested positive as well as negative effects on attitude towards the ad. Most of the studies referred to in this chapter used an experimental setting in which consumers were told that the ads were the focus of the investigations. They were invited to study ads, eliciting at least some degree of elaboration. Therefore, we cannot be sure that the conclusions drawn in these studies will hold under more normal viewing conditions.

Chapter 4 | Effects of openness in ads

In this chapter we investigate the effects of openness on attention, recall, interpretation and attitude towards the ad (A_{ad}). We conducted 5 experiments. Each experiment is discussed in a separate section. In three experiments we determined the effects of openness on attention and recall. Approaching natural viewing conditions, infrared eye tracking was used to measure the time consumers spend looking at (parts of) the ad when they browsed through a general audience magazine. In Experiment 1 we established whether open ads maintain attention longer than their closed counterparts. Experiment 2 replicated Experiment 1 and extended it by measuring the effect of openness on ad recall and product recall. In Experiment 3 consumers' attention was measured for a large number of open and closed ads in order to generalize prior findings. In Experiment 4 we determined whether openness influences consumers' ability to create any interpretation, to create the intended interpretation, and to create alternative interpretations besides the one intended, as well as their attitude towards the ad. We tried to create ideal circumstances for open car ads by selecting participants that were highly motivated and capable to interpret car ads. Finally, to generalize the results of Experiment 4, we integrated the dependent variables of all preceding studies (except for recall) into Experiment 5, selecting a representative sample from the Dutch population. In Experiment 2, 4, and 5 we examined whether consumers' need for cognition will moderate the effects of openness on attention, recall, interpretation, and attitude towards the ad.

4.1 Experiment 1: effects of openness on attention

4.1.1 Introduction

In our content analysis of magazine ads, described in Chapter 2, we found an increase of openness in ads between 1980 and 2000. An explanation for this increase may be that advertisers anticipate a positive effect of openness on consumers' attention to the ad. As discussed in Section 3.1, the advertising literature put forward several arguments in favor as well as against a positive effect of openness on maintaining consumers' attention. As far as we know, only one empirical study established how openness affects consumers' viewing time towards the ad, indicating that differences in openness do not result in differences in viewing time (McQuarrie & Mick, 1992). However, in this study McQuarrie and Mick instructed participants to process ads. Due to this instruction all participants may have been highly motivated to process the ads, and, consequently, may have been inclined to pay much attention to the open as well as the closed ads (as indicated by an average viewing time of nearly 13 seconds for both open and closed ads). In the present experiment we determined the effect of openness on viewing time in more natural conditions: we showed ads in real magazines, we did not explicitly instruct consumers to look at the ads, and we used a relatively unobtrusive eye-tracking device.

Because open ads do not explicitly guide consumers towards an intended message, consumers may need their specific knowledge about the brand to be able to create an interpretation when confronted with an open ad. Consequently, consumers may be inclined to look longer at the brand elements in open ads than in closed ads. Hence, we formulated the following research question and hypothesis:

R1: Does openness affect attention to the ad?

H1: Openness increases attention to the brand.

4.1.2 Method

Material

We selected two car ads, one for the Nissan Patrol GR and the other for the Lexus GS300, from an international magazine that focuses on ads (*Lürzer's Int'L Archive*), and a third ad for Jack Daniels whiskey. We based the selection of these ads on five criteria. The ads: (1) did not explicitly guide towards a specific interpretation; (2) contained a prominent picture; (3) contained no verbal copy, or verbal copy that was easy to remove without compromising the ad; (4) had never appeared in Dutch magazines in order to avoid effects of prior exposure; and (5) it had to be possible to make the open ad more closed by adding a headline (Figure 4.1.1).

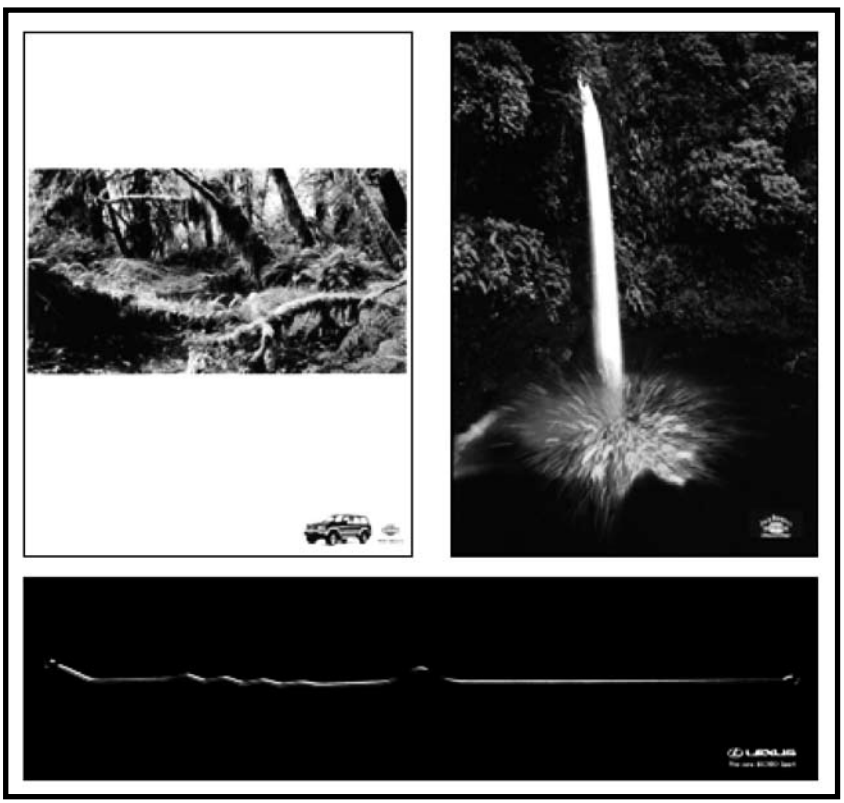


Figure 4.1.1. *Ads selected in Experiment 1*

For each ad we created an open and a closed condition. The open condition was the existing magazine ad without the verbal copy. The closed condition was created by inserting a headline that guided the reader towards the most likely message of the ad's picture (as in Phillips, 2000). Hence, for each ad, both conditions were identical except for a headline that was only present in the closed condition. We derived the headlines from the results of a pre-test in which 4 judges determined the most likely interpretation(s) of the ads (as in McQuarrie & Mick, 1996). The Nissan ad depicted a dense green forest with a triangular traffic sign showing a picture of a deer. Because the traffic sign was placed in the forest, the ad suggested that for a Nissan even an impenetrable forest is like a road. Based on the interpretation of the four judges, we formulated the following headline for Nissan: "Geen terrein is onbegaanbaar voor de NISSAN Patrol GR" [No terrain is inaccessible for the Nissan Patrol GR]. The Lexus ad, already discussed in Section 3.2, showed an unfolded hairpin on a black background. Because the hairpin was unfolded, the ad suggested that for a Lexus a hairpin bend is like a straight road. The accompanying headline was: "Voor een Lexus is zelfs een haarspeldbocht als een rechte weg" [For a Lexus even a hairpin bend is like a straight road]. The Jack Daniels ad showed a waterfall splashing into red and orange flames on the rocks below. The falling water was intended as a metaphor for a sip of Jack Daniels, the flames as a metaphor for its unexpected fiery taste. The headline was: "Een slok Jack Daniels...de vurige smaak" [A sip of Jack Daniels...the fiery taste]. In order to create comparable conditions we printed all ads in color on full pages and placed the brand and logo in the right corner of the ad.

Manipulation check

In order to establish whether the conditions differed in openness as intended, we measured experienced openness for each ad condition using three 7-point semantic differential item scales. A total of 229 participants scored whether the ad (a) '*scarcely / strongly guides towards the message*', (b) '*is a riddle to me / is not a riddle to me*', and (c) '*does not explain / explains the message*'. The last item corresponded to the item used by Phillips (2000) to measure the level of verbal anchoring in an ad. The term 'message' was clarified as "what the advertiser wanted to communicate about the advertised brand". We averaged the responses on the three items to form a scale indicating experienced openness (α = .91; 1 = *very open*, 7 = *very closed*). Participants were randomly selected from a database (with 200000 persons, representative of the Dutch population) by research agency TNS NIPO. The participants were roughly equal in gender, as 48% of the participants was male and 52% was female. Their age ranged between 18 and 85 (M = 47, SD = 15.76). The research agency divided the participants, in advance, in subgroups A and B. Group A (n = 116) was confronted with the open conditions of Lexus and Jack Daniels, the closed Nissan condition, and a dummy ad. The dummy ad was used to

obtain an indication of the relative score of the test-ads on the openness scale. The other group (n = 113) was confronted with the counterpart conditions of these ads (two closed conditions and one open condition) and the same dummy ad. Group A did not differ significantly from group B in gender (54% vs. 50% females, $\chi^2(1, N = 229) = .34$, $p = .60$, two-tailed), age (M = 47 in both groups, $t(227) = 0.08$, $p = .94$, two-tailed), number of cars per household ($M = 1.11$, $M = 1.13$, respectively, $t(227) = 0.23$, $p = .82$, two-tailed), and prosperity ($M = 2.63$, $M = 2.75$, respectively, $t(226) = .83$, $p = .41$, two tailed; 1 = *high prosperity*, 5 = *low prosperity*). We compared the scores of our experimental ads with a dummy ad (an existing ad for Mitsubishi). The dummy ad highly resembled a closed ad as it contained many elements (e.g., a headline, body copy, and visual presence of the product) that guided the reader towards the message that Mitsubishi produces economical cars. The results of the manipulation check are presented below in Section 4.1.3.

Participants

The participants (N = 216) for the actual experiment were randomly selected from the database of the marketing-research agency 'Research International' (with 10000 persons, representative of the Dutch population). Of the participants 50% was male and 50% was female. Their age ranged from 18 to 55 years. Respondents were paid for their participation.

Design

The experimental ads were inserted in two identical copies of a well-known and broadly distributed weekly magazine (*HP De Tijd*) in the Netherlands. The magazine was a shortened version of an issue that participants had not seen before. We created two copies of the magazine that were identical except for the experimental ads. One copy included two open conditions and one closed condition. The other copy contained the counterpart conditions (one open condition and two closed conditions). We inserted both conditions of the same brand on the same spot in both copies. Two ads were positioned in the beginning of the magazine and one in the middle. All ads were placed on the right page and for each brand the ad conditions had the same counter page. The agency Research International randomly assigned the participants to one of the two copies of the magazine (n = 110 and n = 106).

Research instrument

Because the average viewing time for ads is less than 3 seconds, we needed an instrument that enabled us to measure subtle differences in attention. In addition, we preferred an instrument that could unobtrusively measure consumers' attention to different elements in the ad. A suitable instrument is eye-tracking (e.g., Lohse, 1997; Pieters, Rosbergen,

Figure 4.1.2. *Verify eye-tracking instrument*

& Wedel, 1999; Rosbergen, Pieters & Wedel, 1997; Wedel & Pieters, 2000). We used a relatively new eye-tracking instrument, developed by Verify B.V in the Netherlands. The Verify eye-tracking equipment was used in several studies (e.g., Pieters, Rosbergen & Wedel, 1999; Pieters & Wedel, 2004; Wedel & Pieters, 2000). The equipment presents magazines in color on 21 inch LCD monitors (1280 x 1024 pixel resolution). While participants browsed through the magazines at their own pace, their eye movements were recorded by means of an infrared corneal light beam that was reflected from a glass sheet above the magazine to the eye and from the eye back to the glass sheet. Participants were not hampered by electronic equipment on their heads and could move their heads freely within a 30 cm radius (Figure 4.1.2). A camera tracked the position of the head and eye, allowing for continuous correction of position shifts. Another camera tracked the opened pages and linked these with the eye-tracking data. The position of the eye-centre of the participant was measured 50 times per second by the camera. Each measurement (position) is called a sample. Samples last 0.02 seconds. The software provides information about the total number of samples, and the number of samples per element of the advertisement. We measured the average viewing time by counting the total number of samples on the ad's surface and by recoding the number of samples into seconds.

Measures

Attention. We assessed the total viewing time that participants devoted to the ad, and the total time that they viewed all brand elements. Attention to the brand elements included attention to the brand and logo that were placed in the right corner of the ad, as well as attention to all references to the brand in the headline.

Procedure

Participants browsed six (digital versions of) magazines. The magazine that contained the test ads was always shown first. Participants received the following instructions: "We are interested in how people browse through magazines and newspapers; you can browse through the magazine as if you are in a waiting room situation. You will view some magazines, one by one, on the monitor. By touching the right hand side of the screen, you turn over to the next page.

By touching the left hand side of the screen, you will turn back to the previous page". Participants were not instructed to focus on the ads. Participants' eye movements were recorded while they browsed through the magazines at their own pace.

4.1.3 Results

Manipulation check

The manipulation check showed that for each of the three experimental ads, the conditions differed in openness as intended, whereas the dummy ad did not yield differences between the two groups. For each ad, the condition without a headline was judged to be significantly less closed than the condition with a headline (Table 4.1.1, r^2 ranged between .10 and .23). Although we succeeded in creating conditions that differed in openness as intended, the headline conditions of the Lexus and Jack Daniels ads were rated below 3.5 on a 7-point scale. Therefore, in addition the results indicated that all experimental conditions were relatively open, because the dummy ad scored above average (M = 5.3, for both experimental groups). However, for reasons of simplicity, the labels open and closed are used in the next sections to differentiate between the conditions.

Table 4.1.1
Mean Openness Scores for Ads by Condition

Ad	Open	Closed	*t* (*df*)	*p (one-tailed)*
Nissan	2.25	4.08	8.19 (227)	< .01
Lexus	1.61	3.22	8.34 (227)	< .01
Jack-Daniels	1.53	2.37	5.13 (227)	< .01

Note. Openness was measured on a 7-point scale (1 = *very open*, 7 = *very closed*).

Effect of openness on attention

We were in doubt whether openness would affect the duration of attention to the ad (**R1**). Our analyses showed that openness affected attention to the ad negatively. As can be seen in Table 4.1.2, participants spent more time looking at the closed conditions for all three ads (r^2 ranged between .02 and .16). Contrary to our hypothesis (**H1**), openness

decreased attention to the brand (Table 4.1.2). For all three ads the mean viewing time on the brand was lower in the open condition than in the closed condition (r^2 ranged between .06 and .28).

Table 4.1.2
Mean Viewing Time (in Seconds) on Ads and Brands by Condition

	Ad viewing time				Brand viewing time			
Ad	**Open**	**Closed**	***t (df)***	***p*[a]**	**Open**	**Closed**	***t (df)***	***p*[a]**
Nissan	1.33	2.03	4.21 (180)	< .01	0.11	0.44	8.26 (162)	< .01
Lexus	1.63	2.98	5.80 (191)	< .01	0.50	0.68	2.24 (214)	< .05
Jack Daniels	1.92	2.33	2.29 (211)	< .05	0.42	0.80	4.04 (194)	< .01

[a] *p* = two-tailed

4.1.4 Discussion

Using eye-tracking equipment, we explored possible effects of openness on the time consumers spent looking at the ad and the brand. The results showed that openness negatively affected the time consumers spent viewing an ad (R1) and, contrary to our hypothesis (H1), the brand. To our knowledge this is only the second study to focus on openness and attention to the ad, and the first study to investigate the effect of openness in ads on attention to the brand. A study by McQuarrie and Mick (1992) showed no effects of openness on the time consumers spend looking at the ad. However, McQuarrie and Mick argued that future research should replicate their study without instructing the participants to study the ads. They surmised that their instructions might have suppressed a positive effect of openness on attention because consumers may have spent more time looking at closed ads than they would normally have done. Unlike McQuarrie and Mick, we did not instruct participants to look at the ad, we placed the test ads in magazines instead of booklets, and we used a more advanced instrument to measure attention.

A first difference with McQuarrie and Mick's (1992) study is that the viewing times in our experiment were much shorter. We determined the effect of openness on attention in more natural conditions, whereas the participants in McQuarrie and Mick's study were instructed to process ads. Consequently, the shorter viewing times might reflect the processes that take place in real life conditions.

A second difference with McQuarrie and Mick's (1992) study is that our experiment indicated a negative effect of openness on attention to the ad, whereas McQuarrie and Mick found no differences in attention between open and

closed ads. Apparently, consumers avoid investing cognitive effort in ads in general, which corroborates the notions of several authors (Chamblee, Gilmore, Thomas & Soldow, 1993; Franzen, 1997). This finding is important because attention is a prerequisite for an ad to be effective.

There is, however, an explanation for the finding that openness has a negative effect on attention. This negative effect might be due to the fact that the closed conditions contained an extra element: the headline. Participants may have spent more time looking at the closed conditions because of the additional time required to read that headline. For this reason we conducted a second experiment in which we determined the effect of openness on attention to ads that did not differ in amount of verbal copy (see Section 4.2).

Although we predicted that the time consumers spent looking at the brand would increase, the results suggest an opposite effect. Consumers spent less time viewing the brand elements in open ads than the brand elements in closed ones. Again, there is a post-hoc explanation. The difference may be due to the fact that the closed conditions contained more brand elements than the open conditions. In our next experiment we will therefore compare open and closed ads in which the presence of brand elements, and the brand surface is kept constant.

4.2 Experiment 2: effects of openness on attention and recall

4.2.1 Introduction

The goal of this experiment was to replicate our previous experiment in which we examined the effect of openness on attention (Section 4.1). In addition, we established the effect of openness on recall of the ad and the advertised product, and explored whether consumers' need for cognition plays a role in the effect of openness on attention to, and recall of (elements in) the ad.

Effect of openness on attention

Experiment 1 suggested that openness can decrease the time consumers spent looking at an ad. However, that experiment did not provide compelling evidence for this conclusion. The closed ads contained a verbal headline that was missing in the open ads. The headline may very well have caused the difference in viewing time. In order to tackle the problem of differences in verbal-copy presence between the open and the closed conditions in our previous experiment, we created four instead of two conditions. We compared two verbal-copy conditions that contained a headline but differed in openness, and, in addition, compared two visual conditions that differed in openness and in which verbal copy was absent. Experiment 1 suggested that openness can decrease the time that consumers' spent looking at the brand. However, we argued that the closed conditions contained more brand elements than the open conditions which might account for the additional viewing time. In the present experiment we compared open and closed conditions in which we controlled for the presence of brand elements and the brand surface. We formulated the same research question and hypothesis as in Experiment 1:

R1: Does openness affect attention to the ad?

H1: Openness increases attention to the brand.

Effect of openness on recall

As discussed in Section 3.1, recall is important for advertising effectiveness. Several researchers expect a positive effect of openness on recall of (elements in) the ad, using the same arguments that may account for a positive effect of

openness on attention (see Section 3.1). In addition, because consumers use the brand and product in an open ad to create an interpretation, an open ad might encourage brand and product recall. Previous research showed a positive effect of rhetorical figure presence on recall of the brand (Gail & Eves, 1999), product claims (Toncar & Munch, 2001), and other verbal and visual elements in the ad (McQuarrie & Mick, 1992, 2003b). We hypothesized the following:

H2: Openness increases recall of the ad.

H3: Openness increases recall of the advertised product.

Role of need for cognition

According to Peracchio and Meyers-Levy (1994) only highly motivated consumers will try to resolve ambiguity and will search for closure, when exposed to ads. Fiske (1987) argued that consumers with a high need for cognition are willing to spend extra attention to ads that are ambiguous, because of the pleasure they experience when deciphering those ads. We assumed that consumers with a high need for cognition spend relatively more attention to open ads than to closed ads, because they like to search for meaning and feel inclined to create an interpretation. For the same reason, we expected that consumers high in need for cognition will recall open ads and its advertised products relatively better than closed ads and its advertised products. In contrast, consumers low in need for cognition will try to avoid complex cognitive processing, resulting in relatively less attention to -and recall of- open ads. Although no empirical research about the influence of need for cognition on attention to -and recall of- the ad is available, we expected the following interaction effects of openness and need for cognition on attention and recall:

H4: Differences in need for cognition influence consumers' *attention to open and closed ads*: (a) consumers high in need for cognition will devote more attention to open ads than to closed ads, (b) consumers low in need for cognition will devote more attention to closed ads than to open ads, and (c) consumers high in need for cognition will devote more attention to open ads than consumers low in need for cognition.

H5: Differences in need for cognition influence consumers' *recall of open and closed ads*: (a) consumers high in need for cognition will show better recall of open ads than of closed ads, (b) consumers low in need for cognition will show better recall of closed ads than of open ads, and (c) consumers high in need for cognition will show better recall of open ads than consumers low in need for cognition.

H6: Differences in need for cognition influence consumers' *recall of the product* in open and closed ads: (a) consumers high in need for cognition will show better recall of the product in open ads than in closed ads, (b) consumers low in need for cognition will show better recall of the product in closed ads than in open ads, and (c) consumers high in need for cognition will show better recall of the product in open ads than consumers low in need for cognition.

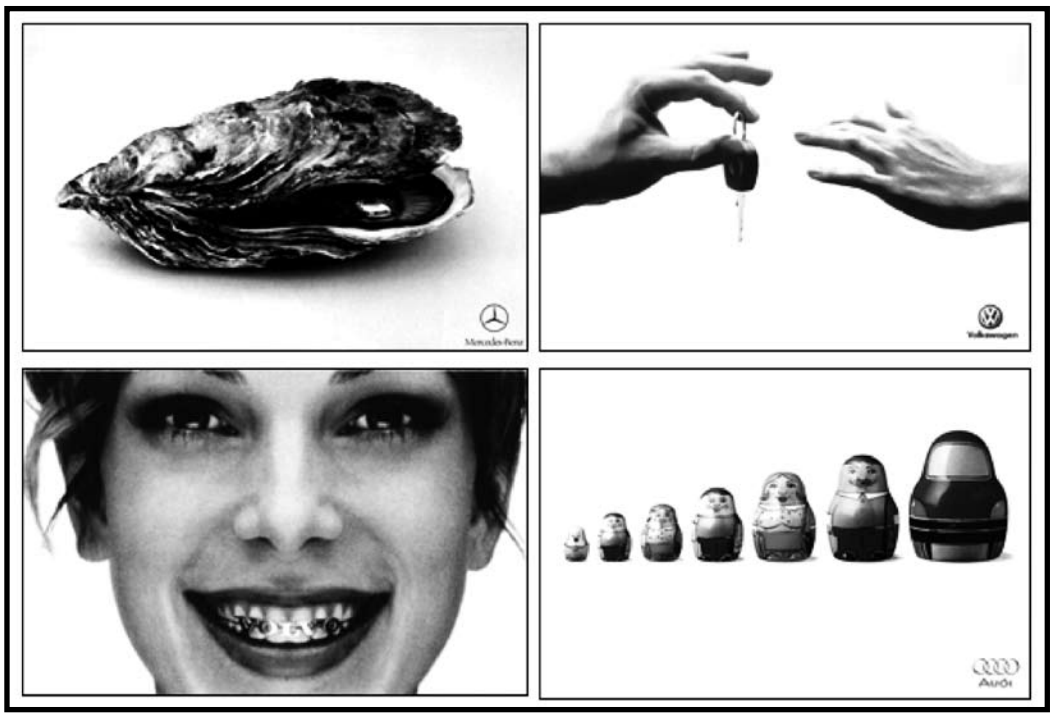


Figure 4.2.1. *Ads selected in Experiment 2*

4.2.2 Method

Material

We selected four car ads (see Figure 4.2.1) from an international advertising yearbook (*Advertising Annual*) and an advertising magazine (*Lürzer's Int'L Archive*). The selection criteria were the same as in Experiment 1 (see Section 4.1).

The selected ads advertised for Mercedes, Volkswagen (two times) and Volvo. We changed the brand of one of the Volkswagen ads into Audi in order to avoid that participants would be confronted with the same brand twice. To increase comparability of the ads, we removed all verbal copy. In the ads for Mercedes, Volkswagen and Audi, we placed the brand and logo in the right corner of the ad, whereas in the Volvo ad, the brand was depicted in the braces.

We created four conditions per ad. For each ad we compared a low *verbal*-guidance condition with a moderate *verbal*-guidance condition, and compared a low *visual*-guidance condition with a moderate-*visual* guidance condition. The verbal-guidance conditions contained headlines that differed in the level of verbal anchoring (as in Phillips, 2000). The low verbal-guidance condition contained a headline that provided less guidance towards the visual's message than the headline in the moderate verbal-guidance condition. The headlines were printed in the same color, font, and size, and were placed under the visual in the middle or left corner of the ad. The low-guidance headlines were formulated the same for all experimental ads: "[Merk] is er" [(Brand) is there]. The formulation of the low-guidance headline was based on the headline in a real Ford ad: "De Probe is er" [The Probe [type of car] is there]. In order to create the moderate-guidance headlines, we showed the ads without verbal copy to 56 first-year students of Communication Science of the Radboud University in the Netherlands. Based on questions designed by Mick and Politi (1989) and used by Phillips (1997) to elicit meanings of visual ads, we formulated the following question: "As you know, advertisers want to sell their product with their ads. Besides that, what do you think the advertiser was trying to communicate with this ad?". Participants had two minutes to answer the question. We based the content of the moderate-guidance headline on the most frequently mentioned interpretation (as in Phillips, 2000). The analyses of the answers concerning the Mercedes ad made it clear that the car, depicted in the oyster, was seen as a pearl. The car was attributed the same characteristics as a pearl: 'unique', 'beautiful' and 'precious'. In addition, the car was compared with the shell (for instance "The car protects its passengers, like a shell protects its pearl"). Because uniqueness was mentioned most often (by 52% of the respondents), we formulated the headline for Mercedes as: "Mercedes is uniek" [Mercedes is unique]. The gold-colored ring attached to the key and the position of the hands of a men and woman in the Volkswagen ad, was experienced as the exchange of wedding rings. Hence, the students associated the visual most often with marriage (62%). The most frequently mentioned association with marriage was: "A connection for ever". For that reason we formulated the moderate-guidance headline of Volkswagen as: "Volkswagen voor altijd" [Volkswagen for ever]. The analyses of the Volvo ad showed that participants associated the metal part around the teeth of the woman with braces that, in due time, enhance beauty. The metal of the

braces protects the teeth and consumers' laughter and beauty. The most often mentioned interpretation was that Volvo protects you so much that you can keep on living your life smiling. Another interpretation was that Volvo protects consumers' beauty after a crash. Protection was mentioned most often (33%), allowing us to formulate the headline as follows: "Volvo beschermt je"[Volvo protects you]. The ad for Audi depicts seven Matrioshka wooden dolls, arranged in size. As the dolls are painted in the same style, they depict one family. The largest doll contains the features of a car. Hence, students most frequently (72%) indicated that: "even a large family will fit inside this car". We formulated the headline for Audi as: "Audi is ruim" [Audi is spacious].

The visual conditions contained no headlines (see Figure 4.2.2). A designer implemented subtle changes in the visuals of the four ads rendering them more open (c.f., McQuarrie & Mick, 1999; 2003b). In the Mercedes ad the small picture of the car in the oyster was removed. The visual of the empty oyster guided less obviously to the associations with the pearl, rendering the ad more open. The golden wedding ring in the Volkswagen was changed into a

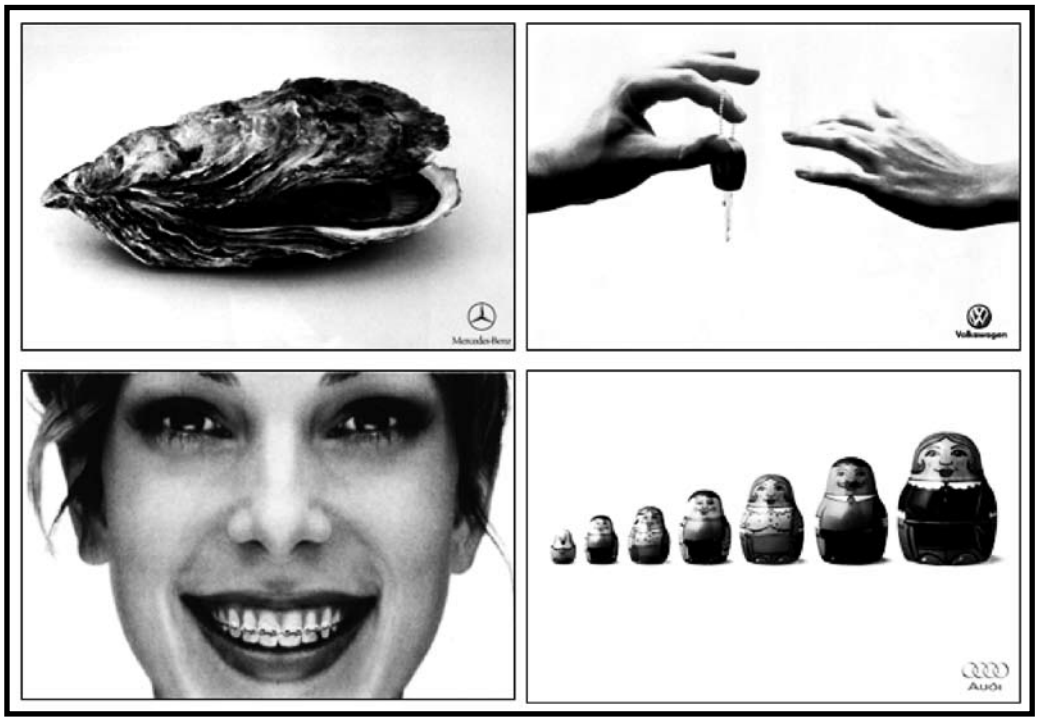


Figure 4.2.2. *Visual manipulations of ads selected in Experiment 2*

metal-colored chain. After the manipulation, only the (position of the) hands suggested marriage, rendering the ad more open. In the Volvo ad, the word Volvo in the brace was removed, creating a brace without text. Therefore, it became less obvious to associate Volvo with the brace, rendering this ad more open. In the Audi ad the doll resembling a car, was changed into an additional member of the family. The depiction of 7 members of a family without the picture of a car, guided less obviously toward the interpretation that Audi is a spacious car.

Manipulation check

As in Experiment 1, we performed a manipulation check to assess the level of guidance of the ad-versions. The research agency 'TNS NIPO' randomly selected 463 participants from a database that was representative of the Dutch population (200000 persons). The research agency randomly divided the participants, in advance, in two clusters. Participants in cluster A were shown the *visual-guidance* conditions, whereas participants in cluster B were shown the *verbal-guidance* conditions. Both clusters were divided into two subgroups in such a way that each participant saw either a moderate-guidance or a low-guidance condition of an ad. Besides four experimental ads, all participants saw one dummy ad. The dummy ad was used to obtain an indication of the relative score of the test-ads on the openness scale. The dummy ad used in cluster A advertised for the brand Mitsubishi, and the dummy ad in cluster B advertised for Fiat. Both dummy ads were existing car ads and contained elements that decreased the level of openness (verbal copy that strongly guided towards the intended message, and visual presence of the advertised product). The dummy ads were used to compare the test-ads with. Subgroups did not differ in age in cluster A (M = 46.47, M = 46.84, $t(227) = 0.08$, $p = .94$, two-tailed), and cluster B (M = 48.90, M = 46.93, $t(232) = 1.01$, $p = .31$, two-tailed); no differences between subgroups were found in gender for cluster A (54% males, 50% females, $\chi^2(1, N = 229) = .34$, $p = .60$) and cluster B (45% males, 55% females, $\chi^2(1, N = 234) = 2.48$, $p = .15$); number of cars per household in cluster A (M = 1.11, M = 1.13, $t(227) = 0.23$, $p = .82$) and cluster B (M = 1.13, M = 1.09, $t(232) = 0.61$, $p = .61$); and in prosperity in cluster A (M = 2.63, M = 2.75, $t(226) = 0.83$, $p = .41$) as well as in cluster B (M = 2.87, M = 2.66, $t(229) = 1.34$, $p = .18$). The experienced openness measure consisted, as in Experiment 1, of three 7-point semantic differentials, anchored by: 1 = *ad scarcely guides towards the message*, 7= *ad strongly guides towards the message*; 1 = *ad is a riddle to me*, 7= *ad is not a riddle to me*; 1 = *ad does not explain the message*, 7 = *ad explains the message*. For each cluster, the responses on the three items were averaged to form a scale indicating the experienced openness in an ad (1 = *very open*, 7 = *very closed*). The reliability of this scale was good in cluster A ($\alpha = .91$) as well as in cluster B ($\alpha = .86$). The results of the manipulation check are presented below in Section 4.2.3.

Participants

In our actual experiment, participants were randomly chosen from the database of the marketing-research agency 'Research International' (10000 persons, representative of the Dutch population). Of the participants (N = 425) 50% was male and 50% was female. Their age ranged from 18 to 55 years. Participants were paid a fee for their participation.

Design

As in Experiment 1, our experiment took place in cooperation with Verify. In the same way as in Experiment 1, we inserted our experimental ads in a shortened issue (35 pages instead of 82 pages) of a Dutch magazine (*HP De Tijd*) that participants had not seen before. The magazine contained twelve ads, including the four experimental ads. The fact that four out of twelve ads advertised for a car was not exceptional; two months earlier the same magazine featured seven car ads, among several other ads. In order to reduce possible effects of a counter page, our experimental ads covered two pages (termed a spread), instead of one page as in Experiment 1. We made four versions of the magazine, each identical in editorial content and filler ads, but different in ad conditions (Table 4.2.1).

Table 4.2.1
Ad Conditions by Magazine Version

	Magazine (*HP De Tijd*)			
Ad	**Version 1**	**Version 2**	**Version 3**	**Version 4**
Mercedes	Low visual guidance	Moderate visual guidance	Low verbal guidance	Moderate verbal guidance
Audi	Moderate visual guidance	Low verbal guidance	Moderate verbal guidance	Low visual guidance
Volkswagen	Low verbal guidance	Moderate verbal guidance	Low visual guidance	Moderate visual guidance
Volvo	Moderate verbal guidance	Low visual guidance	Moderate visual guidance	Low verbal guidance

Per version, the order of the experimental ads in our main experiment was randomized to control for order effects of condition type. We inserted all conditions of the same ad on the same position in each version of the magazine. The experimental ads were placed as the second, fifth, eighth and eleventh ad. The marketing agency Research International randomly assigned the participants to one of the four versions of the magazine (n = 109, n = 110, n = 104, and n = 105). The participants that were exposed to each magazine version were equal in gender (50% male, 50% female), and comparable regarding age ($\chi^2(3, N = 425) = 9.70, p = .54$).

Measures

Attention to the ad. We used the same eye-tracking equipment and measures as in Experiment 1. We assessed the total viewing time that participants devoted to the ad. Attention was measured by counting the number of samples on the ad's surface. Samples were recoded into seconds (a sample had a duration of 0.02 seconds).

Attention to the brand. To determine attention to the brand, we counted the number of seconds (samples) on all parts of the ad in which the brand was present. The brand was always present in the right corner of the ad. In addition, the brand was present in the headline of the verbal conditions, and in the picture of the Volkswagen and Volvo conditions; 'VW' was displayed in the car key and the letters Volvo were displayed in the braces.

Product recall. We measured recall of the product through a post-exposure computerized questionnaire. Participants were seated individually in front of a 21-inch touch-sensitive monitor on which the experimental ads were shown one at a time in random order, in between several other ads. Participants were shown a pixilated picture of the ad in which color, picture, logo and verbal copy were vaguely recognizable but not readable. For each ad, participants indicated the product, choosing from four product names of which one was correct: Mercedes (1 = *car*, 2 = *movie*, 3 = *food (fish)*, 4 = *restaurant*, 5 = *don't know*); Audi (1 = *car*, 2 = *vodka*, 3 = *amusement park*, 4 = *camera*, 5 = *don't know*); Volkswagen (1 = *car*, 2 = *hand-crème*, 3 = *jewelry*, 4 = *real estate agency*, 5 = *don't know*); Volvo (1 = *car*, 2 = *toothpaste*, 3= *facial-crème*, 4 = *lipstick*, 5 = *don't know*).

Ad recall. Recall of the ad was measured using one question. While seeing the ad, participants were asked whether they had seen the ad while browsing through the magazine (1 = *no*, 2 = *yes*).

Need for cognition. We measured need for cognition, using items taken from the need-for-cognition scale by Cacioppo, Petty & Kao (1984) that were translated into Dutch by Pieters, Verplanken and Modde (1987). They used the translated need-for-cognition scale in two studies and reported good reliability coefficients for both studies after dropping three items. Our questionnaire did not leave room for all 15 items of the translated need-for-cognition scale by Pieters, Verplanken and Modde, and for that reason we used a subset of 11 items to measure the concept. Each item consisted of a statement (e.g., "I really enjoy a task that involves coming up with new solutions to problems", followed by a 5-point scale (1 = *strongly disagree*, 5 = *strongly agree*). The item responses were averaged to form a scale (M = 3.54, SD = 0.51, α = .78, N = 425). Participants that received different versions of the magazines, showed no differences in mean need-for-cognition scores (F (3, 425) = 1.58, p = .19, two-tailed). This allowed us to calculate a median need-for-cognition score for the whole group of participants. Participants that scored above the median (Mdn = 3.54) were classified as participants with a high need for cognition, and participants that scored below the median were classified as having a low need for cognition.

Attitude towards advertising. Participants' attitude towards advertising in general has been hypothesized to affect the attitude towards specific ads (Mehta, 2000; Smit & Neijens, 2000). We assessed the attitude towards advertising by means of one question ("What is your opinion about advertising") accompanied by a 5-point semantic differential scale (M = 3.52, SD = 0.85, 1 = *very negative*, 5 = *very positive*). We found no differences in the attitude towards advertising between participants that received different magazine versions; $F(3, 425) = 1.15$, $p = .33$).

Product interest. We used one item to measure participants' interest in the advertised product (M = 3.39, SD = 1.16, 1 = *not at all interested*, 5 = *very interested*). Participants that received different versions of the magazine did not differ in their interest for cars; $F(3, 425) = 0.92$, $p = .43$).

Brand interest. We used one item to measure participants' interest in the advertised brand for each brand separately (1 = *not at all interested*, 5 = *very interested*). On average, participants were "somewhat interested" in the brands: Mercedes (M = 2.60, SD = 1.15), Audi (M = 2.81, SD = 1.20), Volkswagen (M = 2.93, SD = 1.18) and Volvo (M = 2.62, SD = 1.13). The interest for each brand separately, did not differ between participants receiving different versions of the magazine: Mercedes, $F(3, 425) = 0.85$, $p = .48$; Audi, $F(3, 425) = 1.31$, $p = .27$; Volkswagen, $F(3, 425) = 0.44$, $p = .73$; and Volvo, $F(3, 425) = 1.09$, $p = .35$).

Procedure

Participants received one of the four digital versions of the magazine that contained the experimental ads, and were given the same instruction as in Experiment 1. While participants browsed through the magazine at their own pace, their eye movements were recorded. The magazines were shown full spread in color on 21 inch LCD monitors. To provide for a sufficient delay between viewing the ads and the recall measure, participants subsequently performed two unrelated tasks. During about 17 minutes, they browsed through digital versions of five other magazines containing ads for different products. Subsequently they watched a television program for the duration of 10 minutes. Next, product recall and subsequently ad recall were measured. Finally, participants completed a written questionnaire with the measures of, respectively, their (1) attitude towards advertising, (2) need for cognition, (3) interest in the product, and (4) interest in the brand advertised in the experimental ads.

4.2.3 Results

Manipulation check

The manipulation check showed that the verbal conditions as well as the visual conditions differed in experienced openness as intended (Table 4.2.2). For each ad, the low-verbal guidance conditions were judged as more open than the moderate-verbal guidance conditions, although not significantly for the verbal Mercedes conditions. The mean openness scores of the dummy ad for the subgroups varied between 4.49 and 5.50. All conditions, except for the moderate visual guidance condition of Volkswagen, received scores beneath the dummy scores, indicating that all experimental conditions were experienced as relatively open. The possible implications of this latter result are discussed in Section 4.2.4

Table 4.2.2
Mean Openness Scores for Ads by Conditions

Ad	Low verbal guidance	Moderate verbal guidance	*t* (*df* = 232)	*p*[a]	Low visual guidance	Moderate visual guidance	*t* (*df* = 277)	*p* (*one-tailed*)
Volkswagen	3.00	3.97	4.46	< .01	3.66	4.51	3.71	< .01
Mercedes	2.85	3.17	1.36	.09	2.20	3.49	5.67	< .01
Audi	3.90	4.61	6.63	< .01	3.18	3.93	3.10	< .01
Volvo	2.49	3.40	4.26	< .01	2.21	2.92	3.27	< .01

Note. Openness was measured on a 7-point scale (1 = *very open*, 7 = *very closed*).

Effect of openness on attention

Separate t-tests for each ad revealed that openness had no effect on attention to the ad (**R1**). For all ads, the results showed no differences in average viewing time between the low and moderate verbal guidance conditions, and between the low and moderate visual guidance conditions (Table 4.2.3).

In order to check whether our findings replicate the findings of Experiment 1 that verbal copy presence increases attention to the ad, we compared the moderate verbal-guidance condition with the moderate visual-guidance condition (i.e., the non-manipulated version) on attention to the ad (Table 4.2.4). As expected, the results showed that, except for Volkswagen, verbal copy presence increased attention to the ad. Note however, that the difference in

Table 4.2.3
Mean Viewing Time (in Seconds) on Ads by Condition

Ad	Low verbal guidance	Moderate verbal guidance	*t* (*df*)	*p*[a]	Low visual guidance	Moderate visual guidance	*t* (*df*)	*p*[a]
Volkswagen	2.72	2.84	0.51 (214)	.61	2.62	2.81	0.74 (207)	.46
Mercedes	3.58	3.38	0.64 (207)	.53	2.95	2.83	0.47 (214)	.64
Audi	3.52	3.61	0.26 (211)	.80	3.35	3.36	0.03 (210)	.98
Volvo	3.18	3.44	0.11 (210)	.27	3.46	3.04	1.38 (194)	.09

[a]*p = two-tailed.*

Table 4.2.4
Mean Viewing Time (in Seconds) on Ads by Condition

Ad	Moderate verbal guidance	Moderate visual guidance	*t* (*df*)	*p* (*two-tailed*)
Volkswagen	2.84	2.81	0.11 (211)	.91
Mercedes	3.38	2.83	1.99 (210)	< .05
Audi	3.61	3.36	0.79 (207)	.43
Volvo	3.44	3.04	1.56 (214)	.12

viewing time was only significant for Mercedes and that the effect size was relatively small (r^2 = .02). Combined, these results support our argument that the significant difference in viewing time that was found in Experiment 1 can be attributed to the presence of a headline.

Not confirming our expectation (**H1**), openness did not increase attention to the brand in all ad versions (Table 4.2.5). The results showed no significant differences in attention to the brand between the low and moderate *verbal* guidance conditions of Audi and Volvo, and between the low and moderate *visual* guidance conditions of Volkswagen, Mercedes, and Audi. Only for Volkswagen and Mercedes, attention to the brand was significantly higher in the low verbal guidance condition compared to the moderate verbal guidance condition, although the effect sizes were small (r^2 = .04, r^2 = .01, respectively).

Table 4.2.5
Mean Viewing Time (in Seconds) on Brands by Condition

Ad	Low verbal guidance	Moderate verbal guidance	*t* (*df*)	*p*[a]	Low visual guidance	Moderate visual guidance	*t* (*df*)	*p*[a]
Volkswagen	1.41	1.07	2.81 (182)	< .01	0.95	1.03	0.83 (207)	.20
Mercedes	0.97	0.81	1.65 (207)	< .05	0.51	0.49	0.34 (214)	.34
Audi	0.79	0.76	0.44 (211)	.33	0.52	0.49	0.57 (210)	.29
Volvo	1.96	2.04	0.49 (194)	.31	-	-	-	-

Note. Brand was present in the headline and or in the right corner of the ad. In addition, the brand was present in the visual of Volkswagen and Volvo. The visual conditions of Volvo were not included in the analysis, because these conditions differed in brand presence. [a]*p* = one-tailed.

Effects of openness on recall

All ads were well recalled. However, not confirming our expectation (**H2**), openness did not increase recall of the ad. The results showed no significant differences in recall scores between ads with low and moderate verbal guidance, and between ads with low and moderate visual guidance (Table 4.2.6).

Table 4.2.6
Percentage of Participants that Recognized the Ad by Condition

Ad	Low verbal guidance	Moderate verbal guidance	χ^{2a}	*p*[b]	*n*	Low visual guidance	Moderate visual guidance	χ^{2a}	*p*[b]	*n*
Volkswagen	84%	75%	2.63	.05	216	91%	92%	0.05	.41	209
Mercedes	95%	93%	0.35	.28	208	93%	86%	2.53	.06	216
Audi	88%	87%	0.11	.37	213	91%	95%	1.69	.10	212
Volvo	83%	90%	2.11	.07	212	83%	91%	3.08	< .05	213

[a]*df* = 1. [b]*p* = one-tailed.

The results showed some support for our hypothesis that openness increases recall of the advertised product (**H3**). As shown in Table 4.2.7, recall of the product was higher in the low-verbal conditions than in the moderate-verbal conditions (significant for Audi and Volvo, Cramer's V = .50, V = .17, respectively). Product recall was higher in the low-visual conditions than in the moderate-visual conditions (significant for Mercedes, Audi and Volvo, Cramer's V = .13, V = .32, V = .28, respectively).

Table 4.2.7
Percentage of Participants that Recognized the Product by Conditions

Ad	Low verbal guidance	Moderate verbal guidance	χ^{2a}	p^b	*n*	Low visual guidance	Moderate visual guidance	χ^{2a}	p^b	*n*
Volksw.	79%	74%	0.58	.22	215	85%	84%	0.06	.40	208
Mercedes	86%	82%	0.79	.19	208	84%	73%	3.56	< .05	216
Audi	86%	38%	52.11	< .01	211	75%	44%	21.52	< .01	210
Volvo	79%	64%	6.00	< .01	211	83%	57%	16.72	< .01	213

[a] *df* = 1. [b] *p* = one-tailed.

Need for cognition

The hypothesis that consumers high in need for cognition will show relatively longer attention to open ads than consumers low in need for cognition (**H4**), was not supported. We tested the hypothesis for each ad separately, using 2 x 2 ANOVAs with need for cognition (high, low) and openness (high, low) as factors, and attention as a dependent variable. The ANOVAs showed no interaction effects and no main effects for need for cognition. In addition, we hypothesized that need for cognition would play a role in the effect of openness on ad recall (**H5**), and product recall (**H6**). We expected that consumers high in need for cognition would show better recall of open ads, and the advertised products, than consumers low in need for cognition. Again, the hypotheses were tested for each ad separately, using 2 x 2 ANOVAs with need for cognition (high, low) and openness (high, low) as factors and ad recall and product recall as dependent variables. Concerning ad recall, the results showed no interaction effect for need for cognition and openness, and no main effect for need for cognition. Almost the same results were found for product recall. The ANOVAs disclosed no interaction effects of openness and need for cognition. The results only showed a main effect of need for cognition on product recall in the verbal conditions of Audi ($F(1, 195) = 3.19$, $p < .01$) and in the visual conditions of Mercedes ($F(1, 203) = 11.29$, $p < .01$). These main effects showed that consumers high in need for cognition had a better recall of the product than consumers low in need for cognition.

4.2.4 Discussion

The main goal of this experiment was to examine possible effects of openness on attention and recall, and the moderating role of consumers' need for cognition. In contrast with Experiment 1, we compared open and closed ads that did not differ in brand presence and amount of verbal copy. Our analysis of open and closed versions of four magazine ads showed no effect of openness on consumers' time spent looking at the ad and brand, and recall of the ad. The results, however, did suggest a positive effect of openness on product recall. Need for cognition had no influence on the effects of openness on attention and recall.

The finding that openness did not affect the time consumers spent looking at an ad, confirmed our idea that the difference in viewing time between open and closed ads in Experiment 1 was due to the discrepancy in verbal copy presence. Our finding in the present experiment that consumers paid more attention to ads with verbal copy than ads without verbal copy, although only significantly more for one ad, provides additional support for this explanation. Corroborating McQuarrie and Mick (1992), the results showed no systematic effect of openness on attention to the ad (R1). Not confirming our expectation (H1), we did not find a positive effect of openness on attention to the brand. These findings counter the expectation of several authors that openness holds consumers' attention towards the ad and brand (Arias-Bolzmann, Chakraborty & Mowen, 2000; MacInnis, Moorman & Jaworski, 1991; McQuarrie & Mick, 1992; Morgan & Reichert, 1999; Mothersbaugh, Huhmann & Franke, 2002; Peracchio & Meyers-Levy, 1994; Phillips & McQuarrie, 2004; Toncar & Munch, 2001; Warlaumont, 1995, 1997).

Our second expectation (H2) was also not confirmed: openness did not increase recall of the ad, and differences in experienced openness did not lead to differences in ad recall. Although openness did not affect recall of the ad, it did have an effect on recall of the product. As expected (H3), openness increased product recall. All ads showed the same pattern: more consumers recognized the product for open ads than for closed ads (the result was significant for 5 out of 8 ad pairs). These findings are consistent with previous studies that found that the presence of rhetorical figures can increase consumers' recall of brands, product-claims, and verbal copy (Gail &Eves, 1999; McQuarrie & Mick, 1992, 2003b; Toncar & Munch, 2001).

We expected that consumers with a high need for cognition would enjoy open ads and be motivated to elaborate on them, and therefore show longer attention (H4) and better recall scores for open ads (H5), and the advertised products (H6) than consumers with a low need for cognition. However, we found no interaction of openness and need

for cognition and no main effect of need for cognition on attention, or on recall of the ad and the product. Apparently need for cognition does not moderate the effect of openness on attention and recall. An explanation is that, although we tried to create natural viewing conditions, the experimental setting may still have motivated consumers to spend more time viewing the experimental ads than they would normally do. Perhaps it is true that need for cognition does not moderate the effects of openness, because consumers do not want to apply cognitive effort to ads in view of the commercial goals involved in advertising.

In sum, our findings show no convincing benefits, or drawbacks, of openness on attention and recall. However, our findings are limited to the relatively few experimental ads examined, because we carefully adapted ads to construct comparable open and closed conditions. First, in order to create comparable verbal conditions, we adjusted the headline without changing the number of words. Second, in order to create comparable visual conditions, we replaced a visual element with another element that looked the same in three of the ads, and we removed a small element of the picture in one ad (Mercedes).

It is possible that we have only looked at a relatively small part of the openness continuum. Our manipulation check, for instance, showed that *all* ad conditions, even the moderate guidance conditions, were experienced as more open than our dummy ads. Openness may have a positive effect on attention when we also look at the more closed part of the continuum of openness. In order to formulate a more definite conclusion about the effect of openness on attention, we conducted an additional study. In Experiment 3, discussed in Section 4.3, we examined the effect of openness on consumers' viewing time, using a much larger sample of experimental ads representing a larger variety of open ads that are positioned either on the more open part or on the more closed part of the continuum of openness.

4.3 Experiment 3: effects of openness on attention, using a large number of ads

4.3.1 Introduction

Experiment 2 suggested that the headlines in the closed ads of Experiment 1 were, to some extent, responsible for the fact that the closed ads received more attention than the open ads in Experiment 1. Ads with a headline received more attention than ads without a headline. We remedied this in Experiment 2 by designing conditions that were more comparable: we created low and moderate-guidance conditions by (1) inserting headlines differing in guidance towards an interpretation, and by (2) removing all verbal copy and manipulating the pictorial. Having done this there were no discernable differences in attention between open and closed ads: consumers spent the same viewing time on closed ads as they did on open ads. For three reasons the generalizability of Experiment 1 and Experiment 2 is limited. First, although we succeeded in creating paired conditions that differed in openness, the manipulation checks in Experiments 1 and 2 showed that all the ads ranged from highly open to moderately open. Therefore, we only looked at a relatively small section of the openness continuum. Second, in Chapter 1 we argued that open ads come in a variety of forms, and so far we have only investigated a small portion of that variety of open ads. Both open and closed conditions of all selected test-ads in Experiments 1 and 2 contained a prominent picture with a visual rhetorical figure, and in all ads (except for Mercedes) the product was not visible. Third, we used a relatively small number of ads. In the present experiment we did not carefully manipulate ads. Instead, we examined a larger number of ads that differed on more characteristics of openness and represent a broad spectrum of open and closed ads. Although, of course, the term 'study' would be more appropriate, we use the term 'experiment' for the purpose of convenience. We formulated the same research question as in Experiments 1 and 2.

R1: Does openness affect attention to the ad?

4.3.2 Method

Material

As in Experiments 1 and 2, our study took place in cooperation with Verify. Verify has been performing eye-tracking research since 1997, and created a database of eye-tracking data for more than 80000 magazine ads. From this database,

we selected all one-page and two-page ads (spreads) that advertised for cars, just like the ads in Experiment 2 and most of the ads in Experiment 1 (2 out of 3), and that were tested in the same magazine used in Experiments 1 and 2 (*HP de Tijd*) or in a similar type of magazine (*Elsevier*) with the same target audience. This selection yielded a sample of 266 car ads. Two coders, trained graduate students, were instructed to code these ads, pair-wise, as either open or closed.

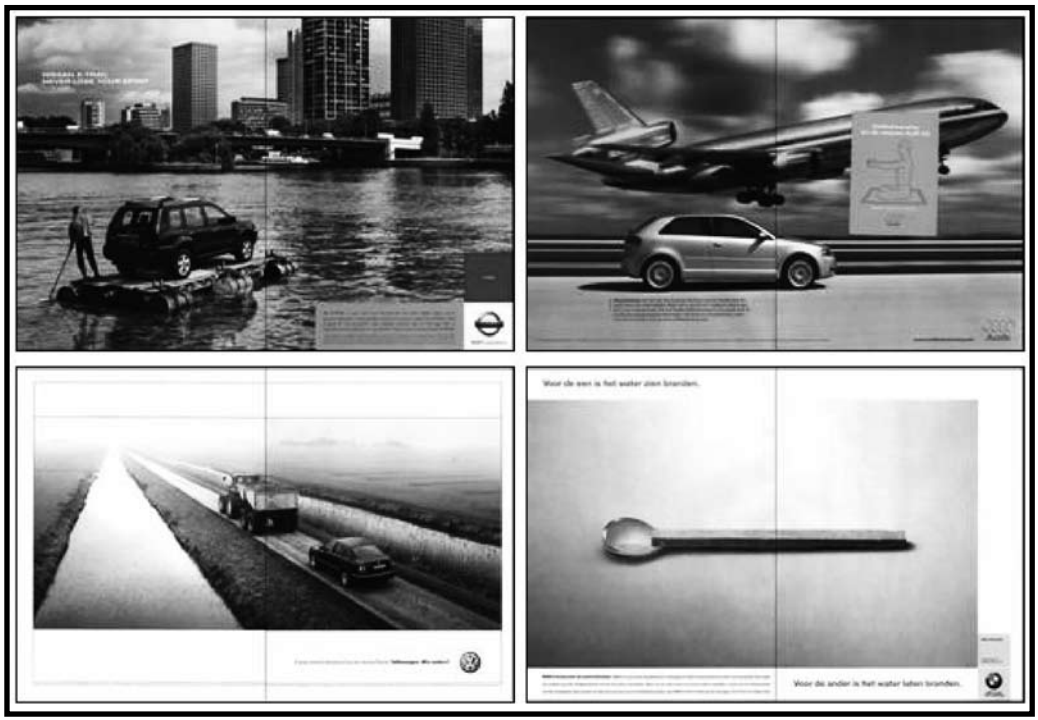


Figure 4.3.1. *Examples of open ads (double page) selected in Experiment 3*

The main criteria were that open ads (1) did not guide the viewer towards a specific interpretation and that they (2) contained a prominent visual. Next, in the group of open ads, the most closed ads were discarded, whereas in the group of closed ads, the most open ones were discarded. Ads that were classified differently by the coders were discussed, and when no agreement was reached, they were discarded. This procedure resulted in a data file with 99 open ads (see Figure 4.3.1 for examples) and 97 closed ads (see Figure 4.3.2 for examples) that advertised for 35 different car brands. The open ads advertised for 25 different car brands, and the closed ads advertised for 30 different car brands.

Figure 4.3.2. *Examples of closed ads (double page) selected in Experiment 3*

Participants

Participants from the database of a Dutch marketing-research agency 'Research International' (with 10000 persons, representative of the Dutch population) had been exposed to the test-ads. The ads were looked at by an average of 114 participants, all aged between 18 and 55 years. More than half (58%) of the ads were examined with male participants only. Because males are probably more interested in cars and, consequently, spend more time looking at car ads than females, we additionally compared the average viewing time between open and closed ads that were only seen by males.

Design

As can be seen in Table 4.3.1, a total of 116 ads (56% of the total ads) were placed in *HP De Tijd*, and 90 ads (44%) were placed in *Elsevier*. The magazines were published between 1997 and 2005. A magazine issue contained a maximum of six test ads.

Table 4.3.1
Number of Ads by Condition per Magazine

	Magazine		
Condition	***HP De Tijd***	***Elsevier***	**Total**
Open	**62**	**37**	**99**
Single page	35	15	50
Double page	27	22	49
Closed	**54**	**43**	**97**
Single page	29	16	45
Double page	25	27	52
Total	**116**	**90**	**196**

Measures

Attention. As in Experiments 1 and 2, attention was measured as the average time participants spend looking at the ad. The average viewing time was measured by counting the total number of samples on the ad's surface and by recoding the number of samples into seconds. Samples last 0.02 seconds.

Procedure

All participants had received the same instructions as in Experiments 1 and 2: participants were not informed that the research topic concerned ads, and were instructed to browse through the magazines as they would do in a waiting room situation. The eye-tracking procedure was the same as in our Experiments 1 and 2: eye movements were recorded while participants browsed through a number of magazines, on average 5, at their own pace.

4.3.3 Results

Table 4.3.2 presents the average viewing times for open and closed ads for single and double-paged ads separately, as the average viewing time for double pages was much higher than the viewing time for single pages (M = 4.1, M = 2.5, respectively, $t(204) = 15.20$, $p < .01$). For both single and double pages there were no significant differences in viewing time between open and closed ads (**R1**).

Table 4.3.2
Mean Viewing Time (in Seconds) on Ads per Page-size by Condition

Ad	Open	Closed	*t* (*df*)	*p* (*two-tailed*)
Single page ads	2.51	2.42	0.62 (103)	.54
Double page ads	4.04	4.19	0.87 (99)	.38
Total	3.27	3.28	0.06 (202)	.95

Table 4.3.3 illustrates the average viewing times for open and closed ads for single and double-paged ads that were selected from experiments in which only males participated. The results showed no differences in viewing time between open and closed ads that were looked at by males only.

Table 4.3.3
Mean Viewing Time (in Seconds) for Males on Ads per Page-size by Condition

Ad	Open	Closed	*t* (*df*)	*p* (*two-tailed*)
Single page ads	2.65	2.80	0.90 (61)	.37
Double page ads	4.35	4.30	0.22 (55)	.38
Total	3.39	3.58	0.94 (116)	.35

4.3.4 Discussion

The aim of this experiment was to investigate whether the findings from Experiment 2 about the effects of openness on attention could be generalized to a larger sample of ads. Rather than carefully manipulating openness, and comparing a limited number of open and closed ads, we compared a large sample of open ads with a large sample of closed ones. We found no differences in viewing time between open and closed ads (R1). Apparently, the absence of differences in attention between open and closed ads is not restricted to the carefully manipulated ads from Experiments 1 and 2, but characterizes a larger population of ads. This again suggests that open ads do not hold consumers' attention longer than closed ads, although our conclusion is still restricted to car ads in Dutch magazines.

Openness does not affect the rather limited attention to ads in general. We do not know why openness has no effect on viewing time. It is possible that consumers are not willing to put any more effort into open ads than closed ads. However, it is also possible that consumers need only a few seconds to create an interpretation for closed ads as

well as open ones. Kroeber-Riel and Esch (2000) argued that consumers need no more than a few seconds in order to extract information from ads that contain a prominent image and a headline. It is possible that consumers do not even attempt to find an interpretation, browsing to the next page as soon as they identify an ad (open or closed) as an ad.

We may conclude that ad makers should not choose openness in an attempt to hold consumers' attention. Whether openness is interesting for advertisers depends on other possible advantages or disadvantages of openness, such as the effects of openness on A_{ad} and on how consumers interpret open ads. However, if the positive effects that are often attributed to open ads only materialize if open ads retain more attention than closed ones, then these open ads probably do not offer any advantages at all. The effect of openness on interpretation and Aad is the major topic that we will address in the following sections (Experiments 4 and 5).

4.4 Experiment 4: effects of openness on interpretation and attitude among car branch students

4.4.1 Introduction

Given the increasing appearance of open ads in magazines over time, reported in Chapter 2, advertisers seem to expect that the open strategy is effective. However, Experiments 1, 2 and 3 revealed no effects of openness on *attention* to the ad and the brand, and ad recall, and an advantage of open ads over closed ads on product recall. In this experiment we will measure the effects of openness on *interpretation* and *attitude towards the ad* (A_{ad}). Contrary to Experiments 1 and 2, in which we selected participants representative of the Dutch population, the effects of openness in Experiment 4 were investigated among students of a car-academy. By selecting participants that were interested in cars and highly capable to interpret car ads, we aimed at increasing the chances of a positive effect of open ads on interpretation and A_{ad}. Following Petty and Cacioppo's (1996) Elaboration Likelihood Model, the likelihood that consumers elaborate upon an (open) ad and create an interpretation depends upon their motivation and capacity to interpret the ad. And if, as suggested by McQuarrie and Mick (1999), appreciation for open ads is contingent upon the search for and the discovery of an interpretation, appreciation for these ads should be higher for consumers who are interested in and capable of interpreting the ad.

Effect of openness on interpretation

Due to the relatively low-guidance towards a message, openness seems likely to increase the number of consumers that (a) do not derive any message at all, (b) do not understand the ad's intended interpretation, and (c) create alternative interpretations besides the intended interpretation. On the negative side, consumers might not be willing to spend cognitive energy on ads. And even when they are willing, they may not succeed in creating an interpretation. Correspondingly, research that focused on ambiguous and visual rhetorical ads indicated that openness is likely to increase the number of consumers that are not able to create any interpretation (Dingena, 1994; Warlaumont, 1995) or the intended interpretation (Morgan & Reichert, 1999; Phillips, 1997). On the positive side, open ads may increase 'interpretation diversity' across consumers, which points to the occurrence of one -or more- alternative interpretations next to the intended interpretation (McQuarrie, 1989; Mick & Politi, 1989; Phillips, 1997). When alternative interpretations are created across consumers, a persuasive advantage may arise because the same ad might appeal to

various consumers (Mick & Politi, 1989; Tanaka, 1992), who decide for themselves what interpretation is most relevant. Although no research has yet compared the diversity of interpretations between open and closed ads, prior research that examined ads or billboards containing a visual rhetorical figure suggested that openness may lead to the creation of several interpretations across consumers (Forceville, 1996; Mick & Politi, 1989; Phillips, 1997). We hypothesized:

H1: Openness reduces the likelihood that consumers create any interpretation.

H2: Openness reduces the likelihood that consumers create the intended interpretation.

H3: Openness increases the likelihood of 'interpretation diversity' *across* consumers.

Effect of openness on A_{ad}

The effect of openness on A_{ad} is unclear because prior research has shown positive effects of open ads on A_{ad} (McQuarrie & Mick, 1992; 1999; 2003b), as well as negative effects (Phillips, 2000; Warlaumont, 1995). Moreover, the advertising literature contains several arguments in favor as well as against a positive effect of an open strategy on A_{ad} (Section 3.3).

In this experiment, we examined one possible reason for a *positive* attitude towards open ads: 'experienced scheme incongruity'. Previous research results (e.g., Berlyne, 1971; Loef, 2002) suggest that ads that are experienced as moderately incongruent are likely to be processed more extensively and influence A_{ad} or A_{brand} in a positive way. Consumers are likely to experience open ads as incongruent because of the low level of guidance towards a certain message. This low level of guidance is rather uncommon for advertisements in general.

In addition, we examined two plausible reasons for a *negative* attitude towards open ads: (a) 'interpretation inability' and (b) 'experienced interpretation difficulty'. When consumers are not able to create an interpretation, a negative effect on A_{ad} can be expected (e.g., McQuarrie & Mick, 1999; & Phillips, 2000), although no research to date has confirmed this argument. The notion that 'experienced interpretation difficulty' might lead to a negative attitude towards open ads was supported in two studies (McQuarrie & Mick, 1992; Phillips, 2000). However, further research is justified, as the conclusion of McQuarrie and Mick was based on just one ad, and because the strong correlation between 'experienced interpretation difficulty' and A_{ad} that Phillips found may have been caused by 'interpretation inability'. We formulated the following research question and hypotheses:

R1: Does openness affect the attitude towards the ad?

H4: Openness increases the likelihood that consumers experience ads as incongruent with their expectations of advertising.

H5: Openness increases the likelihood that consumers experience difficulty during interpretation.

H6: Consumers who experience ads as incongruent with their expectations of advertising will develop a more positive A_{ad} than consumers who experience ads as congruent.

H7: Consumers who are not able to create an interpretation will develop a more negative A_{ad} than consumers who are able to create an interpretation.

H8: Consumers who experience difficulty during interpretation will develop a more negative A_{ad} than consumers who do not experience difficulty.

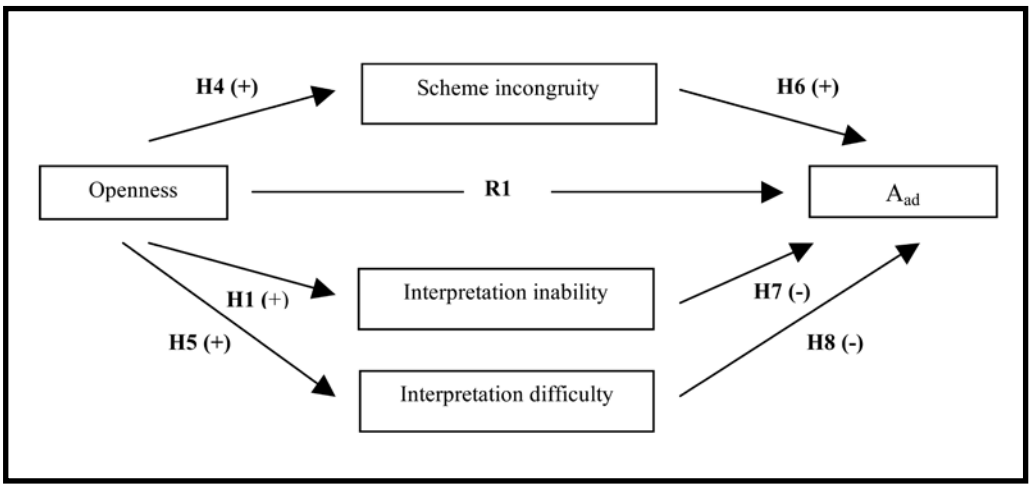


Figure 4.4.1. *An illustration of the research question and hypotheses concerning the effect of openness and A_{ad} and possible mediating variables in Experiment 4*

Role of need for cognition

Several researchers expect that the effect of openness on A_{ad} is related to need for cognition (e.g., McQuarrie & Mick, 1996, 2003a; Phillips & McQuarrie, 2004). Need for cognition refers to differences in the tendency to enjoy effortful cognitive activities. Consumers with a high need for cognition enjoy thinking and are more inclined to engage in

effortful cognitive processing, than consumers low in need for cognition. Need for cognition might yield a relatively positive attitude towards the ad in two ways: (a) it might enhance the chance that consumers engage in a (successful) search for meaning, and (b) it might increase the likelihood that they will enjoy the exercise. Therefore, we expect that openness will lead to a relatively more positive A_{ad} for consumers high in need for cognition than for consumers low in need for cognition. Consumers low in need for cognition will develop a relatively more positive A_{ad} towards closed ads than towards open ads. As consumers with a high need for cognition will strive for closure (Brett, Lang & Wong, 2003; Peracchio & Meyers-Levy, 1994; Toncar and Munch, 2001), they are more likely to create an interpretation when confronted with an open ad. We phrased the following hypotheses:

H9: Differences in need for cognition influence consumers' attitude towards open ads: (a) consumers high in need for cognition will show a more positive attitude towards open ads than towards closed ads, (b) consumers low in need for cognition will show a more positive attitude towards closed ads than towards open ads, and (c) consumers high in need for cognition will show a more positive attitude towards open ads than consumers low in need for cognition.

H10: Consumers high in need for cognition will experience less 'interpretation inability' than consumers low in need for cognition.

4.4.2 Method

Material

We selected three car-ads that we already used in Experiment 2 (see Figure 4.2.2): full page color ads without verbal copy for Mercedes, Volkswagen and Volvo. We used the same headlines as in Experiment 2 to create open and closed conditions. Low-guidance headlines were used to create open conditions and moderate-guidance headlines to create closed conditions. The low-guidance headlines did not relate to the picture and were identical for Mercedes and Volkswagen, except for the advertised brand (e.g., "Mercedes is er" [Mercedes is there], as in Experiment 2). Because we did not want respondents to be exposed to the same open headlines, we formulated the low-guidance headline for Volvo as: "Rij Volvo" [Drive Volvo]. The moderate-guidance headlines slightly guided towards an intended interpretation: "Mercedes is uniek" [Mercedes is unique], "Volkswagen voor altijd" [Volkswagen forever], and "Volvo

beschermt je" [Volvo protects you]. The headlines contained approximately the same number of words and were all placed in the same position below the pictorial.

Manipulation check

We tested whether the low-guidance and high-guidance conditions differed in openness as intended. Although the ads were already tested in the manipulation check in Experiment 2, we decided not to use these results because the participants differed between Experiment 4 (students of a car-academy) and Experiment 2 (participants representative of the Dutch population). It is likely that the students of the car academy that participated in Experiment 4 have stronger associations with the advertised car brands than the participants in Experiment 2. As argued in Section 1.2, experienced openness might be dependent on the level of brand anchoring. Hence, we performed a new manipulation check. A total of 124 first year students from the Institute for the Car Branch and Management (IVA), all male and between the ages of 18 to 26, were divided in two groups, in such a way that each participant saw only one condition of two experimental ads. While completing the questionnaire, participants viewed the ads without restrictions on viewing time. They rated the experienced openness of the ad on three 7-point semantic differential items: (a) 'ad scarcely / strongly guides towards the message', (b) 'ad is a riddle to me / is not a riddle to me', and (c) 'ad does not explain / explains the message'. We averaged the responses on the three items to form a scale. The reliability of this scale was good (α = .87, 1 = *very open*, 7 = *very closed*). The results of the manipulation check are presented below in Section 4.4.3.

Participants

As in the manipulation check, participants were first-year students of the Institute for the Car Branch and Management (IVA) in Driebergen the Netherlands (N = 148). The ages of the participants ranged from 18 to 26, and all were male. None of the students refused to participate, although no incentive was offered. None of these students had participated in the manipulation check.

Design

We compiled two booklets, each with three experimental ads and the same BMW filler-ad. The filler ad was a closed ad with verbal copy and was used to mask the purpose of the study. The first booklet contained the open condition for Mercedes, the closed condition for Volkswagen, the BMW filler-ad, and the open condition for Volvo. The second booklet contained the closed condition for Mercedes, the open condition for Volkswagen, the filler-ad for BMW, and the

closed condition for Volvo. We randomly assigned the participants to one of the two booklets. All participants received an additional booklet with questions, so that they could fill out the questionnaire while inspecting the ads.

Measures

Interpretation. After participants had seen an ad, they responded to a question about the ad's meaning. Based on questions designed by Mick and Politi (1989) and used by Phillips (1997) to elicit interpretations for highly visual ads, we formulated the question as follows: "As you know, advertisers want to sell their product with their ads. Besides that, what do you think the advertiser was trying to communicate with this ad?" The free-writing responses showed whether the participants were able to create an interpretation, whether they created the intended interpretation, and whether they created various interpretations. Participants had two minutes per ad to answer the question. Two coders independently classified the interpretations in categories created by the authors. Initial agreement, measured by Cohen's kappa, ranged from .88 to .92 for the three ads. Differences were resolved through discussion (as in Phillips, 1997). Responses were labeled as '*interpretation inability*' when the participants (a) did not provide a written response, meaning that they were unwilling or unable to answer the question, (b) indicated not to understand the ad, (c) gave a literal description of what was seen in the ad (e.g., "It's a car in a shell"), or (d) wrote down a response that had no relation with the advertised brand or product, for instance a positive or negative response towards the ad itself such as "This is a beautiful ad". Participants created the *intended interpretation* when the written response corresponded with the intended interpretation category that was determined in the pretest preceding Experiment 2 ("unique" for Mercedes, "lasting" for Volkswagen, and "safe" for Volvo, see Section 4.2.2). As in Phillips (1997), we measured the *diversity of interpretations*, across participants. We measured 'interpretation diversity' by counting the number of different interpretation categories, including the intended interpretation, per ad condition.

Attitude towards the ad. We measured A_{ad} by means of an (a) overall grade on a 10-point scale (M = 5.95, SD = 2.11, 1 = *very negative* and 10 = *very positive*), and (b) using four 7-point semantic differential items: 'like / not like'; 'irritating / not irritating'; 'appeals / does not appeal' and 'pretty / ugly'. The first item was used in previous experiments that measured attitude towards ads that can be considered as open (McQuarrie & Mick, 1992, 1999, 2003b; Warlaumont, 1995; Phillips, 2000). Item three was taken from the study of Mitchell and Olson (1981). We averaged the responses on the four items to form a scale (α = .86, M = 4.22, SD = 1.61, 1 = *negative* A_{ad}, 7 = *positive* A_{ad}).

Experienced interpretation difficulty. We measured 'experienced interpretation difficulty' using one item on a 7-point semantic differential (M = 4.05, SD = 2.07, 1 = *straightforward*, 7 = *confusing*). This item was used in a scale by

McQuarrie and Mick (1992, 1999) and Phillips (2000) to determine whether ads that can be regarded as open were difficult to interpret.

Experienced scheme incongruity. We measured 'experienced scheme incongruity' on a 7-point scale (M = 4.95, SD = 1.75, 1= *very expected*, 7 = *very unexpected*, as in Heckler and Childers (1992), and Loef (2002).

Need for cognition. To measure participants' need for cognition, we used a slightly shortened version of Pieters, Verplanken and Modde's (1987) translation of Cacioppo, Petty, and Kao's (1984) original scale. We already used this 11-item scale in Experiment 2. The item responses were averaged to form a scale. The reliability of the scale was good (α = .78, 1 = *low need for cognition*, 7 = *high need for cognition*). Participants that received different versions of the magazines, showed no differences in need-for-cognition scores (M = 3.51, M = 3.61, $t(146)$ = 1.31, p = .26, two-tailed). This allowed us to calculate one median need for cognition-score for the total group of participants. Scores above the median (Mdn = 3.63) were classified as a high need for cognition, and scores below the median were classified as a low need for cognition.

Attitude towards advertising. As in Experiment 2, we measured attitude towards advertising using a 5-point semantic differential scale (M = 3.71, SD = 0.80, 1 = *very negative*, 5 = *very positive*) that was preceded by the question: "What is your attitude towards advertising?". We found no difference in attitude towards advertising between participants that received different booklets (M = 3.74, M = 3.68, $t(146)$ = 0.46, p = .65, two-tailed).

Procedure

The booklets were randomly administered to students in six different classes during regular class hours. Separate booklets - matching the order of the ads - contained the questions, so that participants could fill out the questionnaire while inspecting the ads. Participants first answered a question designed to elicit interpretations, and subsequently rated their A_{ad} (overall grade point) on a ten-point scale. After the participants answered these questions for the first ad, they answered them for the second, third (filler) and fourth ad. Participants then returned to the first ad and answered questions (7-point semantic differential items) about Aad, 'experienced scheme incongruity', and 'experienced interpretation difficulty'. Thereafter they answered these questions for the remaining ads. The questionnaire concluded with the need-for-cognition items, and the attitude towards advertising item. Participants were not allowed to browse back and forth in the booklets. They finished the questionnaire in approximately 30 minutes.

4.4.3 Results

Manipulation check

The results suggest that the low-guidance and moderate-guidance conditions of all three ads differed significantly in experienced openness as desired. For each ad, the low-guidance condition was judged to be more open than the moderate-guidance condition (Table 4.4.1). The low-guidance conditions all scored below the midpoint (4.0) of the openness scale, whereas the moderate-guidance conditions for each ad scored close to the midpoint of the openness scale. The possible implications of the fact that almost all experimental conditions were experienced as somewhat open, will be discussed in Section 4.4.4.

Table 4.4.1
Mean Openness Scores for Ads by Condition

Ad	Low-guidance	Moderate-guidance	*t* (*df*)	*p* (*one-tailed*)
Mercedes	3.34	4.04	2.23 (80)	< .01
Volkswagen	3.32	3.91	1.73 (81)	< .05
Volvo	2.87	4.26	4.24 (81)	< .01

Note. Openness was measured on a 7-point scale (1 = *very open*, 7 = *very closed*).

Effect of openness on interpretation

As hypothesized (**H1**), more participants were unable to create an interpretation for the low-guidance conditions (Table 4.4.2). An interpretation was created less often in the low-guidance than in the moderate-guidance conditions of the Volkswagen and Volvo ads. However, the difference in 'interpretation inability' between the low and moderate-guidance conditions of Mercedes proved not to be significant. Cramér's *V* ranged from low to moderate.

Table 4.4.2
Percentage of Participants Experiencing 'Interpretation Inability' by Condition

Ad[a]	Low-guidance	Moderate-guidance	χ^2 (*df* = 1)	*p*[b]	*V*
Mercedes	6%	3%	.75	.19	.07
Volkswagen	20%	3%	10.84	< .01	.27
Volvo	44%	3%	34.43	< .01	.49

Note. [a]*n* = 148 for each ad. [b]*p* = one-tailed. 'Interpretation inability' was measured on a 2-point scale (0 = *inability to interpret,* 1 = *ability to interpret).*

As predicted (**H2**), openness decreased the number of participants that created the intended interpretation. For all ads, more participants created the intended interpretation in the moderate-guidance condition than in the low-guidance condition (Table 4.4.3). Cramér's *V* ranged from moderate to high.

Table 4.4.3
Percentage of Participants Creating the Intended Interpretation by Condition

Ad[a]	Low-guidance	Moderate-guidance	χ^2 (*df* = 1)	*p*[b]	*V*
Mercedes (unique)	55%	89%	22.03	< .01	.39
Volkswagen (brand loyalty)	24%	55%	34.50	< .01	.32
Volvo (protection)	30%	89%	54.08	< .01	.60

[a]*n* = 148 for each ad. [b]*p* = one-tailed. Finding the intended interpretation was measured on a 2-point scale (0 = *inability to find the intended interpretation,* 1 = *ability to find the intended interpretation).*

Our hypothesis (**H3**), that openness increased 'interpretation diversity' was confirmed for only one ad (Volvo). For each ad, we established 'interpretation diversity' for those participants who were able to create an interpretation. In all three ads the low-guidance conditions showed more interpretation diversity than the moderate-guidance conditions (Table 4.4.4). However, 'interpretation diversity' also showed up in the moderate-guidance conditions. Cramér's *V* was low.

Table 4.4.4
Number of Different Interpretations Mentioned by More than 1% of the Participants by Conditions

Ad	Low-guidance	Moderate-guidance	χ^2 (*df* = 1)	*p*[a]	*V*
Mercedes	7 (*n* = 69)	4 (*n* = 73)	1.08	.15	.09
Volkswagen	8 (*n* = 60)	6 (*n* = 71)	.81	.37	.08
Volvo	9 (*n* = 41)	5 (*n* = 73)	5.46	<.01	.22

Note. Values enclosed in parentheses represent the number of participants that created an interpretation. [a]*p* = one-tailed

Effect of openness on A_{ad}

Openness affected A_{ad} negatively (**R1**). Table 4.4.5 presents the averages of the two measures of A_{ad} for each ad condition. For Volkswagen and Volvo, both measures showed a significantly more positive A_{ad} in the moderate-guidance condition. For Mercedes, the differences between the low and moderate-guidance conditions were not significant. The

effect sizes were relatively small; r^2 ranged from .05 to .17. From here on, only the A_{ad} scale scores are reported because the grade scores produced the same pattern of findings for all hypotheses.

Table 4.4.5
Mean Grade and A_{ad} Scale Scores per Condition by Car-Brand

	Grade				A_{ad} scale			
Ad	**Low-guidance**	**Moderate-guidance**	***t* (*df*)**	***p*[a]**	**Low-guidance**	**Moderate-guidance**	***t* (*df*)**	***p*[a]**
Mercedes	5.73	6.15	1.39 (146)	.17	4.11	4.08	0.10 (146)	.92
Volkswagen	5.65	6.74	3.47 (146)	< .01	4.06	4.76	2.90 (146)	< .01
Volvo	4.68	6.73	5.33 (142)	< .01	3.52	4.81	4.31 (146)	< .01

Note. Grade was scored on a 10-point scale (1= *negative,* 10 = *positive).* A_{ad} was judged on a 7-point attitude scale (1= *negative, 7 = positive),* [a]*p* = two-tailed.

Effect of openness on mediating variables

We continued our analysis by investigating the empirical basis for the argument in favor of a positive effect of openness and the arguments against a positive effect of openness on A_{ad}. Although it seems a forgone conclusion that our hypotheses about at least some of the arguments in favor of a negative effect would outperform the argument assuming a positive effect, we determined how all arguments related to the effect of openness on A_{ad}. As hypothesized (**H4**), openness increased 'experienced scheme incongruity' (Table 4.4.6). The low-guidance condition was experienced as more incongruent with expectations of advertising than the moderate-guidance condition in two out of three ads, although the effect sizes were small. The difference in 'experienced scheme incongruity' between the Mercedes conditions was not significant, although it showed the same pattern. Note that participants experienced all ad versions, both low-guidance and moderate-guidance versions, as rather incongruent with their expectations of advertising (all means above the midpoint of the scale; M = 5.0, SD = 1.7).

Table 4.4.6
Mean Experienced Scheme Incongruity Scores for Ads by Condition

Ad	**Low-guidance**	**Moderate-guidance**	***t* (*df* = 146)**	***P* (*one-tailed*)**	r^2
Mercedes	5.14	4.99	0.55	.29	-
Volkswagen	4.72	4.22	1.90	< .01	.02
Volvo	5.78	4.85	3.17	< .01	.06

Note. 'Experienced scheme incongruity' was measured on a 7-point scale (1= *very congruent, 7 = very incongruent).*

As anticipated (**H5**), openness increased 'experienced interpretation difficulty' (Table 4.4.7). The creation of an interpretation was experienced as more difficult in the low-guidance condition than in the moderate-guidance condition for the Volkswagen and the Volvo ad. The low-guidance and moderate-guidance conditions of Mercedes showed the same pattern yet did not differ significantly in mean 'experienced interpretation difficulty' scores. The effect sizes varied from low to moderate.

Table 4.4.7
Mean Experienced Interpretation Difficulty Scores by Condition

Ad	Low-guidance	Moderate-guidance	*t* (*df* = 146)	*p* (*one-tailed*)	r^2
Mercedes	4.48	4.00	1.56	.06	.02
Volkswagen	4.39	3.23	3.63	< .01	.02
Volvo	5.52	2.72	9.38	< .01	.38

Note 'Experienced interpretation difficulty' was measured on a 7-point scale (1 = *easy*, 7 = *difficult*).

Effect of mediating variables on A_{ad}

We continued our analysis by establishing whether 'experienced scheme incongruity', interpretation inability', and 'experienced interpretation difficulty' related positively or negatively to A_{ad} (Table 4.4.8). Not confirming our expectations (**H6**), 'experienced scheme incongruity' was not related to A_{ad}. Whether consumers experienced ads as congruent or incongruent, did not affect A_{ad}. As anticipated (**H7**), for all test-ads 'interpretation inability' was negatively related to A_{ad}. Participants who were not able to interpret ads, appreciated those ads less than participants who were able to interpret them. As expected (**H8**), for all test-ads there was a significantly negative relationship between 'experienced interpretation difficulty' and A_{ad}. The more consumers experienced difficulty during interpretation, the more negative A_{ad} was.

Table 4.4.8
Correlation Scores of A_{ad} with Experienced Scheme Incongruity, Interpretation Inability, and Experienced Interpretation Difficulty by Condition

	Experienced scheme incongruity			Interpretation inability			Experienced interpretation difficulty		
Ad	*r*	*n*	*p*[a]	*r*	*n*	*p*[a]	*r*	*n*	*p*[a]
Mercedes	.07	142	.40	-.16	148	< .05	-.41	148	< .01
Volkswagen	.01	146	.91	-.36	148	< .01	-.51	148	< .01
Volvo	.12	146	.16	-.41	148	< .01	-.53	148	< .01

[a] *p* = one tailed

As argued in Section 3.3, it is likely that being able to interpret ads will affect the negative relation between 'experienced interpretation difficulty' and A_{ad}, and might even change it from a negative relation into a positive one. However, the results showed that the negative relationship between 'experienced interpretation difficulty' and A_{ad} *did not change* into a positive relationship when we only analyzed the scores of participants who were able to interpret ads. Although the correlations between 'experienced interpretation difficulty' and A_{ad}, were weaker for participants who were able to interpret the ads, they still were clearly negative (Mercedes $r(142) = -.39$, $p < .01$; Volkswagen $r(131) = -.43$, $p < .01$; Volvo $r(114) = -.40$, $p < .01$).

To determine which variables mediate the negative effects of openness on A_{ad}, we performed a regression analysis. We did not include 'experienced scheme incongruity' in the regression analysis because 'experienced scheme incongruity' was not significantly related to A_{ad} for all ads (see Table 4.4.8). Furthermore, we did not perform the regression analysis for the Mercedes ad, because the low-guidance and moderate-guidance conditions of Mercedes did not differ significantly in mean A_{ad}, 'experienced interpretation difficulty' and 'interpretation inability' scores. We created a dummy variable 'openness' to capture the level of verbal anchoring; ads with a low-guidance headline were coded as 0, and ads with a moderate-guidance headline were coded as 1. We performed the regression analysis for Volkswagen and Volvo with (a) 'experienced interpretation difficulty', (b) 'interpretation inability', and (c) openness as predictors. As can be seen in Table 4.4.9, 'experienced interpretation difficulty' and 'interpretation inability' yielded significant regression weights for all ads. No significant regression weights were yielded by openness. No noteworthy decrease in the multiple correlation coefficient occurred when we omitted the non-significant predictor openness in an additional regression analysis. Hence, the negative effect of openness on A_{ad} is almost completely explained by the mediating

Table 4.4.9
Multiple Regression Analysis for Experienced Interpretation Difficulty, Interpretation Inability, and Openness predicting the Attitude towards the Ad

	Experienced interpretation difficulty			Interpretation inability			Openness			
Ad	***B***	***SE B***	β	***B***	***SE B***	β	***B***	***SE B***	β	R^2
Volkswagen	-0.32	.06	-.42*	-1.12	.35	-.24*	-0.15	.22	-.05	.31
Volvo	-0.37	.08	-.45*	-0.80	.39	-.18**	0.09	.35	.02	.29

*$p < .01$, **$p < .05$

variables 'experienced interpretation difficulty' and 'interpretation inability'. As 'experienced interpretation difficulty' and 'interpretation inability' are strongly related, we may conclude that the best predictor for the effect of openness on A_{ad} is 'experienced interpretation difficulty'.

Need for cognition

The hypothesis that need for cognition would interact with the effect of openness on A_{ad} (**H9**) was only supported for one out of three ads. We tested the hypothesis for each ad separately, using 2 x 2 ANOVAs with need for cognition (low, moderate) and openness (high, low) as factors, and A_{ad} as a dependent variable. Only Volvo showed a significant interaction effect of need for cognition and openness on A_{ad} ($F(1, 148) = 4.88$, $p < .05$), albeit in the opposite direction as expected: the attitude towards the low-guidance condition was more positive for participants low in need for cognition than for those high in need for cognition, whereas the attitude towards the moderate-guidance condition was more positive for participants high in need for cognition than low in need for cognition. The ANOVAs showed no main effects for need for cognition.

It was not possible to check whether differences in need for cognition resulted in a differential ability to create an interpretation using 2 x 2 ANOVA's, because nearly all participants were able to create an interpretation for the moderate-guidance conditions of Volvo and Volkswagen and for both Mercedes conditions (see Table 4.4.2). Therefore, the results were analyzed for the low-guidance conditions for Volkswagen and Volvo only, using t-tests for each ad separately (Table 4.4.10). Our hypothesis (**H10**) was only confirmed for Volkswagen. For the low-guidance condition of Volkswagen, participants with a high need for cognition created an interpretation more often than those with a low need for cognition. The effect size was moderate. No significant differences in interpretation between participants high in need for cognition and participants low in need for cognition were found for Volvo.

Table 4.4.10
Percentage of Participants who created an Interpretation per Low-guidance Conditions by Need For Cognition (NFC[a])

Low-guidance ad	Low NFC	High NFC	χ^2 (*df* = 1)	*p* (*one-tailed*)	*V*
Volkswagen	67%	92%	7.69	< .01	.32
Volvo	54%	60%	0.24	.31	-

[a]Split at the median. $n = 148$ for each ad.

4.4.4 Discussion

The aim of this experiment was to determine whether differences exist in consumers' interpretation of, and attitude towards, ads that differ in openness. In addition, we explored the role of need for cognition as a potential interacting variable of openness effects. By investigating car ads among male students in the automobile branch, we aimed to ensure high levels of interest and knowledge, because we wanted to increase the chances of a positive effect of openness on interpretation and A_{ad}. Despite these optimal conditions for open ads, our main conclusion is that openness has a negative influence on interpretation and A_{ad}, regardless of consumers' need for cognition. The best predictor for the effects of openness on A_{ad} was 'experienced interpretation difficulty'. Put in other words, the negative effects of openness on A_{ad} are mainly related to 'experienced interpretation difficulty', as implied by Phillips (2000).

We found that openness decreases the chance that participants are able to create any interpretation (H1), as well as the chance that they create the intended interpretation (H2). This corroborates earlier findings (Dingena, 1994; Morgan & Reichert, 1999; Phillips, 2000; Warlaumont, 1995), and strengthens them, because the present experiment used more precise measures and better matched ads. As in earlier studies (Forceville, 1996; Mick & Politi, 1989; Phillips, 1997), our results showed a high diversity of interpretations for open ads. However, this experiment suggests that it is not openness that increases 'interpretation diversity' across consumers (H3), because the closed ads also elicited 'interpretation diversity'. This finding supports Eco's (1979) argument that even a closed ad can lead to unforeseen interpretations (Section 1.4).

We expected that openness would lead to either a positive or a negative A_{ad} (R1). We found a negative effect of open ads on A_{ad}, in line with Phillips (2000) and Warlaumont (1995). Even the participants in the present experiment, who were interested in -and knowledgeable about- the advertised product (cars), did not appreciate open ads more than closed ones.

We investigated one possible reason for a *positive* effect of openness on A_{ad}: 'experienced scheme incongruity'. As expected (H4), openness in ads increased the likelihood that consumers experienced scheme incongruity. However, contrary to the findings of several researchers (e.g., Berlyne 1971; & Loef, 2002), 'experienced scheme incongruity' did not correlate with A_{ad} (H6).

We investigated two possible reasons for a *negative* effect of openness on A_{ad}: (a) 'interpretation inability', and (b) 'experienced interpretation difficulty'. First, as expected (H7) and in line with previous results (e.g., McQuarrie

& Mick, 1999, 2003a; Phillips, 2000, 2003; Sawyer & Howard, 1991; Toncar & Munch, 2001; Warlaumont, 1995), our experiment showed that not being able to create an interpretation was negatively related to A_{ad}. This is a negative effect of openness, as more consumers were unable to interpret open ads than closed ones. In addition, consumers had a negative A_{ad} towards open ads, regardless of whether they were able to interpret them or not. Second, confirming our hypothesis (H8), and consistent with McQuarrie and Mick (1992), and Phillips (2000), our results showed a more negative A_{ad} when participants experienced difficulty creating an interpretation. Likewise, open ads were experienced as more difficult to interpret than closed ones (H5). A multiple regression analysis, in which we included the variable openness, showed that the best predictor for the effect of openness on A_{ad} was 'experienced interpretation difficulty'.

Contrary to our expectations (H9) and those of several authors (Brett, Lang & Wong, 2003; McQuarrie & Mick, 1996, 2003a; Peracchio & Meyers-Levy, 1994; Phillips & McQuarrie, 2004; Toncar & Munch, 2001), need for cognition did not moderate the effect of openness on A_{ad}. We found no interaction effect of need for cognition with openness (except for one ad) and no main effect of need for cognition. We were not able to determine whether need for cognition moderates the effect of openness on consumers' ability to interpret ads (H10), because nearly all participants were able to create an interpretation for each test-ad.

For one ad (Mercedes), different levels of openness did not affect consumers' ability to create an interpretation, their experienced difficulty creating an interpretation, or A_{ad}. This corroborates our finding that 'experienced interpretation difficulty' is highly predictive for A_{ad}. The results for the Mercedes ad might be due to the fact that the closed condition of the ad was relatively difficult to interpret (see Table 4.4.7). The headline in the moderate-guidance condition should have guided participants towards the interpretation that Mercedes is a unique car (as a pearl is). However, several male students at the car academy have not been able to infer this intended message from the picture (30% of the participants created the interpretation "Beautiful" when seeing the closed condition of Mercedes). In addition, the high-guidance headline may have caused irritation among some students who did not believe that pearls are unique or that Mercedes is a unique car. Some participants responded with remarks such as, "Mercedes is not a rare car", or "Huh, are there many pearls in the ocean?"

Although this experiment unmistakably suggests the disadvantages of openness in ads, three issues deserve further attention. The first issue concerns the manipulation of the open and the closed ads. In order to create open and closed conditions that did not differ in amount of verbal copy, we created headlines that slightly or moderately guided the

reader towards an intended interpretation (as in Experiment 2). However, Peracchio and Meyers-Levy (1994) argued that headlines that do not contain relevant information and thus do not let consumers verify the correctness of a created interpretation, will likely lead to irritation. Consumers expect that a headline guides them towards a certain interpretation. Hence, the negative effect of openness on A_{ad} may have been the result of the low-guidance headline. In Experiment 5 we will, therefore, include an open ad without a headline, and will formulate headlines that provide more guidance towards the message than the ones used in the present experiment.

A second point of interest concerns the research population. All the participants in this experiment were male students of a car academy. Although we deliberately selected these male students because of their knowledge about cars and interest in cars, this may limit the validity of our conclusions to this specific population. Furthermore, it remains unclear whether the results would be the same for female consumers. Although Phillips (2000) reported no gender differences in the experienced difficulty to interpret open ads, several researchers have argued that men and women differ in their interpretation of (open) ads (Darley & Smith, 1995; Meyers-Levy & Sternthal, 1991). Darley and Smith (1995) argued that women are better skilled in, and derive more pleasure from, processing highly visual ads than men. Additionally, the selection of highly motivated subjects might have overshadowed any effects of need for cognition. All participants were interested in cars, and were instructed to evaluate the ads, making it likely that participants low in need for cognition were inclined to scrutinize the open ad versions. Therefore, we will re-examine the effect of openness on A_{ad} and interpretation, selecting male and female adult consumers that are representative of the Dutch population.

Finally, the negative effects of openness that we found might be due to the conditions used, which only ranged from low-guidance to moderate-guidance. Perhaps openness has positive effects when we compare low-guidance conditions with high-guidance conditions instead of moderate-guidance ones. Following Phillips (2000), in Experiment 5 we will attempt to create a condition that guides the consumer towards a message more strongly.

4.5 Experiment 5: effects of openness on interpretation and attitude among a representative sample

4.5.1 Introduction

In our previous experiments (see Section 4.1 to 4.4), we hardly found any beneficial effects of openness on attention, recall, interpretation, and attitude towards the ad (A_{ad}). Openness did not increase attention or enhance recall of the ad, facilitate interpretation, or render a more positive A_{ad} than closed ads. Open ads only showed an advantage over closed ads by enhancing product recall, and eliciting 'interpretation diversity'. To be able to strengthen our conclusions and generalize earlier findings, we performed a final experiment into the effects of advertising openness on interpretation and A_{ad}. We re-examined the negative effects of openness found in Experiment 4, by (a) selecting a research population representative of the Dutch population, (b) manipulating openness in a different way, and (c) investigating a broader range of openness.

First, we selected participants more representative of the Dutch population compared to the participants in Experiment 4. We argued (Section 4.4.4) that the use of an expert and highly motivated male student research population in Experiment 4 may have overshadowed the potential effects of the intervening variable need for cognition. Not all consumers are as knowledgeable about cars and the brands advertised in the experimental ads as the male students of the car academy who participated in Experiment 4. Consumers that are not familiar with the advertised brands and products may be less capable of creating any interpretation, the intended interpretation and alternative interpretations besides the intended one. They might be less motivated to interpret open car-ads, thus increasing the chance of finding the alleged influence of need for cognition. Therefore, we re-examined the effects of openness selecting a more varied research population.

Second, we used different conditions than in Experiment 4 to create open and closed ads. In Experiment 4, we used a headline that communicated as little as possible in order to create an open condition. However, this headline may have caused confusion because of it's irrelevant content. Consumers expect that a headline helps them to interpret the ad's message. For this experiment we created an open condition without verbal copy in order to prevent the possible occurrence of confusion because of a low-guidance headline.

Third, in order to generalize the results of Experiment 4 we attempted to investigate a broader part of the openness continuum. We added a high-guidance condition besides the low-guidance and moderate-guidance conditions that we used in Experiment 4. Furthermore, we selected six ads, instead of three ads used in Experiment 4.

In addition, Experiment 5 contained several innovations compared to Experiment 4. Besides car ads we included ads for mobile phones in order to generalize our conclusions concerning the effects of openness on A_{ad} and interpretation; we used a relatively new nonverbal measurement technique to measure A_{ad} (PrEmo); we added attitude towards the brand as a dependent variable; and we included 'experienced interpretation uncertainty' as a possible intervening variable between openness and A_{ad}.

Effect of openness on interpretation

Experiment 4 showed that openness affected interpretation, because participants were less able to interpret open ads and less able to derive the intended interpretation. However, openness did not increase the diversity of interpretations across participants. We phrased the same hypotheses as in Experiment 4:

H1: Openness reduces the likelihood that consumers create any interpretation.
H2: Openness reduces the likelihood that consumers create the intended interpretation.
H3: Openness increases the likelihood of 'interpretation diversity' across consumers.

Effect of openness on A_{ad}

In experiment 4 we found a negative effect of openness on A_{ad}. In this experiment we again determined the effect of openness on A_{ad}. Additionally, we investigated whether consumers who are uncertain about the aptness of their interpretation experience a more negative A_{ad}, than consumers who are certain. In line with Perrachio and Meyers-Levy (1994), we expected that openness would increase the number of consumers that were uncertain about the correctness of their interpretation. We formulated the same research question and hypotheses as in Experiment 4, and added two hypotheses about the influence of 'experienced interpretation uncertainty' on A_{ad}.

R1: Does openness affect the attitude towards the ad?
H4: Openness increases the likelihood that consumers experience ads as incongruent with their expectations of advertising.
H5: Openness increases the likelihood that consumers experience difficulty during interpretation.
H6: Openness increases the likelihood that consumers experience uncertainty about the aptness of their interpretation.

H7: Consumers who experience ads as incongruent with their expectations of advertising will develop a more positive A_{ad} than consumers who experience ads as congruent.

H8: Consumers who are not able to create an interpretation will develop a more negative A_{ad} than consumers who are able to create an interpretation.

H9: Consumers who experience difficulty during interpretation will develop a more negative A_{ad} than consumers who do not experience difficulty.

H10: Consumers who experience uncertainty about the aptness of their created interpretation will develop a more negative A_{ad} than consumers who do not experience uncertainty.

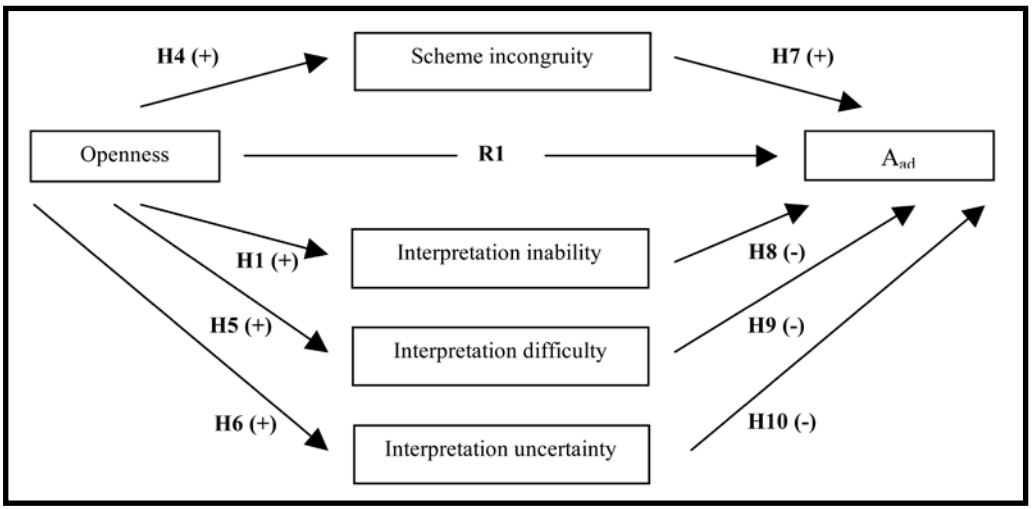


Figure 4.5.1. *An illustration of the research question and hypotheses concerning the effect of openness on A_{ad} and possible mediating variables in Experiment 5*

Effect of openness on attitude towards the brand

In addition to A_{ad}, we measured the effect of openness on consumers' attitude towards the advertised brand (from now on referred to as A_{brand}). Because previous research has shown that A_{ad} positively relates to A_{brand} (Heath & Gaeth, 1994), we expected that openness might affect not only A_{ad} but also A_{brand}. In line with the supposed effects of openness on A_{ad}, we phrased the following research question:

R2: Does openness affect the attitude towards the brand?

Role of need for cognition

Experiment 4 showed that consumers' need for cognition did not influence consumers' A_{ad} towards openness. We formulated the same hypotheses as in Experiment 4:

H11: Differences in need for cognition influence consumers' attitude towards open ads: (a) consumers high in need for cognition will show a more positive attitude towards open ads than towards closed ads, (b) consumers low in need for cognition will show a more positive attitude towards closed ads than towards open ads, and (c) consumers high in need for cognition will show a more positive attitude towards open ads than consumers low in need for cognition.

H12: Consumers high in need for cognition will experience less 'interpretation inability' than consumers low in need for cognition.

4.5.2 Method

Material

We selected three ads that we used in our previous experiments (Lexus, Mercedes and Volkswagen). Additionally, we selected one car ad (Toyota RAV4) and two mobile phone ads (Nokia 3330 and Nokia 8810) on the basis of the criteria formulated in Section 4.1.2. These ads had never appeared in Dutch magazines, except for the Nokia 8810 ad. However, none of the participants indicated to have seen the Nokia 8810 ad before. The selected ads consisted of a picture with one visual object. As in our previous experiments, we removed all verbal copy (if present), and placed the brand in the lower right corner of the ad (Figure 4.5.2). In the Nokia 8810 ad, we removed the pay-off "Connecting People" that was positioned below the brand, and the sentence "Vision in Design" that was located in the glasses case. Also, we removed a picture of two hands reaching out to each other on the grey display of the phone. In the Toyota ad we removed the headline "Full-time 4x4" that was located below the picture. For the Nokia 3330, we removed the sentence "Absolutely absorbing" and the pay-off "Connecting People".

For each ad we created a low, moderate and high-guidance condition. The low-guidance condition consisted of the ad without a headline. To create the moderate-guidance condition, we inserted a headline that gave a clue about the ad's intended interpretation. We created a condition of high-guidance by extending the headline of the moderate-guidance condition in such a way that it explicitly described the ad's intended interpretation. The moderate and high-guidance headlines of the Lexus, Mercedes and Volkswagen ads aimed at the same intended messages as in the previous experiments in which these ads were used. For these ads the moderate-guidance headlines were formulated (translated from Dutch) as follows: for Lexus "Laat de weg voor je buigen" [Bends the road for you], "Pareltje" [Pearl] for Mercedes, and for Volkswagen "Ja ik wil" [Yes I do]. We added sentences to create the following high-guidance headlines: "Laat de weg voor je buigen. De GS300 elke haarspeldbocht een rechte weg" [Bends the road for you. For the Lexus GS300 even a hairpin bend is like a straight road]; "Pareltje. Mercedes SL ...net zo uniek" [Pearl. Mercedes SL....just as unique]; and "Ja ik wil, Volkswagen voor altijd" [Yes I do. Volkswagen forever].

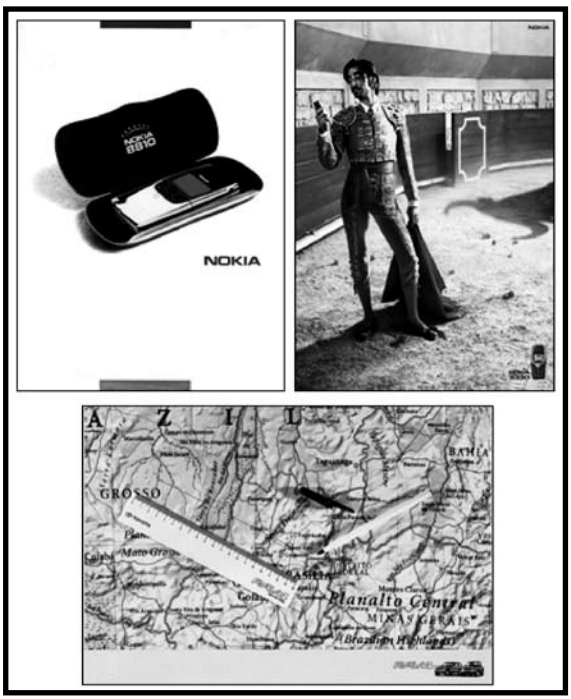


Figure 4.5.2. *The three ads used in Experiment 5 that were not used in Experiment 1-4. The remaining three ads are displayed in Figure 4.1.1 (Lexus) and Figure 4.2.1 (Mercedes and Volkswagen)*

In order to determine the intended interpretation of the Toyota, Nokia 8810 and Nokia 3330 ads, we showed these ads to 22 first-year students of the Department of Communication Science (Radboud University of Nijmegen) and asked them to write down what they thought the intended interpretation was. We formulated the headlines of each ad on the basis of the most frequently mentioned interpretation. Our analyses of the interpretations of the Toyota ad revealed that Toyota owners do not have to follow the main road but can take the shortcut, because Toyota RAV4 performs well at all terrains. Participants associated the Toyota ad with "journey", "adventure", "for every terrain", and "reliability". Because "for every terrain" was mentioned most often (45%), we formulated the high-guidance headline as "Haalbare kaart. De kortste weg kan met Toyota RAV4" ['haalbare kaart' (Feasible route) refers to a map depicting a rough terrain with a lot of mountains. The ruler draws a straight line, suggesting that the roads can be ignored: Take the short cut with Toyota RAV4], and the moderate-guidance headline as "Haalbare kaart [Feasible route]. A large percentage of students (49%) came up with the interpretation that the

Nokia 8810 mobile phone, like glasses, is indispensable and designed for everyday-use. Most students (55%), however, believed that the glasses case referred to the compact size of the mobile phone. For this reason we formulated the high-guidance headline as: "Passend. Nokia 8810. Zichtbaar kleiner" [Fitting. Nokia 8810 visibly smaller], and the moderate-guidance headline for Nokia 8810 as: "Passend" [Fitting]. The careless pose of the toreador in the Nokia 3330 ad, and his intensive look at the mobile phone, made participants think that Nokia 3330 is so seductive and fascinating that it fully absorbs consumers' attention. Hence, the students associated the ad most often with "fascinating temptation" (36%). For that reason we formulated the high-guidance headline as "De verleiding. Alleen oog voor de Nokia 3330" [Temptation. Only eye for Nokia 3330], and the moderate-guidance headline for Nokia 3330 as: "De verleiding" [Temptation] (See Figure 4.5.3).

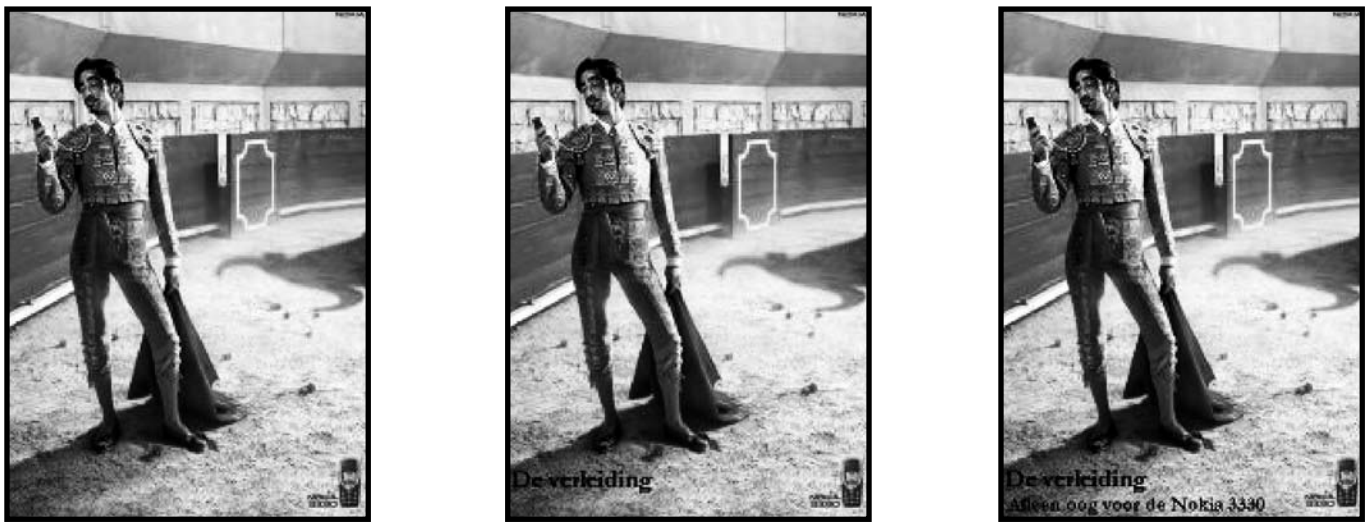


Figure 4.5.3. *The low-guidance, moderate-guidance, and high-guidance conditions of Nokia 3330*

Manipulation check

A manipulation check was conducted to establish whether the ad conditions differed in experienced openness as intended. The research agency 'TNS NIPO' randomly selected 315 participants from a database with 200000 respondents that was representative of the Dutch population. The research agency divided the participants in three groups so

that each participant saw only one condition of each ad (either the low, moderate or high-guidance condition of a particular ad). The groups showed no significant differences in gender; between 47% and 51% of the participants were male ($\chi^2(2, N = 315) = 0.46, p = .79$). Also, no significant age differences ($F(2, 315) = 2.29, p = .10$) were found; the mean age scores (with standard deviations in parentheses) for each group were 48 (15.41), 50 (15.13), and 46 (15.73). In addition, the mean number of cars per household showed no differences between the groups in each cluster ($M = 1.19$, $M = 1.05$, $M = 1.03$, $F(2,315) = 1.94$, $p = .14$). The participants saw all experimental ads and in the end one dummy ad. The dummy ad was used to obtain an indication of the relative score of the test-ads on the openness scale. The dummy ad, an existing car ad that advertised the brand Saab, contained elements that decreased openness, such as verbal copy substantially leading the reader towards a message, and a product that was clearly present in the verbal copy and the picture. The procedure and measures were identical to those used in our previous experiments (see Sections 4.1, 4.2, and 4.4). Experienced openness was measured using three 7-point semantic differential items: 'slightly guide / strongly guide towards the message'; to be 'like a riddle / not like a riddle'; and to 'not explain / explain the message'. The mean score of the three items was used to determine experienced openness in an ad. The reliability of the scale was good ($\alpha = .87$, 1 = *very open*, 7 = *very closed*). The results of the check are presented in Section 4.5.3.

Design

The participants received a computerized questionnaire that they filled in at home, at their own pace (see procedure). They were divided into two clusters (A en B). Participants in each cluster saw three ads (Table 4.5.1): two car ads and

Table 4.5.1
Distribution of Conditions per Group Divided over Two Clusters

	Cluster A			Cluster B		
	Group 1	**Group 2**	**Group 3**	**Group 4**	**Group 5**	**Group 6**
Ad	*n* = 164	*n* = 165	*n* = 156	*n* = 154	*n* = 150	*n* = 168
Volkswagen	Low	Moderate	High			
Nokia 3330	Moderate	High	Low			
Mercedes	High	Low	Moderate			
Lexus				Low	Moderate	High
Nokia 8810				Moderate	High	Low
Toyota				High	Low	Moderate

one mobile phone ad. Participants in cluster A were shown the ads for Volkswagen, Nokia 3330 and Mercedes, whereas participants in cluster B saw the ads for Lexus, Nokia 8810 and Toyota. Each participant viewed a low-guidance, a moderate-guidance and a high-guidance version.

Participants

Research agency 'TNS NIPO' selected 1300 consumers from the same database as used in our manipulation check. Only consumers that had not taken part in the manipulation check, were selected. To ensure that consumers were at least somewhat involved with the advertised products, each consumer owned a mobile phone , and a car was present in their households. Of all consumers 74% (N = 957) returned the questionnaire. No differences were found between the groups in cluster A in participants' interest in cars ($F(2, 484) = 1.36$, $p = .26$) and mobile phones ($F(2, 484) = 2.13$, $p = .12$). The same was true for cluster B: groups in this cluster did not differ in car interest ($F(2, 471) = 0.02$, $p = .99$) and mobile phone interest ($F(2, 471) = 1.03$, $p = .36$). The groups within each cluster were matched in gender, education, and age. The average age in all six groups was 45 years.

Measures

Participants indicated their answers on 5-point scales. We added a 'don't know' category to all scales. When computing aggregated scores, we left out the scores of the 'don't know' category.

Interpretation. We measured whether participants succeeded in creating any interpretation, the intended interpretation, and alternative interpretations, using the same question and procedures as in Experiment 4 (see Section 4.4.2). Two coders independently classified the interpretations into categories, using the categories for the car ads that were developed in Experiment 4. We developed new categories for the mobile-phone ads. Initial agreement, measured with Cohen's kappa, ranged from .86 to .94 for the six ads. For each condition we measured the percentage of participants that were not able to come up with an interpretation. In addition, we coded whether participants created the interpretation corresponding with the intended interpretation category ("lasting" for Volkswagen, "unique" for Mercedes SL, "good road-holding" for Lexus, "all terrain" for Toyota RAV4, "fascination" for Nokia 3330, and "compact" for Nokia 8810). As in Phillips (1997), we calculated "interpretation diversity" by counting the number of different interpretation-categories per ad condition.

Attitude toward the ad. We measured A_{ad} in three different ways. First, as in Experiment 4, we measured A_{ad} with an *overall grade*, using a 10-point scale (1 = *very negative* and 10 = *very positive*). After seeing an ad for the first time,

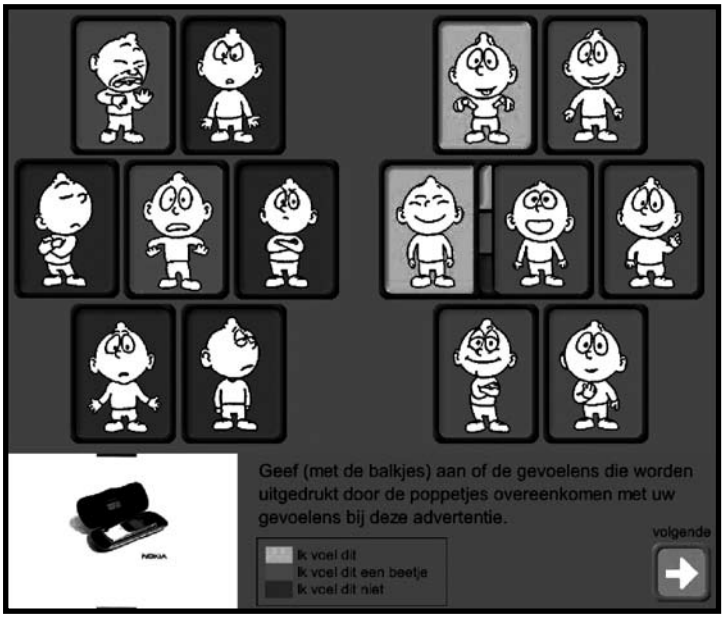


Figure 4.5.4 *Fourteen PrEmo animations*

participants had to answer the question: "Please indicate your appreciation for this ad in an overall grade, where 1 stands for lowest appreciation and 10 for highest appreciation". Second, as in Experiment 4, we measured A_{ad} by constructing a *scale*. We used seven 5-point semantic differential items: 'like / not like', 'irritating / not irritating'; 'appeals / does not appeal', 'pretty / ugly', 'pleasant / not pleasant', 'good / bad', and 'inviting / not inviting'. We averaged the responses on the seven items to form a scale (α = .94, 1 = *very negative*, 5 = *very positive*). The items 'like / not like', 'irritating / not irritating', 'appeals / does not appeal', 'pretty / ugly' were used in Experiment 4, whereas the items 'pleasant / not pleasant' and 'good / bad' were adopted from studies of Mick (1992) and Phillips (2000). Third, we used the instrument PrEmo (see Figure 4.5.4) to obtain a *non-verbal* indicator of A_{ad}. PrEmo is made up of 14 animations, each depicting a separate emotion through facial and bodily expression, and tone of voice (Desmet, Hekkert & Jacobs, 2000). Seven positive emotions (desire, pleasant surprise, amusement, admiration, inspiration, satisfaction, and fascination) and seven negative emotions (disgust, indignation, disdain, unpleasant surprise, dissatisfaction, disappointment, and boredom) were scored on a three-point scale. We asked the participants the following question while they looked at the ad: "Please indicate whether the feelings expressed by the animations coincide with your feelings about this ad". Participants judged on a 3-point scale whether each animation coincided with their feelings (1 = *I feel this*, 2 = *I feel this a little bit* 3 = *I do not feel this*). We made two aggregated scores of the positive emotion-items (α = .90), and negative emotion-items (α = .83).

Experienced interpretation difficulty. As in Experiment 4, we used the item 'straightforward / confusing' to establish 'experienced interpretation difficulty'. In addition, we used three other items: ('obvious / not obvious', 'simple / complicated', 'easy to understand / difficult to understand'). Two items ('straightforward / confusing', and 'easy to understand / difficult to understand') were adopted from a scale used by McQuarrie and Mick (1992, 1999) and Phillips (2000), to determine whether ads were difficult to interpret. For each item, participants answered the

following question: "To what extent you find the ad... [item]?" We aggregated the scores of the four items (α = .86, 1 = *easy*, 5 = *difficult*).

Experienced scheme incongruity. As in Experiment 4, we determined whether participants experienced the ads as incongruent with their expectations of advertising. In addition we measured whether participants regarded the ads as incongruent compared to ads that advertised for the same products (Loef, 2002). We aggregated the scores on both questions (α = .88, 1 = *very congruent*, 5 = *very incongruent*).

Experienced interpretation uncertainty. To obtain an indication of participants' 'experienced interpretation uncertainty' about the aptness of their interpretations, we asked them to answer the following question: "How sure are you that you know what the advertiser is trying to say with this ad" (1 = *very certain*, 5 = *very uncertain*).

A_{brand}. We measured the attitude towards the brand using 13 items on 5-point scales. Participants were asked the question: "To what extent is the following feature applicable to [brand]". The first set of four items concerned general beliefs about a brand: 'weak / strong', 'dull / interesting', 'unsympathetic / sympathetic' and 'unreliable / reliable'. The second set of five items that was only shown for the car brands, stressed certain brand beliefs specifically related to qualities of car-brands ('good road-holding / bad road-holding', 'not unique / unique', 'unsafe / safe', 'temporary / for ever' and 'not fit for all-terrain / fit for all-terrain'). Four of these items coincided with the intended association for each car-brand. ("for ever" for Volkswagen, "unique" for Mercedes SL, "good road-holding" for Lexus, and "all terrain" for Toyota RAV4). The third set of four items that was only shown for the mobile phone brands, stressed certain qualities of mobile phones ('ordinary / exclusive', 'not fascinating / fascinating', 'bad reach / good reach' and 'not compact / compact'). Two of these items ("fascination" for Nokia 3330, and "compact" for Nokia 8810) coincided with the intended brand associations of the two mobile phone ads. For the car-ads we created an aggregated score composed of the four items concerning the brand's beliefs and the five items regarding car features (α = .90, 1 = *very negative* A_{brand}, 5 = *very positive* A_{brand}). For the mobile phone ads we created an aggregated score that we composed using the same four brand-belief items and the four items concerning mobile-phone features (α = .91, 1 = *very negative* A_{brand}, 5 = *very positive* A_{brand}). In addition, we analyzed for each ad separately whether participants scored higher on the item that coincided with the intended brand association.

Need for cognition. We selected 6 items from the 11 items that we used in Experiment 2 and 4 to measure need for cognition. We derived an aggregated score from these 6 items (α = .74, M = 3.55, 1 = *very low need for cognition*, 5 = *very high need for cognition*). The need-for-cognition scores ranged from 3.51 to 3.71 and were slightly higher than neutral. The groups within both clusters did not differ significantly in need for cognition scores. This allowed us to use the same median score (Mdn = 3.67) to distinguish between participants with a high and low need for cognition.

Procedure

The participants received an online questionnaire at home. They could decide for themselves whether they wanted to cooperate with the research. If so, they filled in the questionnaire at home at their own pace, at a moment that suited them best. We informed participants that the questionnaire concerned ads and that they should look at the ads as they would normally do when reading a magazine. Participants were given a practice session with PrEmo, using a sample ad that advertised a smoked sausage for the brand Unox, after which participants saw the first ad. The three ads were shown one after the other, in random order, on a computer screen. The participants looked at the first ad for as long as they wanted. Thereafter, A_{ad} was measured by means of an average grade and, subsequently, by the instrument PrEmo. To obtain an evaluation of both remaining ads, we repeated this procedure for both remaining ads. Thereafter, the participants continued with the open questions to elicit interpretations, the scales concerning 'experienced interpretation difficulty', 'experienced interpretation uncertainty', A_{ad}, A_{brand}, and 'experienced scheme incongruity'. The questionnaire concluded with the need-for-cognition items, followed by some demographic measures. During the whole experiment, each ad remained visible while participants answered the questions. Participants could not switch back to a previous question.

4.5.3 Results

Manipulation check

As expected, all ads showed an increase in experienced openness when verbal guidance decreased (Table 4.5.2). For each ad, participants rated the low-guidance condition as significantly more open than the high-guidance condition. However, the moderate-guidance condition never differed from the low-guidance nor the moderate-guidance condition, as can be seen in the subscripts depicted in Table 4.5.2, except for Lexus. We decided not to report the effects of the moderate-guidance condition on the dependent variables simultaneously with the other conditions, but to discuss these effects in a separate subsection.

As aimed for, Mercedes showed a larger difference in experienced openness between the low-guidance condition and high-guidance condition (a difference of 1.1 points) than the difference in openness between the low-guidance and moderate-guidance conditions we found in Experiment 4 (a difference of 0.7 points, see Table 4.4.1). However, for Volkswagen the difference in experienced openness between the low and high conditions (0.5 points) is slightly smaller than the difference found in Experiment 4 (0.6 points, as can be seen in Table 4.4.1).

The average openness scores of the dummy ad for Saab did not differ between the three groups of participants (M = 3.99, M = 3.98, M = 3.73, $F(2, 256) = 0.64$, $p = .53$).

Table 4.5.2
Mean Experienced Openness Scores for Ad by Condition

Ad[a]	Low-guidance	Moderate-guidance	High-guidance	F[b]	p[c]
Lexus	1.58_a	1.97_b	2.56_c	14.65	< .01
Toyota	2.53_a	2.93_a	3.58_b	9.06	< .01
Mercedes	3.04_a	4.11_b	4.15_b	11.89	< .01
Nokia 3330	3.08_a	3.21_a	4.26_b	14.76	< .01
Nokia 8810	3.59_a	4.08_a	4.90_b	13.55	< .01
Volkswagen	4.35_a	4.83_b	4.84_b	7.44	< .01

Note. Means with different subscripts differ significantly at $p < .01$ by the Scheffé least significant difference test. Openness was measured on a 7-point scale (1 = *open,* 7 = *closed).* [a]n = 315, [b]df = 2, [c]p = one-tailed.

Compared with the dummy ad results, both Lexus conditions were experienced as considerably more open and both Volkswagen conditions were experienced as more closed. In addition, the differences in experienced openness *between the ads* were larger than the differences *between the conditions* of these ads (Figure 4.5.5). As can be seen in

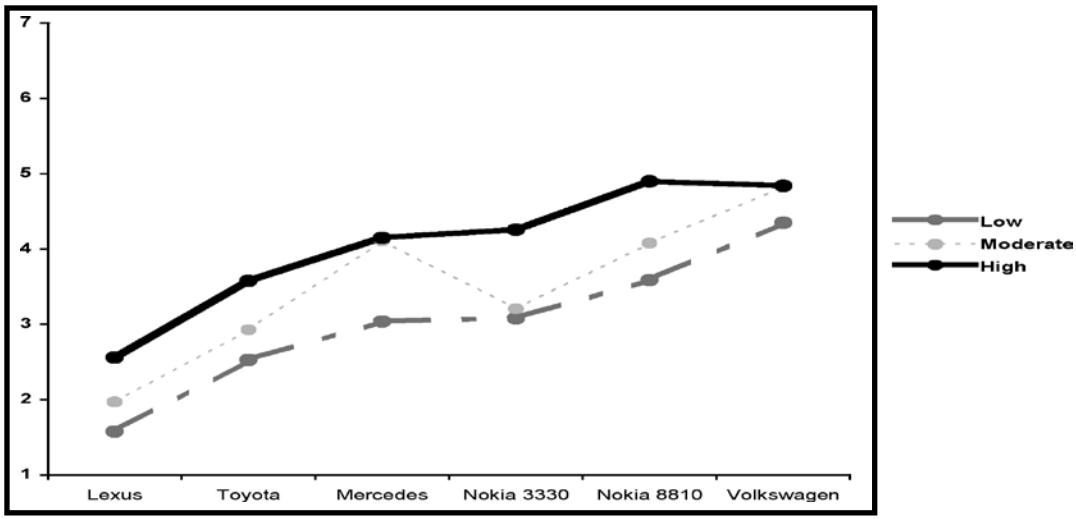


Figure 4.5.5 *Average scores of the six ads and the low and high-guidance conditions on the openness continuum (1 = open, 7 = closed).*

Figure 4.5.5 and Table 4.5.2, the difference in openness between the ads varied between 1.58 (low-guidance condition of Lexus) and 4.90 (high-guidance condition of Nokia 8810), whereas the difference between the conditions was much smaller: the Nokia 3330 ad conditions differed most (between 3.08 and 4.26). In Section 4.5.4 we will discuss if, and how, the relative positions of the test-ads on the openness scale relate to the results on the dependent variables.

Effect of openness on interpretation

Supporting our hypothesis (**H1**), openness decreased the number of consumers that were able to create an interpretation (Table 4.5.3). For all ads, an interpretation was created significantly less often in the low-guidance conditions than in the high-guidance conditions. Cramér's *V* varied from low to moderate.

Table 4.5.3
Percentage of Participants Experiencing Interpretation Inability by Conditions

Ad	Low-guidance	High-guidance	χ^2 (*df = 1*)	*p* (*one-tailed*)	*V*[a]	*n*
Lexus	71%	30%	55.80	< .01	.42	322
Toyota	45%	21%	18.59	< .01	.25	304
Mercedes	19%	14%	1.36	< .01	.06	329
Nokia 3330	35%	14%	18.80	< .01	.24	321
Nokia 8810	21%	10%	7.02	< .01	.15	318
Volkswagen	23%	9%	11.84	< .01	.19	320

[a] *V* = Cramér's *V*. 'Interpretation inability' was measured on a 2-point scale (0 = *inability to interpret,* 1 = *ability to interpret).*

As predicted (**H2**), openness significantly reduced the likelihood that participants created the intended interpretation for all ads (Table 4.5.4). Cramér's *V* was moderate for all ads.

Not supporting our hypothesis (**H3**), openness did not increase 'interpretation diversity' across participants, except for Lexus (Table 4.5.5). For each ad, we only established 'interpretation diversity' for those participants who were able to create an interpretation. Cramér's *V* varied from low to moderate.

Table 4.5.4
Percentage of Participants Creating the Intended Interpretation by Conditions

Ad (Intended interpretation)	Low-guidance	High-guidance	χ^2 (*df* = 1)	*p*[a]	*V*[b]	*n*
Lexus (Good road-holding)	7%	52%	75.63	< .01	.49	322
Toyota (For every terrain)	43%	59%	8.20	< .01	.16	304
Mercedes (Unique)	46%	62%	8.62	< .01	.16	329
Nokia 3330 (Fascination)	24%	49%	21.23	< .01	.26	321
Nokia 8810 (Compact)	32%	82%	91.60	< .01	.54	318
Volkswagen (Brand loyalty)	27%	72%	66.54	< .01	.46	320

[a]*P* = one-tailed, [b]*V*= Cramér's *V*. Finding the intended interpretation was measured on a 2-point scale (0 = *inability to find the intended interpretation,* 1 = *ability to find the intended interpretation).*

Table 4.5.5
Number of Different Interpretations Mentioned by More than 1% of the Participants by Conditions

Ad	Low-guidance	High-guidance	χ^2 (*df* = 1)	*p* (*one-tailed*)	*V*[a]
Lexus	7 (*n* = 44)	8 (*n* = 118)	3.18	< .05	.14
Toyota	4 (*n* = 83)	6 (*n* = 121)	0.00	.50	.00
Mercedes	5 (*n* = 134)	6 (*n* = 141)	0.05	.42	.01
Nokia 3330	12 (*n* = 102)	11 (*n* = 142)	1.12	.15	.07
Nokia 8810	9 (*n* = 133)	7 (*n* = 135)	0.30	.30	.03
Volkswagen	8 (*n* = 126)	7 (*n* = 142)	0.26	.31	.03

Note. Values enclosed in parentheses represent the number of participants that created an interpretation. [a]*V* = Cramér's *V*

Effect of openness on A_{ad}

Openness negatively influenced A_{ad} for four out of six ads (**R1**). Except for Mercedes and Volkswagen, all low-guidance conditions showed significantly lower average grades, lower scores on the A_{ad} scale, lower scores on the positive emotion-scale of PrEmo, and higher scores on the negative emotion-scale of PrEmo, than the high-guidance conditions (Table 4.5.6). Note, however, that the effect sizes were relatively low and that the negative PrEmo emotion-scale showed no significant differences between the conditions of Volkswagen, Mercedes, and Lexus.

Table 4.5.6
Mean Grade, A_{ad} Scale, PrEmo + and PrEmo - Scores per Condition by Car-brand

	Ad	Low-guidance	High-guidance	*t* (*df*)	*p* (*two-tailed*)	r^2	*n*
Grade	Lexus	3.8	4.9	4.80 (320)	< .01	.07	322
	Toyota	5.1	5.7	3.25 (302)	< .01	.03	304
	Mercedes	5.8	6.0	0.75 (327)	.45	-	329
	Nokia 3330	5.0	5.9	4.47 (319)	< .01	.06	321
	Nokia 8810	5.9	6.4	3.12 (316)	< .01	.03	318
	Volkswagen	5.8	5.9	0.82 (318)	.41	-	320
A_{ad} scale	Lexus	2.09	2.37	2.91 (319)	< .01	.03	321
	Toyota	2.47	2.99	4.93 (300)	< .01	.07	302
	Mercedes	3.00	3.12	1.04 (326)	.30	-	328
	Nokia 3330	2.22	2.76	5.40 (317)	< .01	.08	319
	Nokia 8810	2.96	3.43	4.81 (315)	< .01	.07	317
	Volkswagen	2.84	3.03	1.78 (317)	.08	-	319
PrEmo +	Lexus	1.37	1.49	2.06 (320)	< .05	.01	322
	Toyota	1.50	1.68	3.01 (302)	< .01	.03	304
	Mercedes	1.65	1.70	0.73 (327)	.47	-	329
	Nokia 3330	1.34	1.59	4.43 (319)	< .01	.06	321
	Nokia 8810	1.73	1.98	3.69 (316)	< .01	.04	318
	Volkswagen	1.66	1.73	1.06 (318)	.29	-	320
PrEmo -	Lexus	1.73	1.67	0.98 (320)	.33	-	322
	Toyota	1.58	1.40	2.98 (302)	< .01	.03	304
	Mercedes	1.51	1.48	0.50 (327)	.61	-	329
	Nokia 3330	1.76	1.60	0.94 (319)	< .01	.01	321
	Nokia 8810	1.43	1.29	3.01 (313)	< .01	.03	318
	Volkswagen	1.49	1.45	0.74 (318)	.46	-	320

Below, only the attitude-scale scores are used for our analysis, because the Grade and PrEmo measures showed approximately the same pattern of results. We postulated one positive influence of openness on A_{ad}: 'experienced scheme incongruity', and three negative influences: (a) 'interpretation inability', (b) 'experienced interpretation difficulty', and (c) 'experienced interpretation uncertainty' (see Figure 4.5.1). Although we already may conclude that the negative influences have outperformed the positive influence, we determined how each of these influences contributed to A_{ad}.

Effect of openness on mediating variables

In Table 4.5.3, we already showed that openness increases the number of participants that are not able to create an interpretation (H1). We will now determine whether openness affects the other variables that we expect to influence A_{ad}. The hypothesis (**H4**) that openness increases the likelihood that consumers experience scheme incongruity (Table 4.5.7), was supported for three ads (Lexus, Toyota and Mercedes), whereas the three remaining ads showed no significant differences.

Table 4.5.7
Mean Experienced Scheme Incongruity Scores for Ads by Condition

Ad	Low-guidance	High-guidance	*t* (*df*)	*p* (*two-tailed*)	r^2	*n*
Lexus	4.21	3.71	5.18 (310)	< .01	.08	312
Toyota	3.78	3.59	1.91 (289)	< .05	.01	291
Mercedes	3.98	3.74	2.33 (323)	< .01	.02	325
Nokia 3330	3.49	3.56	0.63 (310)	.27	-	312
Nokia 8810	3.35	3.20	1.52 (311)	.07	-	313
Volkswagen	3.47	3.41	0.55 (313)	.29	-	315

Note. 'Experienced scheme incongruity' was measured on a 5-point scale (1 = *very congruent,* 5 = *very incongruent).*

As expected (**H5**), openness increased 'experienced interpretation difficulty'. For all ads, the creation of an interpretation was experienced as more difficult in the low-guidance condition than in the high-guidance condition (Table 4.5.8). The effect sizes varied from low to moderate.

Table 4.5.8
Mean Experienced Interpretation Difficulty Scores by Condition

Ad	Low-guidance	High-guidance	*t* (*df*)	*p* (*one-tailed*)	r^2	*n*
Lexus	4.04	3.15	8.68 (319)	< .01	.19	321
Toyota	3.73	2.76	8.71 (300)	< .01	.20	302
Mercedes	2.85	2.36	4.68 (326)	< .01	.06	328
Nokia 3330	3.29	2.53	7.59 (295)	< .01	.16	320
Nokia 8810	2.93	2.12	7.75 (315)	< .01	.16	317
Volkswagen	2.57	1.94	7.17 (268)	< .01	.16	319

Note. 'Experienced interpretation difficulty' was measured on a 5-point scale (1 = *easy,* 5 = *difficult).*

As anticipated (**H6**), openness increased 'experienced interpretation uncertainty' (Table 4.5.9). For all ads, participants in the low-guidance conditions were more uncertain whether their interpretation coincided with the intended one than participants in the high-guidance conditions. All effect sizes were rather low.

Table 4.5.9
Mean Experienced Interpretation Uncertainty Scores by Condition

Ad	Low-guidance	High-guidance	*t* (*df*)	*p* (*one-tailed*)	r^2	*n*
Lexus	3.29	2.50	4.21 (169)	< .01	.09	171
Toyota	2.84	2.21	4.14 (207)	< .01	.08	209
Mercedes	2.33	2.12	1.61 (269)	< .05	.01	286
Nokia 3330	3.03	2.34	5.50 (265)	< .01	.10	267
Nokia 8810	2.79	2.05	5.69 (217)	< .01	.13	259
Volkswagen	2.56	1.99	5.17 (292)	< .01	.08	294

Note. We only registered 'experienced interpretation uncertainty' scores of participants who were able to create an interpretation. 'Interpretation uncertainty' was measured on a 5-point scale (1 = *very certain*, 5 = *very uncertain*).

Effect of mediating variables on A_{ad}

We continued our analysis by examining whether 'experienced scheme incongruity', 'interpretation inability', 'experienced interpretation difficulty', and 'experienced interpretation uncertainty' were positively or negatively related to A_{ad} (Table 4.5.10). The hypothesis that 'experienced scheme incongruity' was positively related to A_{ad} (**H7**), was supported for three (out of six) ads (Mercedes, Nokia 8810 and Volkswagen). For these three ads, the conditions that were experienced as incongruent, showed a more positive A_{ad} than the conditions that were judged as congruent. Contrary to our expectation, for one ad 'experienced scheme incongruity' *was negatively* related to A_{ad} (Lexus). For the remaining ads we found no significant relation between 'experienced scheme incongruity' and A_{ad} (Nokia 3330 and Toyota). When we combine these results with those presented in Table 4.5.7, we may conclude that we only found for one ad (Mercedes) that openness was significantly positively related to 'experienced scheme incongruity' and that 'experienced scheme incongruity' was significantly related positively to A_{ad}, as well. As hypothesized, 'interpretation inability', 'experienced interpretation difficulty', and 'experienced interpretation uncertainty' were all *negatively related* to A_{ad}, for all ads. As expected (**H8**), the results revealed a significant negative relationship between 'interpretation inability' and A_{ad}. For each ad, the results demonstrated that not being able to create an interpretation was related to a more negative A_{ad}. In addition, as expected (**H9**), for all test-ads there was a significant negative relation

between 'experienced interpretation difficulty' and A_{ad}. The more consumers experienced difficulty when creating an interpretation, the more negative A_{ad} was. Finally, as anticipated (**H10**), for all test-ads there was a significantly negative relationship between 'experienced interpretation uncertainty' and A_{ad}. The more consumers experienced uncertainty about the aptness of their interpretation, the more negative A_{ad} was. 'Experienced interpretation uncertainty' was only calculated for participants who were able to interpret the ads.

Table 4.5.10
Correlation Scores per Ad of A_{ad} with Experienced Scheme Incongruity, Interpretation Inability, Experienced Interpretation Difficulty, and Experienced Interpretation Uncertainty

	Experienced scheme incongruity		Interpretation inability		Experienced interpretation difficulty		Experienced interpretation uncertainty	
Ad	***r***	***n***	***r***	***n***	***r***	***n***	***r***	***n***
Lexus GS 300	-.12*	312	-.47*	321	-.64*	320	-.32*	171
Toyota RAV 4	-.04	291	-.47*	302	-.73*	204	-.42*	209
Mercedes	.23*	325	-.40*	329	-.60*	325	-.39*	286
Nokia 3330	.02	312	-.35*	319	-.52*	318	-.27*	267
Nokia 8810	.24*	313	-.36*	317	-.69*	316	-.36*	259
Volkswagen	.35*	315	-.17*	319	-.50*	318	-.29*	294

*$p < .01$

An additional analysis showed that, as in Experiment 4, the negative relationship between 'experienced interpretation difficulty' and A_{ad} did not change into a positive relationship when we only analyzed the scores of participants who were able to interpret ads (Lexus $r(162) = -.50$, $p < .01$; Toyota $r(204) = -.61$, $p < .01$; Mercedes $r(273) = -.62$, $p < .01$; Nokia 3330 $r(244) = -.45$, $p < .01$, Nokia 8810 $r(267) = -.63$, $p < .01$; Volkswagen $r(268) = -.43$, $p < .01$).

To determine which variables mediate the negative effects of openness on A_{ad}, we performed a regression analysis. We did not include 'experienced scheme incongruity' in the regression analysis because only for one ad (Mercedes) 'scheme incongruity' was significantly related to both openness and A_{ad} (see Table 4.5.7 and Table 4.5.10). We created a dummy variable 'openness' to capture the level of verbal anchoring (as in Experiment 4); the low-guidance condition consisted of the ad without a headline (coded as 1), whereas the high-guidance condition consisted of the ad with an explanatory headline (coded as 0). We ran the regression analysis for each ad separately with the following predictors:

(a) 'experienced interpretation difficulty'; (b) 'interpretation inability', (c) 'experienced interpretation uncertainty, and (d) openness. 'Experienced interpretation uncertainty' yielded no significant regression weights for all ads. Therefore we carried out a second regression analysis, omitting 'experienced interpretation uncertainty'. As can be seen in Table 4.5.11, 'experienced interpretation difficulty' yielded significant regression weights for all ads, and 'interpretation inability' for five ads (except for Volkswagen). Openness only yielded one significant regression weight (for Lexus). Hence, for five ads the negative effect of openness on A_{ad} is almost completely explained by the mediating variables 'experienced interpretation difficulty', and 'interpretation inability'. As 'experienced interpretation difficulty' and 'interpretation inability' are strongly related, we, as in Experiment 4, may conclude that the best predictor for the effect of openness on A_{ad} is 'experienced interpretation difficulty'.

Table 4.5.11
Multiple Regression Analysis per Ad for Variables Predicting Attitude towards the Ad before Deletion of Non Significant Variables

	Experienced interpretation difficulty			Interpretation inability			Openness			
Ad	***B***	***SE B***	β	***B***	***SE B***	β	***B***	***SE B***	β	R^2
Lexus	-.48	.05	-.54*	-.38	.09	-.22*	-.14	.04	-.16*	.39
Toyota	-.62	.05	-.67*	-.32	.09	-.16*	-.06	.04	-.06	.53
Mercedes	-.58	.06	-.51*	-.65	.14	-.23*	-.09	.05	-.09	.37
Nokia 3330	-.53	.05	-.57*	-.39	.11	-.16*	.02	.04	.02	.42
Nokia 8810	-.40	.05	-.40*	-.37	.11	-.17*	.07	.05	.08	.27
Volkswagen	-.58	.06	-.51*	-.10	.13	-.04	-.09	.05	-.09	.24

*$p < .01$

Effect of openness on A_{brand}

Openness negatively affected A_{brand} (**R2**) for all ads (although not significant for Volkswagen and Mercedes). The effect sizes were low (Table 4.5.12).

Table 4.5.12
Mean A_{brand} Score by Conditions

Ad	Low-guidance	High-guidance	*t* (*df*)	*p* (*two-tailed*)	r^2	*n*
Lexus	2.96	3.15	2.00 (320)	< .05	.01	322
Toyota	3.20	3.42	2.73 (302)	< .01	.02	304
Mercedes	3.80	3.88	0.90 (327)	.37	-	329
Nokia 3330	3.08	3.35	3.05 (319)	< .01	.01	321
Nokia 8810	3.58	3.77	2.40 (316)	< .05	.02	318
Volkswagen	3.49	3.43	0.61 (318)	.48	-	320

Note. A_{brand} was measured on a 5-point scale (1 = *very negative towards the brand,* 5 = *very positive towards the brand).*

Openness decreased the number of times that the intended brand association was judged to fit the advertised brand for all ads (not significant for Volkswagen and Mercedes). The effect sizes were all rather low (Table 4.5.13). No clear patterns concerning the additional brand items were found.

Table 4.5.13
Mean Score on Intended Brand Item by Conditions

Ad (Intended brand item)	Low-guidance	High-guidance	*t* (*df*)	*p* (*two-tailed*)	r^2	*n*
Lexus (Good road hold)	3.24	3.53	2.44 (320)	< .05	.02	322
Toyota (Every terrain)	3.53	3.77	2.09 (302)	< .05	.01	304
Mercedes (Unique)	3.61	3.69	0.76 (327)	.45	-	329
Nokia 3330 (Fascination)	2.87	3.14	3.34 (307)	< .01	.03	321
Nokia 8810 (Compact)	3.86	4.25	3.89 (316)	< .01	.03	318
Volkswagen (Brand loyalty)	3.38	3.22	1.40 (318)	.16	-	320

Note. Attitude towards intended brand item was measured on a 5-point scale (1 = *does not fit the brand,* 5 = *fits the brand).*

Need for cognition

We tested the hypothesis (**H11**) that need for cognition plays a role in the effect of openness on A_{ad} for each ad separately, using 2 x 2 ANOVAs with need for cognition (high, low) and openness (high, low) as factors, and A_{ad} as a dependent variable. For all ads, the hypothesis that need for cognition plays a role in the effect of openness on A_{ad} was not supported. We found no interaction effect of need for cognition with openness and no main effect of need for cognition.

Our expectation (**H12**) that need for cognition influences the ability to find an interpretation, was not supported for four out of six ads (Table 4.5.14). Only for the low-guidance conditions of Lexus and Toyota, an interpretation was created more often by participants with a high need for cognition than those with a low need for cognition. We found no differences between participants high and low in need for cognition in 'interpretation inability' when they interpreted the high guidance conditions. Cramér's *V* was moderate for both ads.

Table 4.5.14
Participants Low and High in Need for Cognition[a] who Created an Interpretation by Low-guidance Conditions

Low-guidance	Low NFC	High NFC	χ^2 (*df = 1*)	*p* (*one-tailed*)	*V*[b]	*n*
Lexus	44%	60%	7.39	< .01	.15	321
Toyota	61%	76%	7.69	< .01	.16	304
Mercedes	82%	86%	0.67	.21	-	327
Nokia 3330	76%	77%	0.04	.42	-	319
Nokia 8810	83%	86%	0.58	.45	-	317
Volkswagen	82%	86%	0.79	.19	-	318

[a]Split at the median. [b]*V* = Cramér's *V*

Effects of the moderate-guidance condition

We did not report the scores of the moderate-guidance condition on all dependent variables, because the manipulation check (see Table 4.5.2) showed that in most cases the scores of the moderate-guidance condition did not significantly differ from either the scores of the low-guidance condition or the high-guidance condition. To get an estimation of the scores on the dependent variables of the moderate-guidance condition of all ads, we performed one-way ANOVA's with post-hoc Scheffé least-significant-difference tests. As expected, the scores of the moderate-guidance conditions were always in between the scores of the low-guidance and high-guidance conditions on all dependent variables, although these scores did not always differ significantly.

4.5.4 Discussion

The goal of the present experiment was to re-examine the negative effects of openness found in Experiment 4, by (a) selecting a research population more representative of the Dutch population, (b) manipulating openness in a different way, and (c) investigating a broader range of openness. Overall, the results of Experiment 5 were in line with those of Experiment 4, showing no benefits of openness for advertisers, regardless of the type of product advertised or consumers' need for cognition. For each ad, we created open and closed conditions that differed in degree of openness. We can conclude that the negative effects of openness concerning interpretation creation, A_{ad}, and A_{brand}, pertain to a relatively large part of the openness continuum.

Experiment 5 confirmed and strengthened the findings of Experiment 4 that openness increases the number of participants who do not create any interpretation and decreases the number who create the intended interpretation (H1 and H2). Taken together, the findings of Experiments 4 and 5 suggest that the open strategy poses a high risk for advertisers because of its poor performance in communicating the intended message.

Overall, we found no obvious differences in diversity of interpretations across participants for open and closed ads. As in experiment 4, the results showed that not only did open ads elicit diversity in interpretations, but closed ones did as well (from 4 to 12 different interpretations). In the general discussion (Chapter 5.2) we will discuss possible reasons for this.

Experiment 5 showed that openness affected consumers' A_{ad} and A_{brand} (R1 and R2). On the basis of several measurements of A_{ad}, we can conclude that openness leads to a less favorable A_{ad}. This confirms our findings in Experiment 4 and extends them by showing that openness stimulated a more negative A_{brand}. This latter finding should not come as a surprise, as it is consistent with the strong correlation between A_{ad} and A_{brand} shown in several studies (e.g., Heath & Gaeth, 1994; Mitchell & Olson, 1981).

We identified the following mediating variables: 'experienced scheme incongruity', 'interpretation inability', 'experienced interpretation difficulty', and 'experienced interpretation uncertainty'. The results showed some support for the notion (H4) that openness increases 'experienced scheme incongruity' (found for three out of six ads). For three ads 'experienced scheme incongruity' was positively related to A_{ad} (H7). However, according to several researchers (e.g., Berlyne, 1971; Loef, 2002), 'experienced scheme incongruity' should be positively related to *both* openness and A_{ad}, but this was only the case for one ad (Mercedes).

As expected, and consistent with previous research (see Section 3.3), the results revealed that openness increases 'interpretation inability' (H1), 'experienced interpretation difficulty' (H5), and 'experienced interpretation uncertainty' (H6). Moreover, consumers' A_{ad} became more negative when they were unable to create an interpretation (H8), when they experienced difficulty creating an interpretation (H9), and when they were uncertain about the correctness of the created interpretation (H10). Hence, we may conclude that the negative effect of openness on A_{ad} is mediated by 'experienced interpretation difficulty', 'interpretation inability', and 'experienced interpretation uncertainty'. To determine which of these mediating variables predicted the effects on A_{ad} best, we subsequently performed a multiple regression analysis. The results suggest that the main predictor of A_{ad} is 'experienced interpretation difficulty', which corroborates Phillips (2000) and our findings in Experiment 4.

Participants who are interested in the advertised product category and are highly capable of interpreting these ads, are thought to engage in deeper processing of an ad for that product (Phillips, 2000). For this reason, our selection of highly motivated students from a car school in Experiment 4 may have overshadowed any effect of need for cognition. However, the participants in Experiment 5 responded to openness in a way similar to the highly interested male students in Experiment 4. Experiment 5 showed, once more, that need for cognition does not moderate the effects of openness on A_{ad} (H11). In addition, the results showed that need for cognition moderated between openness and 'interpretation inability' (H12) for only two of six ads. This offers additional support for the conclusion from Experiments 2 and 4 that consumers' need for cognition is of little importance when studying the effects of openness in advertising.

We conducted a fifth experiment for several reasons. *First*, we wanted to be sure that the more negative attitude towards open ads was due to the presence of a low-guidance headline. In Experiment 4 we used open ad conditions that contained a low-guidance headline, which we suggested might have irritated participants because of its non-relevant information. To determine whether these feelings of irritation were the main reason participants showed a more negative attitude towards the open ad conditions, we used open conditions *without* a headline in Experiment 5. As in the previous experiment, we found a negative effect of openness on consumers' A_{ad}. *Second*, we wanted to generalize the results of Experiment 4 by investigating a broader part of the openness continuum, and our manipulation check showed that we succeeded in doing this. A noticeable finding was that differences in experienced openness *across the ads* were larger than the differences in experienced openness *between the conditions* (see Figure 4.5.5). Accordingly, this showed that differences in experienced openness *across ads* relate more strongly to differences in interpretation creation and A_{ad} than differences in experienced openness *between conditions*. These findings suggest that headlines

can only close pictorials to a certain extent. Still, the results show, once more, that ads always benefit from verbal anchoring, regardless of whether the ads are relatively easy or difficult to interpret.

We refer to Chapter 5 for general conclusions and research limitations with respect to the experiments we conducted. In addition, chapter 5 presents practical implications and suggestions for future research.

Chapter 5 | General discussion

This study has sought to clarify the concept of openness in an advertising context, to examine the presence of openness in ads, and to determine the effect of openness on consumers' attention, recall, interpretation, and A_{ad}. Although the term openness has led to some terminological confusion in the advertising literature, openness is a suitable concept to indicate differences in the amount of guidance ads provide towards a certain interpretation. Several related studies helped formulating certain characteristics that render an ad more open: presence of a prominent visual, presence of rhetorical figures, absence of the product and of verbal anchoring, and a low level of brand anchoring. Our content analysis supports the perception of ad-makers as well as researchers that a growing share of ads has become open during the past decades, irrespective of the product advertised or the type of magazine the ad is placed in. In other words, ads currently provide less guidance towards a predetermined interpretation than in the past. This increase in openness called for an examination of its effects. Although we cannot simply claim that ad-makers have increased the amount of openness because they expect positive effects - in fact openness may not even be premeditated - the tendency towards openness is not justified when we consider the results of our experiments. In four experiments, we compared open ads with closed counterparts that contain the same open pictorial as the open versions but that provide additional verbal anchoring, affecting the amount of guidance towards an interpretation of the pictorial. In one experiment, we compared large numbers of open and closed ads that were not systematically manipulated. The findings provide substantial evidence that openness has a negative effect. In addition, we found no empirical support for the notion that need for cognition moderates the effects of openness. In this chapter we will discuss the general conclusions in depth, consider the limitations of this study, examine the theoretical and practical implications, and finally formulate recommendations for future research.

5.1 Summary of conclusions

This section presents our main conclusions regarding the effects of openness on the dependent variables of our studies, and the alleged moderating effects of need for cognition. We discuss the conclusions in relation to the results of previous research and theory about the effects of openness. For an overview of all our hypotheses and the main results, see Table 5.1 at the end of the present section.

No effect of openness on attention

Openness does not influence consumers' attention towards ads. In Experiments 1, 2 and 3, we explored the effect of openness on consumers' attention towards ads. Our findings do not support the popular notion of practitioners as well as researchers that open ads hold attention better than closed ones (e.g., Morgan & Reichert, 1999; Mothersbaugh, Huhmann & Franke, 2002; Peracchio & Meyers-Levy, 1994; Phillips & McQuarrie, 2004; Toncar & Munch, 2001; Warlaumont, 1995, 1997), or that openness decreases attention duration (Chamblee, Gilmore, Thomas & Soldow, 1993; Franzen, 1997). Instead, our experiments strengthened the finding of McQuarrie and Mick (1992) that openness has no beneficial or detrimental effects on consumers' attention towards ads. Our finding that open ads retain attention as long -or rather as short- as closed ones do, is in line with the notion that consumers are not motivated to devote their attention to ads in general, because they know they are dealing with persuasive messages (Kroeber-Riel & Esch, 2000; Messaris, 1997; Peracchio & Meyers-Levy, 1994; Toncar & Munch, 2001; Warlaumont, 1995, 1997).

In addition, openness does not influence consumers' attention towards the brand. In Experiments 1 and 2 we determined whether openness resulted in more attention to elements that describe or depict the brand. Consumers may direct and focus their attention to specific elements of the ad that help them to create a plausible interpretation (Curlo & Chamblee, 1998; MacInnis & Jaworski, 1989; Warlaumont, 1995; Wedel & Pieters, 2000). Hence, when the amount of openness increases, consumers may devote more attention to the brand. However, Experiments 1 and 2 indicated that openness did not affect participants' attention to brand elements.

Our conclusion that open ads do not differ from closed ones in their capacity to hold consumers' attention is convincing for two reasons. First, the finding that openness does not influence attention seems very robust, as this result showed up in two experiments where we compared small numbers of systematically manipulated open and closed ads (Experiments 1 and 2) as well as in a study where we compared a large number of open and closed ads (Experiment 3). The absence of differences in attention duration between open and closed ads was not restricted

to the experiments with a limited number of manipulated experimental ads, but also appeared in a study with a larger population of ads. Second, we used a research situation that approached normal circumstances: (a) participants were not instructed to look at ads; (b) the experimental ads strongly resembled real ads; (c) consumers could browse through magazines at their own pace; (d) the selected magazines were existing magazines that contained ads as well as editorial content; and (e) we used unobtrusive and precise equipment, an infrared eye-tracking instrument, to determine whether openness affected attention to the ad and brand.

No effect of openness on recall of the ad, yet a positive effect on product recall

In Experiment 2 we determined recall of the ad and recall of the advertised product, and concluded that the open strategy does not increase recall of the ad, but does increase recall of the product. The central notion behind the arguments for and against an effect of openness on recall is that openness stimulates a high level of cognitive elaboration that, in its turn, improves recall. Although several researchers expect a positive effect of openness on recall of (elements in) the ad (Arias-Bolzmann, Chakraborty & Mowen, 2000; Childers & Houston, 1984; McQuarrie & Mick, 1992; 1999; 2003a, 2003b; Mothersbaugh, Huhmann, & Franke, 2002; Phillips, 2003; Phillips & McQuarrie, 2004; Tanaka, 1992; Toncar & Munch, 2001), we found no beneficial effects of openness on recall of the ad. However, we did find a positive effect of openness on recall of the product. Consumers remembered the product advertised in the open ads better than in the closed ads. This result extends previous research findings showing a positive effect of openness, on recall of brands, product-claims, and verbal copy (Gail & Eves, 1999; McQuarrie & Mick, 1992, 2003b; Toncar & Munch, 2001). These studies were limited to ads that contained rhetorical figures. Improved recall of the advertised product in open ads is a remarkable result, because the product was never depicted in the ads used in our experiments and could only be inferred from the brand. Perhaps the inference process yields better recall.

Negative effect of openness on creating an interpretation, as well as the intended interpretation

The results of Experiments 4 and 5 revealed that openness not only decreased the number of consumers that were unable to create any interpretation, but also decreased the number of consumers that created the intended interpretation. This conclusion corroborates the ideas of advertising researchers (Kardes, 1988; Mick & Politi, 1989), and is in line with previous research findings (Dingena, 1994; Morgan & Reichert, 1999; Phillips, 1997; Warlaumont, 1995). Our findings suggest that the open strategy is ineffective when it comes to communicating a planned persuasive message.

No effect of openness on interpretation diversity

In Experiments 4 and 5 we found no obvious differences in diversity of interpretations for open and closed ads. Unexpectedly, not only did open ads elicit a range of different interpretations, but closed ads did as well. In Chapter 5.2 we will discuss possible reasons for this result. The argument that creating alternative interpretations across consumers may provide a persuasive advantage because the same ad appeals to various consumers (Mick & Politi, 1989; Tanaka, 1992) seems to hold for open as well as closed ads. Several authors have argued that the absence of guidance in open ads leaves space and opportunity for consumers to create interpretations based on their individual knowledge about ads in general, the advertised product, and the brand (Forceville, 1996; Phillips, 1997; 2003). Interpretation diversity in the *open-ad* conditions supports the notions of several researchers (Barthes, 1977; Eco, 1979; Forceville, 1996; McQuarrie & Mick, 1996; Mick, 1992; Mick & Politi, 1989; Phillips, 1997; Sperber & Wilson, 1986; Warlaumont, 1995), and corroborates the results of three studies showing that openness leads to different interpretations across consumers (Forceville, 1996; Mick & Politi, 1989; Phillips, 1997). A plausible explanation for this effect might be that for open ads, consumers must decide for themselves which characteristics in the ad are relevant to the product and brand (McQuarrie & Phillips, 2005; Phillips & McQuarrie, 2004; Phillips, 2003). Forceville (1996), and Phillips (1997) showed that open ads elicit a variety of interpretations across consumers. To our knowledge, no research has established 'interpretation diversity' for ads that we would describe as closed. Our finding that openness does not increase 'interpretation diversity' across consumers (H3), because the closed ads also elicited 'interpretation diversity', corroborates the argument of Eco (1979) that even a closed ad can lead to unforeseen interpretations (see Section 1.4).

Negative effect of openness on attitude towards the ad and brand

In Experiments 4 and 5 we determined the effect of openness on A_{ad}, and concluded that consumers' attitudes are more negative towards open ads than towards closed ads. Our results are consistent across several measurements of A_{ad} (average grade, attitude scale, and, additionally a non-verbal instrument called PrEmo). Beforehand, the possible effect of openness on A_{ad} was unclear, because McQuarrie & Mick (1992, 1999; 2003b), and more recently Van Enschot (2006), found positive effects of openness on A_{ad}, whereas Phillips (2000) and Warlaumont (1995) found negative effects. This raises the question why we found a predominantly negative effect of openness on A_{ad}. A plausible explanation may lie in differences in the selection and manipulation of the experimental ads. The open ads that we selected provided little guidance. However, in the studies that revealed a positive effect of openness on A_{ad}, the closed as well as the open conditions contained a headline that guided consumers towards the intended interpretation. Due to this guiding

headline, the visual tropes in the open ad conditions were probably not necessary to create an interpretation. Because the tropes *implicitly* communicated the same message as the guiding headline, they probably elicited feelings of pleasure, thus increasing A_{ad}. Explicit repetition of the intended message in the headline and visual in the closed conditions, may have led to a relatively more negative attitude. Hence, the relatively negative attitudinal effects of openness in our experiments seem attributable to a lack of guidance. In addition to the negative effect on A_{ad}, in Experiment 5 we found that openness affects A_{brand} negatively as well. This finding is no surprise, because research has shown that A_{brand} is strongly related to A_{ad} (e.g., Heath & Gaeth, 1994).

To gain insight into the causes of the negative effect of openness on A_{ad}, in Experiment 5 we examined four reasons why openness might affect consumers' attitudes towards open ads. On the one hand, openness might affect A_{ad} positively because (a) open ads are experienced as scheme incongruent, whereas on the other hand, openness might affect A_{ad} negatively because consumers (b) are not able to interpret open ads, (c) experience difficulty interpreting open ads, and (d) are uncertain whether their interpretation coincides with the intended one.

First, '*experienced scheme incongruity*' was not consistently related to openness or to A_{ad}. We found no support for the idea that consumers might experience openness as pleasantly incongruent with their expectations about advertising. 'Experienced scheme incongruity' was neither positively related to openness nor A_{ad}, as was previously proposed by several researchers (Berlyne, 1971; Loef, 2002; McQuarrie & Mick, 2003a; Meyers-Levy & Tybout, 1989; Peracchio & Tybout, 1996; Warlaumont, 1995).

Second, as expected, and corroborating the beliefs of several researchers (e.g., Mick, 1992; McQuarrie & Mick, 1992; 1999, 2003a; Peracchio & Meyers-Levy, 1994; Phillips, 2000), our experiments indicated that *not being able to create an interpretation* is negatively related to A_{ad}. This is a negative effect of openness, as more consumers were unable to interpret open ads than closed ads.

Third, we found support for the argument that *the difficulty that consumers experience when they interpret open ads* negatively mediates the effect of openness on A_{ad}. Confirming the notions of several authors (Franzen 1997; Phillips, 2003; Phillips & McQuarrie, 2004; Toncar & Munch, 2001; Van Enschot, 2006; Warlaumont, 1995), and consistent with research performed by McQuarrie and Mick (1992), and Phillips (2000), our results revealed a more negative A_{ad} when participants experienced more difficulty creating an interpretation. This result contradicts the idea that consumers experience pleasure in searching for an interpretation of an ad (McQuarrie & Mick, 1992; Phillips & McQuarrie, 2004). The results of Experiment 5 indicated that open ads were more difficult to interpret than closed ads. In order to test the argument that the eventual discovery of a satisfactory interpretation might relate to a positive A_{ad}, that discovery

being considered a reward (McQuarrie & Mick, 1992, 1999; Peracchio & Meyers-Levy, 1994; Phillips, 2000; Phillips & McQuarrie, 2004; Sawyer & Howard, 1991; Tanaka, 1992; Toncar & Munch, 2001; Warlaumont, 1995), we limited our analysis of the mediating effect of 'experienced interpretation difficulty' on A_{ad} to those participants who were able to interpret open ads. Confirming the finding of Van Mulken, van Enschot, and Hoeken (2005), the negative relation of openness with A_{ad} did not change into a positive relation, but only changed in strength, becoming less negative. Even when participants were able to interpret the open ad, A_{ad} was lower than for closed ads, which were easier to understand. The reward, the pleasure in solving the riddle, did not compensate for the cognitive effort to decipher the ad. Confirming the findings of two recent studies focusing on implicit ads (Van Enschot, 2006; Van Mulken, Van Enschot & Hoeken, 2005), we may conclude that ads that are difficult to understand are appreciated less than ads that are easy to understand. We found that 'experienced interpretation difficulty' was the best predictor for A_{ad}.

Last, '*experienced interpretation uncertainty*' was negatively correlated with A_{ad}. Consumers were more uncertain about the intended interpretation when exposed to open ads than to closed ads. Because participants were more uncertain whether they had reached the interpretation intended by the ad-maker with open ads than with closed ones, their appreciation of the ad was lower. This finding confirms Peracchio and Meyers-Levy's (1994) argument that when ambiguous (i.e., open) ads do not allow consumers to verify their created interpretations, a negative effect on A_{ad} can be expected.

No moderating effects of need for cognition

We determined the moderating role of need for cognition on attention, recall, A_{ad}, and interpretation. Need for cognition refers to individual differences in the tendency to engage in and enjoy effortful cognitive activities. We expected that effects of openness would vary across individuals with different levels of need for cognition. We assumed that consumers with a high need for cognition would spend relatively more time on open ads than on closed ones, because they want to search for meaning and have the need to create an interpretation. For the same reason, we expected that consumers with a high need for cognition would recall the products advertised in open ads relatively better than those advertised in closed ads. Our findings revealed that this was not the case. We found that need for cognition does not influence the effects of openness on (1) attention, (2) recall of the ad, and (3) recall of the product. Moreover, need for cognition does not moderate the effects of openness on A_{ad} or the creation of an interpretation. We found that consumers with high need for cognition (a) did not hold a more positive attitude towards open ads, and (b) were not able to interpret open ads better than consumers with low need for cognition. These findings do not confirm the

notions of several authors (Brett, Lang & Wong, 2003; McQuarrie & Mick, 1996, 2003a; Peracchio & Meyers-Levy, 1994; Phillips & McQuarrie, 2004; Toncar & Munch, 2001). However, our findings did corroborate the finding of McQuarrie and Mick (2003), who mentioned, in a footnote (p. 582) that need for cognition did not interact with openness. It is possible that need for cognition does not have a moderating role in the effects of openness in advertising, because consumers do not want to invest effort in commercial messages in general.

		Experiments				
Research questions and hypotheses	**Content analysis**	**1**	**2**	**3**	**4**	**5**
Changes in openness						
Magazine ads show an increase in openness.	Accepted					
Do changes in openness vary by magazine type?	No					
Do changes in openness vary by product type?	No					
Effect of openness on attention						
Does openness affect attention to the ad?		Yes*	No	No		
Openness increases attention to the brand.		Rejected	Rejected			
Effect of openness on recall						
Openness increases recall of the ad.			Rejected			
Openness increases recall of the advertised product.			Accepted			
Effect of openness on interpretation						
Openness increases 'interpretation inability'.					Accepted	Accepted
Openness decreases creation of the 'intended interpretation'.					Accepted	Accepted
Openness increases 'interpretation diversity'.					Rejected	Rejected
Effect of openness on attitude towards the ad						
Does openness affect the attitude towards the ad?					Yes**	Yes**
'Interpretation inability' mediates the effect of openness on the attitude towards the ad.					Accepted	Accepted
'Experienced interpretation difficulty' mediates the effect of openness on the attitude towards the ad.					Accepted	Accepted
'Experienced interpretation uncertainty' mediates the effect of openness on the attitude towards the ad.						Accepted
'Experienced scheme incongruity' mediates the effect of openness on the attitude towards the ad.					Rejected	Rejected
Effect of openness on attitude towards the brand						
Does openness affect consumers' attitude toward the brand?						Yes***
Need for cognition (NFC)						
NFC moderates the effect of openness on attention.			Rejected			
NFC moderates the effect of openness on ad recall.			Rejected			
NFC moderates the effect of openness on product recall.			Rejected			
NFC moderates the effect of openness on attitude toward the ad.					Rejected	Rejected
NFC moderates the effect of openness on 'interpretation inability.'					Rejected	Rejected

Table 5.1. Overview of research questions, hypotheses and results. *Negative effect of openness on attention. **Negative effect of openness on attitude towards the ad. ***Negative effect of openness on attitude towards the brand.

5.2 Limitations

Most of our experiments have limitations that warrant attention, because they may have influenced the effects of openness. These limitations are: (1) the participants showed a high degree of task involvement, (2) participants were exposed only once to the test-ads, (3) the relatively small numbers of highly open riddle ads that we used in most of our experiments, (4) the investigation of a small part of the continuum of openness, and (5) the selection of only Dutch participants. These limitations will be discussed below.

High degree of task involvement

The ads were processed with a high degree of task involvement, due to the forced-exposure of respondents to ads, an approach which is typical for experiments in the field of advertising (McQuarrie & Mick, 1992), and because subjects knew that they were taking part in an experiment. We will discuss possible consequences of the high degree of task involvement for attention, interpretation, and the attitude towards open ads.

First, in a more natural setting, attention to open ads may be even less than was found in our experiments. In real life, consumers may spend hardly any effort to interpret open ads; they may even avoid open ads because of an indifferent attitude towards ads in general and because they do not want to spend cognitive energy deciphering a commercial message. According to Abernethy (1991), and Smit (1999), when consumers are given a means to avoid ads, many do just that. However, the limitation of a high degree of task involvement seems less relevant for our experiments concerning the effect of openness on attention, as we measured attention in nearly normal viewing conditions, using a relatively unobtrusive eye-tracking device.

Second, a more natural situation might affect the creation of an interpretation in two ways. First, in normal viewing conditions consumers might not get any message at all, because they might not bother to interpret open ads. The low viewing times for both closed as well as open ads that we found in Experiments 1, 2 and 3 supports this argument. Second, both open and closed ads might generate fewer different interpretations in normal viewing conditions than they did in our experiments. In Experiments 4 and 5, our participants were asked to write down their interpretations of the ads, which may have triggered an abnormal variety of interpretations. This limitation may apply particularly to the closed versions of the ads, because participants may not have felt comfortable just writing down the 'given interpretation' that was spelled out in the verbal headlines, and they may have searched for additional interpretations to what was given in the headlines. The fact that the pictorial did not strongly guide the

reader towards an interpretation, allowed participants to create an interpretation different from the one suggested by the headline of the closed ad.

Third, the possible unwillingness to process any ads, open or closed, in natural viewing conditions might lead consumers to have no attitude towards an ad at all, instead of a negative or a positive one.

Single-exposure design

In all our experiments we used a single-exposure design, whereas in real life consumers are exposed to ads more than once in different editions of the same magazine or in different magazines within a certain time period. Repetition of open ads might facilitate processing and subsequently ad-liking, because it provides more opportunities to learn the ad's intended messages (Anand & Sternthal, 1990; Cox & Cox, 1988; MacInnis & Jaworski, 1989). Multiple exposures might lead to more positive effects of openness than were found in the single exposure setting.

Small numbers of highly open riddle ads

For our experiments, we selected small numbers of highly open ads, belonging to the category of the open riddle ad. This selection may limit the generalizability of our conclusions. We may have emphasized the negative effects of openness because we used ads that were, on average, more open than the ads that consumers usually encounter in magazines. We selected highly open ads, all containing a prominent picture, with little or no verbal copy below the picture, and no depiction of the product. In our manipulation checks, all the dummy ads were rated as less open than our experimental open *and* closed ads, which can be seen as an indication that our ads were indeed highly open. This limitation, however, does not apply to Experiment 3 because in that study we selected a larger number and a larger variety of ads. However, the disadvantage of the use of large numbers of ads is that ads are never fully comparable on all dimensions besides openness.

Investigation of a small part of the continuum of openness

The way openness was manipulated in Experiments 1, 2, 4, and 5 may also limit the generalizability of our findings. Changing the amount of verbal anchoring (as in Phillips, 2000) may have limited our investigation of the effects of openness to a small part of the continuum of openness. Our manipulation checks indicated that the differences in openness between the conditions of each ad were relatively small, though always significant. Apparently, appending headlines to open pictorials can only partially change the level of guidance towards an interpretation. Although we

consistently found negative effects of more open ads on interpretation and A_{ad}, the relatively small changes that we induced in openness by means of verbal anchoring, might explain the relatively low effect sizes in our experiments.

Dutch participants only

In our experiments, we selected representative samples of the Dutch population (Experiments 1, 2, 3, and 5), and a sample of Dutch students of a car sales and management academy (Experiment 4). Therefore, the conclusions of all our experiments will apply to average and specialized consumers with a western cultural background. However, the effects of openness might be different for consumers with a different background. For instance, the Japanese culture might appreciate openness better than the western, because the Japanese consider indirectness as a polite way of communicating (Hofstede, 1991; Di Benedetto, Tamate & Chandran, 1992; Koga & Pearson, 1992). Japanese ad-makers seem eager to meet these preferences, as content analyses suggested that Japanese ads are less explicit than North-American ones (Benedetto, Tamate & Chandran, 1992).

5.3 Theoretical and practical implications

Theoretical implications

Openness is an attractive and useful concept for research in the field of persuasive communication. Openness seems a fruitful term to describe a dimension connecting several advertising studies determining the effects of different kinds of ads, and it provides a theoretical framework that makes sense of the results reported in a wide variety of studies on advertising effects. These studies, using a large variety of terms to denote open ads (e.g., 'indirect', 'implicit', 'figurative', 'ambiguous', 'polysemic', 'unframed', 'abstract', and 'undercoded'), are conceptually connected by the common dimension of openness. The results of these related studies may be interpreted in terms of the effects of openness. We have described these effects in terms of guidance: i.e., a more open ad provides less guidance towards a certain message than a more closed ad. Therefore, the concept of openness relates to the central goal of persuasive communication, namely to communicate certain commercial messages. Finally, openness has proved to be a suitable concept to be operationalized for empirical research, because consumers are able to distinguish between ads with regard to their level of openness.

Practical implications

The findings from our experiments have an obvious implication for ad-makers. It seems clear that they should provide guidance towards the intended interpretation when creating magazine ads. Ad-makers can increase guidance by inserting headlines that lead consumers towards a certain interpretation of the ad. In addition to the use of guidance *within a specific ad*, in Section 5.4 we will discuss several measures to increase guidance that mostly lie *outside the ad*. We will discuss why these measures may increase the chance of beneficial effects of openness and how future research might examine the effects of these measures.

5.4 Suggestions for future research

Our experiments showed that open ads do not lead to positive effects on attention, interpretation, and the attitude towards the ad. However, our conclusions pertain to single ads. Ad-makers might consider increasing guidance by adjusting the context in which open ads appear. They could increase the amount of guidance by repeating open ads, and embedding open ads in ad-campaigns. In Chapter 3.3, we argued that consumers may be irritated by ads that over-explain the message and, in doing so, underestimate the consumers' intelligence (Berger, 2001; Boutlis, 2000). Consequently, when consumers are exposed to ads more than once, by means of multiple exposures and ad campaigns, open ads may hold an advantage over closed ads as they will not offend the consumers' intelligence as much. We will argue why, in these cases, openness might lead to positive effects after all, and discuss how these effects might be examined in research. Furthermore, ad-makers might consider using the open ad-strategy to promote strong brands.

Repetition of open ads

An open ad may lead to positive effects after multiple exposures (McQuarrie & Mick, 2003b; Pechmann & Stewart, 1988, Phillips, 2000). Besides facilitating processing and subsequently increasing ad-liking, multiple exposures may reduce the 'experienced interpretation uncertainty' induced by a novel ad (Berlyne, 1971). According to Phillips (1997; 2000), less verbal anchoring may be needed when comprehension can be achieved through repetition instead of copy. The beneficial effects of repetition do not seem to hold for closed ads, because repeated exposure to ads with obvious messages may lead to boredom, as nothing new can be learned (Belch, 1982). Hence, the open strategy may only show a positive effect after several exposures, whereas the closed strategy may benefit less –or not at all– from repeated exposures.

Some support for the notion that an increase in the number of ad exposures may be beneficial for the open strategy can be found in a study conducted by Berlyne (1971), who found that multiple exposures increased liking of complex stimuli and decreased liking of simple stimuli. More recently, Cox and Cox (1988) revealed that consumers' attitudes towards complex ads became more positive when the number of exposures increased, but this was not the case for simple ads. Although several exposures may increase guidance, a large number of exposures may lead to counter arguments and a negative effect on consumers' attitude towards the ad. According to McQuarrie and Mick (2003b), once consumers solve the puzzle of the pun or metaphor, the tropes may yield less pleasure on subsequent exposures.

In all the studies that we reviewed in Chapter 3, participants were only exposed to the experimental ads once, even though several authors have called for examinations of repeated exposure to (open) ads that contain rhetorical figures (e.g., Phillips, 2000; McQuarrie & Mick, 2003a). Therefore, it would be interesting to empirically determine whether the effect of openness varies with exposure frequency.

Embedding open ads in campaigns

Ads in a campaign often aim to communicate the same message by using different executional elements (see, for example, Figure 5.4.1). Placing open ads into the context of an advertising campaign might increase the level of guidance. Just as with an increase in the number of ad exposures, confronting consumers with ads that belong to the same campaign increases repetition of the ad's intended message, which consequently increases the amount of guidance. A campaign can feature a combination of open and closed ads or a series of open ads (see, for example, Figure 5.4.1). When consumers recognize that open ads belong to the same campaign, this might increase the amount of guidance towards the intended message. For instance, when looking at the Audi ad in which a bubble gum explodes in the face of a woman (Figure 5.4.1), consumers will probably experience some difficulty deciphering the ad's intended message. However, when consumers are exposed to the remaining Audi ads of the same campaign (Figure 5.4.1), they will probably be guided towards the intended message that an Audi car has good road-holding characteristics (it sticks to the road the way burrs sticks in your hair, bubble gum sticks on your face, and a tattoo stays on your skin). When open ads are preceded -or accompanied- by closed ads, the closed ads provide a ready-made interpretation, and the open ads might 'pleasantly' repeat the intended interpretation. To date, no studies have focused on the possible mediating effects of campaigns on the effects of openness on interpretation, attention or attitude. To understand whether campaigns can modify the effect of openness by increasing the level of guidance, one could compare the interpretation of open ads which have been preceded by a closed ad from the same campaign with the interpretation of ads that have not. Assuming that consumers recall the ads that belong to the same

Figure 5.4.1. *An ad campaign by Audi*

campaign, the differences in interpretation of -and attitude towards- the ad, between the open and closed ads that belong to the same campaign might disappear, or become smaller, as consumers may have less difficulty interpreting an open ad that belongs to the campaign.

The use of strong brands

Brands may differ in their ability to anchor interpretations because consumers have different perceptions of brands. Future research might assess whether the brand plays a role in guiding consumers towards a certain interpretation, by using different car-brands in the same open ad, for instance, as shown in Figure 5.4.2. As discussed before in Section 1.6.5, the ad's image may guide the reader towards the message that the car is fast or that the car has a silent engine. When a pretest shows that consumers generally associate the brand 'Toyota Prius' with 'a silent car' and associate the brand 'Subaru Impreza' with 'a fast car', one would expect that the number of elicited interpretations that relate to 'silence' and 'speed' will differ according to the brand depicted in the ad. The expectations that (a) brands can guide the reader towards an interpretation, what we call 'brand anchoring', and that (b) brands differ in their ability to guide the consumer towards a specific interpretation of an (open) ad have not yet been empirically examined. Although open-ad related research often uses fictitious brands (e.g., Martin, Lang, & Wong, 2003; McQuarrie & Mick, 1999; McQuarrie & Phillips, 2005; Peracchio & Meyers-Levy, 1994; Phillips, 1997; Phillips, 2000; Toncar & Munch, 2001), advertising scholars should consider how this form of low brand anchoring can affect experienced openness.

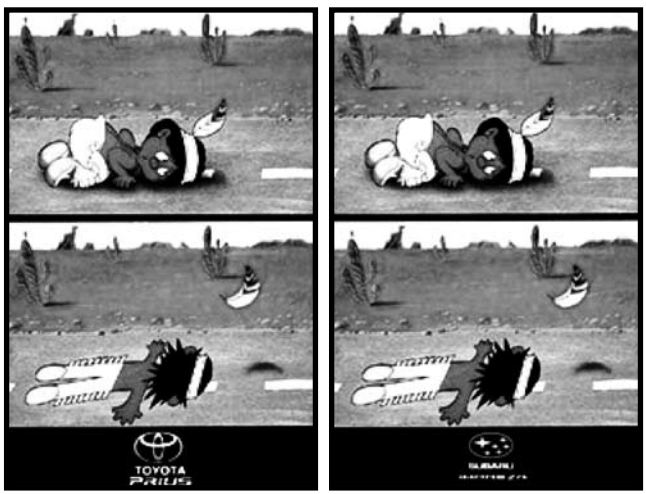


Figure 5.4.2. *Inserting different brands in an open ad*

Final remark

It appears that on a general level the growing popularity of openness in ads is misguided, at least in magazine advertising. Our experiments show that openness is not such an effective strategy as ad-makers might wish. Openness provides ad-makers no benefits when it comes to maintaining consumers' attention, communicating specific

messages, or eliciting a positive attitude towards the ad. Considering its clear negative effects and the large amounts of money involved in the advertising business, an open ad-strategy seems a risky undertaking. However, it would be premature to conclude that the open strategy is unfit to communicate the benefits of products and services under all circumstances, and we have formulated some circumstances in which the open strategy might prove more effective. More research is needed to determine whether the open strategy is indeed worthwhile in these circumstances.

Summary

Nowadays, magazines seem to abound with ads containing messages that are vague and not straightforward. We refer to these ads as open ads. Open ads do not explicitly tell consumers why they should buy the advertised product. Apparently ad-makers expect consumers to be motivated enough to figure out the intended interpretations by themselves. The central characteristic of open ads is their low level of guidance towards a certain intended interpretation. Media analysts have speculated about an increase in openness, but to date this trend has not been investigated for magazine ads. It has been argued that openness increases attention and recall, but this has never been validated. Although previous research has shown positive effects of openness on the attitude towards the ad, negative effects have also been found. Finally, research has shown positive as well as negative effects of ad-openness on interpretation. This study has sought to clarify the concept of openness in advertising, to examine the presence of openness in ads, and to determine the effect of openness on consumers' attention, recall, interpretation, and attitude towards the ad (A_{ad}).

Our *first research objective* was to clarify the concept of openness in the context of advertising. In *Chapter 1* we discuss the term openness. In semiotics, openness is extensively described by Eco (1979), who uses the term 'openness' to differentiate between various types of texts. Eco defines open texts as those that are susceptible to different interpretations. He views openness not as a feature of a particular text, but rather as the result of an interactive process between text and reader. Because of the apparent usefulness of the concept of openness, several advertising researchers have transferred this concept from semiotics to advertising. Although this transfer has led to some terminological confusion, all authors have used the concept of openness to refer to the amount of guidance towards the intended message of the ad. Though no ad is completely open or completely closed, ads can differ in their amount of openness or guidance towards a certain interpretation: Openness is a continuum. Researchers use terms such as 'ambiguous ads', 'indirect ads', 'abstract ads', 'undercoded ads' and 'complex ads' to denote ads that we would describe as open. Although not synonymous, these terms are all highly related to the concept of openness because they imply less guidance towards an intended message. This means that the effects of openness in advertising have actually been more broadly studied than one would believe if one only considers studies that explicitly refer to openness. These related studies helped us to formulate certain characteristics that render an ad more open: presence of a prominent visual, presence of rhetorical figures, absence of the product and of verbal anchoring, and a low level of brand anchoring. By analyzing recurring patterns in a large number of open ads collected over a period of five years, we distinguish four categories of open ads: aesthetic ads, issue ads, story ads, and riddle ads.

Our *second research objective* was to determine whether openness in advertising has increased over time, across different product categories and in different magazines. If openness in ads has indeed increased, the importance of research into the effects of openness increases as well. Therefore, in *Chapter 2* we use content analysis to determine whether there really has been a trend towards more openness in advertising. We conducted content analysis on 768 ads drawn from several editions of four Dutch magazine titles (*Elsevier, Panorama, Margriet,* and *Autovisie*), published in 1980, 1990 and 2000, for five different product types (alcohol, tobacco, appearance, care, and cars). The results show that during the past decades ads have become more open, although the increase diminished between 1990 and 2000. No differences were found between magazines, or between product categories.

Our *final research goal* was to determine the effects of openness on consumers. In *Chapter 3* we discuss possible benefits and drawbacks of open ads, building on previous advertising research that incorporated ads that can be considered as open.

First, openness seems to be a device for ad-makers to retain *attention and stimulate* recall. Researchers view attention as an important condition for an ad to be effective. Almost every advertising model stresses the importance of attention. When an ad does not retain attention, no effect can be expected on recall or on buying intentions or behavior. On the positive side, open ads may maintain consumers' attention for several reasons: (1) open ads are experienced as relatively difficult to interpret; (2) openness is experienced as relatively incongruent with expectations of advertising; (3) openness increases uncertainty about the accuracy of the created interpretation; and (4) openness makes consumers pay attention to the brand, because they need to know about it to be able to create an interpretation. However, on the negative side, openness may decrease attention because consumers are likely to avoid investing cognitive effort in ads. It is also possible that openness does not yield a beneficial or detrimental effect on attention, because consumers are not motivated to devote attention to ads in general, as they know they are dealing with persuasive messages. The arguments for or against a positive effect of openness on attention also apply to the effect of openness on recall.

Second, we want to establish how openness affects *interpretation*. Ad-makers want consumers to interpret ads a certain way. However, consumers might interpret open ads differently than they were intended because they have to create an interpretation themselves, using their specific knowledge about ads, brands and products. Or they might not be able to interpret open ads at all because they are too difficult to understand. On the positive side, when consumers elaborate more on open ads, there is a chance that they will create more alternative interpretations. We argue that

when alternative interpretations are created across consumers, a persuasive advantage may arise because the same ad appeals to a variety of consumers. The absence of guidance in open ads leaves space and opportunity for consumers to create interpretations based on their individual knowledge about ads in general, the advertised product, and the brand.

Third, openness might affect the *attitude towards the ad* (A_{ad}). A positive A_{ad} might affect subsequent advertising effects, such as the attitude towards the brand and purchase intention. Openness in ads may lead to a relatively positive A_{ad} (1) when consumers experience pleasure in searching for an interpretation, (2) when consumers consider finding a plausible interpretation as a reward, (3) when consumers experience openness as pleasantly incongruent with their expectations of advertising, (4) when consumers view openness as an intelligent form of communication that they appreciate, and (5) when openness decreases counter argumentation. However, negative effects of openness on A_{ad} are equally plausible. A negative effect of openness on A_{ad} is likely (1) when consumers experience difficulty creating an interpretation, (2) when consumers are not able to create an interpretation, and (3) when consumers are uncertain whether the created interpretation is the one intended by the ad-maker.

Finally, the individual consumer's need for cognition might interact with the effect of openness on attention, recall, interpretation, and Aad. Need for cognition refers to the tendency to engage in and derive pleasure from effortful cognitive activities. Because consumers have to spend more energy to interpret an open ad than a closed one, we expect that openness might have different effects on consumers with different degrees of need for cognition.

***C**hapter 4* reports five experiments in which we investigated the effects of openness in ads on consumers and established whether need for cognition influences those effects. Table 5.1 contains a summary of our main findings.

In *Experiment 1* we investigated whether open ads command more attention than their closed counterparts. In addition, we measured whether openness increases consumers' attention to the brand. The typical forced exposure paradigm used in laboratory experiments does not seem to provide a very suitable test of any of our contentions about openness and attention. We therefore simulated natural viewing conditions by using infrared eye-tracking equipment from a company called Verify. We measured the attention of 216 participants who browsed through a general audience magazine (*HP De Tijd*) containing three test ads: two car ads and a whiskey ad. For each ad we made two conditions: one condition without a headline and another condition with a headline that provided the reader moderate guidance towards the intended interpretation. At first sight, the results reveal that participants spend significantly less viewing time on ads and brands when openness increases. Apparently, less guidance towards an obvious interpretation does not increase attention towards the ad and brand. However, the negative effect of openness on attention may be due to

the extra element in the closed conditions: the headline. Participants may have spent more time looking at the closed conditions because of the additional time required to read the headline. Headlines require reading time, whereas open ads without headlines are instantly 'read'. For this reason, we conducted a second experiment in which we determined the effect of openness on attention to ads that do not differ in amount of verbal copy.

Experiment 2 replicated Experiment 1 and extended it by establishing the effect of openness on recall of the ad and the advertised product, and exploring whether consumers' need for cognition plays a role in the effect of openness on attention to, and recall of, the ad and its elements. This study addresses the possibility that the presence of headlines in Experiment 1 might have been responsible for the fact that the closed ads received more attention than the open ones. Therefore, Experiment 2 had four conditions (instead of two) for each of the four selected car ads. We manipulated the level of openness in two ways. First, we inserted headlines that differed in the amount of verbal anchoring, creating low and moderate verbal-guidance conditions. Second, we altered the visuals, creating a low and a moderate visual-guidance condition. A total of 425 participants, representative of the Dutch population, participated in the study. We used the same eye-tracking device to measure attention as in Experiment 1, and added an indirect recall task in which participants had to identify the ad and the product when pixilated images of the ads were shown. These pixilated images of the ad make color, pictorial, logo and verbal copy vaguely recognizable but not readable. The results reveal no differences in attention between open and closed ads for the ads themselves and for the advertised brands. Attention duration is rather short for open ads, as well as for closed ads. Possibly, consumers do not want to pay attention to ads in general, because of their persuasive intention. We found that participants recall the advertised products better in open ads than in closed ones, possibly because they have to identify the product in order to be able to plausibly interpret the open ads. There is no interaction effect of need for cognition and openness on attention and recall, and no main effect of need for cognition.

In *Experiment 3* consumers' attention was measured for a large number of open (n = 99) and closed car ads (n = 97) in order to generalize the findings of Experiment 2. Each of these ads was tested among 114 participants, within a single exposure design that involving two magazines (*HP De Tijd* and *Elsevier*), each of which contained several articles and numerous filler ads. These car ads were not systematically manipulated as in Experiments 1 and 2, but selected from the Verify database. This study does not show any advantage of openness on attention, confirming the findings of Experiment 2. Consumers looked at single page ads for approximately 2.5 seconds on average and at double page ads for 4.5 seconds on average. Considering the relatively short viewing time, consumers are apparently not motivated to devote attention to ads. This might be due to the persuasive intention of ads in general.

In *Experiment 4* we determined whether openness influences consumers' ability to create an interpretation, to create the intended interpretation, and to create alternative interpretations besides the intended one. In addition, we measured their A_{ad}. As the findings from the first three experiments suggest a reduced chance of finding positive effects of openness on interpretation and A_{ad}, in Experiment 4 the effects of openness were measured under conditions relatively favorable for processing openness in ads. First year male students of the Institute for the Car Branch and Management (IVA) in Driebergen, The Netherlands, participated in the experiment (N = 148), and were exposed to car-ads. In comparison with most consumers, they are very interested in cars and highly able to interpret car ads. Open and closed conditions were created for three car ads by adding headlines that differed in the amount of guidance towards an interpretation. Despite the beneficial circumstances for finding a positive effect of ad-openness, the results reveal a negative effect of openness on interpretation and A_{ad}, regardless of consumers' need for cognition. The negative effect of openness on A_{ad} is mainly related to the difficulty participants experience interpreting the ads, and their inability to create any interpretation. Participants with a high need for cognition do not differ from those with a low need for cognition in their ability to interpret open ads and their attitude towards open ads. No significant interaction effect is found of need for cognition and openness on A_{ad}, and no main effect of need for cognition.

Finally, to strengthen our conclusions and generalize earlier findings, we performed a *fifth experiment* into the effects of advertising openness on interpretation and A_{ad}. We re-examined the negative effects of openness found in Experiment 4, by (a) selecting a research population more representative of the Dutch population, (b) manipulating openness in a different way, and (c) investigating a broader range of openness. We again studied how need for cognition influences consumers' ability to create an interpretation of open ads, and their A_{ad} Additionally, we determined the attitude towards the brand (A_{brand}). We measured A_{ad} using an average grade point and an attitude scale, and by means of a non-verbal instrument called PrEmo which determines positive as well as negative emotions. PrEmo was made available to us by a company called TNS NIPO. We selected four car ads and two ads for mobile phones, for which we created three conditions with different amounts of anchoring: an ad without a headline, with a moderately guiding headline, and one with a highly guiding headline. We confirmed the results of Experiment 4, finding a negative effect of openness on the ability to create an interpretation, to reach the intended interpretation, and on A_{ad}. Once again, the negative effect of openness on A_{ad} is related to the difficulty participants experience creating an interpretation, but also to their inability to interpret open ads, and their uncertainty about the correctness of their interpretation. Adding to these negative findings, we found a negative effect of openness on A_{brand}. We once again found that need for cognition does not mediate the effects of openness on (a) A_{ad} and (b) the

ability to interpret open ads. We found no interaction effect of need for cognition and openness on A_{ad}, and no main effect of need for cognition.

In *Chapter 5*, we present our general conclusions, discuss the limitations of our studies, consider the theoretical and practical implications of our findings, and formulate recommendations for future research.

We can conclude that openness provides no benefits for advertisers. None of the experiments indicates obvious positive effects of openness in ads on attention. In fact, it becomes clear that openness has no effect on consumers' attention. Although openness does not affect ad recall, we did find a minor, positive influence of openness on product recall. On the other hand, openness unmistakably has negative effects on consumers' interpretation and their A_{ad}; openness decreases the number of consumers that are able to create the intended interpretation or any interpretation at all, and lowers consumers' A_{ad} and A_{brand}. The negative effects of openness on consumers' A_{ad} are mainly related to the difficulty that consumers experience when they interpret ads. Finally, none of our experiments reveals an effect of need for cognition, which raises the question whether need for cognition is important when studying the effects of openness in an advertising context.

We can identify five limitations of our studies. The first concerns the situation in which our experiments took place. Since the ads were processed under conditions of high task involvement, this may have mediated the effects of openness on A_{ad} and interpretation. The second limitation is that participants were exposed to the ads only once, whereas in real-life consumers are confronted with the same ads over and over. The third limitation concerns the selection of the experimental ads. Since all the relatively open ads included in our studies belong to the category of the open 'riddle ad', this may limit the generalizability of our conclusions. This does not apply to Study 3, where we determined the effects of a large number and large variety of open and closed ads on attention. Fourth, the way we manipulated openness in our experiments may limit the generalizability of our findings. Changing the amount of verbal anchoring means that we only investigated the effects of openness for a relatively small part of the continuum of openness. Finally, all of our experiments were conducted on Dutch (western) consumers, so our conclusions may only apply to consumers with a western cultural background.

'Openness' is a term that represents a common dimension of the various terms used in related studies. Though these terms appear at first sight to refer to different types of ads, this common dimension of 'openness' shows that they are in fact closely related to each other. Openness pulls these terms together via the common dimension of degree of guidance. Based on the theoretical notions of Eco (1979), openness is especially suited for advertising research

because openness is defined in terms of guidance towards a certain interpretation. After all, persuading consumers to interpret ads in a certain way is the very goal of persuasive communication. Finally, openness has proved to be a suitable concept to be operationalized for empirical research, because consumers are able to determine an ad's level of openness.

Our findings have one obvious implication for ad-makers. It seems clear that ad-makers need to provide guidance towards the intended interpretation of magazine ads. Ads always benefit from verbal anchoring, regardless of whether the ads are relatively easy or difficult to interpret. As shown in our studies, ad-makers can increase guidance by inserting headlines that lead consumers towards a certain interpretation of the ad and its pictorial. In addition to verbal guidance, ad-makers have several other means to increase guidance in open ads. Ad-makers can increase the amount of guidance by repeating open ads, and by embedding open ads in ad campaigns. The open strategy seems most suited for advertising strong brands.

Considering its clear negative effects and the large amounts of money involved in the advertising business, an open ad-strategy seems risky. However, it is premature to conclude that the open strategy is unable to communicate the benefits of products and services under all circumstances. We have identified some circumstances from which the open strategy might benefit, although further empirical research is necessary to determine the actual benefits.

Samenvatting

Tegenwoordig bevatten tijdschriften veel advertenties die niet rechtstreeks aangeven waarom de consument het geadverteerde merk zou moeten kopen. De geringere sturing naar de bedoelde boodschap is het centrale kenmerk van deze zogenaamde open advertenties. Reclamemakers verwachten kennelijk dat consumenten gemotiveerd genoeg zijn om zelf de bedoelde boodschap te achterhalen. In de media wordt gespeculeerd over een toename in openheid, hoewel dat tot nu toe voor tijdschriften nog niet empirisch is aangetoond. De bewering dat openheid zorgt voor een toename in aandacht en herinnering is nog nooit onderbouwd door middel van onderzoek. Onderzoek naar het voorkomen en de effecten van open advertenties is schaars en levert tegengestelde resultaten op. Het laat zowel positieve als negatieve effecten van openheid zien op de attitude ten aanzien van de advertentie, terwijl de effecten op het interpreteren van de bedoelde boodschap vooral negatief zijn. Het doel van deze dissertatie is drieledig. Ten eerste verduidelijken we het begrip openheid in de context van reclame. Ten tweede stellen we via een inhoudsanalyse vast of er sprake is van een trend in openheid in tijdschriftadvertenties. Tenslotte bepalen we met behulp van een vijftal experimenten wat het effect is van openheid op de aandacht, de herinnering, de interpretatie en de attitude ten aanzien van de advertentie.

Ons *eerste doel* is het verduidelijken van het concept van openheid in een reclamecontext. In Hoofdstuk 1 omschrijven we wat het concept openheid betekent en laten we zien hoe het bruikbaar is voor reclame. We baseren ons op Umberto Eco (1979) die vanuit semiotisch perspectief omschrijft wat hij met openheid bedoelt. Eco gebruikt de term openheid om verschillende typen teksten mee te onderscheiden. Open teksten zijn volgens hem teksten die voor meerdere interpretaties vatbaar zijn. Eco ziet openheid niet als een eigenschap van een bepaalde tekst maar als het resultaat van de interactie tussen de boodschap en de lezer. Gezien de bruikbaarheid van openheid voor reclame-onderzoek, trachten diverse onderzoekers het begrip te vertalen vanuit de semiotiek naar een reclamecontext. Ondanks de terminologische verwarring die daardoor ontstaat, hanteren al deze onderzoekers de term openheid om te refereren aan reclame-uitingen die verschillen in de mate waarin ze naar een bepaalde interpretatie sturen. Advertenties zijn nooit compleet open of compleet gesloten, wat betekent dat openheid in reclame een continuüm is. Onderzoekers gebruiken verschillende termen om aan te geven dat advertenties verschillen in hun mate van sturing naar een interpretatie, zoals: indirect, complex, ambigu, 'unframed', abstract en ondergecodeerd. Hoewel deze termen geen synoniemen van elkaar zijn, zijn ze alle sterk verwant aan het concept van openheid, doordat ze een geringe sturing naar een bedoelde boodschap impliceren. Bovendien laten deze verwante termen zien dat het concept van openheid in meer reclame-onderzoek centraal staat dan alleen in het onderzoek waarin de term openheid wordt gebruikt. Deze

verwante studies helpen ons om kenmerken te formuleren die samen de mate van openheid van een advertentie bepalen: (1) de aanwezigheid van een prominente afbeelding, (2) de afwezigheid van het product in de afbeelding en in de tekst, (3) de afwezigheid van verbale verankering en (4) een laag niveau van merkverankering. Door patronen te herkennen in een groot aantal open advertenties die we hebben verzameld in een periode van vijf jaar, onderscheiden we open advertenties in esthetische-advertenties, issue-advertenties, verhaaladvertenties en raadseladvertenties.

Onze *tweede doelstelling* is te bepalen of er sprake is van een trend in openheid bij advertenties voor verschillende producttypen in verschillende tijdschriften. Wanneer de mate van openheid in advertenties toeneemt, vergroot dat ook de relevantie van onderzoek naar de effecten van openheid. In Hoofdstuk 2 onderzoeken we met een inhoudsanalyse of er sprake is van een trend naar openheid. Onze analyse vindt plaats op 768 advertenties, afkomstig uit diverse edities van Nederlandse tijdschrifttitels (Elsevier, Panorama, Margriet, en Autovisie), gepubliceerd in 1980, 1990 en 2000, voor vijf verschillende producttypes (alcohol, tabak, producten voor het uiterlijk, verzorgingsproducten en auto's). De resultaten bevestigen onze verwachting dat advertenties gedurende de laatste decennia steeds meer open zijn geworden, hoewel deze trend afvlakt tussen 1990 en 2000. We vinden geen verschillen tussen tijdschriften onderling en tussen productcategorieën.

Ons *laatste onderzoekdoel* is het bepalen van de effecten van openheid op ontvangers. In Hoofdstuk 3 bespreken we de mogelijke effecten van openheid op consumenten, waarbij wij ons baseren op onderzoek waarbij advertenties getest zijn die wij beschouwen als open.

Ten eerste gebruiken reclamemakers openheid mogelijk als een middel om *aandacht* vast te houden en *herinnering* van de advertentie en het product te stimuleren. Onderzoekers beschouwen aandacht als een belangrijke voorwaarde voor reclame-effectiviteit. Wanneer een consument geen aandacht schenkt aan een advertentie, kan ook geen (positief) effect verwacht worden op herinnering, koopintentie en koopgedrag. Er zijn redenen te bedenken waarom openheid de aandacht wel en waarom openheid de aandacht niet kan vasthouden. Aan de ene kant kan de open advertentie er in slagen om de aandacht vast te houden, aangezien consumenten (1) open advertenties als relatief moeilijk te interpreteren ervaren; (2) openheid als afwijkend ervaren van hun verwachtingen van reclame, (3) onzeker zijn of de gevonden interpretatie bij de open advertentie wel de bedoelde is, en (4) langer naar het merk kijken aangezien zij verwachten dat het merk hen informatie kan verschaffen over de bedoelde boodschap. Aan de andere kant kan de open advertentie wellicht minder goed de aandacht vasthouden dan de gesloten advertentie omdat consumenten

er niet van houden energie te steken in advertenties die ze moeten ontrafelen. Tenslotte beïnvloedt openheid de aandacht mogelijk niet doordat consumenten over het algemeen niet gemotiveerd zijn om aandacht aan advertenties te schenken aangezien ze weten dat advertenties altijd commerciële boodschappen bevatten. Deze argumenten gelden ook voor de *herinnering* van open advertenties.

Een tweede effect is dat openheid mogelijk de creatie van een *interpretatie* beïnvloedt. Openheid kan het creëren van een interpretatie zowel negatief als positief beïnvloeden. De kans bestaat dat consumenten open advertenties anders interpreteren dan bedoeld door de reclamemaker, omdat zij zelf een interpretatie moeten creëren waarbij ze hun kennis over advertenties, merken en producten aanspreken. Mogelijkerwijs zijn consumenten zelfs helemaal niet in staat om een interpretatie te maken omdat zij de open advertentie moeilijk te begrijpen vinden. Ook is het mogelijk dat consumenten, wanneer zij besluiten om energie in de open advertentie te steken, alternatieve interpretaties creëren, die, net als de bedoelde interpretatie, gunstig voor het merk uitpakken. Een brede groep consumenten voelt zich dan aangesproken door de advertentie, ondanks dat zij niet de bedoelde interpretatie achterhalen.

Een derde effect kan eruit bestaan dat openheid wellicht de *attitude ten aanzien van de advertentie* beïnvloedt. Een positieve attitude ten aanzien van de advertentie kan belangrijke reclame-effecten medebepalen zoals een gunstige attitude ten aanzien van het merk. Openheid beïnvloedt de attitude ten aanzien van de advertentie positief wanneer (1) consumenten plezier beleven aan het zoeken naar een interpretatie, (2) zij het vinden van een interpretatie als een beloning ervaren, (3) consumenten openheid plezierig afwijkend vinden van wat zij doorgaans verwachten van advertenties, (4) zij openheid als een intelligente vorm van communicatie ervaren, en (5) indien openheid contra-argumentatie tegengaat. Maar openheid kan de attitude ten aanzien van de advertentie eveneens negatief beïnvloeden. Een negatief effect van openheid ontstaat wanneer (1) consumenten het moeilijk vinden om een interpretatie te vormen, (2) zij niet in staat zijn om een interpretatie te maken, en (3) wanneer zij onzeker zijn of de door hen gevonden interpretatie samenvalt met de door de reclamemaker bedoelde interpretatie.

Tenslotte speelt de persoonseigenschap *need for cognition* mogelijk een beïnvloedende rol bij aandacht, herinnering, interpretatie en de attitude ten aanzien van de open advertentie. Need for cognition duidt op de geneigdheid van mensen zich bezig te houden met cognitieve activiteiten die moeite kosten. Consumenten met een hoge need for cognition beleven daar plezier aan. Omdat consumenten meer cognitieve moeite moeten doen om een open advertentie te interpreteren dan om een gesloten advertentie te interpreteren, verwachten we dat openheid verschillende effecten heeft bij consumenten die verschillen in need for cognition.

In *Hoofdstuk 4* rapporteren we de resultaten van vijf experimenten waarin we het effect van openheid vaststellen op de aandacht, de herinnering, de interpretatie en de attitude ten aanzien van de advertentie. Tevens bepalen we of de persoonsvariabele need for cognition deze effecten beïnvloedt. Sectie 5.1. bevat een overzicht van de bevindingen van onze studies.

In *Experiment 1* stellen we vast of open advertenties beter de aandacht vasthouden dan hun gesloten tegenhangers. We bepalen in hoeverre de advertentie als geheel de aandacht weet vast te houden en in hoeverre de aandacht specifiek uitgaat naar het geadverteerde merk. In eerder onderzoek is aandacht gemeten door consumenten geforceerd bloot te stellen aan open en gesloten advertenties. Consumenten weten dan dat hun aandacht voor advertenties wordt gemeten. Bovendien krijgen zij de advertenties een voor een voorgelegd. In ons experiment benaderen we omstandigheden waarin consumenten normaal naar advertenties in tijdschriften kijken, door de respondenten er niet op te wijzen dat het onderzoek om advertenties gaat en hen in eigen tempo door bestaande tijdschriften te laten bladeren. We hanteren gebruiksvriendelijke apparatuur om hun aandacht te meten, namelijk de eye-tracking apparatuur van de onderneming Verify. Eye-tracking apparatuur stelt vast waar mensen naar kijken en hoe lang. We stellen de hoeveelheid aandacht vast van 216 deelnemers die door het tijdschrift *HP De Tijd* bladeren. Het tijdschrift bevat drie testadvertenties: twee autoadvertenties en een advertentie voor whisky. Van elke advertentie hebben we twee versies gemaakt: een versie zonder een tekstregel (open) die daardoor nauwelijks naar een bepaalde interpretatie stuurt en een versie met een tekstregel (gesloten) die enigszins naar een bepaalde interpretatie stuurt. De aanvankelijke resultaten hebben laten zien dat deelnemers beduidend minder tijd besteden aan de open advertenties. Zowel de open advertentie als het afgebeelde merk trekken minder aandacht. Hieruit zou kunnen worden geconcludeerd dat een geringere sturing naar een interpretatie niet voor meer aandacht voor de advertentie en het merk zorgt. Experiment 1 houdt echter geen rekening met de grotere hoeveelheid tekst- en merkelementen in de gesloten advertenties. Deze hoeveelheid kan immers verantwoordelijk zijn geweest voor het feit dat de gesloten advertenties meer de aandacht vasthouden dan de open advertenties. In Experiment 2 hebben we dit probleem opgelost door de hoeveelheid tekst en het aantal merkelementen in de te vergelijken open en gesloten condities gelijk te houden.

In *Experiment 2* hebben we vier condities gecreëerd voor elk van vier geselecteerde autoadvertenties. We hebben een open en gesloten conditie gecreëerd door middel van (a) een wijziging in de tekstregel, en (b) een wijziging in de afbeelding. We hebben twee condities gecreëerd met een lage en een gemiddelde sturing door in beide condities tekstregels toe te voegen die verschillen in de mate waarin ze de interpretatie verankeren. Een gelijk aantal woorden maakt de leestijd van beide tekstregels even lang. De overige twee condities met een lage en een gemiddelde sturing

zijn ontstaan doordat we de afbeeldingen hebben gemanipuleerd. Ook bepalen we het effect van openheid op de herinnering van de advertentie en het geadverteerde product. Tenslotte bepalen we welke rol need for cognition speelt bij het effect van openheid op aandacht en herinnering. In totaal 425 respondenten, die representatief zijn voor de Nederlandse bevolking, nemen deel aan ons experiment. We maken wederom gebruik van de 'eye-tracking' apparatuur van Verify en hanteren dezelfde procedure als in het eerste experiment om aandacht te meten. We stellen vast of deelnemers zich de advertentie en het geadverteerde product herinneren, door hen na afloop van de 'eye-tracking' sessies een advertentie voor te leggen in de vorm van een moeilijk herkenbare afbeelding ('pixilated image'). De resultaten laten geen verschillen zien in aandacht voor de open en gesloten advertentieversies en in aandacht voor de merken. Het blijkt dat de deelnemers zich het geadverteerde product in open advertenties beter herinneren dan in gesloten advertenties, mogelijk doordat deelnemers bij de open condities het product hebben moeten identificeren om een plausibele interpretatie te kunnen creëren. Tenslotte laten de resultaten geen effect zien van need for cognition op aandacht en herinnering.

In *Experiment 3* stellen we aandacht vast door middel van een meta-analyse op een groot aantal onderzoeken uit de database van Verify. Om de bevindingen van Experiment 2 te generaliseren, vergelijken we hier de aandachtsscores van een groot aantal open (n = 99) en gesloten auto-advertenties (n = 97). Net als in onze voorgaande experimenten hebben we de aandacht voor deze advertenties gemeten met behulp van de Verify eye-tracking apparatuur. We hanteren dezelfde procedures als in Experiment 1 en 2. Gemiddeld is elk van deze advertenties getest onder 114 consumenten. We hebben de advertenties niet systematisch gemanipuleerd zoals in de voorgaande experimenten, maar geselecteerd uit de database van Verify, waarna ze zijn ingedeeld in open en gesloten advertenties. De advertenties zijn getest in twee vergelijkbare tijdschriften (*HP De Tijd* en *Elsevier*) met daarin diverse artikelen en advertenties. We vinden geen effect van openheid op aandacht, wat overeen komt met onze bevindingen van Experiment 2. Gemiddeld kijken consumenten minder dan 2,5 seconden naar een paginagrote advertentie en minder dan 4,5 seconden naar een advertentie verdeeld over twee pagina's. Gezien deze lage gemiddelde kijktijd, zijn consumenten mogelijk niet gemotiveerd om hun aandacht te schenken aan advertenties om een boodschap te achterhalen door de commerciële doelstelling die ten grondslag ligt aan alle advertenties. Of wellicht is een langere kijktijd niet nodig om een boodschap te achterhalen.

In *Experiment 4* stellen we vast of openheid het creëren van een interpretatie beïnvloedt. We bepalen hiermee of consumenten erin slagen om een interpretatie te bedenken en of ze de gewenste interpretatie achterhalen. Voorts willen we weten of zij alternatieve interpretaties bedenken, naast de bedoelde interpretatie. Tenslotte stellen we

de invloed vast van openheid op de attitude ten aanzien van de advertentie. Onze eerste drie experimenten waarin aandacht en herinnering centraal staan, geven weinig hoop op het vinden van positieve effecten van openheid op interpretaties en de attitude ten aanzien van de advertentie. Daarom besluiten we om de effecten van openheid in Experiment 4 te meten in omstandigheden die relatief gunstig zijn voor het verwerken van open advertenties. Eerstejaarse studenten (N = 148), van het Instituut voor Autobranche en Management (IVA) te Driebergen, doen mee aan het onderzoek. Alle studenten zijn van het mannelijke geslacht. Deze studenten zijn geïnteresseerd in auto's en -naar verwachting- beter in staat om de drie auto- advertenties uit ons experiment te interpreteren dan de gemiddelde consument. We gebruiken voor de drie advertenties dezelfde tekstregels als in Experiment 2. De tekstregels verschillen in hun mate van sturing naar de bedoelde interpretatie. Ondanks deze relatief gunstige omstandigheden voor open advertenties, laten de resultaten een negatief effect van openheid zien op interpretaties en de attitude ten aanzien van de advertentie. Het negatieve effect op de attitude ten aanzien van de advertentie komt doordat respondenten moeite ervaren om de open advertenties te interpreteren. De respondenten met een hoge of lage need for cognition score verschillen niet van elkaar in de mate waarin ze de advertenties kunnen interpreteren en in hoeverre ze deze waarderen.

Om onze eerdere bevindingen te generaliseren, stellen we in *Experiment 5* opnieuw het effect van openheid vast op interpretaties en de attitude ten aanzien van de advertentie. Aansluitend bepalen we de relatie tussen de onzekerheid die deelnemers ervaren over de juistheid van de door hen gevonden interpretatie enerzijds en hun attitude ten aanzien van de advertentie anderzijds. Bovendien stellen we de attitude ten aanzien van het merk vast. Om de attitude ten aanzien van de advertentie vast te stellen gebruiken we, naast een rapportcijfer en een verbale schaal, het innovatieve non-verbale onderzoeksinstrument PrEmo, waarmee positieve en negatieve emoties zijn gemeten. PrEmo is ontwikkeld door Pieter Desmet (TU Delft) en ons ter beschikking gesteld door TNS NIPO. Tegengesteld aan Experiment 4, waaraan bovengemiddeld geïnteresseerde deelnemers hebben deelgenomen, nemen we een steekproef van 957 consumenten die representatief zijn voor de Nederlandse bevolking. We selecteren 4 auto-advertenties en 2 advertenties voor mobiele telefoons. Voor elke van deze advertenties hebben we drie condities gemaakt die van elkaar verschillen in openheid: (1) een advertentie zonder tekstregel, (2) een advertentie met een enigszins sturende tekstregel en tenslotte (3) een advertentie met een duidelijk sturende tekstregel. De resultaten bevestigen alle bevindingen van Experiment 4. We vinden een negatief effect van openheid op het kunnen achterhalen van een interpretatie, en op het achterhalen van de bedoelde interpretatie. Tevens vinden we een negatief effect op de attitude ten aanzien van de advertentie. Experiment 5 laat wederom zien dat het negatieve effect van openheid hoofdzakelijk komt door de ervaren moeite bij

het interpreteren van open advertenties en het niet kunnen interpreteren van open advertenties. Daarnaast vinden we een negatief effect van openheid op de attitude ten aanzien van het merk. Wederom vinden we geen interactie-effect van need for cognition met openheid op (1) de attitude ten aanzien van de advertentie en (2) de mate waarin consumenten erin slagen om de advertentie te interpreteren, en geen hoofdeffect van need for cognition.

In *Hoofdstuk 5* vatten we de conclusies van onze studies samen, bespreken we de beperkingen van onze studie, de theoretische en praktische implicaties en formuleren aanbevelingen voor vervolgonderzoek.

Ons onderzoek laat zien dat openheid nauwelijks voordelen voor adverteerders biedt, maar wel een aantal nadelen. Onze experimenten laten zien dat openheid aandacht niet positief beïnvloedt. In een enkel experiment constateren we een betere productherinnering. Openheid beïnvloedt het creëren van interpretaties en de attitude negatief; consumenten slagen er minder goed in om de open advertenties te interpreteren en de bedoelde interpretatie te achterhalen. Voorts zijn de attitude ten aanzien van de advertentie en het merk negatiever bij open dan bij gesloten advertenties. We constateren dat de negatieve attitude ten aanzien van de advertentie vooral verband houdt met de moeite die consumenten ervaren bij het interpreteren van open advertenties. Tenslotte vinden we geen enkel bewijs dat need for cognition een rol speelt bij de effecten van openheid. Dat werpt de vraag op over het belang van need for cognition bij het bestuderen van openheid in een advertentiecontext.

We formuleren vijf beperkingen van onze studies. De eerste beperking betreft de situatie waarin onze experimenten plaats hebben gevonden. Het feit dat de deelnemers in Experiment 4 en 5 gemotiveerd zijn geweest om de advertenties te verwerken, kan de effecten van openheid op de attitude ten aanzien van de advertentie en het creëren van een interpretatie hebben beïnvloed. Ze hebben immers al snel door gehad dat in het onderzoek advertenties zijn getest. Daarentegen hebben de deelnemers van Experiment 1, 2 en 3 niet geweten dat hun aandacht voor advertenties is gemeten. De tweede beperking betreft het gegeven dat deelnemers slechts eenmalig zijn blootgesteld aan de testadvertenties, terwijl in normale omstandigheden consumenten veel vaker dezelfde advertenties zien. De derde beperking betreft de selectie van testadvertenties die in hoge mate open zijn en alle tot de raadselcategorie behoren, wat de generaliseerbaarheid van onze resultaten verkleint. Deze beperking geldt in mindere mate voor Experiment 3 waarin we het effect van openheid op aandacht vast hebben gesteld voor een grote hoeveelheid en grote variëteit van open advertenties. De vierde beperking betreft de manipulatie van de testadvertenties in Experiment 4 en 5 om open en gesloten versies te maken. Verbale manipulatie blijkt de mate van openheid slechts in beperkte mate te hebben beïnvloed, waardoor we slechts een relatief klein gedeelte van

het continuüm van openheid hebben onderzocht. Tenslotte gelden de conclusies van onze studie alleen voor consumenten met een westerse culturele achtergrond.

De term openheid duidt op een gemeenschappelijke dimensie van een groot aantal verwante studies. Deze gemeenschappelijke dimensie maakt zichtbaar hoe diverse termen, die op het eerste gezicht verschillende typen advertenties aanduiden, gerelateerd zijn. Openheid is gebaseerd op theoretische noties afkomstig uit de semiotiek en is geschikt om toegepast te worden in advertentieonderzoek aangezien openheid omschreven is in termen van sturing naar een bepaalde boodschap. Het overbrengen van een bepaalde boodschap is een uiteindelijk doel van veel vormen van persuasieve communicatie. Tenslotte bewijst openheid als concept geschikt te zijn voor operationalisatie in empirisch onderzoek aangezien consumenten in staat zijn om advertenties te onderscheiden naar hun mate van openheid.

Het lijkt duidelijk dat reclamemakers sturing moeten geven naar een bepaalde interpretatie wanneer ze tijdschriftadvertenties ontwerpen. Onze experimenten laten zien dat reclamemakers de sturing enigszins kunnen verhogen door tekstregels te gebruiken die consumenten sturen naar een bepaalde interpretatie van (de afbeelding in) de advertentie. Daarnaast kan de hoeveelheid sturing naar een interpretatie vergroot worden door (1) open advertenties herhaald aan te bieden, (2) open advertenties in te bedden in campagnes, en (3) de open advertentiestrategie in te zetten voor sterke merken. Toekomstig onderzoek moet duidelijk maken in hoeverre deze maatregelen de open advertentiestrategie toch de moeite waard maken.

References

Abernethy, A.M. (1991). Physical and mechanical avoidance of television commercials: An exploratory study of zipping, zapping and leaving. *Proceedings of the American Academy of Advertising*, USA, Reno, 223-231.

Anand, P., & Sternthal, B. (1990). Ease of message processing as a moderator of repetition effects in advertising. *Journal of Marketing Research*, 27, 345-53.

Andresen, T. (1987). *Anzeigenkontakt und informationsuberschuss. Eine empirische untersuchung über die determinanten des anzeigenkontaktes publikumszeitschriften mit hilfe der blickaufzeichnung*. [Noticing advertisements and information overload. An empirical research into the determinants of noticing advertisements in magazines using eye-movements]. Unpublished doctoral dissertation, Universität des Saarlandes, Nurnberg.

Arias-Bolzmann, L., Chakraborty, G., & Mowen, C. (2000). Effects of absurdity in advertising: The moderating role of product category attitude and the mediating role of cognitive responses. *Journal of Advertising*, 29, 35-49.

Babin, L. A., & Burns, A. C. (1997). Effects of print ad pictures and copy containing instructions to imagine on mental imagery that mediates attitudes. *Journal of Advertising*, 26, 33-43.

Barthes, R. (1977). *Image music text*. New York: Hill and Wang.

Belch, G. E. (1982). The effects of television commercial repetition in cognitive response and message acceptance. *Journal of Consumer Research*, 9, 56-65.

Berger, W. (2001). *Advertising today*. London: Phaidon.

Berlyne, D. E. (1971). *Aesthetics and psychobiology*. New York: Appleton-Century-Crofts.

Bock, M., & Rath, W, von. (1997). The influence of attention on advertising effectiveness. *Swiss Journal of Psychology*, 56, 42-50.

Bondanella, P. E. (1997). *Umberto Eco and the open text: Semiotics, fiction, popular culture*. Cambridge: Cambridge University Press.

Boutlis, P. (2000). A theory of post-modern advertising. *International Journal of Advertising*, 19, 2-24.

Brett, A. S. M., Lang, B., & Wong, S. (2003). Conclusion explicitness in advertising. The moderating role of need for cognition (NFC) and argument quality (AQ) on persuasion. *Journal of Advertising*, 32, 57-66.

Burton, P., & Purvis, S. (1996). *Which ad pulled best?* Chicago: NTC Publishing Group.

Brown, S. P., & Stayman, D. M. (1992). Antecedents and consequences of attitude toward the ad: A metaanalysis. *Journal of Consumer Research*, 19, 34-51.

Cacioppo, J. T., Petty, R. E. & Kao, C. F. (1984). The efficient assessment of need for cognition. *Journal of Personality Assessment,* 48 (3), 306-307.

Chaiken, S. (1984). Cognitive theories of persuasion. *Advances in Experimental Psychology*, 17, 267-359.

Chamblee, R., Gilmore, R., Thomas, G., & Soldow, G. F. (1993). When copy complexity can help ad readership. *Journal of Advertising Research*, 33, 23-28.

Chandler, D. (2002). *Semiotics: The Basics*. London: Routledge.

Chebat, J., Charlebois, M., & Gélinas-Chebat, C. (2001). What makes open vs. closed conclusion advertisements more persuasive? The moderating role of prior knowledge and involvement. *Journal of Business Research*, 53, 93-102.

Childers, T. L., & Houston, M. J. (1984). Conditions for a picture-superiority effect on consumer memory. *Journal of Consumer Research*, 11, 643-654.

Cook, G. (2001). *The discourse of advertising* (2nd ed.). New York: Routledge.

Cox, D., & Cox, A.D. (1988). What does familiarity breed? Complexity as a moderator of repetition effects in advertisement evaluation. *Journal of Consumer Research*, 15, 111-117.

Curlo, E., & Chamblee, R. (1998). Ad processing and persuasion: The role of brand identification. *Psychology & Marketing*, 15, 279-299.

Darley, W. K., & Smith, R. E. (1995). Gender differences and information processing strategies. *Journal of Advertising*, 24 (1), 41-56.

Desmet, P. M. A., Hekkert, P., & Jacobs, J. J. (2000). When a car makes you smile: Development and application of an instrument to measure product emotions. In S.J. Hoch and R.J. Meyer (Eds.), *Advances in Consumer Research*, 27, 111-117.

Di Benedetto, C. A.,Tamate, M. Y., & Chandran, R. (1992). Developing creative advertising strategy for the Japanese marketplace. *Journal of Advertising Research*, 32, 39-49.

Dingena, M. (1994). *The creation of meaning in advertising. Interaction of figurative advertising and individual differences in processing styles*. Amsterdam: Thesis Publishers.

Dyer, G. (1982). *Advertising as communication*. London: Methuen.

Eco, U. (1979). *The role of the reader: Explorations in the semiotics of texts*. London: Indiana University Press.

Edell, J. A., & Staelin, R. (1983). The information processing of pictures in print advertisements. *Journal of Consumer Research*, 10, 45-61.

Faier, J. A., & Unger, L. S. (1987). The use of closure as a global advertising technique. *Proceedings of the 1987 conference of the American Academy of Advertising*. Columbia, SC: University of South Carolina, 114-117.

Fiske, J. (1987). *Television culture*. London: Methuen.

Forceville, C. (1996). *Pictorial metaphor in advertising*. New York: Routledge.

Franzen, G. (1997). *Advertising effectiveness. Findings from empirical research* (2nd ed.). Oxfordshire, United Kingdom: Admap Publications.

Gail, T., & Eves, A. (1999). The use of rhetorical devices in advertising. *Journal of Advertising Research*, 39, 39-41.

Goodstein, R. C. (1993). Category-based applications and extensions in advertising: Motivating more extensive ad processing. *Journal of Consumer Research*, 20, 87-99.

Haley, R. I., & Baldinger, A. L. (1991). The ARF copy research validity project. *Journal of Advertising Research*, 35, 7-16.

Hall, S. (1997). *Representation: Cultural representations and signifying practices*. London: Sage.

Heath, R. (2001). *The hidden power of advertising: How low involvement processing influences the way we choose brands*. Henley-on-Thames: Admap.

Heath, T. B., & Gaeth, G. J. (1994). Theory and method in the study of ad and brand attitudes: Toward a systematic model. In E. M. Clark, T. C. Brock, & D. W. Stewart (Eds.), *Attention, attitude, and affect in response to advertising* (pp.125-148). Hillsdale, NJ: Lawrence Erlbaum Associates.

Heckler, S. E., & Childers, T. L. (1992). The role of expectancy and relevancy in memory for verbal and visual information: What is incongruency? *Journal of Consumer Research*, 18, 475-492.

Hofstede, G. (1991). *Cultures and organizations. Intercultural cooperation and its importance for survival*. London: McGraw-Hill.

Houston, M. J., Childers, T. L., & Heckler, S. E. (1987). Picture-word consistency and the elaborative processing of advertisements. *Journal of Marketing Research*, 24, 359-369.

Kardes, F. R. (1988). Spontaneous inference processing in advertising: The effects of conclusion omission and involvement on persuasion. *Journal of Consumer Research*, 15, 225-233.

Ketelaar, P. E., Van Gisbergen, M. S., & Beentjes, J. (in press). The dark side of openness for consumer response. In E.F. McQuarrie & B. J Phillips (Eds.), *Go figure: New directions in advertising rhetoric*. Armonk, NY: M.E. Sharpe.

Ketelaar, P. E., Van Gisbergen M. S., & Bosman, J. A. M. (2004). *Open and closed advertisements: Moderating effects of comprehension on appreciation*. In P. Neijens, C. Hess, B. van den Putte & E. Smit (Eds.), *Content and media factors in advertising* (pp. 22-36). Amsterdam: Het Spinhuis Publishers.

Ketelaar, P. E., Van Gisbergen, M. S., Bosman, J. A. M., & Beentjes, J. (2006). *Attention for open and closed advertisements*. Manuscript submitted for publication.

Koga, Y., & Pearson, B. A. (1992), Cross-cultural advertising strategies in Japanese vs. American women's magazines. *Intercultural Communication Studies II*, 1, 1-18.

Kroeber-Riel, W., & Esch, F. R. (2000). *Strategie und technik der werbung. Verhaltenwissenschaftliche ansätze*. [Strategy and competence in advertising. Scientific statements]. Stuttgart, Germany: Kohlhammer.

Krugman, H. E. (2000). Memory without recall, exposure without perception. *Journal of Advertising Research*, 40, 49-54. (Reprinted from *Journal of Advertising Research*, 4, 7-12, by H.E. Krugman, 1977).

Leigh, J. H. (1994). The use of figures of speech in print ad headlines. *Journal of Advertising*, 23 (2), 17-33.

Leiss, W., Kline, S., & Jhally, S. (1990). *Social communication in advertising: Persons, products, & images of well-being* (2nd ed.). New York: Methuen publications.

Loef, J. (2002). *Incongruity between ads and consumer expectations of advertising*. Amsterdam: Thela Thesis.

Lohse, G. L. (1997). Consumer eye movement patterns on yellow pages advertising. *Journal of Advertising*, 26, 62-75.

MacInnis, D. J., Moorman, C., & Jaworski, B. J. (1991). Enhancing and measuring consumers' motivation, opportunity, and ability to process brand information from ads. *Journal of Marketing*, 55, 32-53.

MacInnis, D. J., & Jaworski, B. J. (1989). Information processing from advertisements: Toward an integrative framework. *Journal of Marketing*, 53, 1-23.

Mackenzie, S. B., & Lutz, R. J. (1989). An empirical examination of the structural antecedents of attitude toward the ad in an advertising pretesting context. *Journal of Marketing*, 53, 48-65.

Martin, B. A. S., Lang, B., & Wong, S. (2003). Conclusion explicitness in advertising. The moderating role of need for cognition (NFC) and argument quality (AQ) on persuasion. *Journal of Advertising*, 32, 57-66.

McGuire, W. J. (1985). Attitudes and attitude change. In G. Lindzey & E. Anderson (Eds.), *The Handbook of Social Psychology, II*, vol 3. New York: Random House.

McGuire, W. J. (2000). Standing on the shoulders of ancients: Consumer research, persuasion, and figurative language. *Journal of Consumer Research*, 27, 109-114.

McQuarrie, E. F. (1989). Advertising resonance: a semiological perspective. In E. C. Hirschman (Ed.), *Interpretive consumer research* (pp. 97-114), Provo, UT: Association for Consumer Research.

McQuarrie, E. F., & Mick, D. G. (1992). On resonance: A critical pluralistic inquiry into advertising rhetoric. *Journal of Consumer Research*, 19, 180-197.

McQuarrie, E. F., & Mick, D. G. (1996). Figures of rhetoric in advertising language. *Journal of Consumer Research*, 22, 424-438.

McQuarrie, E. F., & Mick, D. G. (1999). Visual rhetoric in advertising: Text-interpretive, experimental, and reader-response analyses. *Journal of Consumer Research*, 26, 37-54.

McQuarrie, E. F., & Mick, D. G. (2003a). The contribution of semiotic and rhetorical perspectives to the explanation of visual persuasion in advertising. In L. M. Scott., & R. Batra (Eds.), *Persuasive imagery. A consumer response perspective* (pp. 191-221). London: Lawrence Erlbaum.

McQuarrie, E. F. & Mick, D. G. (2003b). Visual and verbal rhetorical figures under direct processing versus incidental exposure to advertising. *Journal of Consumer Research*, 26, 37-51.

McQuarrie, E. F., & Phillips, B. J. (2005). Indirect persuasion in advertising: How consumers process metaphors presented in pictures and words. *Journal of Advertising*, 34, 7-21.

Mehta, A. (2000). Advertising attitudes and advertising effectiveness. *Journal of Advertising Research, may/june*, 67-72.

Messaris, P (1992). Visual manipulation: Visual means of affecting responses to images. *Communication,* 13, 181-195.

Messaris, P. (1997). *Visual persuasion: The role of images in advertising*. London: Sage.

Meyers-Levy, J. T., & Sternthal, B. (1991). Gender differences in the use of message cues. *Journal of Marketing Research*, 28, 84-96.

Meyers-Levy, J. T., & Tybout, A. M. (1989). Scheme congruity as a basis for product evaluation. *Journal of Consumer Research*, 16 (June), 39-54.

Mick, D. G. (1992). Levels of subjective comprehension in advertising processing and their relations to ad perceptions, attitudes, and memory. *Journal of Consumer Research*, 18, 411-424.

Mick, D. G., & Politi, L. G. (1989). Consumers' interpretations of advertising imagery: A visit to the hell of connotation. In E. C. Hirschman (Ed.), *Interpretive Consumer Research* (pp. 85-96). Provo, UT: Association for Consumer Research.

Mitchell, A. A. (1986). The effect of verbal and visual components of advertisements on brand attitudes and attitude toward the advertisement. *Journal of Consumer Research*, 13, 12-24.

Mitchell, A. A., & Olson, J. C. (1981). Are product attribute beliefs the only mediator of advertising effects on brand attitudes? *Journal of Marketing Research*, 18, 318-322.

Morgan, S. E., & Reichert, T. (1999). The message is in the metaphor: assessing the comprehension of metaphors in advertisements. *Journal of Advertising*, 28, 1-11.

Moriarty, S. E. (1996). Abduction: A theory of visual interpretation. *Communication Theory*, 6, 167-187.

Morrison, B. J., & Dainoff, M. J. (1972). Advertisement complexity and looking time. *Journal of Marketing Research*, 9, 396-400.

Mothersbaugh, D. L., Huhmann, B. A., & Franke, G. R. (2002). Combinatory and separative effects of rhetorical figures on consumers' effort and focus in ad processing. *Journal of Consumer Research*, 28, 589-602.

Nelson, M. R., & Hitchon, J. C. (1995). Theory of synesthesia applied to persuasion in print advertising headlines. *Journalism and Mass Communication Quarterly*, 72, 346-360.

Nicholson, D. R. (1998). The diesel jeans and workwear advertising campaign and the commodification of resistance. Undressing the ad. In K. T. Frith (Ed.), *Reading culture in advertising*, New York: Peter Lang.

Ogilvy, D (1983). *Confessions of an advertising man*. New York: Atheneum.

Olney, T. J., Holbrook, M. B., & Batra, R. (1991). Consumer responses to advertising: The effects of ad content, emotions, and attitude toward the ad on viewing time. *Journal of Consumer Research*, 17, 440-453.

Olshavsky, R. W. (1994). Attention as an epiphenomenon: Some implications for advertising. In E. M. Clark, T. C. Brock & D. W. Stewart (Eds.), *Attention, attitude, and affect in response to advertising* (pp. 80-88). London: Lawrence Erlbaum.

Osimo, B. (2004). The role of the reader. *In Translation course. Part two: perceptions* (section 19). Retrieved November 1, 2005, from http://www.logos.it.

Pechmann, C., & Stewart, D. W. (1988). Advertising repetition: A critical review of wearin and wearout. In J.H. Leigh and C.R. Martin (Eds.), *Current Issues and Research in Advertising (pp. 285-330).* Ann Arbor, MI: The University of Michigan Press.

Peracchio, L. A., & Meyers-Levy, J. (1994). How ambiguous cropped objects in ad photos can affect product evaluations. *Journal of Consumer Research*, 21, 190-204.

Peracchio, L. A., & Tybout, M. (1996). The moderating role of prior knowledge in schema-based product evaluation. *Journal of Consumer Research*, 23, 177-192.

Petty, R. E., & Cacioppo, J. T. (1996). *Attitudes and persuasion: Classic and contemporary approaches* (2nd ed.). Boulder, CO: Westview Press.

Phillips, B. J. (1997). Thinking into it: Consumer interpretations of complex images. *Journal of Advertising*, 26, 77-86.

Phillips, B. J. (2000). The impact of verbal anchoring on consumer response to image ads. *Journal of Advertising*, 29, 15-24.

Phillips, B. J. (2003). Understanding visual metaphor in advertising. In L. Scott., & R. Batra (Eds.), *Persuasive imagery: A consumer response perspective* (pp. 297-310). Mahwah, NJ: Lawrence Erlbaum associates.

Phillips, B. J., & McQuarrie, E. F. (2002). The development, change, and transformation of rhetorical style in magazine advertisements 1954-1999. *Journal of Advertising*, 31(4), 1-13.

Phillips, B. J., & McQuarrie, E. F. (2004). Beyond visual metaphor: A new typology of visual rhetoric in advertising. *Marketing Theory*, 4, 113-136.

Pieters, R. G. M., & Raaij, F. W. van. (1992). *Reclamewerking*. Leiden, The Netherlands: Stenfert Kroese.

Pieters, R. G. M., Rosbergen, E., & Wedel, M. (1999). Visual attention to repeated print advertising: A test of scanpath theory. *Journal of Marketing Research*, 36, 424-438.

Pieters, R. G. M., Verplanken, B., & Modde, J. M. (1987). Neiging tot nadenken: samenhang met beredeneerd gedrag. [Need for cognition: relationship with reasoned action]. *Nederlands Tijdschift voor de Psychologie,* 42 (2), 62-66.

Pieters, R. G. M., Warlop, L., & Wedel, M. (2002). Breaking through the clutter: Benefits of advertisement originality and familiarity for brand attention and memory. *Marketing Science*, 48, 765-781.

Pieters, R. G. M., & Wedel, M. (2004). Attention capture and transfer in advertising: Brand, pictorial, and text-size effects. *Journal of Marketing*, 68, 36-50.

Pollay, R. W. (1985). The subsidizing sizzle: A descriptive history of print advertising, 1900-1980. *Journal of Marketing,* 48 (Summer), 24-37.

Rayner, K. (1978). Eye movements in reading and information processing. *Psychological Bulletin*, 85, 618-660.

Rosbergen, E. (1998). *Assessing visual attention to print advertising through statistical analysis of eye-movement data* (Doctoral dissertation, University of Groningen, 1998). Capelle a/d IJsel, The Netherlands: Labyrint.

Rosbergen, E., Pieters, R., & Wedel, M. (1997). Visual attention to advertising: A segment-level analysis. *Journal of Consumer Research*, 27, 307-314.

Rossiter, J. R., & Percy, L. (1983) Visual communication in advertising. In R. J. Harris (Ed.), *Information processing research in advertising*. (pp. 83-125). Hillsdale, NJ: Lawrence Erlbaum Associates.

Sawyer, A. G. (1988). Can there be effective advertising without explicit conclusions? Decide for yourself. In S. Heckler., & D. W. Steward (Eds.), *Nonverbal Communication in Advertising* (pp. 159-184). Toronto, Canada: Lexington.

Sawyer, A. G., & Howard, D. J. (1991). Effects of omitting conclusions in advertisements to involved and uninvolved audiences. *Journal of Marketing Research*, 28, 467-476.

Schreurs, W. (2001). *Geschiedenis van de reclame in Nederland*. [The history of advertising in the Netherlands]. Utrecht, The Netherlands: Het Spectrum.

Scott, L. M. (1994). Images in advertising: The need for a theory of visual rhetoric. *Journal of Consumer Research*, 21 (September), 252-273.

Smit, E. G. (1999). *Mass media advertising: Information or wallpaper?* Amsterdam, the Netherlands: Spinhuis Publishers.

Smit, E. G., & Neijens, P. C. (2000). Segmentation based on affinity for advertising. *Journal of Advertising Research*, 40 (4), 35-44.

Sperber, D., & Wilson, D. (1986). *Relevance: Communication and cognition*. Oxford: Blackwell.

Stern, B. B. (1989). Literary explication: A methodology for consumer research. In E. C. Hirschman (Ed.), *Interpretive consumer research* (pp. 48-59). Provo, UT: Association for Consumer Research.

Stern, B. B. (1992). Crafty advertisers: Literary versus literal deceptiveness. *Journal of Public Policy & Marketing*, 1 (11), 72-81.

Tanaka, K. (1992). The pun in advertising: A pragmatic approach. *Lingua*, 87, 91-102.

Tolley, B. S., & Bogart, L. (1994). How readers process newspaper advertising. In E. M. Clark, T. C. Brock & D. W. Stewart (Eds.), *Attention, attitude, and affect in response to advertising (pp. 80-88)*. London: Lawrence Erlbaum.

Toncar, M., & Munch, J. (2001). Consumer responses to tropes in print advertising. *Journal of Advertising*, 30, 55-65.

Van Enschot, R. (2006). Retoriek in reclame. *Waardering voor schema's en tropen in tekst en beeld*. [Rhetorics in advertising. Appreciation of schemes and tropes in print and pictorials]. Nijmegen, The Netherlands: F&N Boekservice.

Van Gisbergen, M. S., Ketelaar, P. E., & Beentjes, J. (2004). Changes in advertising language? A content analysis of magazine advertisements in 1980 and 2000. In P. Neijens, C. Hess, B. van den Putte & E. Smit (Eds.), *Content and media factors in advertising (pp.51-61)*. Amsterdam: Het Spinhuis Publishers.

Van Mulken, M., van Enschot, R., & Hoeken, J. A. L. (2005). Levels of implicitness in magazine advertisements: An experimental study into the relationship between complexity and appreciation in magazine advertisements. *Information Design Journal + Document Design*, 13 (2), 155-164.

Warlaumont, H. G. (1995). Advertising images: From persuasion to polysemy. *Journal of Current Issues and Research in Advertising*, 1, 19-31.

Warlaumont, H. G. (1997). Appropriating reality: Consumers' perceptions of schema-inconsistent advertising. *Journalism & Mass Communication Quarterly*, 74, 39-54.

Wedel, M., & Pieters, R. (2000). Eye fixations on advertisements and memory for brands: A model and findings. *Marketing Science*, 19, 297-312.

Williamson, J. (1978). *Decoding advertisements. Ideology and meaning in advertising* (Rev. ed.). London: Marion Boyars.

Young-Won H., & Hoch, S. J. (1989). Ambiguity, processing strategy, and advertising-evidence interactions. *Journal of Consumer Research*, 16, 354-360.

Curriculum Vitae

Paul Ketelaar was born in The Hague (1960). After receiving a Master's degree in Social Psychology and Communication Science (1986) from the Radboud University of Nijmegen, he started traveling (1987-1988). In that period he worked as a free-lance photographer. During the 1990s he was co-owner of a communication agency in health communication (1989-2000). He works as an Assistant Professor in the Department of Communication Science at the Radboud University of Nijmegen (1992-present). Paul's research interests include the effects of marketing-communication strategies on consumer behavior. He is director of Marketing Symbolics, a foundation aiming to increase cooperation between business and science and to make communication research results more widely known (1998-present). Paul lives in Nijmegen with his wife Karoline and daughters, Joline (1996) and Marlotte (1997).

Marnix Van Gisbergen was born in Nijmegen (1974). In 1998 he received his Master's degree in Communication Science, and after that he worked as an Assistant Professor in Communication Science at the Radboud University of Nijmegen (1998-2005). He works as a Lecturer in Leisure Management at the Breda University of Applied Sciences (2005-present). He was recently appointed as Manager of Research Development at De Vos & Jansen Marketing Group, a full service research company in the Netherlands (2005-present). His research interests include leisure management and the effects of communication strategies on consumer behavior. Marnix is manager of Marketing Symbolics (1998-present). He lives in Nijmegen with his partner Susan Burgers and daughters, Minne (2004) and, just before defending his thesis, Luna (2006).