

**Multimodal Interpretation:**

**The effects of a local linguistic prime on the interpretation of a political cartoon.**

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## **Abstract**

Political cartoons are a part of daily life, as they have their staple page in the newspaper every morning. Many of these cartoons are multimodal in nature, and require an understanding of both the visual and verbal components to fully realise the meaning of the image, as well as an understanding of the cultural context that the cartoon was produced in. This study will look into the effects of a local, linguistic, contextual prime on the interpretations of a visual element by a group of individuals. This has been done through a quantitative survey, which was spread both online and on paper.

Though the Likert-scale part of the survey appears to be statistically insignificant, interesting data was drawn from the qualitative question posed at the end of the survey. No conclusive evidence was drawn from this study, though it has provided a base for many future studies with regards to the interaction between primes and the interpretational process of metaphorical elements of meaning making.

**Key words:** Multimodal, metaphor, political cartoon, priming, iconicity, directionality

## 1. Introduction

Metaphorical thought is an important part of what makes us human. As such, the complicated process of interpretation for metaphors is incredibly interesting because there is a lot more to learn about the subject. This is, in part, also due to the unique nature of metaphors between various cultures and groups of people. Metaphor has been extensively studied before, but our knowledge on the subject can still be improved. We do not yet fully understand, for example, how linguistic and visual elements interact with one another in the interpretative process.

Researchers like Kövecses (2005) and Lakoff and Johnson (1980) have studied the universal and cultural contexts that are paired with the generation and interpretation of metaphorical thought, whereas others like Yus (2009) have looked more into how individuals make sense of metaphors. This study will aim to be somewhere in the middle between those two sides of the same coin. Is it possible to override these culturally connoted interpretations of metaphorical pictures by priming the individual with a different, linguistic, element? This is the question this paper will aim to answer, and as such this paper will look into the effects of priming on the process of interpretation for multimodal metaphorical elements. At the end it should give us more insight into how linguistic and visual means of communication interact on a metaphorical level.

Kövecses' work offers explanations with regards to the role that cultural background and context play in the development and interpretation of metaphorical elements. It explains how differences in interpretation are the result of differences in experience, both as an individual and as a group. This means that the human species has the capacity to understand things of a bodily nature metaphorically as elements of a different, more complex type. We as a species, for example, seem to associate the element of warmth with the more complex element of affection. This has come through in the English language as having warm feelings for someone, but mentally it is a metaphorical concept as WARMTH IS

AFFECTION (Kövecses, 2005).

It has also been suggested that there is such a thing as universal metaphors. These are metaphorical concepts that apply to every individual alive, regardless of their socio-cultural background. Examples of these would be MORE IS UP and GOOD IS UP (Lakoff & Johnson, 1980). Other metaphors, however, are based on a cultural experience and thus differ between, and even within cultures. How strong a role other elements such as a directly available context play in the interpretational process is still relatively unclear, however.

Refaie (2009) has studied how a political cartoon can be interpreted when they are left in their original context, but without any interference from other elements. She explains how metaphorical elements of meaning making are usually constructed by a combination of available long-term memories, as well as recently activated contextual clues based on previous utterances in the instance of the communication that is going on. In this structure, it would be interesting to explore which of these two elements might, usually, have the upper hand. In the framework of relevance theory, which will be explained below, it is not unthinkable that the recently activated contextual clues weigh more heavily on the interpretational process than such things as available cultural and universal awareness of metaphorical concepts. If this is the case, then it might be possible to override the original interpretation of a picture with a different one on the basis of available contextual clues. That is what this study will investigate.

As is explained by Geenen in his article, modes and instances of meaning making rely heavily upon the context-based information that an element carries (p. 3). This contextual information changes over time, as individuals draw upon elements of meaning making to suit their own purpose during social interactions. Despite this changing nature of the information that is to be interpreted, it seems humans are capable of divining the correct interpretation from the particular social, cultural and historical contexts. The human mind goes through a

process that slowly eliminates the incorrect interpretations from the meaning potential that a given element carries. This process requires the presence of contextual information in order for the person in question to arrive at the correct interpretation (p. 3).

It has been suggested that these cultural contexts, named cultural knowledge systems by Hong (2003), can be turned on and off by cultural priming, especially if an individual has multiple cultural systems available to them. This is the case for, for example, Chinese Americans (Hong, 2003). If this applies to the interpretation of metaphorical modes of meaning making, then it would not be unthinkable that a linguistic prime might cause this cultural context to be overridden by the priming element of meaning making.

A more specific look at the interpretational process regarding metaphors is provided by Francisco Yus, who shows that a reader will go through a set process to interpret written metaphors. This process is the same every time, and Yus argues that it makes no difference whether the metaphor is a purely written one, or a metaphor carrying clear multimodal elements (2009). Though some of the steps might be slightly different depending on the mode of meaning making, the overall process is assumed to be the same. Yus explains how a viewer, or reader, will go through a set of given steps, following the path that costs the least amount of effort. Yus's article defines this as being part of *relevance theory*, which concerns the nature of the process of interpretation of metaphors. An important part of this relevance theory is the step where the reader or viewer compares the given information with the contextual information that is available to them from their general knowledge (2009). This step in the process of relevance theory is the element that this study will be chiefly focused on. The article explains how a reader or viewer will go through various explanations that occur to him or her until they finally reach an interpretation that is satisfactory to them.

To illustrate what is meant by this, an example from that article will follow. The London underground has had an advertisement for their services that contained the text: "Less

bread. No jam.” Initially, the viewer will interpret this as an advertisement for a sandwich spread. The problem is, however, that they then are confronted with the image of a train, which does not correspond with the interpretation of the advertisement being about sandwich spread. The reader is instead prompted to go further down the lists of interpretations, at which point they will realise that “jam” is about traffic jams, and that “bread” is a colloquial for money. Once they reach this conclusion the reader will be content with the results and move on (Yus 2009).

The concept of relevance theory that Sperber and Wilson developed over 20 years ago can thus be applied to the interpretational process of metaphorical elements of meaning making. By virtue of how relevance theory works, it could be assumed that recent communicative information weighs more heavily in the interpretational process of metaphorical elements, as it is more likely that recent contextual clues are more important to the interpreter than the cultural context in which the metaphor is grounded. Especially because of the principle that, in the framework of relevance theory, a speaker should be maximally relevant it follows that recent contextual clues are more relevant in completing the interpretational process than cultural context. After all, an utterance would make no sense if it had not been made in order to contribute to the relevance of the conversation, unless there has been a significant change of subject. This is why it seems logical if previous utterances in a conversation add more to the interpretation of a given element of meaning making than other information that cannot necessarily be explicated from the conversation itself.

This research project will be based on the discrepancy between the influence of natural, universal metaphor versus the influence of contextual information on the interpretational process. It will look at how a linguistic prime affects the feelings of participants on certain statements, and their interpretation of the image overall. Quantitative tests will be performed through the spreading of enquiries, both in paper, as well as online. In



these tests cartoons will be shown that, in qualitative analysis, have shown to be interpreted in multiple ways. To these will be added a source of 'contextual' information, which may result in the test subjects being primed to interpret the cartoon in a given way. There will also be a control group that will not undergo any attempt at priming. The size of these groups will be as big as possible, hopefully. A larger group of participants is desirable because of the significance of the outcomes of the research.

The hypothesis to this research will be that groups from varying backgrounds and cultures will all interpret the presented cartoons the same way, based on the contextual information that is provided. A result akin to this might mean that contextually based information overrides, or at least takes precedence over, information that is provided through metaphorical awareness on the basis of cultural and historical backgrounds. If this proves to be the case, then this may have implications for the greater whole of relevance theory, and it might allow for a more structured revision of this otherwise somewhat vague theory.

## 2. Literature review

This chapter will provide an overview a few key studies that have provided the background and incentive for this study. First, relevance theory and pragmatic interpretation will be explained, and will be linked to the studies on cultural context. It will aim to further situate my research in previous studies, so that the reader may fully understand the theoretical and methodological impetuses of this study.

### 2.1 Relevance Theory

Relevance theory, as proposed by Dan Sperber and Deirdre Wilson in 1985, is based on the Gricean model of cooperative verbal communications which abides by conversational maxims. Thus they share three of Grice's assumptions about verbal interaction. First, they assume that the sentence meaning is used to convey the speaker's meaning, which is fulfilled by being recognised as such. Second, the speaker's meaning cannot always be strictly decoded, but may instead have to be inferred from behaviour and contextual information. Third, the communicative behaviour is expected to meet certain standards, allowing the hearer to interpret the behaviour more efficiently.

Above from these three shared assumptions, there are also three important differences. Relevance theory is applicable to a greater scope of types of communication, as relevance theory includes everything that is part of *ostensive communication*, which means it does not exclude 'showing' what the speaker means, something that Grice's theory does exclude. For example, when Mary points at her broken leg when Peter asks her to go play squash, she means that she cannot play squash. In Grice's model, she does not also actively mean that her leg is bandaged, and that meaning is thus excluded. Sperber and Wilson's relevance theory does include this type of meaning making.

Relevance theory also does away with Grice's first maxim of Quality, as Sperber and

Wilson believe that it is never properly violated in such a way that it is actually meaningful to note that it has been violated. Lastly, there is a difference in what is perceived as being cooperative for both theories. Whereas Grice assumes that the attempt at cooperation applies to the entire conversation, the cooperative nature of the conversation ends at the mutual recognition that the speaker is trying to communicate something. Instead it focuses on how the interpretation is based on the contextually relevant behaviour and clues.

It should be noted be noted that, though Grice considered meaning to be a primarily psychological concept, with its linguistic parts being only secondary, it focuses primarily on semantic elements and is more descriptive, whereas relevance theory goes more in-depth into the cognitive element of meaning making (Wilson 2014).

Wilson (2014) does state that, according to relevance theory, an interlocutor will aim for his utterances to be as relevant to the addressee as possible. If it were to be an irrelevant utterance, then it would not be worth paying attention to for the addressee. Thus the interlocutor should always adhere to this principle if he wishes for the addressee to actually consider what he or she is saying.

From this follows a set of principles that an interlocutor is assumed to follow at every step in the process of communication (Wilson, 2014):

1. *Communicative principle of relevance*

Every utterance communicates a presumption of its own optimal relevance.

2. *Optimal relevance*

- a. It is at least relevant enough to be worth the addressee's processing effort.
- b. It is the most relevant one compatible with the speaker's abilities and preferences.

It should be noted that, as Sperber and Wilson have already indicated themselves, interpretation will stop at the most *optimally* relevant interpretation, not the *maximally*

relevant interpretation. This means that an interlocutor will have to somehow exclude unwanted interpretations that cost less effort according to the relevance principle if they wish to avoid a risk of misunderstanding. An interlocutor may do so by altering the shared information that is manifest to them both, or by providing an earlier utterance that will guide the interpreter towards the desired interpretation.

Since all utterances are assumed to be relevant to the conversation by the interpreter, this means that an interpreter will take previous utterances into account when they go through the process of interpretation, even if it may not be directly related or relevant in a 'normal' sense of the word, as it will be assumed to be relevant in the sense of relevance theory.

This is also illustrated by Forceville (1996), who states that there are four ways that the addressee will incorporate new information into the existing present context in the addressee's mind. Firstly, the new information is always processed, and thus modified, by the older present context. As a result of this, new assumptions are generated, which are the product of a combination of the new and old information, that could not have been created without either the old context or the newly provided information. In this process, both old and new information can be modified and altered due to the presence of more information, depending on the relative potency of the available assumptions that are considered relevant in the interpretational process for the addressee. However, it should be noted that assumptions are not necessarily completely accepted or rejected, thus leading to amalgamated assumptions where some of the available information is either weakened or strengthened based on how strong the assumptions are in relative terms (Forceville, 1996).

Forceville also shows how relevance theory can be applied to metaphor, as Sperber and Wilson seem to consider thoughts to be as literal as possible at all times, whereas Forceville agrees with Lakoff and Johnson, who believe that thoughts are actually rather metaphorical in many instances. It should be noted, however, that for both duo's there is a

difference between thought and linguistic utterance. For both Sperber and Wilson, and for Lakoff and Johnson, thought and utterance do not correspond with one another on a one to one basis. There is a noticeable gap between thought and utterance, which appears to increase in size as the meaning becomes more metaphorical (Forceville, 1996).

## ***2.2 Metaphorical conceptualisation***

Kövecses' study and ideas are primarily based on those conducted by Lakoff and Johnson. According to Lakoff and Johnson (1980), metaphor (in thought) is based on a sense of bodily experience. They argue that these bodily experiences, which are not complex and understood naturally can be used to make sense of more complex ideas and concepts. An individual is assumed to do this through a metaphorical process, in order to make complex abstractions properly describable. As a result of this, since everyone on our planet has the same bodily experiences to a certain extent, they assume there are such things as universal metaphors. An example of this are the metaphorical concepts of MORE IS UP and UP IS GOOD. In virtually all cultures and populations on our planet, going up is a good thing. One goes up through the ranks, the better jobs are generally placed higher up in the office building. As such, this is a universal metaphor, which is the same across cultures.

Once metaphor is used to explain more complicated ideas, however, the conceptualisation of metaphor begins to differ between cultures and populations. Examples of these are given by Kövecses (2005). Across the world, there appears to be the (near)-universal metaphorical concept THE ANGRY PERSON IS A PRESSURISED CONTAINER. In English, for example, this becomes noticeable through various metaphorical linguistic utterances of meaning making. In English, it can be said of an angry person that they 'blow their lid,' which relates to the pressurised container metaphor. Various cultures have more complex, or more specific, variations of this. In Japanese, for example, the anger is seen as primarily coming from the stomach, whereas in Zulu it is understood as coming from the

heart, an organ that is related to love rather than anger in English. The secondary element that is related to anger in English is heat, which can be seen in phrases such as ‘Keep your cool,’ and ‘He’s a hothead’. Conceptualisations such as these can then be used to create further abstract notions and explanations. Humans make use of these complex metaphorical concepts so they can put their feelings and experiences into words, so that others may make sense of what they mean. Though these elements are an important part of how we explain our feelings and put our experiences into words, Kövecses even explains how these metaphorical concepts do not just appear in linguistic matters, but also in socio-physical reality. For example, think of the UP IS GOOD concept earlier. The socio-physical result of this concept is, as mentioned before, that more important people are often located in physically higher positions than those that are less important, or less good at a certain aspect.

The views of Lakoff and Johnson, and Kövecses, are challenged by Quinn. She argues that metaphor is not at all essential to the understanding of more abstract concepts, but that metaphors are rather a reflection of culture instead of being the basis for it. Her claims mean that abstract concepts can be understood in a literal way. Marriage as a concept, for example, could be explained based on a series of expectations and the concept of love (Kövecses 2005).

Kövecses accurately points out that, though it would be possible to describe marriage in such a fashion, one is then left with the equally abstract and complex concept of love.

Quinn argues that love can be understood in terms of basic, infantile experiences, but Kövecses counters that these experiences are simply not detailed enough for an accurate description of the (adult) concept of love (Kövecses 2005). One should also keep in mind that, even though it might be *possible* to construct a concept of marriage through literal terms and experiences, that this is not necessarily what actually *happens*. This becomes clear from Quinn’s own descriptions of couples talking about marriage, where all of them must resort to

metaphorical terms of speech in order to be capable of getting their thoughts on the matter across (Quinn, 1996: 211-12).

### ***2.3 Relevance theory in multimodal metaphor***

As explained in the introduction, Francisco Yus (2005) has provided a basis of evidence for the assumption that relevance theory is applicable to the process of interpretation for multimodal instances of metaphorical meaning making. He makes the claim that, like the interpretation of verbal metaphor, the interpretation of visual and multimodal metaphors are based on a modular part of the brain. For verbal metaphor, this is named the *language module*, and for visual metaphor this is named the *perceptual module*.

Other than this basic difference, Yus argues that the process is the same for both verbal and visual metaphor. Both processes are fast and automatic, and both are not learned but rather something that happens naturally. In these processes, relevance theory predicts that there are two clear stages that are separate from each other.

First there is a stage of decoding, during which the brain decodes what kind of clues the offered information gives with regards to the interlocutor's thoughts. This is followed by a stage of inferential processing, where the recipient attempts to make sense of the uttered pieces of information based on the explicit content, implicatures and relevant contextual clues until a satisfactory interpretation is achieved (Yus, 2005: 150).

An important concept here is the *scale of iconicity*. Yus shows that elements can be depicted more or less recognisably, which places them somewhere on the scale of iconicity. This is related to how easy it is to interpret an image as the intended meaning, or 'correctly'. It also applies to how quickly the interpreter will switch from a *denotative* interpretation to a *connotative* interpretation. This means that the interpreter will recognise the instance of meaning making as metaphorical. The more iconic an element of meaning making is, the easier it is to determine whether there are any incongruities with what the interpreter knows of

the depicted element, and thus whether there is an *ad hoc pointer*.

For example, in the picture that will be used in this study, there is a person that is very clearly recognisable as the pope. However, he is depicted in a little rowing boat. This presents a situation that is normally not part of the *prototypical visual syntax* of, or things that we have memorised as being related to, the pope. As a result of this, the interpreter will be aware of the fact that this image is meant to be interpreted metaphorically, rather than literally.

Once an individual has reached the stage of connotative interpretation, Yus argues, there is no difference between visual or verbal metaphor anymore. For both types of metaphor, the interpreter will now create various *ad hoc* concepts of what they see or hear. This allows the interpreter to make sense of the given elements metaphorically by assigning properties to the *source image* that are part of the *target image*. For example, in the image to be used in this study, the Vatican is depicted as a stranded ship. Properties of the stranded ship, like being helpless, being useless and being broken are now assigned to the *ad hoc* concept of \*VATICAN.

Refaie shows that the interpretation of a metaphor is ultimately based on an interpreter's cultural and personal background. However, she also suggests that some metaphorical concepts, such as the passage of time, are likely to be available to every individual reader or viewer. These are the metaphorical concepts that were described as universal metaphors by Kövecses, and Lakoff and Johnson.

Refaie argues that political cartoonists often rely on these universal metaphors in order to represent the complex and daunting world of politics more easily, and in terms that everyone can understand, rather than just an initiated few. As such, the positioning of elements are often used to indicate the passage of time, and the concept of size is regularly used to represent power struggles and status. For example, in the picture of Tony Blair being crushed by a giant boot, which represents George W. Bush, the obvious difference in size is



representative of the relative power between Tony Blair as the prime minister of the UK and George W. Bush as the president of the USA. This interpretation of a power struggle is gained from the metaphorical concept of BIGGER IS STRONGER.

This metaphorical concept is the result of bodily experiences that the human species has had. In general, a bigger person is stronger than a smaller person. An adult is stronger than a child. As such, this interpretation is available to every individual that attempts to interpret the picture.

Refaie goes further into the interpretational process by explaining how metaphorical interpretation is not only based on these cultural and universal metaphors, but also on something called *working memory*. This concept encompasses everything that is readily available for useage in the interpretational process from both “[...] long-term memory, as well as ideas that were recently activated through the communicative interaction” (Refaie, 2005). This would be in line with the application of relevance theory to metaphorical images by Francisco Yus.

Refaie assumes that metaphorical concepts in political cartoons will ultimately be based more on the contextual clues and social contexts than on the universal experiences of the human species. This is because, while it is entirely possible that some concepts like BIGGER IS STRONGER are available to every individual, it is far more likely that a cartoon is based on some form of cultural context. Refaie offers the tendency of western cartoons to rely on sports as a metaphorical representation of politics as an example.

The results of Refaie’s study confirm her initial assumptions with regards to how much the participants would rely on their working memory, and their cultural background specifically. One of their participants, a young Muslim woman who was very concerned with the situation in Palestine, interpreted the cartoon about the struggle between Blair and Bush as a situation where the Palestinian civilian population was being crushed by the actions of the

likes of Bush. Since it is likely to be on the mind of this participant constantly, information that is related to the issue in Palestine was more easily available for usage in the interpretational process.

As Refaie took care not to influence the interpretational process of her participants, her study does not provide any results with regards to how easily an interpretation can be skewed by present recent contextual clues, and it is this aspect of the interpretational process of metaphorical elements of meaning making that this study aims to focus on.

#### ***2.4 Priming***

Kövecses has already indicated that a universal metaphorical concept may be ‘overridden’ by a cultural metaphorical concept, though he dislikes the use of the word ‘override’. He explains how the USA and France responded differently to the extra-marital affairs of their leaders, even though both countries adhere to a SOCIAL RELATIONS ARE FAMILIAL RELATIONS type concept. This concept means that the leader of the country is then seen as the head of the family (the country), and thus should adhere to the social values that a father would be expected to adhere to. The difference between the USA and France lies in their other core values. Something that can be incredibly important to the French might not be as important to the inhabitants of the USA. This leads to the differing overall cultural context for the two countries, where the French appear to value sexual freedom far more than the Americans. As a result of this, the responses in both countries differed, and the metaphorical concept was ‘overridden’.

Intercultural priming may, however, also affect the interpretative process of an individual. Hong and others (2003) conducted research with regards to the interpretative process of an individual in a framework of a given cultural background. They found that an individual is only liable to interpret something in the framework of their cultural background if the system containing this background is activated by previous information. In terms of

*relevance theory*, this would mean that there must be something in the shared manifestness of the individual that indicates to him or her that the given framework is appropriate. They also found that, if multiple cultural frameworks are available to an individual, the one that will be used is determined by the shared manifestness that is available to the individual. For example, an individual with a Chinese cultural background, and an American cultural background, is more liable to interpret an ambiguous element in a Chinese cultural framework when he or she is surrounded by Chinese elements of culture, and he or she is more likely to interpret an ambiguous element in an American cultural framework when he or she is surrounded by American cultural elements.

An important thing to take into consideration with primed interpretations is the iconicity of the original image, which motivates individuals to interpret the image ‘correctly’. Iconicity is a term that is often used in religious studies, as religions often either make heavy use of icons, or forbid it altogether as idolatry (Sebeok, 1976). The notion of iconicity in linguistics is used to describe how much a word or image, or other mode of meaning making, is akin to the object or notion that it is trying to represent. Onomatopoeic words, for example, are highly iconic in that they sound like the sound they are trying to represent (Meir, 2010). Other words like ‘sword’ are less iconic, as the word sword is generally not sharp, long, or made of metal.

This term of iconicity is also important in our understanding of metaphorical elements of meaning making in language. Since the *source domain* needs to be similar to the *target domain* for the successful creation of a metaphorical understanding of a given concept, that means the source domain and target domain must somehow share something in an iconic fashion (Meir, 2010). Otherwise, the creation of the metaphorical concept would not be successful. For example, the sentence ‘He is a hothead,’ would not work effectively if individuals did not feel anger was related to a sensation of heat. Therefore, metaphorical elements of meaning making will always carry some form of iconicity in them. As Meir

explains, visual media rely more heavily on iconicity than spoken media, because it easier to see things that concepts have in common than to explain those commonalities (2010). Thus this study will aim to answer the question whether these cultural primes can affect or even override the original cultural background, or iconicity, that is used for the interpretational process for a multimodal image.

### 3. Method

The goal of this study was to investigate whether a complex linguistic local prime can affect the interpretation of a visual element of meaning making, in order to determine the salience of local contextualisation versus socio-cultural background knowledge. An enquiry was spread amongst a group of 60 participants in order to provide us with the necessary data.

First, however, a pre-test was done with 10 participants in order to find a suitable image for the main enquiry. The participants were shown figure 1.



*Figure 1. An altered version of a cartoon about pope Benedict, who abdicated in 2013, by Dave Granlund. Original picture included verbal clues on the stern of the cruise ship, "Vatican", and on the small boat, "Benedict".*

Figure 1 is a highly iconic image because the pope is clearly recognisable. There are strong similarities between the real pope, and the depicted concept of POPE in the image. The white garb, and the white headgear are similar to the clothing that the pope would normally wear in public. The Vatican, which is represented as a giant steamer, is only metaphorically akin to its visual representation. According to the image, both are lumbering, broken-down and helpless things, but visually the ship looks nothing like the Vatican. Therefore, the steamer is far less iconic than the depiction of the pope.

The participants were presented with figure 1 without any contextual information, and were then asked what they thought this picture might represent. They were asked to say anything that they might come up with, and they were told there were no wrong answers. No time limit was imposed upon them, and they were free to keep mentioning new interpretations and explanations until they themselves felt satisfied with the answers they had given. The answers they gave were written down by me. Several different types of answers were provided, like the relationship between Greece and the banks of that country, or England trying to leave the EU.

Answers that were repeated multiple times, however, were the abdication of pope Benedict, which was the original meaning, and various links with the current refugee crisis in Europe. Seven of the twelve pre-test participants mentioned the refugee crisis, or refugees in general, and all of them linked the image to the refugee crisis because the refugee crisis was frequently discussed on the news at the time. Since this other interpretation appeared to be more readily available due to the news coverage on the issue, I decided to limit the main enquiry to the original interpretation of the religious issue, and the alternative interpretation of the refugee issue for the sake of keeping this study focused on testing the plausibility of the current hypothesis. Thus the main enquiry was focused on these two sets of meanings, in order to keep the variables more manageable.

### ***3.1 Survey***

The main enquiry first showed the participant the image on the second page. On a separate page, this image was followed by 12 statements with a 5-point Likert scale ranging from “strongly disagree” to “strongly agree”, with the strongly disagree matching the lowest number (1), and the strongly agree matching the highest number (5). Given the initial findings of the qualitative pilot, 12 statements were generated that would be related to the refugee crisis or ecclesiastical issue, and staggered in such a way that the participants were first presented with some statements that were related to the refugee crisis, rather than the ecclesiastical issue.

The statements covered a variety of different levels of abstraction in order to provide data on whether the more elaborate, and thus more abstracted, elements of the image would be affected to a greater degree than the more basic elements of the image. There were simple statements which covered whether the participant thought the person in the little boat might represent a refugee, and more complex statements that were concerned with directionality of the image and the intentions of the depicted figure.

Lastly, participants were provided with an optional open-ended question so they might further explain the personal interpretation of the image, as well as a page for the collection of details like age, sex and country of origin.

The primed version of the enquiry contained a prime on a separate page before the participant was shown the image, alongside the explanation for the participants with regards to what was actually expected of them. A copy of the enquiry is enclosed with this paper in the appendix.

### **3.2 Participants**

No distinction was made between participants, and no group was specifically targeted or desired as test participant. The enquiries were spread both online, as well as provided in paper version to groups of people in the student cafeteria at the Radboud University in Nijmegen. Due to this, a bias towards (Dutch) students was to be expected.

Ultimately, 58 participants replied to the enquiry, of which 27 replied to the control version without a prime, and 31 replied to the primed version of the enquiry. 7 of the 27 replies to the control enquiry have been gathered online, with the other 20 replies having been supplied on paper. 21 of the 31 replies to the primed enquiry were gathered online, and the other 10 were answered in their paper version.

### **3.3 Prime**

The priming of the primed group took place within the survey response structure. It was important to make sure that the prime became part of the *mutual manifestness*, though without making it too obviously present in order to avoid skewed data. Mutual manifestness is a term coined by Sperber and Wilson (1996) in their discussion of relevance theory, in order to provide the world with a less problematic version of *mutual knowledge*. Mutual manifestness is the term they used in order to describe the general set of possible assumptions that are available to two participants in a conversation. As such, the prime had to be potentially noticeable to all V2 participants.

The prime was placed in between the instructions for the participants so that the chance of a participant seeing the prime was as high as possible. Evidently, it is still possible for an individual to glance over this prime, as is explained by Richard Zakia in his discussion of human perception (2002). This is why a question was included at the end of the survey with regards to whether the participant remembered the prime. It should be noted that this ad



hoc check still heavily relied on short-term memory more than anything else, and the validity of this check remains rather uncertain.

For the sake of a consistent presentation of the prime, it was decided that the prime should be presented visually, as part of the survey, rather than verbally. The priming instance was worded as follows: “The reason I will have you look at this picture in particular is because I found its placement on the page of the newspaper, in between a bunch of articles on the current refugee crisis in Europe, rather interesting.” The prime was placed on the page with the explanation of the survey, which was on the page before the page which showed the image. The phrasing of the sentence was thought to be moderate enough in order to avoid a forced suggestion that it had to be applicable to the image. The participants still had to be free to consider it either part of the explanation of the image or not.

#### 4. Results

This chapter will provide an overview of the statistical results of the survey responses. The programme used to generate these results was SPSS 21. As stated in the method chapter, 27 individuals replied to the unprimed survey, and 31 individuals replied to the primed survey. The twelve statements were condensed into two categories, namely religion and refugee crisis. The data in these two categories as a whole was yielded slightly kurtotic and skewed results, but not worryingly so as the z-values of the kurtosis and skewness data are still lower than 2. Thus, we may conclude that the generated data, though not perfectly normally distributed, is approximately normally distributed.

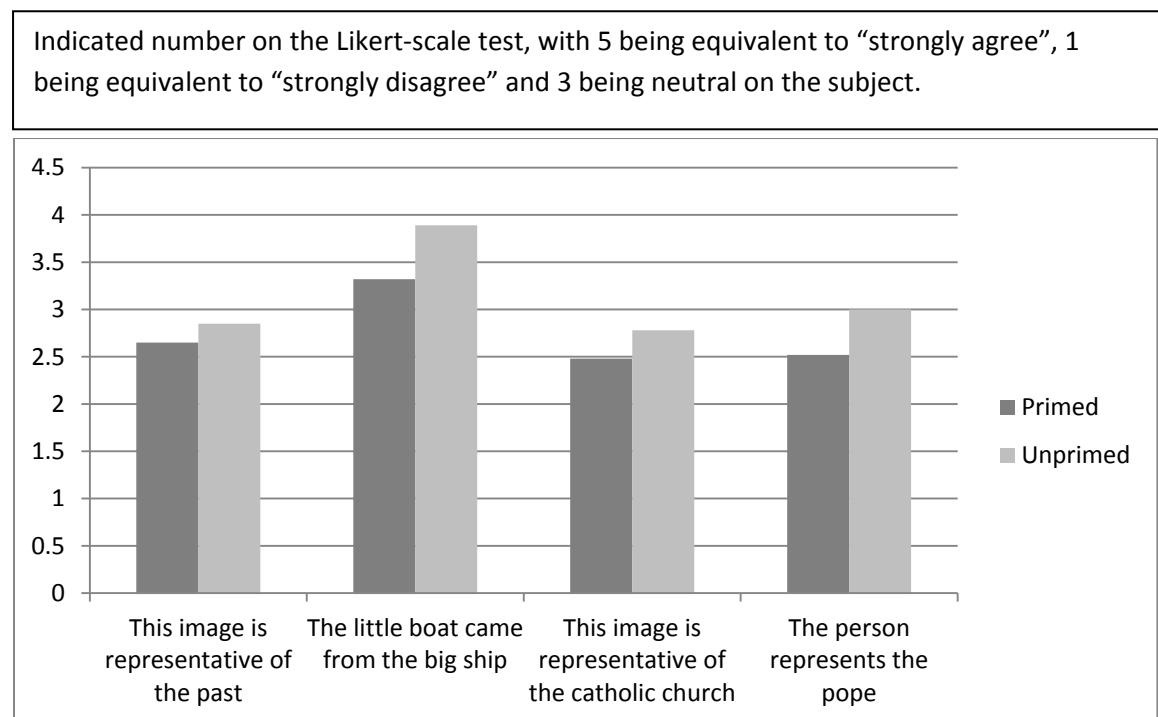
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval	
									Lower	Upper
Religion	Equal variances assumed	.843	.362	1,514	56	.136	.38769	.25605	-.12523	.90062
	Equal variances not assumed			1,507	53,654	.138	.38769	.25729	-.12821	.90860
Refugee Crisis	Equal variances assumed	.584	.448	-.765	56	.447	-.14623	.19110	-.52905	.23659
	Equal variances not assumed			-.767	55,283	.447	-.14623	.19074	-.52844	.23598

Figure 2. Results for the statistical t-test between the groups of statements that were lumped together in two separate categories: Religion and Refugee crisis.

This approximately normally distributed data allows for an analysis with an independent sample t-test in order to compare the means of the two groups. As is evident from the table below, the Levene's test yielded no significant difference in variances between the two groups. The t-test itself also showed that there is no significant difference in means between the two groups, which means that we will have to reject the H1 (There will be a significant

difference between these two groups), in favour of the H0 (There will not be a significant difference between these two groups).

It appears that overall, the results were not statistically significant, though there was a noticeable difference. The difference that priming made in the interpretational process of the image given in the survey carried a significance of 0,136 for the religious statements, and 0,447 for the statements about refugees.

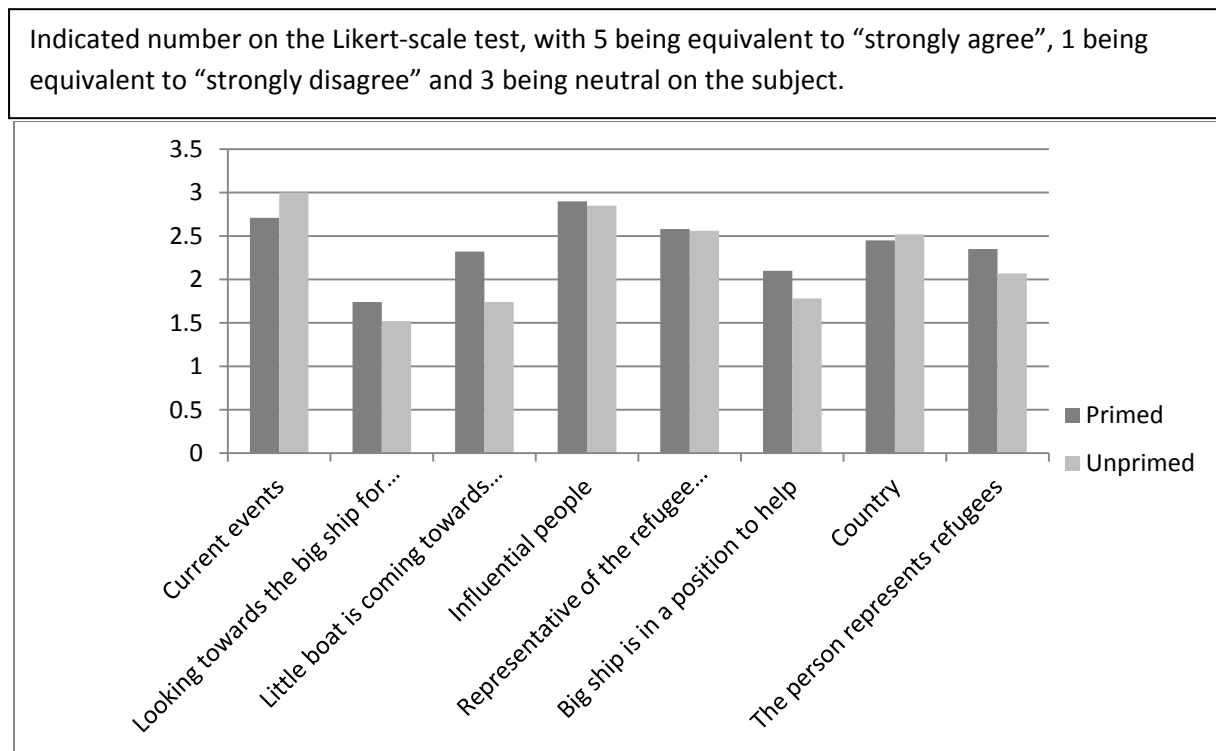


*Graph 1. Means of the indicated values for the religious statements on the Likert-scale part of the survey.*

It is visible in graph 1 that the primed participants were more inclined to disagree (more strongly) with the religious statements than the unprimed participants across the board. On average, they are technically in agreement with the statement about the origin of the little boat.. Still, the primed participants, when compared to the unprimed participants, agree less strongly with the given statement, as can be observed in the data. This may be indicative of the primed participants being less inclined to interpret the image as being related to the

religious or papal issue. If this is indeed the case, then the prime may have not only strengthened the potential interpretation of the refugee crisis, but also weakened the original interpretation of the religious issue.

A similar tendency cannot be observed in the statements on the refugee crisis (graph 2, below), where there appears to be no general tendency to agree more or less for either the primed or unprimed participants. Instead, tendencies stronger and weaker agreement and disagreement were observed for primed and unprimed participants depending on the statement. Aside from more fluctuating tendencies for the differences between primed and unprimed participants, the means of the results appear to be more more inclined towards disagreement. A stronger inclination to disagree than to agree was observed in both groups of statements, for both primed and unprimed participants.



Graph 2. Means of the indicated values for the refugee statements on the Likert-scale part of the survey.

Statistical t-tests were run on the individual statements of “The person in the little boat represents the pope.” and “The person in the small boat represents refugees.” after a noticeable difference was observed in the graphs containing the means of both groups.

	Was the participant primed?	N	Mean	Std. Deviation	Std. Error Mean
The person represents the pope.	No	27	3,00	1,687	,325
	Yes	31	2,52	1,525	,274
The person in the small boat represents refugees.	No	27	2,07	1,174	,226
	Yes	31	2,35	1,330	,239

Figure 3. Means and Standard Deviations for the two statements about the representation of the person in the small boat for both categories.

The results for both statements were slightly skewed and kurtotic, though once again not worryingly so. The data used was approximately normally distributed and a regular t-test sufficed for the purpose of this comparison. Though the means were observably different, and both the religious statement and the refugee statement changed as was initially expected, no statistical significance was found in the means of these two statements. The statement about refugees carried a statistical significance of 0,401 and the *p*-value of the statement about the pope was 0,256. Once again, the H1 (There will be a significant difference between these two groups) must be rejected, whereas there is support for the H0 (There will not be a significant difference between these two groups).

	Was the participant primed?	N	Mean	Std. Deviation	Std. Error Mean
The little boat came from the big ship.	No	27	3,89	1,219	,235
	Yes	31	3,32	1,641	,295
The little boat is coming towards the cruise ship.	No	27	1,74	1,095	,211
	Yes	31	2,32	1,469	,264

Figure 4. Means and Standard Deviations for the two statements about the directionality of the little boat for both categories.

A statistical t-test was also run for the individual statements of “The little boat came from the big ship.” and “The little boat is coming towards the cruise ship.” because there was a visible difference in means in the graphs above. The data was once more approximately normally distributed, and as a result an independent t-test sufficed. Though a distinct difference was observable in the data, the results for both statements were once again not statistically significant for both statements in both the primed and unprimed surveys. The religious statement about the boat coming from the big ship has a statistical significance of 0,139, whereas its refugee statement about the boat coming towards the big ship has a  $p$ -value of 0,097.

Despite the higher statistical significance than the other statements, it must still be observed that the overall tendency towards the religious statement was more affirmative than the overall tendency towards the statement about refugees. The tendency towards the statement about the little boat coming towards the big ship was not affirmative at all, though an upward tendency is visible.

The last thing that should be observed is that there was one statement for which the data was highly skewed and kurtotic, far more so than the rest of the statements. This statement was the one on whether the person in the small ship was looking towards the big ship for help. This meant that the data on the statement about the little boat looking towards the big ship for help could not possibly be assumed to be approximately normally distributed, and thus it was not usable in normal t-tests.

Since no t-tests were run with this data separately (it was included in the categorical grouping, the whole of which was then found to be approximately normally distributed), it does not make a difference for the outcome of this study in particular, though the data itself may be interesting to various readers.

## **5. Discussion**

This chapter will discuss the data generated by the open questions and attempt to explain the survey response data coupled with the open ended response data by linking it to data found by other studies. The statistical data this study found does not allow us to reject the original  $H_0$  (There will not be a statistically significant difference in interpretation between the primed group of individuals and the control group). This means that the statistical data does not support the initial hypothesis with regards to whether the prime would wholly override the original interpretational process. Therefore, we must reject the original hypothesis of this study.

### ***5.1 Skewness in statistics***

It must be noted that the results for some of the presented statements were more skewed than might have otherwise been considered normally distributed for statistical processing. Though the lumped groups of Religion and Refugee Crisis were approximately normally distributed, even for normal conditions, some statements were slightly more skewed than would normally be desirable. These statements were: The person in the little boat is looking towards the big ship for help, The little boat is coming towards the cruise ship, The people in the big ship are in a position to help, and The person in the small boat represents refugees. Of these statements, only the first one was skewed (and kurtotic) to the point where a t-test was not usable at all. The others were more skewed than was entirely desirable, but had levels of kurtosis that were still acceptable.

This observation can be explained by a look at the image that participants were asked to interpret. The image has a high iconicity. The person depicted in the small rowing boat is easily recognisable as the pope, or at the very least as a person with ecclesiastical ties. There is no visual clue present in the image at all, however, for an interpretation of the person in the

small rowing boat as being a refugee. A tendency to disagree with that particular statement was thus to be expected, as there was very little reason for the unprimed participants to interpret the person as a refugee.

The skewness of the other two statements, including the kurtotic one, can be explained in the same way. Like there is a clear visual element in the pope that interferes with the potential interpretation related to the refugee crisis, there is a visual element that makes the statements with regards to the cruise ship providing help to the small rowing boat problematic: the cruise ship is stuck on a set of rocks. The statement with regards to the direction that the rowing boat is going in is related to the issue of *directionality*. Results of these statements will be further discussed in section 5.3: Effects of the prime, and 5.3.1: Directionality.

## ***5.2 Open questions***

The open questions presented at the end of the survey provide additional information that tells a more nuanced story. As was to be expected, the few participants that indicated agreement with the Likert-scale statement about the image representing the refugee crisis also mentioned the refugee crisis in their answers to the open question. One participant, for example, assigned a 5 to the statement with regards to whether the image was representative of the refugee crisis.

Her answer to the open question was as follows: “The refugees are coming towards to Europe, while also in the fear of being crushed.” Her answer also appears to correspond with her other indications for the Likert-scale statements. She noticeable does not mention the pope, or religion, and she assigned a 1 to the statement about the given image representing the catholic church. This means that she strongly disagreed with the given statement, and her answer to the open question reflects this.

More interesting, however, are the participants who appeared to contradict themselves. On multiple occasions participants have assigned low(er) values to the statements about the



refugee crisis in Europe, thus indicating that they disagreed, or at least not agreed, with said statements. The answers to the open questions, however, still referenced the refugee crisis on a regular basis, even for those participants that had previously assigned low(er) values to the Likert-scale statements.

The data generated with the open question allows us to make slightly modified assumptions on the basis of the original hypothesis. The answers to the open question show that the majority of the primed participants still referred to refugees in some form or other, despite the fact that they tended to indicate that they disagreed with the given Likert-scale statements. One participant, for example, answered the open question as follows: “The large ship stands for the massive number of refugees and the small boat stands for the little help they’re getting from Europe.” However, she also assigned the statement “This image is representative of the refugee crisis.” a 1.

Another participant stated that “[t]he cruise ship represents the large number of refugees that are stranded and the small ship represents skilled individuals. The skilled individuals have escaped being stranded because they are desired in other countries where as average people who don't stand out are left stranded.” This person assigned the same statement regarding refugees a 3. There is a discrepancy between their agreement with the Likert-scale statements and their given interpretations in the open question. This means that, despite their misgivings, they apparently were ultimately still inclined to interpret it as a picture that was somehow related to refugees. A reversed tendency, where respondents indicated that they disagreed with the statements regarding the religious issue, but still mentioned religion or the pope in their open answers was not observed.

One participant worded their answer to the open question as follows: “Really confusing. I can’t match it with the refugee crisis as I don’t see where Catholicism comes in.” Two other participants mentioned both refugees and Catholicism in a similarly styled answer,

in which they expressed difficulties linking the two subjects together in the image. This has the potential to generate an accurate representation of the thought process that went on for participants presented with survey 2. Other than the stranded ship, which does not necessitate an interpretation of refugees specifically, the pictorial components of the image offer no reason for it to be interpreted as being related to the refugee crisis, whereas there is a pictorial component that offers a reason for the image to be representative of the ecclesiastical issue, namely the pope. The prime appears to have created the expectation that it is somehow related to the refugee crisis, despite the lack of a pictorial component that would give the participant a reason to think this would indeed be the case. With the given data from this study, such an assumption with regards to the ongoing thought processes cannot accurately be tested, but it is an important piece of data for potential future research.

Wilson's text (2014) can be used in an attempt to explain this observed tendency. As mentioned in section 2, it is now generally accepted by scholars that, under the assumptions that relevance theory is correct, every utterance in a conversation carries within itself an assumption of being relevant enough to be uttered. An interpreter would be lead to assume that everything uttered is relevant to the interpretation, and as a result would then change their interpretation accordingly. This would be in line with the data collected in this study, where the majority of the participants appear to have integrated the refugees into their interpretation of the picture.

Eight of the primed participants, compared to only one of the unprimed respondents, did not just mention the refugees in their answers to the open question, but also mentioned Catholicism like the participant mentioned above. More accurately, they appear to refer to the depiction of the pope specifically, along with their interpretation related to the refugee crisis. For these participants the picture appeared to become an amalgamation of the refugee crisis and the catholic church, and they often mentioned how the pope was supposed to help the

refugees. Rather than overriding the original interpretation, the prime appears to have added an additional layer of meaning to the picture that then altered the interpretations of the majority of the primed participants.

This observation can also be explained with previously mentioned literature. Forceville (2006) indicates that newly introduced information is integrated into the present contextual information during the interpretational process. Information that is introduced later does not automatically invalidate previously introduced context or present information. In terms of this study, that could be translated into: “The element of the prime about the refugee crisis does not alter the fact that the image contains a highly iconic representation of the pope.”

### ***5.3 Effects of the prime***

Eight of the primed participants that still mentioned the Catholic element in their answers to the open question generally mentioned the person being the pope, but for some participants that did not mention this Catholic element it seems that the person in the little boat became more representative of a refugee than of the pope, despite the high iconicity that is carried by the image.

One participant indicated through a plural lexical reference that there were multiple people in the small boat “[...] because they are refugees.” Stone (2000) conducted a study that investigated the role of selective attention in perceptual priming. They assume that selective attention is connected to a need for stimulus identification. If this is the case, then it may provide a potential explanation for the observed instance of interpretation.

This data is salient because of the discrepancy between the iconicity of the single person depicted and the strength of the participant’s conviction with regards to there being multiple people in the small rowing boat, but we cannot attribute too much weight to it. Not only was this data observed in only a single respondent, it may also be more closely related to

the issue of short-term memory, rather than the actual interpretation of the presented image.

Something similar could be observed with regards to the statement about the big ship providing help to the small rowing boat. Many participants did not mention the big ship being on a formation of rocks at all, and they were often more neutral on the given statement. Participants that did mention the formation of rocks, however, also indicated that they strongly disagreed with both statements regarding help from the big ship for the small rowing boat. The rocks were mentioned less in the group with primed participants, and in this case the prime may have motivated the participants to pay selective attention to the image.

A correlation between memory, priming and interpretation cannot be drawn from the results of this study, but further studies investigating this may carry implications for our understanding of the interpretational process with regards to editorial cartoons and advertisements alike. Since the observation was only made for a single participant in this study, there is a high(er) probability that this should be attributed to chance, but it is still a salient piece of data. One that would be interesting to study with a more qualitative setup for future studies, since the in-depth understanding

### ***5.3.1 Directionality***

Further observable differences between the primed and unprimed participants were the fact that the primed participants indicated to agree less with the statement about the small ship coming from the big ship, and indicated to agree more with the statement about the small boat moving towards the big ship. (see figure 4). These two trends together, though not statistically significant, constitute an important change in the observed *directionality* of the image.

Directionality is a term used by Kress & Van Leeuwen (2006) in their discussion of the concept of a visual grammar. They describe it as being a version of narrative in pictorial representation that indicates a certain relation between two visual elements in a given image. For example, if there is an arrow pointing from the word 'friends' to the word 'fun' in a given

image, there is an implied narrative about friends leading to fun based on the directionality of the image. Kress & Van Leeuwen claim that directionality is necessary in order to convey a certain sense of narrative in an image. When the direction in a vector is missing, it becomes a normal connection or relation. An inversion of the directionality of the image would change the meaning of the picture dramatically, and something akin to this appears to happen for the primed participants in this study.

The striking thing is that Kress and Van Leeuwen describe some examples of reading patterns, which are based on directionality, as something innately cultural as well, like there are cultural metaphorical concepts at the basis of our interpretation of the world around us. Examples of this are the western tendency to read from left to right, in contrast to the Japanese tendency to read from right to left. The fact that the directionality of the image appear to be different for some of the primed participants, despite the clear directional vectors in the rowing boat, the pope and the trail in the wake of the rowing boat, was unexpected.

A possible explanation is the relation between narrative and directionality that Kress and Van Leeuwen mention. Due to the directionality of the image, a certain expectation of narrative is created for the interpreter. A different sense of directionality will be paired with a different narrative that can be drawn from the image. The change from a religious narrative to a refugee narrative appears to be correlated with a different directionality. This may be due to the pope, in the religious narrative, is actually abandoning the catholic church, and the refugees, in the refugee crisis narrative, are actually looking for help. Whether the prime motivated an alteration in the directionality of the image, which in turn then led to a different perceived interpretation, or the other way round is impossible to tell from the given data. Our understanding of the interpretational process of visual information would benefit from further, more qualitative, research with regards to this aspect as well.

The reason the directionality and narrative of the image changed so readily for some of

the primed participants may be related to the priming of sets of cultural background mentioned in section 2. If multiple sets of potential contextual backgrounds against which the image could be interpreted were available, then the prime may have activated a different set than would have originally been used to interpret the image. Depending on whether it was more natural for the participant to see the image as being directed towards the left, or towards the right, may have depended on the participant's cultural background, and the prime may have overridden this natural state through imposing a set narrative onto the image, despite the clear 'grammatical' directionality that this image carries. Whether this may have been the case is impossible to tell from the data generated by this study.

A further element of directionality, though not entirely the same, is also mentioned by Kress & Van Leeuwen. They name the concepts of *demand* and *offer*, which are related to the gaze of the viewer and the depicted visual elements. An image that is considered a *demand* has a visual element that gazes directly at the viewer, thereby expecting them to do something or feel a certain way. A famous example of this is the "Uncle Sam"-army poster from WWI America.

The opposite, where the directionality of the gaze is not aimed directly at the viewer, is what is called an image with an offer. These images do not expect the viewer to undertake action, to sympathise or anything of the sort. Instead, they are open to be scrutinised by the viewer (Kress & Van Leeuwen, 2006). Political cartoons seem to be more commonly represented in the second type than the first one, and so is the image that has been used in this study, since the pope is depicted with his back towards us, the viewers. It is one of the visual elements, along with the overall style and tone of the image, that make the image very clearly recognisable as a political cartoon. It leaves the subject of the image, in this case the pope, open to be criticised, and this is also visible from the results of this study. The participants, both primed and control group, were unanimously critical of the situation that they thought

was being represented in the image, regardless of whether they interpreted it as a religious image or as a picture concerning the refugee crisis. This may have been caused by the visual clues of the image. The image was clearly recognisable to the participant as being a political cartoon (Geenen, personal conversation, 14-04-2016). Political cartoons are generally expected to be critical of the depicted elements, and this attitude was recognisable in the responses to the surveys as well, both to V1 and V2.

#### ***5.4 Multimodality***

This section is meant as a short reply to Maes and Schilperoord, who argue that not all metaphorical representations that initially appear to be multimodal in nature need not necessarily actually be multimodal (2009). They offer a cartoon of a Dutch politician as an example. They argue that the verbal representation of the politician's name does not make the metaphor multimodal in nature, as it is not necessary information in order to interpret the metaphor correctly. Instead, proper names are used to make the depicted person more easily recognisable to the viewer.

If this assumption is true, then the original version of the altered image that was presented to the participants in our study should not be considered multimodal in nature, as the verbal components for this image merely consisted of the name of the pope and the name of the Vatican as an institution. If Maes' and Schilperoord's arguments follow, then all respondents to this survey should still have come up with the same overall metaphorical structure of the image, though they might interpret the represented individuals incorrectly.

Based on the data generated by this study, it appears that this is not the case. Various participants did not notice the ship being old and damaged, and instead saw it as a beacon of hope and safety. For example, one participant stated that "[...] the big ships of the West might not be available." Another considered the image to be a depiction of "[...] a sinking ship that turned out not to be sinking." For these participants the metaphorical mapping of being old

and run-down from the big ship onto the institution of the Vatican appears to have been lost completely.

Based on the data generated by this study it is impossible to test new assumptions that might arise on the basis of this information, but I would like to propose a tenuous assumption that may be tested in future studies. I would suggest that, though the proper names might not be strictly necessary (some participants in this study also stuck to the original metaphorical mappings, thus indicating that this argument may go either way depending on the individual), it does aid some individuals in interpreting the metaphorical mappings correctly (rather than just providing a clue to help with the identification of the subject). If this assumption is correct, then the verbal component of a multimodal cartoon might not be required, but will be used as additional information, even if it is ultimately unnecessary.

It should be noted that this current study does not provide any data that may confirm or deny whether this assumption is correct, and as such it is pointless to make any real claims on this matter. Instead, this aspect of multimodal metaphor, and the place of the verbal component within that, would benefit from further research.

### ***5.5 Final thoughts***

There is an interesting discrepancy between the data generated by the Likert-scale statements and the answers that participants gave to the open question later during the enquiry. The data from the Likert-scale statements proved to be statistically insignificant, which means we failed to reject the H<sub>0</sub> (There will not be a significant difference between these two groups). From a statistical standpoint, we must assume that the differences made by the prime in the interpretations of the image were based on chance.

The open questions, however, provided us with data that allows for a more nuanced understanding, where the prime appeared to have a noticeable effect on the results of the interpretations made by the participants. More importantly, however, the open questions



provided us with data that gave us a very brief glimpse into the interpretational process of some of the participants, and how they came to their final conclusions. This data is in line with the expectations based on previous studies discussed in section 2, in that a new interpretation is generated based on the given context, and as a result strengthens the likelihood of this previous research being correct on the matter. For example, the data suggests that the prime generated an expectation for the participants about the image being somehow related to the refugee crisis, even if there appeared to be no further reasons for them to believe this was indeed the case. This generated expectation is in line with Wilson's formulations on optimal relevance. This, along with the discrepancy between the quantitative and qualitative results, are potentially the most interesting things that came out of this study, and warrant further research. A possible explanation for the results of this study would be that the original assumptions about the effects of a prime on the interpretative process were too rigid and too strong. Instead, the data supports the assumption that a linguistic prime will modify the interpretation, rather than override it entirely.

### ***5.5.1 Limitations of the study***

There were several problems we encountered during this study, many of which could be avoided during future and follow-up studies.

As has been mentioned many times before, due to the quantitative nature of this study, there may not have been as much useful data gathered as might have been possible with a qualitative approach. It is noticeable that most of the interesting results and ideas that came up in this study originated from the open questions section of the survey, rather than the Likert-scale questions. Furthermore, it is a lot more difficult to make assumptions with regards to the interpretative process of an individual on the basis of Likert-scale statements than it is on the basis of open questions where the participant has a chance to explain themselves.

Second, the nature of the statements of the Likert-scale part of the survey were

problematic. Though there was a separate prime in the explanatory section of the survey for the primed group, which was lacking in the control group, the control group was likely primed to some extent by the Likert-scale statements themselves. Since the refugee crisis and the religious issue are both mentioned in the statements themselves, these have likely placed pre-existing expectations in the participants' minds, like the intended prime appears to have done for the primed participants. Especially the fact that both the prime, as well as the statements, were presented in text may have motivated a priming effect from the Likert-scale statements. This issue can also be avoided by simply conducting a qualitative study, with open questions rather than statements that the participants have to respond to.

A further issue this study ran into is the issue of a heavy Western-European student-bias in the group of participants. With a more diverse group of test participants, particularly with participants for whom the current refugee crisis is not in the daily news, the results of this study might have been very different. It was also noticeable that the students generally looked at the survey itself more critically than the few older and younger participants of the study. Therefore, future and follow-up studies would benefit from a group of participants that is less homogenous, with more differences in age, occupation and level of education.

Overall, most issues this study had to contend with could have been prevented by simply conducting a qualitative study, rather than a quantitative one so that a greater insight into the workings of the interpretational process for multimodal metaphorical images can be achieved.

## 6. Conclusion

This study aimed to answer the question whether a local linguistic prime can override the more iconic visual representations that are present in the given image. Additional data about this subject would improve our understanding of how individuals interpret metaphorical concepts, and ultimately how they use that to make sense of the world. Though this particular study looks at political cartoons, the results of this study could also be applicable to advertisements, although it must be admitted that advertisements are a vastly different medium than political cartoons. The survey with Likert-scale statements and an open question was spread both in paper version, as well as online.

The original hypothesis, “It is possible to override these iconic representations in interpretations of metaphorical pictures by priming the individual with a different, linguistic, element.” had to be rejected, as we failed to reject the statistical  $H_0$ . There was not enough data to suggest that this original hypothesis might be correct, and we had to reject it. The formulation of the original hypothesis was likely too strong, and on the basis of the data a new hypothesis may be formulated: a local linguistic prime will alter the original interpretation in order to incorporate modifications prompted by the prime into the original cultural background context in order to amalgamate into a new, changed interpretation.

These new assumptions appear to be supported by the data generated in this study, and if the assumptions that this new hypothesis entail are correct, it will have wide ramifications for our perception of primes with regards to the metaphorical element of our daily lives. It means that relevance theory cannot just be applied to normal conversational contexts and especially linguistic and verbal elements, but also to the interpretational process of visual elements and metaphorical conceptualisation. A careful confirmation of the new assumptions would also carry implications with regards to how individuals integrate new information into their interpretations of various multimodal elements, and how critical individuals are of such

pieces of new information. It may provide insight in how individuals deal with conflicting information, given by local contextual clues and the iconic visual information and which of these two might take precedence in the case of such conflict. For example, all of the primed participants that mentioned the refugee crisis in this study, included this alternative information into their interpretation of the image, despite the fact that this information was incongruent with the visual iconicity of the presented image.

The issue of the pope resigning from his position in the Vatican and the current refugee crisis in Europe are already two vastly different concepts, both in what they actually are, but also in how they are represented in the everyday media. Despite how different these two things are, the linguistic prime still appeared to lead to amalgamated interpretations of the visual element, even with how iconic the image really is.

It would be interesting to see how far apart the two instances of meaning making can be before a breakdown in an attempt at interpretation is experienced; how different do the linguistic prime and the pictorially iconic image have to be before the participants decide that the prime can no longer be amalgamated into the original interpretation. At what point is something that was mentioned in previous context no longer considered to be optimally relevant and is the attempt at meaning making dismissed instead of integrated into the original interpretation? This is something that should be explored by a different study, as the data collected in this study is entirely insufficient to make any sensible comments about this premise other than it being an interesting subject of study for other researchers.

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6/15/2016

Survey 1

## Survey 1

Thank you for taking part in this study!

You must leave your email address at the end of the survey in order to get a chance to win the £25 Amazon voucher. The email address will be used for nothing but this purpose, and the survey will be entirely anonymous.

Thanks a lot for participating!

Kind regards,

- Sjoerd Geven  
Student of English Language and Culture  
Radboud University, Nijmegen

\*Verelst

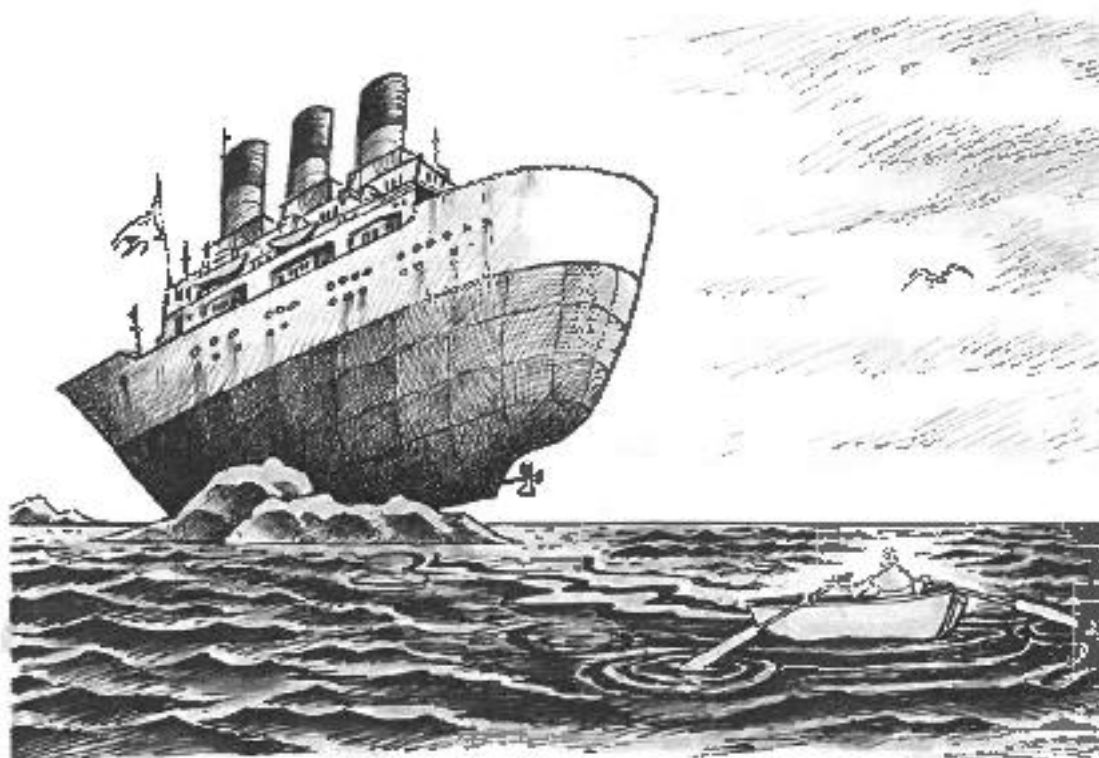
## Explanation

A brief explanation.

The reason I will have you look at this picture in particular is because I found its placement on the page of the newspaper, in between a bunch of articles on the current refugee crisis in Europe, rather interesting.

There will be 12 statements with regards to the symbolic meaning of this picture. It is up to you to indicate how (strongly) you feel about these statements.

## Picture 1



DAVE GRANLUND © www.davegranlund.com

6/15/2016

Survey 1

1. **This picture is representative of current events.** \*

*Markeer slechts één ovaal.*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

2. **The person in the little boat is looking to the cruise ship for help.** \*

*Markeer slechts één ovaal.*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

3. **The little boat is coming towards the cruise ship.** \*

*Markeer slechts één ovaal.*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

4. **The cruise ship represents influential people.** \*

*Markeer slechts één ovaal.*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

5. **The cruise ship is representative of the past.** \*

*Markeer slechts één ovaal.*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

6. **This picture is representative of the refugee crisis in Europe.** \*

*Markeer slechts één ovaal.*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

7. **The people on the cruise ship are in a position to help.**

*Markeer slechts één ovaal.*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree



6/15/2018

Survey 1

8. **The person in the little boat came from the cruise ship. \***

*Markeer slechts één ovaal.*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

9. **This picture is representative of the catholic church. \***

*Markeer slechts één ovaal.*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

10. **The cruise ship is representative of a country. \***

*Markeer slechts één ovaal.*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

11. **The man in the small ship represents refugees. \***

*Markeer slechts één ovaal.*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

12. **The man in the small ship represents the pope. \***

*Markeer slechts één ovaal.*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

13. **How would you interpret this image overall?**

.....

.....

.....

.....

.....

14. **Do you remember what the articles surrounding the picture were about? \***

.....

8/15/2016

Survey 1

**15. Age**

.....

**16. Sex**

*Markeer slechts één optie.*

- Male
- Female
- Other

**17. Country**

.....

**18. Email address**

.....

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 Google Forms

## Survey 2

Thank you for taking part in this study!

You must leave your email address at the end of the survey in order to get a chance to win the £25 Amazon voucher. The email address will be used for nothing but this purpose, and the survey will be entirely anonymous.

Thanks a lot for participating!

Kind regards,

- Sjoerd Geven  
Student of English Language and Culture  
Radboud University, Nijmegen

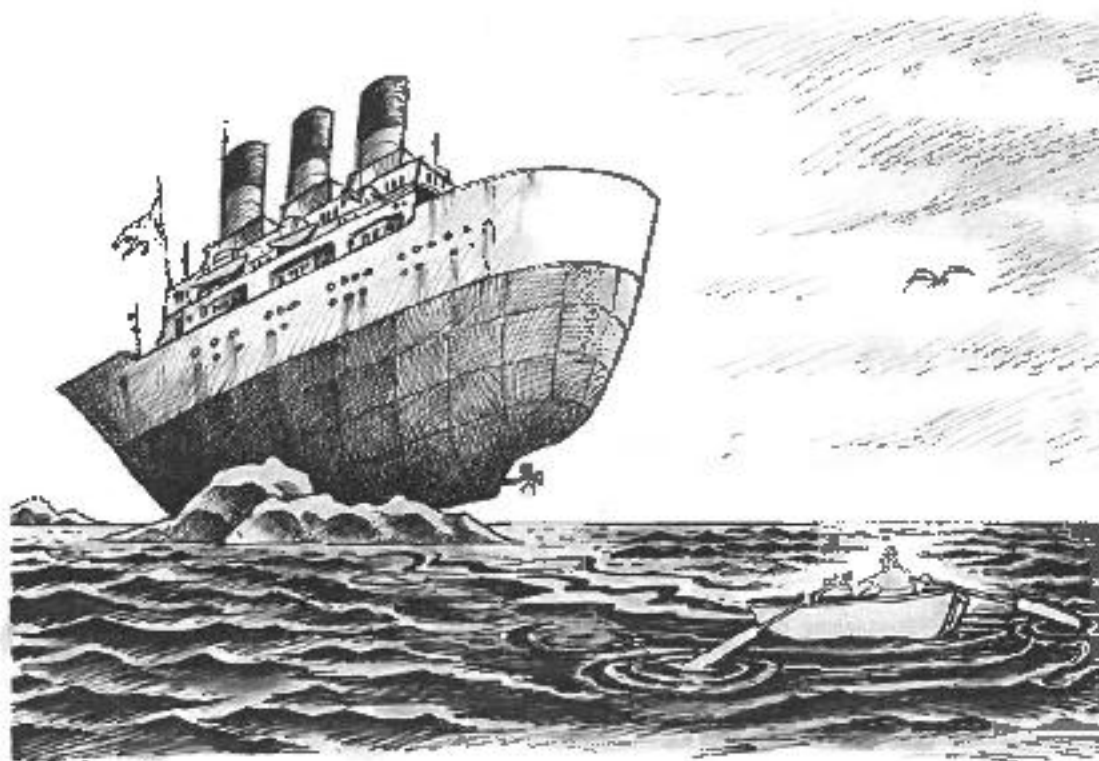
\*Verelst

## Explanation

A brief explanation.

There will be 12 statements with regards to the symbolic meaning of this picture. It is up to you to indicate how (strongly) you feel about these statements.

## Picture 1



DAVE GRANLUND © www.davegranlund.com

6/15/2016

Survey 1

1. **This picture is representative of current events.** \*

*Markeer slechts één ovaal.*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

2. **The person in the little boat is looking to the cruise ship for help.** \*

*Markeer slechts één ovaal.*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

3. **The little boat is coming towards the cruise ship.** \*

*Markeer slechts één ovaal.*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

4. **The cruise ship represents influential people.** \*

*Markeer slechts één ovaal.*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

5. **The cruise ship is representative of the past.** \*

*Markeer slechts één ovaal.*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

6. **This picture is representative of the refugee crisis in Europe.** \*

*Markeer slechts één ovaal.*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

7. **The people on the cruise ship are in a position to help.**

*Markeer slechts één ovaal.*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

8/15/2016

Survey 2

8. **The person in the little boat came from the cruise ship. \***

*Markeer slechts één ovaal.*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

9. **This picture is representative of the catholic church. \***

*Markeer slechts één ovaal.*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

10. **The cruise ship is representative of a country. \***

*Markeer slechts één ovaal.*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

11. **The man in the small ship represents refugees. \***

*Markeer slechts één ovaal.*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

12. **The man in the small ship represents the pope. \***

*Markeer slechts één ovaal.*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

13. **How would you interpret this image overall?**

.....

.....

.....

.....

.....

14. **Age**

.....

6/15/2016

Survey 2

15. **Sex**

*Markeer slechts één oval.*

- Male
- Female
- Other

16. **Country**

.....

17. **Email address**

.....

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