

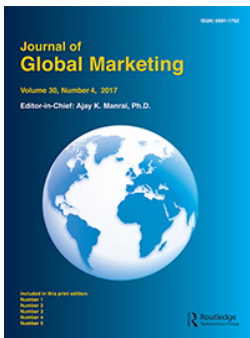
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To cite this article: Jos Hornikx & Rob le Pair (2017) The Influence of High-/Low-Context Culture on Perceived Ad Complexity and Liking, Journal of Global Marketing, 30:4, 228-237, DOI: [10.1080/08911762.2017.1296985](https://doi.org/10.1080/08911762.2017.1296985)

To link to this article: <https://doi.org/10.1080/08911762.2017.1296985>



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Published online: 27 Mar 2017.



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## The Influence of High-/Low-Context Culture on Perceived Ad Complexity and Liking

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### ABSTRACT

According to Hall's context theory, people from different cultures may react differently to complex messages. The current study is the first empirical examination of context theory's role on message comprehension and appreciation. In a comparative survey-based study ( $N = 289$ ), Belgian and Dutch participants judged 12 complex product advertisements with visual metaphors. As expected by context theory, perceived complexity was lower for Belgian (a higher-context culture) than for Dutch participants (a lower-context culture), and participants' personal context culture score fully accounted for this difference. Similarly, ad liking was higher for Belgian than for Dutch participants, and again, this difference was explained by context score.



### KEYWORDS

Advertising; complexity; comprehension; context theory; visual metaphors

### Introduction

It is understood that advertising messages targeted at audiences from different parts of the world do not always travel, which increases the need for adapting messages across the globe instead of standardizing them (e.g., Agrawal, 1995; Hornikx & O'Keefe, 2009; La Ferle, Edwards, & Lee, 2008). It seems straightforward that, when communicating with their target audience in different cultures, companies want to clearly mention the benefits of their products in order to maximize their impact (see Wyer & Shrum, 2015). However, scholars have noted an increase in the use of complex advertisements; for instance, through visual images (Phillips, 1997; Scott, 1993). An example of such a complex ad is an ad for liquid detergent that was used in Western Europe. The visual in the ad displays a piece of clothing with blue liquid detergent in the form of a crocodile attacking a brown, coffee-like stain. Readers will themselves have to make the inference that the detergent is as effective in removing stains as the crocodile is in eating its prey. Increased complexity in advertising has been found to affect consumers' comprehension and liking of ads (e.g., Lagerwerf & Meijers, 2008; McQuarrie & Mick, 1999; Van Mulken, Van Hooft, & Nederstigt, 2014).

According to the influential context theory of Hall (Hall, 1976; Hall & Hall, 1990; see also Kittler, Rygl, & Mackinnon, 2011), a person's cultural background affects how well that person is able to comprehend complex messages and how well s/he appreciates such messages. That is, people from a low-context culture are expected to have more difficulties in comprehending complex messages and, consequently, to appreciate them less than people from a high-context culture. Surprisingly, despite the research attention devoted to context theory (for a review, see Cardon, 2008), one of the central tenets of the theory has only been tested indirectly. That is, a limited number of experiments have examined whether people in countries characterized as high-context cultures comprehend and appreciate complex messages better than people in countries characterized as low-context cultures (e.g., Van Mulken, Le Pair, & Forceville, 2010). The methodological problem of this approach is that potential differences in comprehension and appreciation cannot be empirically attributed to context culture, but only to the broader notion of nationality. Studies mainly have accepted Hall's theoretical classification of high- and low-context cultures without attempts to substantiate it empirically (Kittler et al., 2011). Cardon (2008, p. 400), for instance, noted, "Studies that use contexting as an

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explanatory framework for cross-cultural variation almost invariably accept the contexting continuum,” neglecting to measure participants’ context scores. In order to accurately demonstrate the role of context theory, participants’ individual context scores should be assessed. The current study is the first empirical examination of context theory’s role on message comprehension and liking. It will examine whether it is indeed people’s individual context score that affects the degree of comprehension and liking of complex messages. It does so by examining the role of context culture for one example of complex messages: advertisements with visual metaphors.

In the first half of the theoretical framework, we will outline the role of comprehension in the persuasion process in general, and in the case of complex advertisements in particular. In the second half, we will explain how context theory is related to people’s comprehension of messages, leading to the hypotheses of the current study.

### Comprehension and persuasion

When communicating, senders would seem to be most successful if their recipients understand them. Therefore, “communicators who wish to transmit information to a recipient are presumably motivated to construct their messages in a way that the recipient will understand and consider to be informative” (Wyer & Shrum, 2015, p. 186). In other words, messages should not be too complex. The complexity of a message can be the result of different message components (Lowrey, 2008), such as the difficulty of the words that are used (e.g., jargon or words from a foreign language), the syntax of the sentences (see Lowrey, 1998), or the length of the message. A message does not have one given complexity; what is complex to one person is not necessarily complex to another. As Lowrey (2008, p. 173, italics in original) argued: “The important issue is the recognition that complexity effects occur *in the individual*.” When we refer to the complexity of a message in this article, we therefore also refer to the comprehension of the message by the receiver. The complexity of a message is actually defined by the comprehension of the receiver.

In communication theories, the important role of comprehension has been acknowledged. According to the information processing theory of McGuire (1972), for instance, a persuasive communicative attempt is only expected to be successful if it passes a number of

critical steps, including the comprehension of the message. In other words, if a recipient has noticed a message, and is motivated to process it, the message will only have an impact on beliefs, attitudes, and intentions if it is comprehended. More recent persuasion models, such as the Elaboration Likelihood Model (ELM; Petty & Cacioppo, 1986) and the Heuristic-Systematic Model (HSM; Chaiken, 1987), have nuanced the role of comprehension. That is, recipients can be persuaded by a message even if they have not processed (and thus comprehended) that message. In such circumstances, recipients are persuaded by other elements in the message for which comprehension is less relevant. Ratneshwar and Chaiken (1991) demonstrated this effect from the perspective of the HSM. In two studies, they observed that participants’ attitudes towards the product were affected by the source’s expertise when the message was difficult to understand. Source expertise did not play a role when the participants were able to understand the message. From the perspective of ELM, studies have also underlined that the recipients’ background influences perceived complexity. For instance, See, Petty, and Evans (2009) showed, in two studies, that people with a high need for cognition (who have a tendency to appreciate undertaking cognitive activities) were more motivated to process a complex rather than a simple message, and that people with a low need for cognition were more motivated to process a simple instead of a complex message.

From the perspectives of both ELM and HSM, comprehension does play a part in the persuasion process, but it is not a necessary condition for persuasion to take place. These models, however, do not account for the design of complex ads such as the example of the liquid detergent, which suggests that complexity is employed to positively affect appreciation. The frequent use of complex ads can be best understood when these ads are conceptualized as messages with rhetorical figures, such as visual metaphors (Forceville, 1996; Phillips, 1997). Relevance Theory (Sperber & Wilson, 1995) has proven to be a successful approach for our understanding of the relationship between complexity and persuasion of such messages (cf. Tanaka, 1992).

### Relevance theory and complex messages

In Relevance Theory (Sperber & Wilson, 1995), the principle of relevance holds that people search for a balance between the effort they have to put into understanding the message and the benefits they expect the

effort to provide them. That is, the more benefits they expect, the more willing they are to invest in processing the message. In an advertising context, the more effort is spent in deciphering an ad, the more satisfied consumers will be that they have succeeded in this deciphering. Studies have shown that this satisfaction transfers to higher ad liking and to a more positive product attitude for ads that require considerable cognitive efforts than for ads that need lower cognitive efforts (e.g., Forceville, 1996; Phillips, 2000; Tanaka, 1992). This is why complex messages are sometimes more effective than less complex messages. However, Relevance Theory also predicts that if people have to invest more effort into comprehending the message than they believe is warranted by the benefits they gain from this investment, they become frustrated. This means that messages beyond a certain tipping point (Van Mulken et al., 2014) are too complex, and therefore become less effective. For instance, if an ad contains a slogan in a foreign language that the recipient does not recognize (let alone understand), more effort will not result in better comprehension and better liking. In such circumstances, a less complex message is more effective. Thus, Relevance Theory accommodates two seemingly opposing outcomes: a more complex message may generate higher as well as lower appreciation than a less complex message. A similar conclusion is also drawn from another perspective, which is the resource matching hypothesis (Anand & Sternthal, 1990; Larsen, Luna, & Peracchio, 2004). According to this hypothesis, the highest level of persuasion is obtained if there is a balance between the required cognitive resources for understanding the message and the cognitive resources that are available from the receiver. A message that is too simple or too difficult to understand is therefore expected to be less persuasive than a message with matching resources.

A prototypical message component that results in complex messages is the use of metaphors. Relevance Theory has been successful in explaining findings related to comprehension and persuasion of metaphors. Metaphors, whether verbal or visual, are rhetorical figures that may have a high degree of complexity (e.g., McQuarrie & Mick, 1996; Phillips & McQuarrie, 2004). Imagine an ad for a sports car that does not feature the car, but instead shows a leopard running on a coastal road. What makes a metaphor complex is that the message is not explicit. It is the reader who has to infer the so-called implicatures, the

inferential steps that are needed to decipher the message (Sperber & Wilson, 1995). In this example, the implicature is that the car that is advertised (but not depicted) is as fast as the leopard shown in the ad.

A number of experimental studies have presented results that are in line with predictions from Relevance Theory. That is, not only were ads with more complex metaphors better liked than ads with less complex metaphors, but ads with too complex metaphors were liked less than ads with less complex metaphors (Phillips, 2000; Van Mulken et al., 2014). Phillips (2000), for example, constructed ads in three versions. In a toothpaste ad that featured a pearl necklace, one version included an explicit headline as verbal anchoring (“Makes your teeth pearly white”), one version included an implicit headline as verbal anchoring (“Flash ‘em”), and one version did not include a headline (the complex ad). On the one hand, the results demonstrated that the more complex, implicit ad was better liked than the less complex, explicit ad; on the other, the results demonstrated that the too complex ad without a headline was liked less than the implicit ad.

For complex messages to be effective, consumers need to have a minimum of cognitive resources. Consumers differ in these resources; for instance, because they vary in the motivation to invest in cognitive tasks (e.g., Lagerwerf & Meijers, 2008; See et al., 2009). Another source of variation is consumers’ cultural background; namely, their context culture, as the next section will explain.

### High-/low-context and comprehension

A number of theoretical models have been developed to help understand how culture affects communication. Two of the most cited theoretical frameworks in communication are the cultural dimensions of Hofstede (1980, 2001) and the context theory of Hall (1976; Hall & Hall, 1990; see Cardon, 2008, for citations of both authors). According to Hall’s high-/low-context theory, cultures differ in their preferences for indirect, implicit messages versus direct, explicit messages. As Hall (1976, p. 79) states: “A high-context (HC) communication or message is one in which most of the information is either in the physical context or internalized in the person, while very little is in the coded, explicit, transmitted part of the message. A low-context (LC) communication is just the opposite; i.e., the mass of the information is vested in the explicit code.” For

the processing of complex messages, the perspective of context theory is very relevant. In high-context cultures, people are said to prefer symbolic, artful language that is implicit. In low-context cultures, people are said to prefer explicit, task-related language. As a result, context theory predicts complex messages containing visual metaphors to be better understood and to be better appreciated in high- rather than in low-context cultures.

The work of Hofstede is data-driven: nations have been given precise numerical scores on cultural dimensions on the basis of empirical research. Likewise, large numbers of studies have measured cultural values on participants' level to examine how these values relate to other variables (for an overview of such studies, see Soares, Farhangmehr, & Shoham, 2007; Taras, Kirkman, & Steel, 2010). Hall's approach, however, was theoretical: nations have been grouped and accorded a position on the continuum from low- to high-context rather loosely. Examples of countries that Hall classified as low-context are Norway and Switzerland; examples of high-context countries are China and Japan. The context theory framework has been adopted in cultural studies to a large extent; Cardon (2008), for instance, reviewed 244 articles. His analysis showed that only a small percentage of these studies were empirical (see also Kittler et al., 2011). This means that, however popular, context theory has mainly been used as a theoretical construct to study cultural differences and similarities. When it comes to complex messages in the advertising domain, though, there have been empirical studies that based their expectations on context theory.

Callow and Schiffman (2002) examined the degree to which consumers infer meaning from images in advertising. They expected consumers from the Philippines to infer more meaning than consumers from the US because of Hall's classification of the Philippines and the US as predominantly a high- or low-context culture, respectively. As the ads depicted individuals or individuals in interaction, they chose to measure the participants' personal achievement (i.e., leadership) and affiliation (i.e., friendship) evoked by the images as measures of implicit meaning. The results of their study showed that the Filipino participants scored higher on both scales than the American participants, leading Callow and Schiffman (2002) to conclude that images evoke more implicit meanings in high- than in low-context cultures.

A number of scholars have claimed that the comprehension and interpretation of visual metaphors in particular may differ between cultures (e.g., Kövecses, 2005; Le Pair & Van Mulken, 2008; McQuarrie & Mick, 1999; Van Mulken et al., 2010). In high-context cultures, people are used to messages that are implicit and for which it is necessary to use cues from the context to decipher the message, such as metaphors. In low-context cultures, people are used to messages that are direct and simple; for them, interpreting metaphors is relatively more demanding. Two studies have empirically tested this expectation. Le Pair and Van Mulken (2008) examined the perceived complexity and appreciation of ads with metaphors in France, Spain (both relatively high-context cultures), and the Netherlands (a relatively low-context culture). They predicted lower perceived complexity and higher appreciation (i.e., ad liking) for French and Spanish than for Dutch participants. The results confirmed three of four expected differences: perceived complexity was higher for Dutch than for Spanish participants (but not than for French), and ad liking was lower for Dutch than for Spanish and French participants. Van Mulken et al. (2010) also investigated perceived complexity and liking of visual metaphors in advertising among participants from the same three countries. Contrary to their expectations, French and Spanish participants did not perceive the visual metaphors to be easier to understand and did not like them more than the Dutch participants.

## Hypotheses

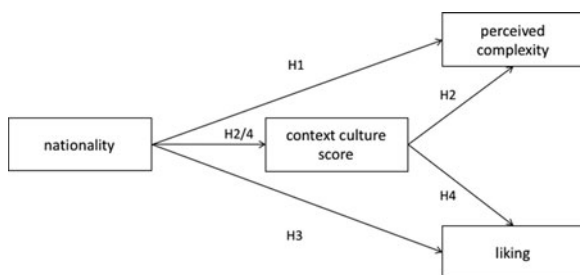
There is some empirical evidence that consumers from different context cultures vary in their reaction (i.e., perceived complexity, ad liking) to complex visual messages, such as ads containing visual metaphors. However, is it context culture that is responsible for this variation? A major limitation of the studies providing this evidence is that they drew their conclusions on the basis of groups of people: consumers from a country with a presumed lower-context culture versus consumers from a country with a presumed higher-context culture. However, the differences that were observed between these groups were solely attributed to consumers' context culture. This methodological issue is not unique; Cardon (2008), in his review of papers on context culture and communication, also noted that context culture was measured at the individual level in only a minority of studies. Measuring a



cultural construct responsible for the expected cultural differences at the level of the studies' participants is an essential methodological tool to enable attributing empirical, cultural differences to that cultural construct (Hoeken & Korzilius, 2003; Van de Vijver & Leung, 1997). Although there are problems associated with the use of self-reported measurements, it is the best tool there currently is (see Matsumoto & Yoo, 2006; Taras, Roney, & Steel, 2009). Le Pair and Van Mulken (2008, p. 289) stress that their choice to relate the findings on ad liking to participants' context culture is a "tentative explanation," and Callow and Schiffman (2002, p. 274) acknowledge, "It would also be advantageous to measure context at an individual—as opposed to a cultural—level."

Therefore, the aim of the present study is to examine whether national differences in the comprehension and appreciation of ads with visual metaphors can indeed be attributed to participants' context-culture scores. If empirical support for the role of context-cultures scores is to be found, it would considerably strengthen the notion of context culture as a perspective to study cultural differences and similarities in advertising and communication. The present study is the first of its kind to test one of the central claims of context theory: namely, that complex messages are perceived as less complex and are better liked in higher-context than in lower-context cultures.

Figure 1 visualizes the theoretical model of the role of context culture in perceived complexity and message liking that is under investigation. The upper half of the figure models the relationship between receiver nationality and perceived complexity of the message. First, it is expected that participants from a higher-context culture perceive the message as less complex than participants from a lower-context culture (H1). More important, we will test whether the effect formulated in H1 is



**Figure 1.** Theoretical model of the role of context culture in perceived complexity and liking of ads. (The Netherlands in the referent category).

indeed mediated by participants' context-culture scores (H2):

H1: Participants from a higher-context culture perceive ads with visual metaphors as less complex than participants from a lower-context culture.

H2: Participants' personal context scores mediate the effect of nationality on perceived complexity.

The lower part of Figure 1 models the relationship between receiver nationality and ad appreciation. First, it is expected that participants from a higher-context culture will like the complex ad better than participants from a lower-context culture (H3). Finally, it is expected that the effect predicted in H3 is mediated by participants' context-culture scores (H4):

H3: Participants from a higher-context culture like ads with visual metaphors better than participants from a lower-context culture.

H4: Participants' personal context scores mediate the effect of nationality on ad liking.

## Method

### Participants

This study focuses on two Western European countries: Belgium and the Netherlands. These countries were selected because they are similar in many respects, but differ in context culture. Belgium and the Netherlands are highly comparable in their political system, their economic status, and their geographical location, and they both have Dutch as a national language. This means that the potential cross-cultural differences observed cannot be accounted for by different languages used in the study (following the suggestion made by Van de Vijver & Leung, 1997). Belgium and the Netherlands have been classified as low-context (only Belgium reported; Kittler et al., 2011) or medium-context (Helsen, Jedidi, & DeSarbo, 1993) in studies in which the classification was not substantiated in any way. Based on their insights into Hall's context theory and the Dutch and Belgian (communication) culture, cross-cultural communication scholars Gerritsen and Claes (Gerritsen, 2002; Claes & Gerritsen, 2011) indicate that Belgium is a medium-context culture, and the Netherlands a low-context culture. In this study, we follow their classification: Belgium is expected to be a higher-context culture than the Netherlands. Importantly, the current study examines

this classification empirically by assessing individual context scores in both cultures.

In total, 289 students participated in this comparative survey-based study. They were Belgian ( $n = 174$ ) or Dutch ( $n = 115$ ) students. The Belgian students were sampled from the Dutch-speaking part of the country: Flanders. The ages ranged from 17 to 25 ( $M = 20.94$ ,  $SD = 1.78$ ). About half of the participants were female (56%). The Belgian and Dutch students did not differ in mean age ( $F(1, 287) = 3.67$ ,  $p = .056$ ) or in gender distribution ( $X^2(1) = 3.27$ ,  $p = .071$ ).

### Material

In a comparative survey-based study, Dutch and Belgian participants read and judged 12 full-color advertisements that were taken from two advertising databases. In order to present participants with ads that varied in complexity, different metaphors were used, including the juxtaposition metaphor, the fusion metaphor, and the replacement metaphor (cf. Phillips & McQuarrie, 2004). The ads featured different products, such as a car, detergent, soda, and a mobile phone. An example of an ad with a juxtaposition metaphor is the one for Land Rover, which shows three objects crossing a large river: two hippos and one Land Rover (with the implicature that the vehicle is able to cross that river as smoothly as the two animals). An example of a fusion metaphor is the ad for Ariel liquid detergent that was discussed in the introduction. For the replacement metaphor, an example is the ad for Contrex water, which features a Contrex water bottle looking at itself in the mirror (replacing a human person looking at his or her body shape). An expert on metaphors in advertising checked the ads on the metaphors that were included, and another expert ensured the cross-cultural equivalence of the material in the Netherlands and Belgium.

### Design

The study had a one-factor design: advertisements with visual metaphors were presented to participants with the Belgian or the Dutch nationality (between-subject design). Each participant judged all ads in the same order.

### Instrumentation

For each advertisement, perceived ad complexity was measured with two items with 7-point scales:

“The message of the advertisement is easy/hard to understand” and “The message of the advertisement is simple/complex” (mean reliability:  $\alpha = .93$ , range .83–.96). After the two perceived complexity items, ad liking was assessed with two items for each ad with 7-point scales (taken from Le Pair & Van Mulken, 2008): “The advertisement is badly/well chosen” and “The advertisement is unattractive/attractive” (mean reliability:  $\alpha = .90$ , range .82–.93). We used 2-item scales for perceived ad complexity and ad liking because participants had to assess these constructs for 12 different ads. The use of short scales is consistent with recommendations in the marketing literature (Bergkvist & Rossiter, 2007).

In addition, personal preference for high/low context was measured on a 5-point scale with nine items taken from Richardson and Smith (2007), which were selected on the basis of a principle component analysis run on data collected in a pretest ( $N = 30$ , age:  $M = 23.90$ ,  $SD = 2.16$ ). Two examples of items were “A speaker can assume that listeners will know what they really mean,” and “People understand many things that are left unsaid” (all nine items are in Appendix 1). In the main study, the scale proved to be just adequate ( $\alpha = .68$ ). A principal component analysis did not lead to a more reliable scale. The questionnaire ended with items on nationality, gender, age, and education.

### Procedure and statistical tests

Potential participants were invited to take part in an online study. After the data collection, two of the participants were randomly selected to receive a 25-euro coupon. For each participant, a mean score for perceived complexity and for ad liking was computed based on the 12 advertisements. The mean scores for perceived complexity and ad liking were submitted to regression analyses for the direct effect of nationality on perceived complexity (H1) and ad liking (H3). For the indirect effects of nationality through context scores on perceived complexity (H2) and ad liking (H4), we used bootstrapping as mediation technique. In doing so, we followed current methodological advice (see Hayes, 2009; Rucker, Preacher, Tormala, & Petty, 2011) to employ bootstrapping as a mediation technique because of its benefits compared to conventional methods, such as bootstrapping's higher power to detect potential indirect effects (e.g., Baron & Kenny, 1986).

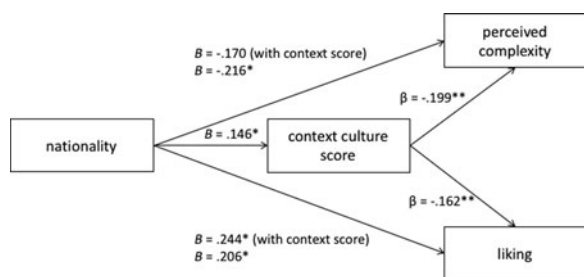


## Results

As a preliminary test, we first checked whether Belgian participants indeed scored higher on their personal context score than Dutch participants. This proved to be the case ( $F(1, 287) = 5.85, p = .016, \eta^2 = .02$ ). The Belgian participants had a higher context score ( $M = 3.07, SD = 0.49, n = 174$ ) than the Dutch participants ( $M = 2.92, SD = 0.52, n = 115$ ). The effect size is small, but what matters is the relationship between personal context score, on the one hand, and perceived complexity and ad liking on the other. These relationships are relevant to the hypotheses.

When it comes to the role of context culture on perceived complexity, a linear regression showed, in the first place, that nationality predicted perceived complexity ( $F(1, 287) = 4.48, p = .035, R^2 = .01; B = -.216, SE = .102, p = .035$ ): Belgian participants ( $M = 3.28, SD = 0.86$ ) perceived the ads as less complex than the Dutch participants ( $M = 3.49, SD = 0.83$ ). This result supported H1. These results are visualized in the upper part of Figure 2. The indirect effect of nationality on perceived complexity through participants' individual context score proved to be significant ( $b = -.05; CI [-0.117, -0.007]$ , bootstrapping technique,  $N = 50,000$ ). Therefore, empirical evidence was found for H2, which means that participants' personal context scores indeed mediated the effect of nationality on perceived complexity. Belgian participants have a lower perceived complexity than Dutch participants, and this national difference is explained by the participants' personal context score.

When it comes to the role of context culture on liking, a linear regression first showed that nationality predicted ad liking ( $F(1, 287) = 4.39, p = .037, R^2 = .01; B = .206, SE = .098$ ): Belgian participants ( $M = 4.33, SD = 0.77$ ) liked the ads better than the Dutch participants ( $M = 4.13, SD = 0.89$ ). This result supported H3 (see the lower part of Figure 2). The indirect effect



**Figure 2.** Results of regression analyses in the theoretical model. (The Netherlands is the referent category.)

of nationality on ad liking through participants' individual context score also proved to be significant ( $b = -.04; CI [-0.104, -0.005]$ , bootstrapping technique,  $N = 50,000$ ). Therefore, empirical evidence was also found for H4, which means that participants' personal context scores indeed mediated the effect of nationality on ad liking. Belgian participants have a higher ad liking than Dutch participants, and this national difference is explained by the participants' personal context score. For the sake of completeness, Figure 2 displays the (un)standardized coefficients of the discussed relationships in the model.

## Conclusion and discussion

Although the use of understandable messages is commonplace in advertising and communication, complex messages are regularly used; for example, through the use of jargon, foreign languages, or verbal or visual metaphors. According to Hall (1976; Hall & Hall, 1990), the extent to which such complex messages are comprehended and appreciated depends on context culture. Although context theory has been a dominant perspective in studying cultural differences and similarities in advertising and communication, the theory has received only very limited empirical attention (Cardon, 2008; Kittler et al., 2011). In the studies that did investigate the role of context culture in comprehension and persuasion, individuals' nationality was measured but not individuals' context culture. This methodological limitation makes it impossible to assess whether it is indeed context culture that is the explanatory factor of the results obtained. The present study shows that individuals' context scores account for the national differences between perceived complexity and liking of ads with complex visual metaphors.

In absolute terms, the differences between the Belgian and Dutch participants in the comprehension and liking scores were small. These small differences seem to be related to the large similarities between the two populations, both in broad characteristics (e.g., political system, geographical location) and in context culture. This actually implies that context theory is a powerful explanation for differences in perceived complexity and liking of ads. That is to say, despite these small (but significant) differences in context score in this study, these context scores proved to be the explanation for the national difference in both complexity and liking of the ads.

It should be noted that the present study cannot rule out a potential role of the participants' study background, as we did not assess this in the questionnaire. From the same gender distributions in the two samples, it might be considered unlikely that, for instance, one sample contained predominantly arts students (which are mostly female students) and the other predominantly engineering students (which are mostly male students). Future studies should, however, incorporate study background as a personal characteristic.

This study provides a unique contribution to the domain of culture and advertising in that it presents empirical evidence for the role that Hall's (1976; Hall & Hall, 1990) context culture plays in cross-cultural communication. New empirical studies should be conducted with other countries than Belgium and the Netherlands in order to empirically examine Hall's theoretical classification of high- and low-context cultures. Beyond these kinds of replications, we suggest five directions for future investigations to further examine how context theory affects comprehension and persuasion in advertising and communication.

### **Future research**

The five areas of future research relate to the study of context culture on the nonlinear relationship between comprehension and persuasion, the selection of complex message components other than visual metaphors, the measurement of context culture on an individual level, the measurement of message comprehension, and the measurement of persuasion.

First, whereas the present study took a linear relationship between comprehension and liking as a starting point, future research may examine nonlinear relationships. From Relevance Theory (Sperber & Wilson, 1995) and the resource-matching hypothesis (e.g., Larsen et al., 2004), we know that, for visual metaphors in particular, the relationship between comprehension and persuasion is nonlinear: with an increase in complexity, persuasion also increases up to a point where it starts to decrease. For future research on context culture and visual metaphors, it would be interesting to examine if this nonlinear relationship holds as strongly for high-context culture participants as for low-context culture participants.

Second, it seems useful to conduct conceptual replications of this kind of study with other complex ads that do not contain visual metaphors, but instead contain

other complex message characteristics. Potential characteristics may be verbal metaphors (cf. McQuarrie & Mick, 2003, 2009), jargon (cf. Xu & Wyer, 2010), or foreign languages (cf. Hornikx & Van Meurs, 2015).

Third, future research may invest in developing new and/or refining existing measures for high/low context (see Kim, Pan, & Park, 1998). The current study used an abridged version of the scale used by Richardson and Smith (2007), which is among the very few scales available. On the basis of his review of studies on context theory, one of Cardon's (2008, p. 423) concluding remarks was about this measurement issue: "[F]uture research must employ rigorously developed measures. Such measures would allow a basis for effectively contrasting cultures and would allow for replication and extension studies."

Fourth, in future empirical studies on the role of context theory in comprehension and persuasion, it may be worthwhile to vary the ways in which message comprehension is measured. The present study had an approach taken in a number of other studies (e.g., Le Pair & Van Mulken, 2008; McQuarrie & Mick, 1999, Study 2; Van Enschot & Hoeken, 2015): participants were asked to report the degree to which they understood the message. Next to this measure of perceived comprehension, other useful approaches are to ask participants to select the appropriate meaning among a list of potential meanings (cf. Van Mulken et al., 2014) or to ask them to write down what they think is the meaning of the message (cf. Van Mulken et al., 2010). In the current comparative survey-based study, participants were exposed to 12 different product ads; asking for actual comprehension of all of the ads might have revealed the purpose of the study.

Finally, the present study focused on ad liking as a form of persuasion, which makes sense from Hall's predictions about comprehension and appreciation. Future studies may examine other dependent variables, such as product attitude or behavioral intention.

With its first empirical demonstration of the role of context culture on comprehension and persuasion, the current study suggests that using Hall's context theory may be a fruitful way of thinking about adapting messages to diverse cultural audiences. Complex ads, such as the example of the liquid detergent, may be better comprehended and better appreciated in higher- than in lower-context cultures. It is hoped that more research attention will be paid to context culture in the area of culture and advertising.

## Acknowledgment

The authors thank Ellen van Maaren for her assistance in the data collection, and Christian Burgers for his suggestion for the data analysis.

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**Appendix 1. Items of the context score scale (taken from Richardson & Smith, 2007; a high score implies high context culture, except for the first item)**

1. Speakers should not expect that listeners will figure out what they really mean unless the intended message is stated precisely.
2. It is more important to state a message efficiently than with great detail.
3. Even if not stated exactly, a speaker's intent will rarely be misunderstood.
4. Intentions not explicitly stated can often be inferred from the context.
5. A speaker can assume that listeners will know what they really mean.
6. People understand many things that are left unsaid.
7. Fewer words can often lead to better understanding.
8. You can often convey more information with fewer words.
9. Some ideas are better understood when left unsaid.