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Irony in language, in thought, and in communication

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Abstract

We introduce a three-dimensional model for irony research, which is an extension of Steen's (2008, 2011) three-dimensional model of metaphor and similarly argues that the study of irony requires three distinct dimensions: (1) language, (2) thought and (3) communication. Irony in language requires the study of irony's linguistic structure. Irony in thought focuses on the obligatory reversal of evaluation between the propositional and intended meaning of an ironic utterance. Irony in communication, finally, focuses on whether the literal meaning serves as a distinct referent in the meaning of the ironic utterance. Our model brings together contemporary research on irony and metaphor within one framework and can guide and inspire both theoretical and empirical research.

Key words: Verbal irony, sarcasm, language, cognition, thought, communication

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Since the days of antiquity, types of figurative language such as metaphor and irony have been seen as forms of ornamental language that add rhetorical flourish to a text (cf. Quintilian, transl. 1959). In this classic perspective, metaphor and irony were classified as "destabilization tropes" (McQuarrie & Mick, 1996), meaning that they are both figures of speech deviating from 'literal' meaning and often carrying various potential implicatures. This classic perspective on figurative language has changed in the late 1970s and early 1980s with the 'cognitive turn' in metaphor studies (Steen, 2011). Conceptual Metaphor Theory (CMT, Lakoff & Johnson, 1980) is one of the most influential theories that has brought about this change in thinking about metaphor. CMT proposes that many metaphorical expressions in language (e.g., *we are at a crossroads; this relationship isn't going anywhere*) cluster under larger conceptual structures in thought, which are labeled 'conceptual metaphors' (e.g., LOVE IS A JOURNEY). The introduction of CMT has led to a very rich and vibrant literature on metaphor which has provided many new, valuable and exciting insights (e.g. Gibbs, 2008).

Yet, at the same time, the 'cognitive turn' has also led to a more negative outcome, which is that the metaphor literature has developed in very different ways compared to the literature on irony. That is, while both metaphor and irony were classified in similar ways as tropes in classical treatises on rhetoric, current theories and research on metaphor and irony employ very different theories, constructs and variables to explain the workings of the two tropes. While it has recently been proposed that research on figurative language benefits from studying the interaction of various tropes like metaphor and irony (e.g., Burgers, Konijn & Steen, 2016;

Musolff, 2017), the different theoretical approaches to the two tropes make this a difficult feat to pull off.

Therefore, the goal of this paper is to introduce a theoretical framework for verbal irony that enables direct comparison and contrast with metaphor. In order to achieve this goal, we demonstrate that and how the three-dimensional model of metaphor proposed by Steen (2008, 2011) can be used to guide and inspire both theoretical and empirical research into verbal irony. The model is three-dimensional in that we argue that, like metaphor, the study of verbal irony requires three distinct dimensions: (1) language, (2) thought, and (3) communication. We posit that making a distinction between these three dimensions is crucial to ground and resolve current debates on verbal irony and that it can bring together research on distinct figures like metaphor and irony within a single framework.

In the next section, we start with a short summary of the three-dimensional model of metaphor (Steen, 2008, 2011). Then, we argue that the distinction between irony in language and irony in thought is crucial for analyzing verbal irony, and that analyzing irony on these two levels can help resolve various debates in the irony literature. In the third section, we propose that the study of irony in communication is another crucial element in explaining pragmatic effects of irony in real-world interactions. We start with a description by Gibbs (2012), who first introduced the distinction between deliberate and non-deliberate irony. We subsequently demonstrate how our definition of deliberateness is different from that proposed by Gibbs (2012). In the final section of the paper, we focus on the role of the three-dimensional model in the field of irony studies.

The three-dimensional model of metaphor

The three-dimensional model of metaphor starts from a definition of metaphor as a "cross-domain mapping" (Lakoff & Johnson, 1980), and subsequently posits that metaphors can and should be analyzed on three different but intersecting dimensions: (1) language, (2) thought and (3) communication. Taking these three dimensions into account can for instance help to differentiate between the ways different types of metaphors are processed. The metaphor literature posits that metaphors are typically processed in one of two ways: by comparison or by categorization (e.g., Bowdle & Gentner, 2005). In case a metaphor is processed by comparison, the reader activates elements from both the source and target domains and maps elements from the source domain onto the target domain. In case a metaphor is processed by categorization, the metaphorical meaning is already stored in the reader's mental lexicon, who can immediately understand the metaphor without first having to activate elements from the source domain. Instead, the reader can immediately categorize the concept activated by the metaphor related word as referring to an available metaphorical meaning (or not). Predictions of when metaphors are processed by comparison and when by categorization are typically more accurate when taking the different levels of the three-dimensional model into account even if they do not have to refer them in the terms proposed in Steen (2008, 2011).

The level of language in the three-dimensional model deals with the differential linguistic forms metaphors can take. An important distinction in terms of linguistic forms of metaphor is that between genuine metaphors (e.g., *My surgeon is a butcher*) and similes (e.g., *My surgeon is like a butcher,* e.g., Bowdle & Gentner, 2005; Roncero, de Almeida, Martin & de Caro, 2016; Steen, 2011). The difference between genuine metaphors and similes is that the latter contain a comparison word (e.g., *like*) while the former do not. Thus, while genuine metaphors and similes can contain similar cross-domain comparisons in thought (e.g., between *surgeons* and *butchers*),

the diverging linguistic forms may still lead to differences in processing. By including a comparison word (also known as a metaphor marker) such as *like*, similes explicitly invite their audience to draw a comparison between source and target. Genuine metaphors, by contrast, do not have such a comparison word, making it likelier that the recipient understands the metaphor without explicitly comparing information from the two domains (i.e., processing by categorization; see Bowdle & Gentner, 2005). In this way, small differences in linguistic structure of verbal metaphor may impact how a metaphor is processed and understood.

The second level distinguished within the three-dimensional model is the level of thought, which focuses on the way the two different concepts (source and target domain) are metaphorically connected. The three-dimensional model proposes that the novelty or conventionality of the comparison between the two conceptual domains is a crucial conceptual variable determining how a metaphor is processed (Bowdle & Gentner, 2005; Steen, 2008; 2011). That is, novel metaphors typically ask more cognitive effort of the reader because they have to construct a new mapping between the source and target domain concepts involved, implying that these are relatively likely to be processed by comparison. Conventional metaphors, by contrast, have been around for quite some time, making it likelier for specific recipients to have come across the metaphor, stored its mapping in their conceptual system and process the metaphor by categorization.

The two levels of language and thought have been assumed in most theories of metaphor that have been developed since the cognitive turn, such as Lakoff and Johnson's (1980) CMT and Bowdle and Gentner's (2005) Career of Metaphor Theory. The novel contribution of the three-dimensional model to the field of metaphor studies is the explicit raising of awareness of a third dimension of metaphor that metaphor scholars need to consider: the dimension of

communication (Steen, 2008; 2011). The three-dimensional model posits that the variable of

deliberateness is key in explaining the ways in which metaphors operate in communication. In

the definition of deliberateness proposed by the three-dimensional model, a metaphor is used

deliberately when it is used by the speaker *as* a metaphor. That is, the structure of a deliberate

metaphor "signals that the recipient has to move away their attention momentarily from the

target domain of the utterance or even phrase to the source domain that is evoked by the

metaphor-related expression" (Steen, 2015, p. 68). Thus, in case of a deliberate metaphor, the

source domain has to be present as an 'alien' referent in the situation model (Steen, 2015). For

non-deliberate metaphor, this is not the case, implying that the source domain is not represented

in distinct fashion within the situation model, because the metaphor can be understood by simple

word disambiguation in language and categorization in thought. The three-dimensional model

also predicts that, because of these differences in processing, deliberate metaphors will likely

have different communicative ('rhetorical') effects compared to non-deliberate metaphors

(Steen, 2008; 2011; 2015). First experimental results corroborate these hypotheses in that

specific linguistic structures (e.g., the use of simile over non-simile) and conceptual properties

(e.g., novel over conventional metaphors) promote activation of the source domain (Krennmayr,

Bowdle, Mulder & Steen, 2014).

       In the remainder of this paper, we propose that the three-dimensional model for metaphor

can be extended to also account for irony. Furthermore, we posit that making the explicit

distinction between irony in language, irony in thought and irony in communication can help to

resolve various debates in the irony literature. As such, a three-dimensional approach to verbal

irony enriches the literature in two ways. First, it helps to integrate contemporary academic

perspectives on metaphor and irony. Second, it can help in resolving various debates in the irony literature and, as such, push the field of irony studies forward.

Irony in language

The first important element when starting a theoretical discussion is to give a definition of the key phenomenon at hand, which in our case is verbal irony. As we will see, the exact definition of irony is one of the topics of hot debate in the irony literature. Yet, as a start, we depart from the definition provided by Burgers, van Mulken and Schellens (2011, p. 190), who define irony as "an utterance with a literal evaluation that is implicitly contrary to its intended evaluation". At the core of this definition (and most other definitions of verbal irony) is that an ironic utterance contains a propositional meaning that has a different valence (positive or negative) compared to the valence the speaker aims to convey (negative or positive). As an example, consider a situation in which a soccer player of a national team gets a very easy opportunity to score a goal. Instead of scoring, however, he shoots the ball wide of the goal. This situation could prompt you to say ironically:

(1)   Great shot!

The propositional meaning of utterance (1) has a positive valence, because of the use of the word *great*. The intended meaning, however, is negative because the speaker wants to convey a negative statement about the soccer player's failed attempt to score a goal.

Many studies on irony have proposed that, like metaphor, irony can include markers which aid its detection. Characteristic of an irony marker is that, if the marker were to be removed from the ironic utterance, the utterance would still be ironic, even though it may be the case that the irony is more difficult to detect by its audience (Attardo, 2000a). In the irony

literature, different irony markers have been identified. Consider the following variations on

utterance (1):

(2)   Gee, great shot!

(3)   Great shot, isn't it?

(4)   "Great" shot!

In terms of propositions (the level of 'thought'), utterances (2-4) are comparable to utterance (1)

in that their propositional content implies a positive evaluation of the attempt of the soccer player

to score a goal. Yet, the linguistic instantiations of utterances (2-4) are different from that of

utterance (1): utterance (2) has an interjection (*Gee*), utterance (3) has a tag question (*isn't it*) and

utterance (4) includes quotation marks. Interjections (e.g., Kovaz, Kreuz & Riordan, 2013), tag

questions (e.g., Kreuz, 1996) and quotation marks (e.g., Hancock, 2004) have all been mentioned

in the irony literature as markers of irony.[1]

Irony markers have been defined at various levels of linguistic analysis. In a recent

overview of the literature, Burgers and van Mulken (2017) posit that linguistic irony markers can

belong to different linguistic categories, such as typography (e.g., quotation marks,

capitalization, emoticons), morphology (e.g., diminutive forms) and syntax (e.g., interjections,

tag questions). Irony can also be marked by direct markers, which explicitly inform the reader of

the ironic nature of a statement, like the use of the phrase "said ironically" in a novel (Kovaz et

al., 2013) or the use of a hashtag like #irony on social media (Kunneman, Liebrecht, van Mulken

& van den Bosch, 2015).

Various experimental studies have demonstrated that the use of irony markers impacts irony processing and improves irony comprehension and evaluation (e.g., Burgers, van Mulken & Schellens, 2012a, Experiment 2; Colston & Keller, 1998; Kreuz, Kassler, Coppenrath & McLain Allen, 1999; Kreuz & Roberts, 1995). This may be compared with the effect of metaphor markers and their effect on processing discussed above. The question whether or not speakers include irony markers in their ironic utterances is an important variable at the language level in explaining effects of ironic utterances. In other words, the dimension of language focuses on the way in which the ironic utterance is formulated, and can zoom in on different types of irony markers.

Irony in thought

The second dimension of the three-dimensional model is that of thought. The importance of focusing on the dimension of thought has been brought to the forefront in irony studies since the 1980s (although the authors at the time would use very different terms from those used in metaphor studies). Until that time, many scholars had used what has become known as the "standard definition" of verbal irony, which was "saying the opposite of what you mean". This standard definition was subsequently applied to ironic utterances by selecting a target word and replacing it with an opposite (or at least: comparable) word of reversed valence. In utterances (1-4), for instance, the reader can understand the irony by replacing the word *great* in the propositional meaning with an opposite term like *bad* to come to the intended meaning of the irony.

Various authors, however, showed that this manner of applying the standard definition to ironic utterances could not be used for all ironic utterances. A famous counterexample is provided by Wilson and Sperber (1992). Suppose that Peter invites his friend Mary to spend the

month of May in Tuscany (Italy), because he says that the Tuscany weather in May is always

beautiful. Upon arriving, however, it is pouring with rain. Mary subsequently says ironically:

(5)   Oh Tuscany in May! (Wilson & Sperber, 1992)

Utterance (5) is a demonstration that irony cannot be dealt with by solely focusing on the

dimension of language. In contrast to utterances (1-4), the irony in utterance (5) cannot be

understood by simply taking the opposite term of one of the words in the utterance. After all, it is

not really possible to take a term of opposite valence of the words *Oh*, *Tuscany*, *in* or *May*.[2]

Nevertheless, utterance (5) still contains an ironic utterance about the contrast between Peter's

promise to Mary and the reality of the weather in Tuscany. This implies that irony cannot solely

be identified at the level of language and that we also need the dimension of thought when

explaining the use and effects of irony in discourse.

The exact ways in which this dimension of thought should be understood in relation to

irony has been (and still is) a subject of debate in the irony literature. In their framework of

Relevance Theory, Wilson and Sperber (2002) define irony as a form of "echoic use".[3] This

means that irony always involves an echo of an earlier statement or norm, as well as a negative

evaluation of that statement or norm. In the case of utterance (5), for instance, the original

statement is Peter's promise to Mary, which is both repeated and negatively evaluated. The

Relevance-Theoretical approach to irony explicitly places a larger emphasis on the thought

dimension compared to the standard definition. After all, in the former view, recipients have to

keep the original statement or norm in mind to fully understand and appreciate the ironic

utterance under discussion. Nevertheless, in order to understand the irony in utterances (1)-(4),

recipients need to derive that what is said ('literal' statement) has a different valence compared to what is implicated (see Gibbs, 2002), implying that the dimension of thought is crucial for understanding these ironic utterances as well.

The perspective on irony advocated within Relevance Theory has been challenged by other theories, most notably the Pretense Theory of Irony (Clark & Gerrig, 1984; Currie, 2006). This theory proposes a different way to conceptualize irony in thought, by focusing on elements of pretense. That is, the propositional meaning of the ironic utterance is supposed to be understood as a pretense: Recipients should understand that the speaker S is actually pretending to be an uninformed or dim speaker S', and see through the pretense. By doing so, an ironic utterance contains a duality between the pretended meaning of S' and the actual meaning of S (Clark & Gerrig, 1984). In utterance (5), for instance, the pretended meaning of the irony refers to Peter's promise, revealing him as the target of Mary's irony.

Both Relevance Theory and Pretense Theory are good at explaining specific individual cases of ironic utterances, yet fail at other cases. For instance, critics of Pretense Theory are quick to explain that Pretense Theory has problems explaining cases which do not have a ready target person like utterance (5), as in Wilson (2013). In contrast, critics of the Relevance-Theoretical account of irony are quick to point out that it cannot always adequately specify when something can (or cannot) count as an echo, leaving open the possibility that the concept of echo is stretched to infinity (e.g., Attardo, 2000b). To advance the debate of how irony operates in thought, some scholars have proposed integrated accounts of the Pretense and Relevance-Theoretical accounts of irony (e.g., Popa-Wyatt, 2014). In contrast, other scholars have proposed that the description of irony in thought can be simplified to not necessarily include constructs like echoes and sources of statement or pretended and real speakers. These approaches propose

to view irony in thought as a certain propositional structure, involving a shift in evaluative

valence (Burgers et al., 2011; Kapogianni, 2016; Partington, 2007), and this is the perspective we

will be developing in the rest of this chapter.

The perspective of irony as a shift in evaluative valence proposes that any ironic

utterance can be modeled as an evaluative contrast between the propositional ('literal') and the

intended meaning of the utterance under discussion. The perspective assumes a number of

conditions which set it apart from the interpretation of the standard definition in which irony was

defined as "saying the opposite of what you mean". The first major difference is that the word

'opposite' in the standard definition has traditionally been interpreted as meaning logical

opposite (e.g., Kapogianni, 2016). That is, when taking utterance (1) under consideration, the

traditional interpretation of the standard definition requires the recipient to replace the

propositional term 'great' with its (logical) opposite. The important question that immediately

arises is how to determine the logical opposite of a term like *great*. One interpretation of this

statement is to take the term under discussion (which is then designated with the logical

character A) and add a negation to generate an opposite term (which is then designated with the

logical character –A).

An important problem with this approach is that many empirical studies have shown that

negations in language are not processed by means of logical disambiguation. Logical

disambiguation would entail that the negated concept (e.g., *Great*) would be suppressed in

memory and supplanted with its logical counterpart (e.g., *Not great*). In reality, however,

recipients access the negated concept (e.g., *Great*), which is retained rather than suppressed

when encountering a negation (e.g., Fraenkel & Schul, 2008; Giora, Balaban, Fein, & Alkabets,

2005), which leads recipients to infer a mitigated rather than an opposite meaning of the negated

concept (e.g., Beukeboom, Finkenauer & Wigboldus, 2010). This implies that, in utterance

processing, negations of the word under discussion cannot be equated with an opposite meaning.

If negating a target word or proposition does not necessarily lead to its opposite, the

question remains how to determine what *is* the intended meaning. An alternative could be to

search for an antonym of the target term, leading to the question how to determine whether

words like *bad*, *horrible*, or *poor* would count as the antonym of *great* in utterance (1). Thus, to

solve both problems with determining the 'opposite' meaning, the perspective that sees irony as

an evaluative contrast (Burgers et al., 2011; Partington, 2007) simply presupposes a valence shift

between the propositional meaning (positive or negative) and the intended meaning (negative or

positive) of an ironic utterance. This shift in valence implies that the two meanings do not

necessarily have to be logical opposites. In contrast, the propositional meaning should be located

somewhere in one valence domain, meaning that the propositional meaning needs to include

some kind of positive or negative valence. The intended meaning, then, should be located

somewhere in the other domain, meaning that it needs to have some sort of negative or positive

valence. The exact location of the two meanings in their respective domains do not necessarily

need to be logical opposites.

The second advantage of identifying reversal of evaluation at the level of thought (rather

than that of language) is that it can deal with a large variety of ironic utterances, and with the

difference between explicitly and implicitly evaluative ironic utterances (Burgers et al., 2012a,

Experiment 1; Burgers, van Mulken & Schellens, 2012b). The reversal of evaluation perspective

proposes that irony can always be modeled on an evaluative scale (e.g., *an evaluation about the*

scoring attempt of the soccer player), which has a positive domain, a negative domain and a

neutral zero point. An explicitly evaluative ironic utterance contains an evaluative word such as

Great in utterance (1). In order to reconstruct the evaluation scale of the irony in such an explicitly evaluative ironic utterance, the evaluative word from the utterance can be used directly as a direct aid. In contrast, implicitly evaluative ironic utterances do not contain an evaluative word which can be used to reconstruct the evaluation scale. In those cases, more context is needed to construct the evaluation scale, and to go from the linguistic level of the expression to the conceptual level of evaluative contrast.

Furthermore, various studies have compared processing, comprehension and evaluation of these different types of ironic utterances (Bosco & Bucciarelli, 2008; Burgers et al., 2012a, Experiment 1). Such studies consistently show that explicitly evaluative ironic utterances (which include evaluative words like *Great*) are easier to process and understand than implicitly evaluative ironic utterances (which do not include such an evaluative word). Furthermore, explicitly evaluative ironic utterances are typically also more liked compared to implicitly evaluative ironic utterances: explicitly evaluative irony includes an evaluative word as a referent to the scale at the linguistic level (e.g., *Great*), while implicitly evaluative irony requires more cognitive effort because it does not include such a word.

A second important characteristic of irony at the conceptual level concerns the reversal in valence. While all ironic utterances contain such a reversal, the direction of reversal can differ between ironic utterances. Some ironic utterances are ironic praise, meaning that they include a propositional meaning that is positive and an intended meaning that is negative, as in the case of utterances (1-5). In contrast, other ironic utterances are ironic blame and contain a shift from a negative propositional meaning to a positive intended meaning. Consider for instance the scenario in which a soccer player who is known for missing easy chances suddenly scores an incredible goal. In response, you could ironically exclaim:

(6) Bad shot!

Utterance (6) is an example of ironic blame, because the irony can be solved by going from the negative propositional evaluation of the shot to the (ironically) intended positive evaluation.

Various authors have noted that there is an 'asymmetry of affect' in verbal irony in that ironic praise is used more often in natural discourse than ironic blame (e.g., Clark & Gerrig, 1984; Hancock, 2004; Kreuz, 1996). As a result, recipients tend to see ironic praise as a more typical way to convey irony than ironic blame (Kumon-Nakamura, Glucksberg & Brown, 1995, Experiment 1). Furthermore, reading-time data have shown that recipients find ironic praise easier to process than ironic blame (Kreuz & Link, 2002). These differences have even led some scholars to refer to ironic praise with the term "canonical irony" and to ironic blame with the term "non-canonical irony" (Kreuz & Link, 2002).[4] For the analysis of the irony at the level of thought, then, the distinction between ironic praise and ironic blame is important, with, generally speaking, ironic praise being the more conventional form of irony.

Thus, the decision to distinguish linguistic elements of the ironic utterances (e.g., irony markers) from elements at the level of thought (e.g., identifying the evaluation scale and the reversal of evaluation on that scale) can help in unpacking several elements of ironic utterances, and make it clearer at which level of analysis a discussion about the nature of irony can be had. Nevertheless, irony is not solely a matter of language and thought. In the following, we propose that the level of communication is crucial in getting a full picture of irony in discourse.

Irony in communication

The third dimension is irony in communication. Like metaphor, irony can be used in some communicative situations to shift or confirm a certain perspective on a topic. A key term in this respect is that of deliberateness, which we argue is a crucial aspect in understanding the way irony works in communicative situations.

To the best of our knowledge, the term 'deliberateness' has first been used explicitly in relation to irony by Gibbs (2012), who proposes that many theories on verbal irony are flawed because they mistakenly assume (implicitly or explicitly) that, in most situations, irony is used deliberately. In Gibbs' (2012) view, deliberateness means that theories assume that speakers make a conscious decision to insert an ironic utterance at a certain place in the discourse. For instance, such theories often start from the perspective that the decision to make an ironic utterance is made based on a careful balance of conversational costs and gains (as expressed, e.g., in theories of figurative communication based on game theory, such as Mialon & Mialon, 2013). In contrast to these theories, Gibbs (2012) proposes that most ironic utterances are made in a split-second without elaborate planning (*non-deliberate irony,* Gibbs, 2012).

We agree with Gibbs (2012) that, in many cases, speakers will not consciously plan or (in many cases) even realize that they are ironic at a certain part in the discourse. Nevertheless, our position differs from the position taken by Gibbs (2012). The main reason for this difference is that we propose a very different definition of the concept of deliberateness. From this different starting point then follows a different position viz. the use and importance of deliberate and non-deliberate irony in communication.

In our model, we follow the definition and operationalization of deliberateness as taken by the three-dimensional model for metaphor (Steen, 2008, 2011, 2015). In this model,

deliberateness is very closely linked to attention, in that, for deliberate metaphor, the recipient needs to pay attention to the source domain in the text's situation model. This perspective on deliberateness contains both a semiotic and a processing element. For the semiotic element, extending this definition to verbal irony implies that, in deliberate irony, the propositional meaning is present as a direct referent in the situation model of the utterance under discussion. In non-deliberate irony, in contrast, the propositional meaning is not present as a direct referent in the situation model. This distinction between deliberate and non-deliberate irony also has important consequences for irony processing. In deliberate irony, recipients activate both the propositional and the intended meaning and posit them in their situation model for the utterance. In non-deliberate irony, recipients immediately come to the intended meaning of the irony without first considering the propositional meaning.

In order to show that our position on the importance of deliberateness in irony studies receives empirical support from the literature, we need to provide empirical support for three different positions: (1) the position that and how ironic utterances serve as and are processed as deliberate irony, (2) the position that and how ironic utterances serve as and are processed as non-deliberate irony, and (3) that these differences have important communicative consequences.

First, many theories on irony like the Relevance-Theoretical (Wilson & Sperber, 2002) and the Pretense account (Clark & Gerrig, 1984) have proposed that for a complete understanding of many (if not all) ironic utterances, recipients need to activate both the propositional and intended meaning in the situation model. In a semiotic analysis of those cases, both the original expectation, promise and/or norm (which relates to the propositional meaning of the ironic utterance) and the violation of that expectation, promise and/or norm (which relates

to the intended meaning of the ironic utterance) are part of the situation model. Thereby, the

situation model of the text contains both the propositional and the intended meaning of the irony.

The notion that irony is typically processed in two steps through both the propositional

and intended meaning has already been proposed in classic processing theories of irony like the

Standard Pragmatic Model (SPM; Attardo, 2000b; Dews & Winner, 1999). Such models

hypothesize that, upon encountering an ironic utterance, a recipient first processes and activates

the propositional meaning of the utterance. When the recipient notices that this meaning does not

fit the context, they replace the propositional with the contrary, intended meaning in their

situation model, thereby discarding the original propositional meaning from the situation model.

Various studies provide empirical support for this thesis that irony is typically processed in two

steps (Dews & Winner, 1999; Schwoebel, Dews, Winner & Srinavas, 2000).

More recent studies propose an important change to the predictions of SPM. That is,

while SPM proposes that the propositional meaning is discarded after coming to the intended

meaning, more recent processing models like the Graded Salience Hypothesis (GSH; Giora,

2003) argue that the propositional meaning remains active in the situation model, *even after* the

intended meaning has been activated. Various psycholinguistic experiments provide empirical

support for this thesis (e.g., Akimoto, Miyazawa, & Muramoto, 2012; Fein, Yeari & Giora, 2015;

Giora, Fein, & Schwartz, 1998), which implies that, after processing, both meanings

(propositional and intended) are active in the situation model.

We propose to label such cases where both the propositional ('literal') and intended

meaning of the irony are present in the situation model (semiotic element of deliberateness) and

are activated and processed by recipients (processing element of deliberateness) as cases of

deliberate irony. These cases ask the recipient to pay attention to both valences of the ironic expression.

This is not the case for non-deliberate irony in which recipients can immediately come to the intended meaning without having to pay attention to the propositional meaning of the irony. From a semiotic perspective on deliberateness, at least two types of ironic expressions meet this criterion for non-deliberateness: (1) conventional ironies and (2) default ironic expressions.

First, conventional ironies are expressions that have a conventionalized ironic meaning (e.g., Barbe, 1995; Giora & Fein, 1999). In metaphor studies, the most prevalent procedure for establishing conventionality on a semiotic level is by checking the dictionary whether or not the metaphorical meaning is included in the dictionary. When this is the case, the metaphor is conventional on a semiotic level (e.g., Steen, Dorst, Herrmann, Kaal, Krennmayr & Pasma, 2010). For conventional irony, we propose a similar procedure which details that, if a word or phrase is marked in the dictionary as having a conventionalized ironic meaning, we label that expression as conventional irony.

A good example is the compound noun 'wise guy' (also mentioned in Giora et al., 1998). According to the dictionary[5], the basic meaning of the adjective 'wise' related to people refers to somebody who is "able to make good choices and decisions because they have a lot of experience". The dictionary description of the compound noun 'wise guy', in contrast, refers to somebody "who annoys you because they think that they know everything or think that they are very funny". In this example, the conventionalized meaning of the noun 'wise guy' thus refers to somebody who does *not* meet the definition of the adjective 'wise'. Similarly, the phrase 'a bright spark' is defined in the dictionary as "someone who is clever or who has a clever idea". Yet, the dictionary definition of this term also acknowledges the conventionally ironic nature of

the term by adding that it "is usually used for showing that you think someone is stupid". Other

examples of such conventionally ironic words and expressions (with the dictionary definition

between brackets) include 'smart alec' ("Showing disapproval: someone who behaves in an

annoying way by trying to show how clever they are"), 'God's gift' ("Showing disapproval:

someone who thinks they are extremely attractive or extremely good at something"), 'Tell me

about it' ("used for saying that you already know about something unpleasant that someone has

just described because you have experienced it yourself") and 'A likely story' ("used for telling

someone that you do not believe what they have just said").

A second example of an ironic expression we propose to see as a type of non-deliberate

irony is a default ironic expression. Here, we follow the definition of defaultness as expressed in

the Defaultness Hypothesis (DH; Giora, Givoni, & Fein, 2015; Giora, Givoni, Heruti & Fein,

2017), which posits that, in some cases, specific grammatical constructions may have a default

interpretation that is not achieved by looking at the salience, non-literalness, or contextual

strength alone. For instance, Giora et al. (2015) propose that, in Hebrew, an expression of the

grammatical structure of *X is not the most/not particularly/not the best Y* (e.g., John is not the

most ethical politician; Jack is not particularly bright) has an ironic reading as its default

interpretation. That is, while the propositional meaning of such expressions entails that X has the

property Y in a slight manner (e.g., Jack is slightly bright), the intended meaning suggests that X

does not have property Y at all (e.g., Jack is stupid). The latter meaning is the default

interpretation of this particular grammatical structure.

In terms of processing, non-deliberateness entails that recipients come to the intended

meaning of an ironic expression without having to access the propositional meaning first. The

thesis that two-step processing does not happen for all ironic utterances was first coined in

Gibbs' (1986, 1994) Direct Access View (DAV). The DAV posits that some ironic utterances are processed through direct access to the intended meaning, meaning that, for these cases, activating the propositional meaning is unnecessary for irony comprehension. Later studies provide empirical support that this is particularly the case for conventional irony (Giora & Fein, 1999) and default ironic expressions (Giora et al., 2015). First, for conventionality, Giora and Fein (1999) demonstrate that the intended meaning of conventional irony is immediately facilitated after processing. Second, for defaultness, Giora et al. (2015) show that default ironic expressions are processed faster than non-default ironic or literal equivalents. Taken together, these studies demonstrate that the type of ironic expressions we propose to designate as non-deliberate irony are also processed in line with our predictions for non-deliberate irony.

In sum, the irony literature has posited that most ironic utterances are processed in two steps (e.g., Giora, 2003), which means that they count as deliberate in the framework of our three-dimensional model. Nevertheless, some linguistic cues (e.g., conventional irony, default ironic expressions) can help recipients in coming to the intended interpretation without first accessing the propositional meaning. Next to these two predictions, the three-dimensional model of irony (like the three-dimensional model of metaphor) makes a third prediction, which is that the distinction between deliberate and non-deliberate irony has important communicative consequences. A theory of irony in communication that is closely related to irony deliberateness and explicates some of these consequences is the Irony Bias (Burgers & Beukeboom, 2016).

The Irony Bias (Burgers & Beukeboom, 2016) proposes that irony is one means through which social stereotypes are communicated and upheld. In social situations, people often classify other people into stereotypic groups based on differential characteristics such as age, gender and/or occupation. These groups carry specific associations of what is expected of members

belonging to these groups (e.g., elderly people are very wise, as wisdom comes with age). In reality, however, people may act in ways that are unexpected based on their stereotypical associations (e.g., the old man from across the street may make uninformed, incorrect and silly statements). This situation may evoke the ironic comment:

(7) What a wise man!

Various irony theories propose that irony may be especially appropriate to use in these situations in which the expected norm (e.g., *elderly are wise*) is violated (e.g., Kumon-Nakamura et al., 1995; Utsumi, 2000), and assume that irony can then be used to point at the deficiency of the norm under discussion. Yet, when irony is processed deliberately, the (faulty) propositional meaning ("*the old man is wise*"), which is in line with the stereotype, will also be activated and remain active after processing. As a result, ironic comments like (7) mention and reinforce the stereotype, even in the wake of disconfirming information. Empirical evidence shows that irony is indeed used more often and considered more appropriate in situations in which stereotypes are violated (vs. confirmed; Burgers & Beukeboom, 2016, Experiments 1-3) and that irony (compared to literal statements) induces recipients to reason more in line with the stereotype (Burgers & Beukeboom, 2016, Experiment 4).

Theories on irony in communication like the Irony Bias thus hinge on the assumption that irony is processed in two steps, and that both meanings are activated and remain active during processing (*deliberate irony*). When this is not the case, and recipients immediately come to the intended meaning without activating the propositional meaning (*non-deliberate irony*), irony may not work to reinforce stereotypes in the way as proposed by the Irony Bias (Burgers &

Beukeboom, 2016). Consider the following alternative qualification of the old man mentioned in the previous paragraphs:

(8) What a wise guy!

Utterance (8) contains an example of conventional irony, in that the expression 'wise guy' has been conventionalized as meaning that somebody is *not* wise.[6] In those cases, the propositional meaning is likely not included in the situation model for the utterance, and recipients can come to the intended meaning without activating the propositional meaning. This may have the communicative consequence that, in the case of utterance (8), the stereotype ('elderly people are wise') is not activated, implying that utterance (8) does *not* uphold the stereotype as proposed by the Irony Bias. In this way, utterances (7) and (8), which only differ in one word (man vs. guy) may actually lead to different communicative consequences in that the (faulty) stereotype (e.g., *elderly are wise*) is upheld through utterance (7), but not through utterance (8). In other words, deliberateness (under our definition) may be a driving force in determining whether the effects of the Irony Bias occur in communication (or not).[7] In this way, the dimension of communication is a third and crucial dimension to the study of verbal irony.

Discussion and Conclusion

This paper introduces a three-dimensional model of verbal irony, which proposes that irony needs to be analyzed on three dimensions: (1) language, (2) thought, and (3) communication. Studies on irony could focus on one of these three dimensions by analyzing linguistic structures in ironic utterances (e.g., by focusing on irony markers; language level), by studying the evaluation scale and the type of reversal (e.g., by focusing on the differences

between ironic praise and blame; level of thought) and by analyzing the communicative elements

(e.g., by determining whether the propositional meaning is present in the situation model; level

of communication). This three-dimensional model can be used to structure debates in the field of

irony studies in that scholars can explicitly indicate at which level of analysis their interest in

irony lies.

Of course, scholars could also focus on the relationship between the different domains,

including semiotic analysis and processing research. One such study has already been described,

which focuses on the role of defaultness in irony processing (Giora et al., 2015). In this

perspective, defaultness describes the relationship between linguistic structure (e.g., grammatical

constructions like *X is not the best Y*), and subsequent processing outcomes (single-step

processing). Such studies help in providing a rich picture of the role of irony in discourse across

dimensions of discourse.

Additionally, our three-dimensional model provides scholars with a framework that can

be used to connect studies on irony and metaphor. We noted that classical rhetoricians (e.g.,

Quintilian, transl. 1959) typically saw figurative devices such as metaphor and irony as

belonging to a superordinate class (*tropes*). Yet, since the cognitive turn in linguistics, the studies

of these devices have gone their separate ways with scholars using very different theoretical tools

and constructs when talking about irony compared to metaphor. An advantage of our three-

dimensional model is that it provides scholars with one theoretical model that can be used to

discuss both tropes on an equal level. This makes it easy to compare and contrast the two tropes.

A first glance already shows some clear differences between the tropes. Some of these

differences may seem obvious to most scholars of metaphor and irony. For instance, we expect

that the proposition that metaphor and irony work in different ways on the conceptual level

(metaphor by cross-domain mapping; irony by implicit reversal of evaluation) will not be controversial. Yet, our model also provides some hypotheses that may be more unexpected. In particular, when looking at the level of communication, the three-dimensional model for metaphor proposes that most metaphors in natural discourse are non-deliberate in the definition of Steen (2008; 2011; 2015). This means that source-domain elements are not a part of the situation model. Recipients are consequently predicted to understand these metaphors through simple lexical disambiguation and do not need to pay attention to source domain knowledge for a correct understanding of the metaphor. In contrast, studies on irony (e.g., Akimoto et al., 2012; Fein et al., 2015; Giora et al., 1998) suggest that, for most ironic utterances in discourse, the propositional meaning features as part of the situation model (but not for all, see Giora et al., 2015). Consequently, recipients can only understand these utterances by processing irony in two steps, and need to pay attention to both the propositional and intended meaning of the irony. As a result, most irony in discourse would be deliberate rather than non-deliberate.

Please note that the definition of deliberateness in our three-dimensional model diverges from the definition as proposed by Gibbs (2012). In Gibbs' (2012) perspective, deliberateness seems to be equated with consciousness, in that he sees deliberate irony as speakers making a conscious decision to use irony at a specific time and place in the discourse to achieve a specific communicative effect. Although some theories seem to assume such rational decision making when using irony (e.g., Mialon & Mialon, 2013), we agree with Gibbs (2012) that it may be very rare for speakers to consciously plan out their ironic utterances in conversation in advance. Thus, our hypotheses on deliberateness in irony are different from Gibbs (2012), simply because we start from a different definition and conceptualization of the term deliberateness.

In particular, our definition of deliberateness focuses on the presence of both propositional and intended meaning in the situation model (*deliberate irony*) vs. the presence of only the intended meaning in the situation model (*non-deliberate irony*). This distinction leads to differential processing hypotheses (deliberate irony: two-step processing; non-deliberate irony: one-step processing), which in turn lead to communicative effects that can be unrelated to consciousness. For instance, the hypotheses of the Irony Bias (Burgers & Beukeboom, 2016) about the ways in which irony can be used to communicate and maintain stereotypic expectancies implicitly assume that attention to both the propositional and intended meaning is one of the preconditions for irony to serve as a stereotype-maintaining device. At the same time, the construction and maintenance of stereotypes and the categorization of individuals as belonging to certain categorized groups, may be a process that is more automatic than conscious. That is, many studies from the field of social psychology have shown the prevalence of implicit social cognition, and demonstrate that stereotyping is a social behavior that is often at implicit, under-conscious levels of thought (e.g., Arendt, 2013; Greenwald & Benaji, 1995; Williams & Poehlman, in press). In other words, irony may have communicative effects that are not only unintended, but are also achieved without speakers and addressee being aware of them.

In sum, applying our three-dimensional model of irony may be beneficial for irony studies in different ways. First, we hope that our model will help to structure debates in the field of irony studies by capturing irony research on linguistic structure, conceptual content and communicative effects in one, integrated framework. Secondly, our model can align research on irony with research on metaphor, and provide a possible integration of the two fields. This will help scholars in more closely determining how different tropes like metaphor and irony lead to similar or different effects under which linguistic, conceptual and communicative conditions.

Acknowledgment

Notes

[1] Some scholars have also proposed that specific prosodic markers can be indicative of irony, and have tried to isolate specific intonational patterns that mark irony (e.g., Kreuz & Roberts, 1995). However, current research demonstrates that, rather than isolating specific intonational patterns, scholars should focus on "prosodic contrasts" as markers of irony, which means that the prosody of an ironic utterance is somehow different from the preceding sentence(s), thereby introducing a contrast which can alert a listener to the possibility of a sentence being ironic (e.g., Bryant, 2010).

[2] An alternative interpretation could view the word *Oh* as an exclamation of delight. In this case, *Oh* can be replaced with a term of opposite valence (e.g., *Yuck* or *Bleh*). In this invented example, Mary could have also uttered the phrase *Tuscany in May!* ironically, which would leave the analysis of (5) as a case of implicitly evaluative irony in place.

[3] Over time, the definition of irony within Relevance Theory has slightly shifted from "echoic mention" (e.g., Sperber & Wilson, 1981) and "echoic interpretation" (e.g., Wilson & Sperber, 1992) to "echoic use" (e.g., Wilson & Sperber, 2002). These shifts did not substantially alter Wilson and Sperber's approach to irony.

[4] However, the asymmetry of affect may be bounded by the genre under investigation. Burgers et al. (2012b) conducted a corpus analysis of verbal irony across written genres. For five out of the six genres included in this study, the 'asymmetry of affect' was confirmed. The exception was the genre of commercial advertisements, in which ironic blame was used more often than ironic praise.

[5] Current procedures for metaphor identification like the Metaphor Identification Procedure (MIP, Pragglejaz Group, 2007) and its adapted version the Metaphor Identification Procedure Vrije Universiteit (MIPVU, Steen et al., 2010) suggest employing a usage-based dictionary for metaphor identification. For English, both procedures recommend using the Macmillan dictionary. In our explanations of conventional

irony, all dictionary definitions are taken from the online version of the Macmillan dictionary for British

English (http://www.macmillandictionary.com, accessed April 14, 2016).

[6] While the Macmillan Dictionary of British English (as well as other British-English dictionaries like the

Cambridge English dictionary, http://dictionary.cambridge.org), and the Macmillian dictionary for

American English all only contain this one meaning of wise guy in its entry, some other dictionaries for

American English (such as Merriam Webster, https://www.merriam-webster.com/) add a secondary

meaning which is mobster (and Merriam Webster notes that the word in the meaning of 'mobster' is

spelled differently as wiseguy). This means that stereotypic associations with specific words can differ

across (sub-)cultures and language variations (e.g., British vs. American English).

[7] Yet, it is not the only factor because contextual cues may also moderate whether or not the effects of the

Irony Bias occur. A follow-up study (Burgers, Beukeboom, Kelder & Peeters, 2015) shows that the

effects of the Irony Bias occur when talking about a third-party group about which the recipient is

relatively neutral. When talking about groups to which the recipients themselves belong or feel a strong

rivalry with (e.g., fanatical sports fan discussing their own team or the big rival team), previous opinions

override the effects of the Irony Bias, and speakers mainly find irony more appropriate to talk about their

rival team (irrespective of the actual situation), and more inappropriate to talk about their own team

(irrespective of the situation).

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