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Rhetorical shadows: The conceptual representation of incongruent shadows

Joost Schilperoord^a and Lisanne van Weelden^b

^aTilburg Center for Cognition and Communication (TiCC), Tilburg, The Netherlands; ^bUtrecht Institute of Linguistics OTS (Uil OTS), Utrecht, The Netherlands

ABSTRACT

This article addresses the topic of conceptual representation of shadows. We analyze several examples of contemporary imagery, taken from advertising and cartooning, to shed light on the way shadow depictions are used as rhetorical devices. Instead of being inserted as a natural phenomenon, rhetorical shadows invite the construction of meaning, and instead of being a mere natural companion of their casters, they reveal things about their casters. Three so-called “shadow incongruity types” are distinguished: (1) shadows revealing the “true nature” of their caster or the “hidden contents” of the caster’s mind; (2) shadows marking some transition their caster is involved in; and (3) shadows suggesting a certain quality attached to one of a shadow’s main ingredients (casting object, light source or surface). For each of these types of rhetorical shadows, we demonstrate that the way they convey meaning basically follows the principles of perceiving and understanding natural shadows.

KEYWORDS

Rhetorics; shadows; visual language; visual communication

1. Introduction

A cast shadow is an area on a surface from which light is cut off by an interposed object.¹ Vision scientists examine how the human visual system uses shadow information to define scenes and to uncover the presence, location, shape, and size of objects in scenes (Mamassian, Knill, & Kersten, 1998; Mamassian, 2004; Dee & Santos, 2011). Another line of shadow-research, one the current article ties in with, studies shadows as communicative artifacts (cf. Stoichita, 1997; Casati, 2003, 2004; Cavanagh, 2005).

Researchers of this lineage take an interest, for example, in the many metaphorical meanings associated with the word “shadow.” One can “be frightened of one’s own shadow,” “take the shadow for the substance,” “be only a shadow of one’s former self,” or “be unworthy of standing in someone

CONTACT Joost Schilperoord ✉ J.Schilperoord@uvt.nl 📧 Tilburg center for Cognition and Communication (TiCC), PO box 90153, 5000 LE Tilburg The Netherlands.

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¹A cast shadow differs from a *self-shadow* or *shade* – the darkness illuminated bodies create on themselves (cf. Mamassian et al., 1998). This article deals only with cast shadows.

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else's shadow." They also study the symbolism shadows come endowed with in literary artifacts such as narratives, fairy tales, myths, and allegories. In the *Apostles Acts*² for example, the shadow of the apostle Peter is a healing power that works on the sick that are brought into the streets. In Von Chamisso's *Peter Schlemihls wundersame Geschichte*, the shadow symbolizes the protagonist's soul when the devil persuades him to cut off his shadow and sell it to him.³ When Dante visits the underworld his shadow is a tell-tale sign to the lost souls that he belongs to the world of the living.⁴ And in Plato's illustrious *Allegory of the Cave* the shadow appears as an imposter to symbolize human ignorance as the mental state of detainees in a cave who take the shadows cast by events happening outside their prison for reality. In all these (and many more) examples the shadow represents meanings that none of the laws of optics can predict.

Shadows are not only deeply ingrained in language and discourse, but also in (Western) visual art and culture. Once the optical principles of depicting shadows were fully mastered, artists inserted them into their paintings and drawings to enhance realism and to provide objects with presence, solidity and volume. But the art of depicting realistic shadows also developed into a practice of using them as a representative form in their own right (Stoichita, 1997; Gombrich, 2014). Especially during the Renaissance the shadow became what Stoichita calls "the product of an empirical manipulation" when painters began exploiting the expressive possibilities shadows had to offer on a symbolic and psychological level (Stoichita 1997, p.130).

The aim of this research is to further explore the expressive possibilities that shadow depictions have to offer. Rather than on how humans perceive and act upon natural shadows, we focus on shadow depictions that are used to produce conceptual or meaning representations in recipients. We specifically focus on the ways shadows are used in contemporary persuasive imagery like advertisements and editorial cartoons.⁵ Although previous research has taught us much about artistic functions served by shadows in works of art, their communicative and rhetorical potential in advertisements and cartoons is a largely unexplored territory. By addressing these issues, we hope to contribute to knowledge of the structural characteristics of shadow depictions that fit communicative applications, and of the conceptual and rhetorical responses invited by those depictions. To set the stage, we discuss an advertisement for a "Sony noise cancelling" headphone. We see an empty square with a large building in the background. It is a sunny day, with blue skies and bright sunlight. On the right-hand side of the image a man with headphones walks towards the viewer.

²See <http://www.biblestudytools.com/acts/>

³See <http://gutenberg.spiegel.de/buch/peter-schlemihls-wundersame-geschichte-759/1>

⁴*La Divina Commedia*, Purgatorio, canto III. See www.bartelby.com (retrieved 11/30/2016).

⁵The empirical basis of this research is a corpus of about 100 advertisements and cartoons that employ depictions of shadows to persuasive purposes.

Although no one else is present, we see dark shadows of a marching brass band casted on the pavement. The shadows are surrounded by shadows of cheerful onlookers and playing children. Except for the man with the headphones, all the shadows come without casters.⁶ Because only objects capable of floating or flying can cast truncated shadows, and because members of brass bands and onlookers obviously lack that ability, the inevitable conclusion is that the shadows must have arrived out of nowhere; hence, they are an anomaly. Given that the perennial Buy this!-incentive of advertisements seems to thrive best on clarity and simplicity, the obvious question is what may have inspired this advertiser to try to stir up potential consumers by giving them a puzzle.

Imagine a viewer who sees this ad for the first time. Because what the image shows is impossible, it will likely raise initial surprise and even some confusion in this viewer – “what is going on here?”⁷ How our viewer will respond on this confusion depends critically on whether s/he considers the image to be a “product of an empirical manipulation” and assumes that the casting objects have been erased *on purpose*. Otherwise, the image will probably be dismissed as a mere error; amusing perhaps but otherwise insignificant. Assuming the viewer indeed takes the image to be relevant on some way his or her next task will be to make sense of the anomaly and to find out why what’s wrong is wrong.

This calls for mobilizing additional cognitive resources and performing a controlled, deliberate analysis of the impossible shadows. Acknowledging what sort of message this is and what sort of proposition might sell a set of headphones, our viewer might get to the idea that the erased casters visually evoke what the product is claimed to accomplish: *when used, the (noisy) band and spectators become the silent shadows they cast*. Note that although the shadows remain anomalous to the eye, they now do say something relevant to the mind. Once understood, our viewer might even judge the image a clever, original and pleasurable way of visualizing silence – the kinds of appreciative responses the advertiser might have hoped for. If this analysis makes sense, the advertiser’s apparent reason to confront consumers with a shadow-riddle may thus be to add rhetorical force to the message.

The headphone advertisement exemplifies what all *communicative* depictions of shadows have in common. To invite meaning construal that goes beyond what can be actually seen; such depictions invoke some sort of anomaly – an *incongruent* shadow, as we shall call them. In the headphone advertisement, the presence of cast shadows functions as some sort of index that attends the viewer to the fact that there are no casters. In the remainder of this article we distinguish several templates of

⁶Due to copyright matters, we are not allowed to reprint the images discussed here and elsewhere in this paper. We therefore provide descriptions of the incongruent shadows and what they communicate. We advise readers to look them up on the web – in most cases they can be easily found using search descriptions like ‘shadows in ads’. All advertisements can be found on <http://www.adsoftheworld.com/>.

⁷This is, however, not as trivial as it may seem. Jacobson and Werner (2004) report experimental evidence suggesting that viewers are often insensitive to impossible shadows.

designing and using anomalous shadows, and demonstrate how these templates invite their own particular kinds of meaning construal.

We describe these templates from a combined rhetorical and cognitive perspective. We argue that both the perception and interpretation of incongruent shadows are guided by the same cognitive principles that also guide the perception and understanding of natural shadows. Three general types of incongruent depictions of shadows are illustrated and described in detail. They are characterized in terms of the type of incongruity they employ, and in terms of the interpretative processes they invite. Some avenues for further research are also considered.

2. Rhetorical shadows

Rhetorical figures are the tools of persuasion. In the hands of the competent communicator, they supply messages with the expressive force capable of challenging an audience's preconceptions and altering their opinions and attitudes. The defining property of all rhetorical figuration is *deviation from expectation*, that is, from an audience's "sense of what properly goes with what" (Burke, 1954, p. 74, see also Kaplan, 2005; McQuarrie & Mick, 1999; Maes & Schilperoord, 2008). Our "sense" is that shadows "properly go with" casters, so when an image shows them without casters, it deviates from what we expect to see. Although deviation from expectation surely has the potential to surprise and intrigue viewers, to be a truly effective rhetorical tool, a deviation must be experienced as meaningful and not just as merely decorative.

Maes and Schilperoord (2008) call this condition the "content requirement," and it critically implies that successful persuasion is a matter of designing rhetorical figures capable of appealing to basic mechanisms of meaning construal (cf. Maes & Schilperoord, 2008; Schilperoord, Maes, & Ferdinandusse, 2009). To acknowledge this, consider the common rhetorical figure of verbal rhyme. When processing a piece of text, we expect the words used to capture the text's content to give us immediate access to what they *mean*. If, however, the text producer has decided to place two or more words with overlapping phonology in rhyming positions, our expectation is compromised because the artifact directs our attention to the *form* of the words. At the same time, the deviation may be effective because the figure triggers our sensitivity to repetition and patterning. So, rather than mere window-dressing, rhyme as rhetorical figure is capable of affecting meaning construal by grouping the meanings of the rhyming words (cf. Tsur, 1992).

Given the content requirement for effective rhetorics, an exploration of how depictions of shadows may serve rhetorical purposes through "deviation from expectation" should start with attending to the cognitive

structures and processes that feed such expectations in the first place.⁸ In their interdisciplinary review of research on the content of cast shadows, Dee and Santos (2011, p. 2) state that shadows “(…) are largely used by the human perceptual system to draw conclusions about everyday scenes (…).” A shadow’s occurrence may inform the visual system about any of its three constituents: a light source, a casting object and a surface (p. 5ff). For example, when viewers perceive a truncated shadow, they infer that the caster must be hovering somewhere; when the shadow cast by some fixed object shrinks, they infer that the source of light moves away from the caster; and when there happen to be several candidate casters, the one actually producing the shadow is determined by its resemblance in shape and size. In general terms, the human visual system employs the content of cast shadows, either witnessed in real or in images, by solving what Mamassian (2004) and Dee and Santos (2011) call the *Shadow Correspondence Problem*:

“[G]iven objects and perceived shadows in one scene, how can shadows be unambiguously anchored to their casters?” (Dee & Santos, 2011, p. 3)

We suppose the Shadow Correspondence Problem (SCP) can be regarded as a basic cognitive model of people’s knowledge of cast shadows. The model specifies the necessary and sufficient conditions for a shadow to occur and the causal relations that hold among its constituents. This way, it accounts for viewers’ expectation that any perceived shadow can be unambiguously anchored to some casting object. So, on account of SCP, a depiction of a cast shadow can be said to deviate from expectation *if it prevents the shadow to be “unambiguously anchored” to a caster*. From here on, we refer to those kinds of shadow depictions as *shadow incongruities*.⁹

In addition, SCP enables us to derive the principles of shadow perception that specify the characteristics of shadow incongruities. We shall refer to these principles as “anchoring rules” and assume that shadow incongruities result from violations of one or several of these rules. Different types of shadow incongruities can then be identified in terms of the anchoring rules they violate (see section 3). For example, in the headphone advertisement discussed above the relevant anchoring rule being violated is “when there is a cast shadow, there must be a caster.”

Violations of anchoring rules may constitute a sufficient condition for deviancy, but to count as rhetorically incongruent, shadows must meet the prior content requirement. Given an incongruity, there must be a consideration of what Sperber and Wilson (1986) call the *principle of relevance*: the act of transmitting a message conveys not only that what is said (or shown) has meaning, but in addition is

⁸This section draws on theoretical insights into the cognition of natural shadow perception that appear in, for example, Mamassian et al. (1998); Jacobson and Werner (2004); Mamassian (2004); and, Dee and Santos (2011).

⁹For a general theory of *visual incongruities*, see Schilperoord (2017).

worth the cognitive effort needed to distract the message's meaning. Viewed from the recipient's perspective, the principle predicts that recipients will search for meaning in any given signal, that is, they will assume the signal to be deliberately designed to serve some communicative intention.

Naturally, misunderstandings are lurking. Errors of depiction may be taken for deliberate incongruities, or the reverse might occur. However, in the genres we selected to examine incongruent shadows are not particularly innocent. Viewers approach ads and cartoons equipped with knowledge based on numerous earlier encounters. Because they know what kind of messages they are dealing with and what these messages aspire to, false alarms are virtually ruled out. As a result, they will in all likelihood feel invited to appreciate shadow incongruities for what they are and to put effort into finding out what they have to say.¹⁰

This brings us to matters of interpretation. The follow-up of assuming that incongruent shadows mean something is to find out what they mean. Only when the viewer infers that the (presumably) deliberately erased casters in the headphone advertisement visually represent the silence the advertised headphones are claimed to provide, he can be assumed to have interpreted the incongruity. The process of interpreting incongruities is called *incongruity resolution*: explaining an incongruity's presence by distracting some (contextually) relevant meaning from it (cf. Forabosco, 2008; Schilperoord, 2017).¹¹

A resolution is accurate to the extent that it matches the communicator's original intentions, but accuracy can only be achieved if at least two issues are sufficiently addressed.¹² First, the recipient has to identify the topic of the message and, second, has to come up with a (contextually) relevant and significant way of relating the topic to the incongruity. For example, the resolution produced by our viewer for the headphone advertisement is arguably accurate because it can be linked to the claimed noise reducing qualities of the product (issue 1). In addition, it allows connecting the topic/product to the incongruity in terms of cause-and-effect (issue 2).

We can now give a three-part answer to the question addressed in this section – how can depictions of shadows serve rhetorical purposes? First, it should be incongruent, that is, violate one or several anchoring rules. Second, the incongruity must be acknowledged as deliberative and processed according to the relevance principle. And third, a recipient must be able to

¹⁰For a detailed discussion of Relevance Theory and its application to advertising, see Forceville (1996, p. 84ff; p. 98ff).

¹¹Detailed accounts of various types of incongruity resolution are offered in Forceville (1996, 2008); Michelon, Snyder, Buckner, McAvoy, and Zacks (2003); Kaplan (2005); Callister and Stern (2008); Yus (2009); Jakesch, Leder, and Forster (2013); Schilperoord (2017).

¹²Whether a resolution is actually accurate is, ultimately, an empirical question. The resolutions we have to offer in this article are based on our own common sense and our understanding of the pragmatics of the genres of advertising and cartooning.

come up with an accurate resolution to the incongruity, that is, one that matches the communicator's intentions. In the next section we take the principle of relevance for granted and dive deeper into what kinds of shadow incongruities we encounter—specified in terms of the anchoring rules that they violate and what kinds of incongruity resolution these types call for.

3. Three types of rhetorical shadows

Three general types of shadow incongruities will be described and illustrated, called type I, II, and III.¹³ Both type I and II violate the anchoring rule of the required resemblance between caster and its shadow. Type I incongruities distort the shadow's shape to the effect that it comes to represent an entirely distinct object (section 3.1). Type II incongruities have shadows and casters represent the same object, but manipulate the shadow to capture the casting object in different poses, attitudes or qualities (section 3.2). Because in type I and II cases the locus of incongruity concerns shadow and caster, they call for resolutions that critically involve the relation between caster and shadow. The relation suggested by type I incongruities concerns the shadow revealing the caster's "true nature." In all attested cases the topic of the ad or cartoon therefore *is* the caster.

The relation suggested by type II incongruities concerns shadows that seem to represent the caster's "other self."¹⁴ The topic of these cases is a factor that *causes* the relation between caster and shadow. Type III incongruities contain depictions of shadows that function as an *index* for an incongruity. The locus of incongruity is either the caster or the light source (section 3.3). The generic anchoring rule being violated is that if the shadow has a property as depicted, then the constituents "object" and/or "source" should have that property as well. The general format of the resolution is that the incongruent entity represents some quality the product/topic is claimed to possess or to bring about. headphone advertisement exemplifies a type III incongruity: the erased casters signify the "silence" that the advertised product is claimed to provide. As such, the shadow is not part of the resolution; what needs to be resolved is the incongruent shadow constituent, the caster or light source.

3.1. Type I: The revealing shadow

The revealing shadow is present in two advertisements which both show the cast shadow of a T-rex. The first one is part of a famous Lego campaign from 2005 and shows a simple construction of four bright yellow Lego blocks

¹³The three types account for about 80% of the cases in our corpus.

¹⁴For an art historical discussion of shadows as revealing the caster's true nature, or representing its "other self," see Stoichita (1997, p. 127ff; p. 138ff).

shaped as a schematic bird-like object against a green background. The construction is lit by a light source located outside the field of vision somewhere in the upper right corner. The impossible shadow cast by the Lego blocks is projected on the green surface and is shaped as a T-rex. The second example is an advertisement for Mercedes Benz' services and also depicts a shadow of a T-rex. In this ad, the casting object is a monkey wrench that is lit by a light source located somewhere right from the viewer's point of view. The accompanying text is 'Unofficial service can be dangerous.'

The incongruity in both advertisements is caused by the fact that an object that is *not* a T-rex casts the shadow of a T-rex. In the Lego ad the caster actually is the advertised product, while in the Mercedes Benz ad it is metonymically connected to a maintenance service other than the recommended service. The anchoring rule that is violated in these examples is that no entity can cast another entity's shadow.

Resolving the incongruity operates on transcending the physical link between caster and shadow to the level of conceptualization. Despite the objects being dissimilar, type I incongruities suggest them to be identical *conceptually*. The caster represents what the topic of the message appears to be, and its shadow reveals its "true nature," or what the caster actually is.¹⁵ So, the Lego advertisement communicates the message that the caster is not just a set of toy blocks, but a real and living T-rex. Likewise, the monkey wrench in the Mercedes Benz ad is claimed to be not just a tool but a T-rex. Interestingly, the valences of the revealed "true nature" are contrastive. In the Lego ad the T-rex is a good object of imagination, while in the Mercedes Benz ad it shows recipients the bad things that are bound to happen should they decide not to use the recommended service. This contrast follows from the messages' focus on either its topic the Lego ad or on "not topic" the Mercedes Benz ad.

An instructive way to understand how the revelatory potential of type I shadows is indeed based on identity, is to imagine an alternative visualization of the Lego ad. This ad depicts the same two objects (Lego block and T-rex), but instead of utilizing a caster-shadow complex, it employs the structural template of juxtaposition. This alternative is shown in [Figure 1](#).

[Figure 1](#) contains an incongruity since it integrates two apparently distinct objects within the confines of a single panel. Evidence from previous research suggests that juxtaposing objects is especially apt to suggest metaphorical relations between the two objects (cf. Van Weelden, 2013). In processing a metaphor, one of the two objects is taken as the metaphor's target object and

¹⁵The idea of the shadow representing its caster's identity or 'true being' has ancient roots. Stoichita (1997) traces the development of shadow painting back to two famous shadow myths that both pertain to identity. The first one tells that painting originated from the first time the profile of a human's shadow was traced by lines on a wall. The myth hence draws a direct line from caster to shadow to representation, one that, in Casati's words 'doesn't even pass the fallible mind' (Stoichita, 1997, p. 150; Casati, 2003, p. 156). The second myth is Plato's illustrious cave allegory, where the shadow appears as an ancient kind of *make-believe*: that a shadow *is* the caster itself (cf. Casati, 2003, 5–9). Type I incongruities appear to artfully combine the two myths, on the one hand by extending the notion of the shadow being its caster's double to the effect of revealing what it *truly is*, and on the other hand by exploiting the essence of the shadow as optical make-believe.

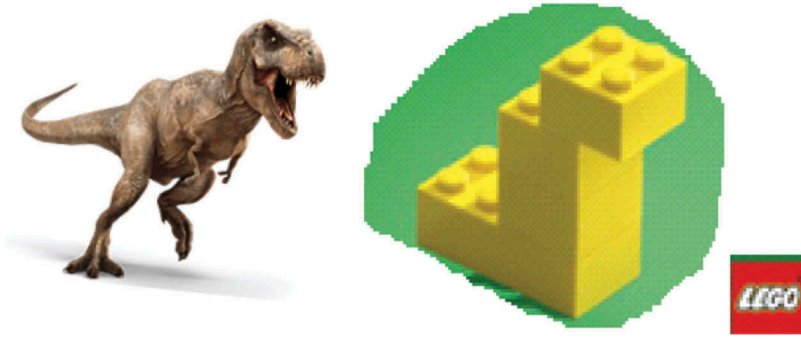


Figure 1. Alternative Lego advertisement.

the other as its source object (Lakoff & Johnson, 1980). Hence, the incongruity in [Figure 1](#) invites conceptualizing the Lego blocks as similar to a T-rex: “a Lego block is (like) a T-rex” (cf. Bowdle & Gentner, 2005).

The differences in meaning invited by the two variants can be elegantly highlighted by Walton’s theory of *make-believe* (Walton, 1973). Let us suppose that the image in the original Lego ad visually represents a game of make-believe (i.e., children playing with Lego blocks and imagine them being T-rexes or other fascinating things). Of course, Lego-blocks are not T-rexes, but any assumption to that effect can be said to be true, in Walton’s words, “in the game of make-believe” (p. 287). That is, the image in the Lego ad evokes a context in which there is a rule to the effect “there is a T-rex” because of the presence of a Lego-block structure/caster. As said, this claim is “make-believedly” true. That is, it is valid relative to the child’s imagination.¹⁶ The identity claim the ad promotes “Lego Blocks is T-rex” is then true in the make-believe context, but it has little to say about the real world (p. 293ff).

Now compare this to what [Figure 1](#) manages to accomplish. In Walton’s view, metaphors “characteristically serve to describe (...) facts about the real world” (p. 293). The claim that our alternative version communicates “Lego blocks are (like) T-rex” is not make-believedly true, but instead true in the real world. Therefore, the T-rex in [Figure 1](#) is interesting only for what it can render metaphorically true in the real world. Because the focus is on the product—rather than on what that product may render make-believedly true—the alternative ad is rhetorically much weaker.¹⁷

We now move to the use of type I incongruities in editorial cartoons. Although as we shall see the same revelatory aspect is suggested here, the conceptualization

¹⁶For [Figure 3](#), the context might be the one in which the recipient chooses not to utilize the advertised service. Walton’s own example concerns children playing with mud pies (p. 287).

¹⁷A similar analysis can be provided for [Figure 3](#). The monkey wrench is interesting only for what it renders true in the dissuaded context: the disastrous results of having one’s Mercedes repaired by some “other” service.

the figure invites when used in this genre differs in interesting ways from advertisements.¹⁸

The cartoon we want to draw attention to is one by Mike Keefe. On October 5, 2007, the *New York Times* mentioned a secret U.S. Justice Department memo that amounted to “and expansive endorsement of the harshest interrogation techniques ever used by the CIA.”¹⁹ Shortly afterwards former President Bush defended these techniques during a press conference in which he issued the statement that Keefe’s cartoon addresses: “this government does not torture people.”²⁰ Keefe’s cartoon shows Bush standing on the left-hand side of the cartoon in the forefront with stretched, downward pointing arms and unfolded hands and fingers; his body language suggesting that what he has told is everything there is to be told. The speech balloon above him contains the famous words ‘this government does not torture people’. The noticeable element in this cartoon is Bush’s cast shadow. The president is lit by a light source that is not visualized but is located somewhere in left foreground. His shadow is projected on a wall behind him and traces the contours of prisoner Ali Shallal al-Qaisi, the man on one of the infamous photographs that were taken during the Abu Ghraib detainee abuse in 2004.²¹ Hence, caster and shadow again represent distinct objects. Resolving the incongruity proceeds in a way similar to the ones discussed above: the shadow appears to represent something about the cartoon’s protagonist that hidden from the eye. Like the incongruent shadows in the Lego and the Mercedes Benz advertisement inform viewers about the ‘true nature’ of the casters, the Abu Ghraib shadow cast by Bush appears to externalize the ‘true’ contents of the President’s mind as he speaks the words ‘this government does not torture people’. There is a difference in how this is accomplished between this cartoon and the two ads, however. In Keefe’s cartoon, the shadow does not so much represent a person or object, but a particular photograph; one that most informed viewers will associate directly with the 2004 events and the issue of Governmental involvement in the Abu Ghraib events.²² So, while in the Lego and the Mercedes Benz advertisement the revelation pertains to the claimed ‘true nature’ of the casters, in Keefe’s cartoon it concerns the ‘true contents’ of the protagonist’s mind.

Despite these similarities, a closer look at the identity relation suggested by Keefe’s cartoon brings to light an important difference regarding its ontological status. Note that it is virtually impossible to reconcile what the Abu Ghraib photo stands for—the Abu Ghraib tortures had governmental authorization—

¹⁸The incongruity type is actually quite frequent in cartoons. We have found at least six examples.

¹⁹See *editions.cnn.com*; retrieved 5/20/2016. Keefe’s cartoon can be found on <http://vagabondscholar.blogspot.nl/2008/02/torture-watch-21908.html>

²⁰For details, see for example Baker (2014, p. 485ff).

²¹See https://en.wikipedia.org/wiki/Abu_Ghraid_torture_and_prisoner_abuse, retrieved 2/15/2017. The photo can be found on https://en.wikipedia.org/wiki/Ali_Shallal_al-Qaisi; retrieved 2/15/2017. Note the wall behind Bush is also the one shown on the photo.

²²See for example Anderson (2011, pp. 176–178).

with what the President actually says. And, because the photograph is his shadow (i.e., inevitably linked to him) the incongruity effectively reveals that Bush is telling lies. We believe this implication of lying is entirely absent in the earlier discussed advertisements. As we saw, the Lego ad's claim "Lego blocks are T-rex" is valid only in the make-believe world the image evokes. Therefore, the claim "Lego blocks are Lego blocks" can never be a lie because it pertains to what is the case in the real world. In contrast to this, the revelation the shadow effectuates in Keefe's cartoon is claimed true within the very same context in which the President claims his statement to be true. So, the contents of statement and shadow contradict and because the shadow reveals what is actually the case, Bush's statement is bound to be a lie.

This difference in the status of claims may well be related to the genres of advertisements and cartoons. Authors including Bellman (1999) and Stern (1991) argued that advertising is to be regarded as commercial fiction. Ads do not lie because what they claim to be true is true within the fictional context they evoke. Editorial cartoons, on the other hand, are often qualified as a type of political discourse (cf. Edwards & Winkler, 1997) and as offering claims about (sociopolitical) reality (cf. Medhurst & Desousa, 1981; Van den Hoven & Schilperoord, *in press*).

3.2 Type II: The shadow as the caster's other self

Type II incongruities differ from the first type in that caster and shadow are the same object but they represent that object in different "qualities", "roles," or "manifestations". Examples come from two advertisements promoting "extra energy" products: one for Powerbar and a second one for a beverage Gatorade. The Powerbar ad shows a young woman dressed in sports outfit, while she energetically runs on the pavement from left to right. She is lit by an invisible source and casts a long shadow, projected behind her on a wall. Her shadow evokes a sense of "otherness" as it captures the lady while taking a break; she is bending forwards with her hands on her knees. The reverse situation occurs in the Gatorade advertisement. Here we see a lady traipsing towards the viewer while next to her, her energetically running shadow is casted on the wall beside her. In both images, the incongruity thus merges two distinct manifestations of one and the same object. The anchoring rule which is violated here is "caster and shadow represent a single perceptual instance".

Type II incongruities can be resolved by construing a relation of transition between two states of an object which are represented by caster and shadow. The two advertisements suggest some temporal "before-after" transition. In the Powerbar advertisement, the shadow represents the protagonist's state as who she was before and the caster who she is now. Hence, the transition moves from shadow to caster. The reverse is the case in the Gatorade

advertisement. Here, the shadow represents the lady as who she will or hopes to become in the future, while the caster represents her as who she is now. The transition thus moves from caster to shadow. In both cases, however, the advertised product is claimed to be the causal force that sets the transition in motion: use the product and your old, tired self will become a revitalized, new self. Generally stated, in Type II incongruities the topic is a factor causing the suggested transition.

The same type of incongruent shadow can also be used to suggest non-temporal transitions of entities. This happens in two advertisements, one for Adidas running shoes and the other one for Chanel, “Égoïste Platinum”, a man’s perfume. The Adidas ad shows an athlete on a running track running from right to left. Behind him on the right-hand side of the image and cut loose from him, his shadow can be seen, stretching his arms towards its caster in a gesture and bodily attitude that suggests a realization of being beaten. The Chanel ad paints an even more complex event. The protagonist is a young, handsome man who appears to just have come from the shower and who is involved in a fist fight with his own shadow, casted on the wall behind him. Between them, a bottle of the recommended perfume is floating in the air. It indeed looks as if the ‘two’ men are fighting over that very bottle.

Note that no temporal “before-after” notion appears to be present in these ads. Instead, in both images we witness a caster-protagonist who actually interacts with his shadow, or rival. Hence, instead of a temporal transition, these images show a single event, happening in the very same instance. The Adidas advertisement seems to claim that with the advertised running shoes the athlete-as-caster can run so fast that he literally leaves his own shadow behind – the latter stretching “his” arms in an attempt to hold on to his caster.²³ Something similar is at stake in the Chanel ad where we see a young man fighting his own shadow who, apparently, has stolen his bottle of aftershave. The incongruity again invokes an element of rivalry. The advertised product is so desirable that it transforms the one who owes it into an ultimate egoist; one who is willing to protect it against all others, even his own shadow.²⁴

3.3. Type III: The indexical shadow

Type III incongruities use a depiction of a shadow as an index to signal that one the constituents, object or source,²⁵ constitutes an incongruity. Type III incongruities therefore typically concern one entity. We shall discuss three examples which all exemplify different kinds of incongruities.

²³The image even recreates the famous Lucky Luke emblem by showing a man “who runs faster than his shadow.”

²⁴An interesting analysis of this ad appears in Stoichita (1997, p. 37).

²⁵This may also concern the surface-constituent, but we haven’t been able to find examples of this kind in advertisements or cartoons.

The first ad is one for Nissan car lights and shows a close up from man walking across a pedestrian crossing on a very bright, sunny day. However, instead of one, sun-produced cast shadow, the man casts two shadows, both projected on the pavement, one on his right and another one on his left side. The ad claims the outstanding power of the recommended car lights by having the lights produce the second, impossible shadow of the walking man. The double shadow hence functions as an index suggesting a second light source – the incongruity. The anchoring rule that is violated states that in the given circumstances (i.e., a bright sunny day), objects can cast only one shadow.

The second example of type III incongruities is an advertisement for UPAF Funding organization. We see a stage and a large, green curtain in the background. On the stage stands a chair with a cello being played with a bow in front of it. However, no cello player is actually visible sitting in the chair. The two objects, cello and chair, cast their shadow on the green curtain. However, this shadow image actually does show the cello player. The incongruity here is hence essentially similar to the one present in the headphone ad, the one with shadows without casters. The shadow on the green curtain is casted by the cello player who is, however, absent/erased. The relevant rule is that any perceived shadow has a caster.

The third example is an advertisement for Mr Clean Floor cleaner. The image is simple: a close up of a brightly lit bathroom wall with a toilet paper holder. The latter object casts a shadow on the wall. Incongruity results from this shadow being above the holder, suggesting that the light source is located somewhere on the floor instead of on the ceiling (where we expect it to be). The anchoring rule that is violated here hence concerns the unlikely location of the source of light.

The general format of the resolution is to construe the incongruent entity as representing or suggesting some quality the product/topic is claimed to possess or to bring about. The depicted shadow therefore has no role in the resolution. Hence, in the Nissan car light advertisement, the incongruent right hand shadow, being as intense and sharp as the one produced by the sun, visualizes the claim that the car lights are as powerful as the sun. In the UPAF advertisement the absent cello player signifies what is bound to happen should “your support” fail to happen.²⁶ The incongruent source location in Mr Clean advertisement visualizes the claim that floors cleaned with the advertised product get so bright that they start casting shadows.

Generalizing over these (and other) examples it seems that the resolution for type III incongruities is much more context-dependent than the one we

²⁶What complicates matters a bit is that the suggested absence of the musician does not actually ‘need’ his shadow cast on the green curtain. The instrument-without-player alone could accomplish this. However, it can be argued that the image as it stands still suggests the cello player’s presence, albeit in a way that emphasizes what he might *become* should your support fail to happen: a shadow player, hence no longer a real one.

proposed for type I and type II incongruities. Regardless of what objects they represent, type I resolutions always include the revelatory aspect, while the topic role is always assigned to the casting object. Likewise, type II incongruities always evoke the transitional aspect with the topic functioning as the factor causing the transition. Type III resolutions defy such a template specification. The one thing that they have in common is what we noted already: the product possesses or brings about some desirable quality that is somehow visualized by the incongruity.

3.4. Conclusion

Table 1 summarizes the main structural and conceptual properties of the three types of incongruent shadows distinguished in this section.²⁷

Our analyses have revealed that to decipher what the incongruent shadows are saying, the viewer must be well aware, not only of looking at an advertisement or a cartoon, but also, and critically, what these messages are about (their topic: the product or some sociopolitical actor or event). As noted already in Section 2, only thanks to the fact that (most) viewers know what kind of messages they are dealing with and what messages they aspire to, that they are able to resolve the incongruity. Both topical awareness and the pragmatics of the genre imply important constraints on interpretation—yielding shadows with fairly limited meaning-functions.

The fact that the T-rex in the Mercedes Benz advertisement has “bad things” to say, yet the one in the Lego advertisement suggests the opposite can only be appreciated once the viewer knows what these two ads are about and what they are claiming about their topic. Obviously, such constraints on meaning construction are often verbally represented or they stem from foreknowledge of how to read and understand ads or editorial cartoons. However, we have argued that the ways in which such constraints interact with the distinguished types of incongruity allows generalizing over specific cases they represent the interpretative templates shown in Table 1. Therefore, this is how rhetorical shadows in advertisements and cartoon differ from the ones that can be witnessed in works of art (cf. Stoichita, 1997). Because the latter are characterized by an absence of clear topical indications and sender intentions, shadows in such expressions can have wide ranges of meaning and often allow for various interpretations.

²⁷A comprehensive account of shadow incongruities should categorize them in terms of the *graphic operations* to design them. For example, the headphone advertisement and the UPAF advertisement results from an operation called *Erase*, while the type I and type II incongruities to be discussed here result from applying an operation called *Distort* (for details, see Schilperoord, 2013, in press). Here, however, we leave this issue aside.

Table 1. Shadow incongruity types.

Type	Number of objects	Ontology of objects	Locus of incongruity	Resolution	Topic
Type I	2	Different	Shadow-caster	Revelation	Topic is caster
Type II	2	Same	Shadow-caster	Transition	Topic causes transition
Type III	1	—	Constituent	Property of constituent	Topic possesses/causes property

4. Closing remarks

The authors have identified and described several ways of manipulating depictions of shadows to serve conceptual and rhetorical purposes. What these manipulated shadow depictions have in common is the fundamental property that defines all rhetorical figures: deviation. As a cognitive criterion to account for such deviant depictions, we have employed Mamassian's (2004) and Dee and Santos' (2011) *Shadow Correspondence Problem*: the problem of anchoring a perceived shadow to a casting object in an unambiguous way. Rhetorical shadows are shadow depictions which prevent immediate, or “natural” anchoring. Driven by the principles of relevance, such depictions invite the construction of conceptual representations (rather than perceptual or motor representations), i.e., of meaning.

By specifying so-called anchoring rules—principles of shadow perception that can be derived from SCP—we have been able to identify three general types of shadow incongruities: shadow and caster represent distinct objects, they represent the same object but in different qualities, or the shadow depiction functions as an index signaling one of the shadow constituents being incongruent. We also hope to have substantiated our claim that the very same anchoring rules responsible for the incongruity also guide resolving the incongruities. For example, the rule that shadow images should retain perceptual resemblance between an object and its shadow transcends to the conceptual level to resolve cases where caster and shadow come to represent disparate objects. T-rexes and Lego blocks are obviously different objects, but conceptually the T-rex as shadow reveals the true nature of the toy blocks as caster. Rhetorical shadows speak to the mind more than to the eye, and so interpreting them is a matter of thinking more than of looking.

Evidently, much of what we proposed here needs empirical verification. Further research is first needed to find out whether the proposed incongruity types indeed cover all possibilities.²⁸ One example in our corpus that we find

²⁸Whatever this may yield, it will *not* include shadows produced during shadow plays or ombromanie. Such shadows may be “ambiguous” but they are not incongruent shadows.

hard to categorize is an advertisement for Ariel laundry detergent. This one shows a close up of the cast shadow of a walking young woman projected on the pavement, produced by the sun on a bright day. We barely see anything from the woman - only her shoes, shinbones and one of her knees appear in the upper left region of the image. The shadow regularly traces the woman's contours. However, in stead of being all dark, the region projected from the woman's belly, chest and shoulders is completely transparent (or should we say absent) - effectively revealing pavement tiles.²⁹

This shadow incongruity may be a type I case in that the “absent” shadow reveals how white t-shirts will be when washed with the advertised detergent—they start functioning as light source and eclipse sunlight. But it may also be a type III case in that the absent shadow signifies the whiteness of the caster as if the sun can shine through it. Or it may be distinct type, one that has not yet properly identified and described.

Further research should also test the various claims we have put forth with regard both to detecting shadow incongruities and to the interpretations they invite. We are currently conducting experimental research to test the hypothesized difference in conceptual meaning and rhetorical impact of two-object images using the caster-shadow combination versus the juxtaposition template (the Lego ad and our self made alternative in [Figure 1](#)). Much more work is awaiting us in the shadows.

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²⁹One of the reviewers pointed out to us that in this case the shadow appears to be a drawing on the pavement although it still allows to be conceptualized as a cast shadow. We concur, but we maintain that conceptualizing the dark areas as a cast shadow serves the rhetorical purpose of the ad.

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