

When Negatives Are Easier to Understand Than Affirmatives: The Case of Negative Sarcasm

Rachel Giora

Abstract Based on Hebrew items, I present here findings showing that some **novel** negative constructions (e.g. *Supportive he is not*; *Punctuality is not her forte/what she excels at*) are interpreted and rated as sarcastic even when **in isolation**, and even when **involving no semantic anomaly or internal incongruity**. Their affirmative alternatives (*Supportive he is*; *Punctuality is her forte/what she excels at*) are interpreted literally and rated as literal. In strongly supportive contexts, the negative constructions are processed faster when biased toward their nonsalient sarcastic interpretation than toward their equally strongly biased literal interpretation. In contrast, affirmative utterances are slower to process when embedded in sarcastically biasing contexts than in salience-based (often literal) ones. Corpus-based studies provide further corroborative evidence. They show that the environment of such negative utterances resonates with their sarcastic rather than their literal interpretation; the opposite is true of affirmative sarcasm. The priority of nonsalient sarcastic interpretation of negative constructions is shown to be affected by negation rather than by the structural markedness of the fronted constructions. No contemporary processing model can account for these findings.

Keywords Affirmative sarcasm • Negative sarcasm • Processing ease • Negation • Default sarcastic interpretations

1 Introduction

In this chapter I adduce evidence questioning the prevalent assumption that affirmatives are easier to understand than negatives (see e.g. Brisard et al. 2009; Hasson and Glucksberg 2006; Wason 1959; see also Giora 2006; Tian and Breheny 2016

R. Giora (✉)

Department of Linguistics, Tel Aviv University, 69978 Tel Aviv, Israel

e-mail: giorar@tau.ac.il

URL: <http://www.tau.ac.il/~giorar>

this volume). This is illustrated by comparing negative and affirmative sarcasm. Most studies looking into sarcasm interpretation demonstrate that affirmative sarcasm is difficult to derive, involving complex interpretation processes (e.g. Fein et al. 2015; Giora et al. 2007; for a review, see Giora 2003). The studies presented here, however, show that, unlike affirmative sarcasm, negative sarcasm is easy to understand, involving no incompatible interpretations in the process. These studies thus question the assumed priority of salience-based interpretations—interpretations based on the salient/coded meanings of their utterance components—over nonsalient novel interpretations—interpretations removed from the coded meanings of their utterance components (see Fein et al. 2015; Giora 1997, 1999, 2003; Giora et al. 2007).¹

However, before examining the interpretations of affirmative and negative sarcastic utterances, let me begin with a note on terminology. The following examples might be helpful in this respect. Consider, first, examples (1–2), uttered when the person in question is very late:

- (1) Punctuality is what she excels at.
- (2) Punctuality is not what she excels at.

While the utterance in (1) is treated here as a case of affirmative sarcasm, the utterance in (2) is a case of negative sarcasm. Both, however, are cases of “ironic criticism”, where a concept of a positive and complimentary value is rejected (Schwoebel et al. 2000) in one way or another, either implicitly (1) or explicitly (2).

Note further examples (3–4), which are uttered when the person in question has been explicitly portrayed as one whose “punctuality is not what she excels at”, but in the situation in question she is highly punctual:

- (3) Indeed, punctuality is not what she excels at.
- (4) Indeed, belatedness is what she excels at.

Examples (3–4) are cases of “ironic praise”, where a concept of a negative value (“not what she excels at”; “belatedness”) is rejected (Schwoebel et al. 2000), here, in both cases, implicitly.

Given the scope of this article, only cases of ironic criticism (see 1–2) are considered here. In what follows, we will look at whether affirmative and negative ironies involve different processing routes, which might further shape their linguistic environment (see *Corpus-based findings* sections).

¹Sarcasm and verbal irony are used here interchangeably. Whether affirmative or negative, sarcasm is taken to communicate the opposite or near opposite of what is said, getting across a ridiculing dissociative attitude to what is explicit, alluded, or implicated (e.g. Carston 2002; Curcó 2000; Giora 1995; Kumon-Nakamura et al. 1995; Sperber and Wilson 1986/1995). On the various definitions of sarcasm or verbal irony, see e.g. Giora (2011a) and Giora and Attardo (2014).

2 Affirmative Sarcasm—on the Priority of Salience-Based Interpretations

Is affirmative sarcasm easy to understand? The literature on sarcasm interpretation abounds in misgivings with regard to this question. The salience-based (often literal) interpretation of (non-conventionalized) affirmative sarcasm (*Punctuality is what she excels at*), uttered in a specific context (in which that person is very late), is treated in the literature in various ways. It is taken to be patently untrue (Grice 1975), a pretense partially aimed at misleading a gullible audience (Clark and Gerrig 1984), an allusional pretense involving pragmatic insincerity (Kreuz and Glucksberg 1989; Kumon-Nakamura et al. 1995), an echoic mention of a ludicrous thought or utterance the speaker is dissociating herself from (Carston 2002; Sperber 1984; Sperber and Wilson 1981, 1986/1995; Wilson and Sperber 1992), or a desirable state of affairs which is a far cry from the situation referred to (Giora 1995). Interestingly, what has been fathomed untrue, insincere, farfetched, unrealistic, incredible, or ludicrous, i.e., what should obviously not be taken literally, may not just be taken literally, but may, in effect, become our reality.

Consider, for instance, the idea of recycling human feces and turning it into edible hamburgers, destined to feed the people of the third world. This apparently outrageous proposal was indeed first introduced by a satiric group—*The Yes Men* (2003)²—who appeared on TV and at business conferences, impersonating World Trade Organization spokespersons. The aim of their sarcastic satires was to warn people against this and similar organizations, shown to be motivated by profit rather than by care for humans' well-being. However, this sarcastic criticism was lost on their audiences, who rejected the idea of “turd burger” with anger and indignation, assuming that World Trade Organization may indeed come up with such outrageous ideas. Surprisingly (or not), “poop burger” might now become part of our reality. A Japanese scientist has now created artificial meat from human feces (served as burgers) in an attempt to solve the world hunger crisis.³

It looks like what is presumed unthinkable (and as such—a sarcastic cue⁴) is thinkable even when totally inconceivable. Very much like the various audiences of *The Yes Men*, who had no problem taking the presumed unthinkable at face value, Swift's (1729)⁵ contemporary readers also took literally his anonymously published essay titled *A modest proposal for preventing the children of the poor from being a burthen to their parents or country, and for making them beneficial*

²<http://www.imdb.com/title/tt0379593/> (Retrieved on December 22, 2003).

³http://blogs.browardpalmbeach.com/cleanplatecharlie/2011/06/japanese_scientist_makes_turd_burger.php, <http://inhabitat.com/poop-burger-japanese-researcher-creates-artificial-meat-from-human-feces/> (Retrieved on July 5, 2012).

⁴On various sarcastic cues, see e.g. Bryant and Fox Tree (2002), Kreuz and Caucci (2007) and Voyer and Techentin (2010).

⁵<http://art-bin.com/art/omodest.html>.

to the public. To be beneficial to the public and solve the Irish people's poverty problem, Swift "proposed" that the Irish poor sell their babies as food for the rich, who, in return, would benefit from a new taste of "tender" flesh: "... a young healthy child well nursed is at a year old a most delicious, nourishing, and wholesome food, whether stewed, roasted, baked, or boiled; and I make no doubt that it will equally serve in a fricassee or a ragout." Swift's "modest" proposal was aimed at criticizing the Irish rich and the Irish policies for their cruel and immoral treatment of the poor. Regardless, it was (initially) taken at face value and met with anger and disdain (Booth 1974).

The reception of Swift's as well as *The Yes Men's* ideas by their contemporaries suggests that even highly improbable (although implementable) ideas may be taken literally rather than with a pinch of salt. Although in the (political and social) context of their utterance, people must have been aware of these ideas' almost unimaginable nature, the hideous was not rejected in favor of a more benevolent sarcastic interpretation.

These reactions to or rather misinterpretations of affirmative sarcasm are not unprecedented. Although universal and highly pervasive, humor is often lost on comprehenders. This is particularly true of sarcastic irony and particularly so when it is practiced among strangers, as illustrated by the "no-irony zones" policy practiced in American airports, prohibiting the use of irony when talking to airport officials (Phelan 2009 cited in Burgers et al. 2012). No wonder it is rare among non-intimates (as shown by Eisterhold et al. 2006). It thus comes as no surprise that speakers often have to explain or excuse themselves by making explicit their missed original intent (5–7), while further reinforcing it by overt markers (e.g. *just*, *literally*, *actually*) intended to make sure their intent is now clear (in bold, for convenience):

- (5) **I was just being sarcastic**... Like I would really kill myself???.⁶
- (6) **Actually, I was being sarcastic** and I guess you are an *idiot*... plain and simple (bibby42, 2008).⁷
- (7) Hey Lisa, **actually I was being sarcastic** about me being shy! haha I am anything but!⁸

2.1 Empirical Evidence

Is the impression that affirmative sarcasm is hard to understand really substantiated? Is there evidence showing that sarcasm may be interpreted indirectly, involving initially a contextually incompatible phase? Could it be the case that ironists in

⁶<http://www.formspring.me/r/kay-i-was-just-being-sarcastic-like-i-would-really-kill-myself-okay-do-you-like-any-particular-form-of-music/208327112979946133> (Retrieved on 7.5.12).

⁷www.youtube.com/all_comments?v=aPPGSFMXELo&page=7 (Retrieved on 6.5.12).

⁸<http://cakecrumbsbeachsand.blogspot.co.uk/2012/02/ten-questions.html> (Retrieved on 25.6.2012).

fact intend their audiences to be first led down the garden path by what has been explicitly stated (see Clark and Gerrig 1984)? Does sarcastic irony, like any kind of humor, put the mirror up to our automaticity, which should be redressed and become more pliable through humor (as suggested by Bergson 1900/1956)? Based on experimental and corpus-based studies, the answer to these questions is positive.

2.1.1 Experimental Findings

Let's begin by looking at (affirmative) sarcasm processing. Prevalent contextualist approaches in the field, such as *The direct access view* (Gibbs 1994, 2002) and *Constraint satisfaction models* (Campbell and Katz 2012; Pexman et al. 2000) argue that a strongly supportive context, predictive of an oncoming sarcastic utterance, should not activate a contextually incompatible (salience-based, whether literal or nonliteral) interpretation initially. Instead, such a rich context should facilitate contextually compatible sarcastic interpretations directly. Although none is deemed necessary, cues such as contextual information about speakers' occupation (Pexman et al. 2000), a failed expectation on the part of protagonists (Gibbs 1986a, 2002; Campbell and Katz 2012), the involvement of negations, a victim, or negative emotions (Campbell and Katz 2012) should prompt ironic interpretation instantly.

According to lexicon-based models, however, lexical processes are unconditional and cannot be blocked by contextual information to the contrary (Giora 1997, 2003, following Fodor 1983). As a result, comprehension may initially go astray and involve salient (coded and prominent) but contextually inappropriate meanings, regardless of degree of nonliteralness (as assumed by *The graded salience hypothesis*, Giora 1997, 1999, 2003). Consequently, salient meanings and, hence, salience-based, contextually incompatible utterance interpretations—interpretations based on the salient meanings of the utterance components—may also be involved initially in utterance interpretation (as shown for affirmative irony by Fein et al. 2015; Giora and Fein 1999; Giora et al. 2007).

Similarly, pragmatically oriented views, such as *The literal first model* (Grice 1975; Searle 1979) and *The least disruption principle view* (Attardo 2000, 2001; Eisterhold et al. 2006), also posit a mandatory processing stage, which involves literally-based interpretations—interpretations based on the literal meanings of the utterance components, which, in the case of sarcasm, are contextually inappropriate. Along the same lines, given the echoic mention view of *Relevance Theory* (e.g. Carston 2002; Curcó 2000; Sperber and Wilson 1986/1995; Wilson and Sperber 1992), according to which sarcasm dismisses “what is said” while projecting an attitude of ridicule, literal meanings and interpretations must also be involved in the process. In sum, whether literal or nonliteral, the involvement of contextually incompatible interpretations must affect a less than smooth interpretation process for affirmative sarcasm.

Findings support the predictions of lexicon-based and pragmatic models. They attest to the temporal priority of contextually inappropriate salience-based

interpretations, even when the context is predictive of an oncoming sarcastic statement (Fein et al. 2015; Giora et al. 2007). Neither do they demonstrate equivalent processes for both sarcastic and salience-based interpretations (as assumed by contextualist views). Instead, they demonstrate that context-based sarcastic interpretations lag behind (e.g. Colston and Gibbs 2002; Filik et al. 2014; Filik and Moxey 2010; Giora et al. 2009; for reinterpretation of Gibbs' 1986a results, see Giora 1995; but see Gibbs 1986b, where sarcastic interpretations get activated faster than literal ones). In all, most lab results show that interpreting affirmative sarcastic statements and exclamations is indeed a complex process, involving initially contextually incompatible salient meanings and salience-based (often literal) interpretations. As predicted by the various lexicon-based and pragmatically oriented models and *the graded salience hypothesis* (see also Giora 2014), they attest to the superiority of salient meanings and salience-based interpretations over context-based, nonsalient sarcastic ones.

2.1.2 Corpus-Based Findings

Is there corroborative evidence, coming from natural language use, attesting to the involvement of sarcasm's contextually incompatible salience-based interpretation? One source of evidence would be the linguistic environment of sarcastic utterances. If sarcasm interpretation indeed involves activating its non-sarcastic salience-based interpretation, interlocutors and even the speakers themselves may address it, despite its contextual incompatibility. It follows then that an environment of sarcasm that resonates with its contextually incompatible interpretations more often than with its sarcastic interpretation will provide such corroborative findings.

According to Du Bois (2007, 2014), "resonance" is substantiated via the activation of similarities between utterances. From that perspective, establishing affinities with the salience-based interpretations of sarcastic utterances supposes the availability of such interpretations.

What would count as resonance with the nonsalient compatible interpretation of affirmative sarcasm? What would count as resonance with the incompatible salience-based interpretation of affirmative sarcasm?

For illustration, consider the example in (8), in which the linguistic environment of the affirmative sarcastic utterance (in bold) resonates with its nonsalient sarcastic interpretation (in italics). In contrast, the sarcastic utterance in (9) (in bold), exemplifies resonance with its salience-based literal interpretation (in italics; cited in Giora et al. 2014b):

- (8) The man [Olmert] who made a number of courageous statements about peace late in his tenure has orchestrated no fewer than two wars. Talking peace and making war, the "**moderate**" and "**enlightened**" prime minister [Olmert] has been revealed as one of our *greatest fomenters of war*.⁹

⁹<http://english.alahednews.com.lb/essaydetails.php?eid=7345&cid=389#.UchpOvm15QE> (Retrieved on 24.6.13).

- (9) “Hooray to the Israeli Air Force pilots doing a *splendid* job” effused Brigadier General Avi Benayahu, the IDF spokesperson, talking to Yonit Levy—white turtleneck against a background of tanks, vis à vis hundreds of funerals in Gaza—a token of the “**splendid** job” of our **fine** pilots.¹⁰

Findings indeed show that salience-based contextually incompatible interpretations prevail in the environment of affirmative sarcasm (as exemplified in 9). In Kotthoff (2003), for instance, dinner-table conversations among friends exhibited resonance with incompatible, salience-based interpretations of (German) sarcastic remarks; the reverse pattern, however, prevailed among strangers participating in TV talk-shows. In Giora and Gur (2003), an hour long (Hebrew) conversation between friends also exhibited higher percentage (75 %) of resonance with incompatible, salience-based interpretations than with context-based sarcastic interpretations.¹¹ Similar results were also obtained when resonance in written discourses was examined (Giora et al. 2014b). For instance, looking at about 1600 ironies in (Hebrew) editorials and op-ed articles reveals that the environment of 46 % of the sarcastic remarks reflects their salience-based, contextually incompatible interpretations. In contrast, resonating with context-based, sarcastic interpretations occurs in 8 % of the cases only. The environment of the rest either resonates with both their compatible and incompatible interpretations (3 %) or exhibits no resonance with any of their interpretations (43 %).¹² When it comes to affirmative sarcasm, resonating with salience-based incompatible interpretations, then, is significantly more frequent than with contextually compatible sarcastic interpretations.

In sum, findings from lab results and natural data converge on the view that affirmative sarcasm interpretation is a complex and fallible process, involving salience-based, contextually inappropriate interpretations.

3 Negative Sarcasm—on the Priority of Nonsalient Interpretations

Is processing negative sarcasm (*Punctuality is not what she excels at*, see (2) above) different from processing its affirmative version (*Punctuality is what she excels at*, see (1) above)? Specifically, is negative sarcasm more difficult to understand than its affirmative alternative, as might be presumed given the vast literature on negation suggesting that negatives are more difficult to understand than affirmatives (for a review, see Giora 2006)? Is the nonsalient sarcastic interpretation of negative sarcasm more difficult to derive than its salience-based (non-sarcastic)

¹⁰http://www.mouse.co.il/CM.television_articles_item,790,209,31362,.aspx (Retrieved on 24.6.13).

¹¹Resonance was assessed by two native speakers of Hebrew. Only cases where agreement was 100 % were included.

¹²Resonance was assessed by three native speakers of Hebrew. Agreement among the three was very high.

interpretation? According to lexicon-based and pragmatically oriented models including *the graded salience hypothesis*, the answer to all these questions must be in the affirmative, since it should involve its **negative** salience-based interpretation initially, in spite of its contextual incompatibility.

In contrast, according to the view of negation as a low-salience marker (Giora 2006; Giora et al. 2010; Givoni et al. 2013), highlighting meanings and interpretations low on salience, the answer to these questions must be in the negative. Unlike affirmative sarcasm, this view predicts that, in processing negative sarcasm, it is the nonsalient sarcastic interpretation that should be tapped initially and directly, without having to activate the salience-based (often literal) interpretation first. Relevant to our discussion here is the view of negation as a marker generating novel *nonliteral* interpretations *by default* (see Giora et al. 2010, 2013, 2014, 2015).

For a nonliteral interpretation to be a default, utterances have to meet the conditions for default nonliteral interpretation (10) which guarantee that potential ambiguity between literal and nonliteral interpretations is allowed a priori.

(10) Conditions for default nonliteral interpretation

- (a) *Familiarity* and *conventionality* should be avoided, so that coded nonliteral meanings and negative polarity items would not be involved;¹³
- (b) *Semantic anomaly* or *internal incongruity* should be avoided, so that neither metaphoric (e.g. Beardsley 1958) nor sarcastic (Partington 2011) interpretations are invited;
- (c) *Specific and informative contextual information* should be avoided, so that nonliteral interpretations are neither invited nor inhibited (e.g. Grice 1975; Gibbs 1986a, 2002).

In sum, novel items, free of utterance internal and external cues, neither prompting nor blocking either a literal or a nonliteral interpretation, will make up potential candidates for default nonliteral interpretations.

3.1 Empirical Evidence

Is there, then, evidence showing that, unlike affirmative utterances, some negative utterances, meeting the conditions in (10), are interpreted sarcastically directly, without involving contextually incompatible non-sarcastic interpretations initially? If so, is there also evidence, based on natural language use, showing that, unlike affirmative sarcasm, the linguistic environment of negative sarcasm resonates with its nonsalient sarcastic interpretation rather than with its salience-based here literal interpretation? The following provides answers to these questions.

¹³Negative Polarity Items (NPIs) may exhibit asymmetrical behavior in minimal pairs of negative and affirmative expressions or utterances. Conventionalization may further render affirmative counterparts nonexistent (e.g. Horn 1989: 49; Israel 2004, 2011). Note that they are further prompted in sarcastic contexts (see Horn 2001, 2016 this volume).

3.1.1 Experimental Findings

Indeed, as shown by Giora et al. (2005,¹⁴ 2010, 2013, 2015), negation is an operator generating novel nonliteral—sarcastic and metaphoric—interpretations by default. When presented in isolation, unfamiliar (Hebrew) utterances such as *I am not your physician*, *This is not a safe*, *Smart he is not*, *Punctuality is not her forte*, *Agility is not her most distinctive attribute* are interpreted and rated as nonliteral (i.e., either as metaphoric or sarcastic). When presented in strongly biasing contexts, they are read faster when biased toward their nonliteral than toward their equally strongly biased literal interpretation. Focusing specifically on sarcasm interpretation, the view of negation as inducing nonliteral interpretations by default predicts that it is the sarcastic interpretation of the negative utterances that will be activated unconditionally and directly, without having to involve the salience-based (non-sarcastic) interpretation initially (Giora et al. 2013, 2015).

In Giora et al. (2013), novel negative utterances, such as *Supportive she is not*, potentially ambiguous between literal (“She has some reservations”) and sarcastic (“She’s disparaging and undermining”) interpretations, were interpreted sarcastically and rated as more sarcastic than their equally novel affirmative counterparts when presented in isolation. When embedded in strongly biasing contexts, they were read faster when biased toward their sarcastic than toward their equally strongly biased literal interpretation. Testing the alternative assumption that it might be the structural markedness of the fronted constructions rather than the negation marker that affected sarcasm predominantly showed that it is negation rather than structural markedness that plays a significant role in inducing sarcasm. Negative versions (*Supportive she is not*, *She is not supportive*) of these utterances were always rated as more sarcastic compared to their affirmative versions (*Supportive she is yes*, *She is yes supportive*¹⁵), regardless of degree of structural markedness.

Giora et al. (2015) examined utterances such as *Supportiveness is not her forte* and *Supportiveness is not her best attribute*. These constructions, potentially ambiguous between literal (“She is fairly supportive, but there are other things she is better at”) and sarcastic interpretations (“She is not supportive at all”), were controlled for novelty, as were their affirmative counterparts. Results show that these negative versions were interpreted sarcastically and rated as more sarcastic than their equally novel affirmative counterparts when presented in isolation. When embedded in strongly biasing contexts, they were read faster when biased toward their sarcastic than toward their equally strongly biased literal interpretation. Weighing negation against the structural markedness of the fronted constructions showed that it is only negation that plays a role in affecting sarcasm. Negative versions of these utterances (*Supportiveness is not her forte/best attribute*, *Her forte/best attribute is not supportiveness*) were always rated as more sarcastic than their affirmative counterparts (*Supportiveness is yes her forte/best*

¹⁴In Giora et al. (2005) we suggest that such negative utterances might be viewed as understatement which are often perceived as ironic (see also Horn 1989).

¹⁵Explicit affirmative markers are licensed in Hebrew.

attribute, Her forte/best attribute is yes supportiveness). Structural markedness didn't play a role at all.

Taken together, these findings show that negation affects sarcasm interpretation by default. While the default interpretation of affirmative sarcasm is its salience-based literal interpretation, the default interpretation of negative sarcasm is its nonsalient sarcastic interpretation. Apparently the negative sarcastic utterances examined here are easier to interpret than affirmative sarcasm. Whereas the former's interpretations are computed directly and exclusively, the latter involves a dual process, activating inappropriate interpretations initially.

No contemporary processing model can account for these results. They cannot be explained by context-based approaches, given that contextual information was equally strongly constraining, whether biased toward the literal or toward the sarcastic interpretation. Neither can they be accounted for by lexicon-based or literal-based models. Given that they demonstrate the temporal priority of novel nonsalient interpretations—interpretations removed from the coded meanings of their utterance components—over salience-based interpretations—interpretations based on the coded meanings of their utterance components, they defy any explanation based on the priority of lexicalized meanings.

3.1.2 Corpus-Based Findings

Is there corroborative evidence, coming from natural language use, attesting to the involvement of sarcasm's contextually compatible nonsalient interpretation? As with affirmative sarcasm, here too, one should look at the linguistic environment of negative sarcastic utterances. Given that negative sarcasm involves a sarcastic interpretation initially, interlocutors and even the speakers themselves may address it. An environment of negative sarcastic remarks that exhibits resonance with their sarcastic interpretation more often than with their salience-based incompatible interpretation will provide such converging evidence.

What would count as resonance with the compatible sarcastic interpretation of negative sarcasm? What would count as resonance with the incompatible salience-based literal interpretation of negative sarcasm?

For illustration, consider the example in (11), in which the environment of the negative sarcastic utterance *Smart she is not* (in bold) resonates with its nonsalient sarcastic interpretation (in italics). In contrast, the same construction in (12) (in bold), exemplifies resonance with its salience-based literal interpretation (in italics; cited in Giora et al. 2013):

- (11) A skilled politician wouldn't be instrumental in the death of her own political party, as she certainly is... **Smart she is not**, or she wouldn't be a *walking joke*. The confidence comes from being *too stupid* to know she hasn't got a chance, and fearless only because she's *too dumb* to be embarrassed by her *village idiot* tag.¹⁶

¹⁶According to Chungmin Lee (p.c.), this construction (X s/he is not) is an instance of metalinguistic negation.

(12) Netanyahu—**smart he is not**

Today the following news item has been published: Netanyahu announces that Turkel commission will prove that we have acted appropriately.

It's really frustrating... Any time you think he may this time act *sensibly*, again [he proves you wrong].¹⁷

Similarly, in (13) below, the environment of the negative sarcastic utterance *Patience is not my forte* (in bold) resonates with its nonsalient sarcastic interpretation (in italics; cited in Giora et al. 2014). In contrast, the same construction in (14) (in bold), exemplifies resonance with its salience-based literal interpretation (in italics):

(13) “I am *fast*. To give you a reference point, I am somewhere between a snake and a mon-goose. And a panther.”—Dwight Schrute, *The Office*

Patience is not my forte. *I like to get things done yesterday*, and it's in my nature to want to get everywhere *as fast as humanly possible*. My attitude toward my debt is no different. I'm *in a hurry*, so heaven help anything that gets in my way!¹⁸

(14) You have large ambitions, and it is difficult for you to be tolerant and understanding of those who desire less in life or who are more *slow* and methodical by nature. **Patience is not your forte.**¹⁹

Findings indeed show that resonance with nonsalient sarcastic interpretations of items prevails in the linguistic environment of negative sarcasm. Thus, on the basis of a corpus-based search, 169 natural (Hebrew) instances of the form “X s/he is not” were collected. However, the environment of only 109 cases allowed a direct comparison between resonance with either the sarcastic or the literal interpretation. (The rest either allowed resonance with both or did not display any resonance). Of these 109 cases, the environment of 100 cases (92 %) resonated with their sarcastic interpretation; only in 9 cases (8 %) did it resonate with the salience-based literal interpretation (Giora et al. 2013). Similarly, of 127 natural instances of negative sarcastic utterances (in Hebrew and English) of the form “X is not her forte/best attribute”, the environment of only 83 cases allowed a direct comparison between resonance with either the sarcastic or with the literal interpretation. (The rest either allowed resonance with both or did not display any resonance). Of these 83 cases, the environment of 73 (88 %) cases resonated with their nonsalient sarcastic interpretation; the rest 10 cases (12 %) resonated with the salience-based literal interpretation (Giora et al. 2014).²⁰ Prevalence, then, of resonance with the nonsalient sarcastic interpretation of negative sarcasm is significantly larger than with its salience-based interpretation.

¹⁷<http://www.facebook.com/topic.php?uid=120300104673132&topic=146> (Retrieved on 20 June, 2010).

¹⁸<http://bsindebt.com/personal-finance/shifting-gears> (Retrieved on September 21, 2014).

¹⁹<http://www.kabalarians.com/Male/mthobisi.htm> (Retrieved on June 29, 2013).

²⁰Resonance was assessed by 3 native speakers of Hebrew. Agreement between them was high.

In sum, findings from lab results and natural data converge on the view that, unlike affirmative sarcasm, negative sarcasm is understood directly—faster than its salience-based literal interpretation. This process is smooth for the sarcastic interpretation of such negative utterances, but more complex for their literal interpretation which probably involves activating their default sarcastic interpretation initially.

4 Discussion and Conclusions

As a low-salience marker, inducing nonsalient interpretations by default, negation debunks the view (proposed by e.g. Fein et al. 2015; Giora 1997, 1999, 2003, 2011b; Giora et al. 2007) that salience-based interpretations of utterances enjoy priority in that they get activated initially and may not be circumvented. Instead, results here show that, while the superiority of salience-based interpretations may be quite prevalent, it dissipates in the face of low-salience marking.

Giora et al. (2010, 2013, 2014, 2015) show that negation further generates non-literal interpretations by default. While Giora et al. (2010, 2013) show that negation generates metaphorical interpretations by default, Giora et al. (2013, 2014, 2015) show that negation generates sarcastic interpretations by defaults. Relevant to our discussion here are the findings that the negative constructions tested by the latter (*Meticulous she is not; Punctuality is not his forte; Punctuality is not her strongest feature*²¹) are interpreted and rated as sarcastic even outside of a supportive context. When in strongly supportive contexts, they are read faster when biased toward their sarcastic than toward their equally strongly biased literal interpretation. Weighing negation against the structural markedness of these fronted constructions demonstrates that it is negation rather than the markedness of the construction that affects sarcasm by default. Corpus-based studies further provide corroborative evidence. They show that, unlike affirmative sarcastic remarks, negative sarcastic utterances are interpreted sarcastically unconditionally. As a result, the linguistic environment of such remarks reflects their nonsalient sarcastic interpretation rather than their salience-based literal interpretation. In sum, unlike affirmative sarcasm, negative sarcasm is understood directly and initially, both outside of context and even when context is strongly supportive of the salience-based literal interpretation.

One should note, however, that negation is not the only marker inviting low-salience interpretations. According to Givoni et al. (2013), a number of markers play a significant role in prompting low-salience meanings and interpretations, whether literal or nonliteral. Take *literally* for example. Despite its semantics, this marker does not necessarily call for low-salience literal interpretations of conventional metaphors. Rather, it may just as well invite other low-salience metaphorical interpretations. Consider (15) (cited in Givoni et al. 2013), taken from *Gilmore Girls*

²¹For Hebrew illustrations, see Appendix.

(Season 7, Episode 17: *Gilmore Girls Only*), where Logan, Rory's boyfriend, who has driven all the way back home after he was sacked by his boss, tells Rory what has happened (on *literally* highlighting nonliteral meanings, see also Israel 2002):

- (15) Logan: Basically, he told me to **hit the road**.
 Rory: And you took him *literally*.

In her reply, Rory deautomatizes *hit the road*, which is a familiar idiom whose salient meaning is "leave/go away". Using *literally* in "And you took it *literally*", Rory refers to an alternative low-salience *nonliteral* interpretation of *hit the road*, which involves "driving" or "moving" on the road, rather than to a literal interpretation of "*hitting*" as in "beating" the road.

Or take the following use of *literally* (in italics) in (16), in which *take into* (in bold), which is modified by *literally*, is not intended literally, but instead induces another low-salience metaphorical interpretation, indicating that, rather than having access into real parts or tissues of Einstein's brain, iPad users may now watch his brain closely via a great number of slides of sliced tissue:

- (16) Armchair neurologists can now investigate one of the greatest minds of the last century. For just \$9.99, a new iPad app will **take** users **into** the brain of Albert Einstein—*literally*. The app, which features a collection of 350 slides of sliced tissue, was produced by the National Museum of Health and Medicine Chicago.²²

Other researchers, such as Moon (2008) and Veale (2012, 2013), looked at another marker—*about*—and studied its effect on similes' interpretations. They show that, when prefacing "as X as Y" similes, this marker cues the addressee as to the speaker's sarcastic intent. While for Moon's findings, this is always the case, Veale's studies, based on a large corpus, show that, alongside a vehicle for which the ground is remotely relevant or apt (as in 17), the *about* marker promotes an ironic interpretation in most (76 %) of the cases. Still, when "as X as Y" similes were not marked by *about* (as in 18), they were mostly (82 %) non-ironic (but also shorter and less inventive):

- (17) ...about as modern as a top-hatted chimneysweep.
 (18) ...as pervasive as air.

In sum, not all negatives are created equal.²³ While some may complicate processing of utterances, others facilitate them. The case of negative utterances, interpreted sarcastically by default, is a case in point for the latter.

Acknowledgments The research reported here was supported by THE ISRAEL SCIENCE FOUNDATION (grant no. 436/12). I am also obliged to the editors of this volume and to 4 anonymous reviewers and deeply so to Ari Drucker and Ruth Filik for very valuable comments.

²²<http://blogs.artinfo.com/artintheair/2012/09/28/chicago-museum-produces-an-app-guide-to-einsteins-brain/> (Retrieved on October 28, 2012).

²³Consider, for instance, evidence showing that it is novelty that is effortful rather than negation, as shown by Meytes and Tamir (2005) cited in Giora (2006), in which conventional negative collocations were faster to process compared to their novel affirmative versions.

Appendix

Illustrations of Hebrew negative items plus Sarcastic and Literal interpretations.

1.

דקדקנית היא לא

Dakdekanit hi lo.

Meticulous she (is)not

Sarcastic: היא מהפפת

Hi mexafefet.

She (is) careless/sloppy

Literal: היא דקדקנית במידה סבירה

Hi dakdekanit be=mida svira

She (is) meticulous at extent reasonable

(She's reasonably meticulous).

2.

דייקנות זה לא הצד החזק שלו

Daikanut ze lo ha=cad ha=xazak shel=o.

Punctuality is not the side the strongest his

(Punctuality is not his forte)

Sarcastic: הוא מאוד לא דייקן

Hu meod lo daikan

He (is) very.much not punctual

(He is far from being punctual)

Literal: הוא דייקן במידה סבירה אבל יש דברים אחרים שבהם הוא טוב יותר

Hu daikan be=mida svira aval yesh dvarim axerim

He (is) punctual at extent reasonable but there.are things other

she=ba=hem hu tov yoter

that in them he (is) good more

(He is fairly punctual, but there are things he is better at)

3.

דייקנות זה לא הדבר שהכי מאפיין אותו

Daikanut ze lo ha=davar she=haxi meafyen oto

Punctuality is not the thing that most characterizes him

Punctuality is not what best characterizes him

Sarcastic: הוא מאוד לא דייקן

Hu meod lo daikan

He (is) very.much not punctual

(He is far from being punctual)

Literal: הוא דייקן במידה סבירה אבל יש דברים אחרים שבהם הוא טוב יותר

Hu daikan be=mida svira aval yesh dvarim axerim

He (is) punctual at extent reasonable but there.are things other

she=ba=hem hu tov yoter

that in them he (is) good more

(He is fairly punctual, but there are things he is better at)

References

- Attardo, S. (2000). Irony as relevant inappropriateness. *Journal of Pragmatics*, 32(6), 793–826.
- Attardo, S. (2001). *Humorous texts: A semantics and pragmatics analysis*. Berlin: de Gruyter.
- Beardsley, M. C. (1958). *Aesthetics*. New York: Harcourt, Brace and World.
- Bergson, H. (1900/1956). Laughter. In W. Sypher (Ed.), *Comedy* (pp. 61–190). New York: Doubleday.
- Booth, W. (1974). *A rhetoric of irony*. Chicago: University of Chicago Press.
- Brisard, F., Östman, J.-O., & Verschueren, J. (Eds.). (2009). *Grammar, meaning and pragmatics*. Amsterdam: Benjamins.
- Bryant, G. A., & Fox Tree, J. E. (2002). Recognizing verbal irony in spontaneous speech. *Metaphor and Symbol*, 17, 99–117.
- Burgers, C., van Mulken, M., & Schellens, P. J. (2012). Type of evaluation and marking of irony: The role of perceived complexity and comprehension. *Journal of Pragmatics*, 44, 231–242.
- Campbell, J. D., & Katz, A. N. (2012). Are there necessary conditions for inducing a sense of sarcastic irony? *Discourse Processes*, 49(6), 459–480.
- Carston, R. (2002). *Thoughts and utterances: The pragmatics of explicit communication*. Oxford: Blackwell.
- Clark, H. H., & Gerrig, R. (1984). On the pretense theory of irony. *Journal of Experimental Psychology General*, 113, 121–126.
- Colston, H. L., & Gibbs, R. W., Jr. (2002). Are irony and metaphor understood differently? *Metaphor and Symbol*, 17, 57–60.
- Curcó, C. (2000). Irony: Negation, echo and metarepresentation. *Lingua*, 110, 257–280.
- Du Bois, W. J. (2007). The stance triangle. In R. Englebretson (Ed.), *Stancetaking in discourse: Subjectivity, evaluation, interaction* (pp. 139–182). Amsterdam: Benjamins.
- Du Bois, W. J. (2014). Toward a dialogic syntax. *Cognitive Linguistics*, 25(3), 359–410.
- Eisterhold, J., Attardo, S., & Boxer, D. (2006). Reactions to irony in discourse: Evidence for the least disruption principle. *Journal of Pragmatics*, 38(8), 1239–1256.
- Fein, O., Yeari, M., & Giora, R. (2015). On the priority of salience-based interpretations: The case of irony. *Intercultural Pragmatics*, 12(1), 1–32.
- Filik, R., Leuthold, H., Wallington, K., & Page, J. (2014). Testing theories of irony processing using eye-tracking and ERPs. *Journal of Experimental Psychology. Learning, Memory, and Cognition*, 40(3), 811–828.
- Filik, R., & Moxey, L. M. (2010). The on-line processing of written irony. *Cognition*, 116(3), 421–436.
- Fodor, J. A. (1983). *The modularity of mind: An essay on faculty psychology*. Cambridge: MIT Press.
- Gibbs, R. W., Jr. (1986a). On the psycholinguistics of sarcasm. *Journal of Experimental Psychology: General*, 115, 3–15.
- Gibbs, R. W., Jr. (1986b). Comprehension and memory for nonliteral utterances: The problem of sarcastic indirect requests. *Acta Psychologica*, 62, 41–57.
- Gibbs, R. W., Jr. (1994). *The poetics of mind: Figurative thought, language, and understanding*. Cambridge: Cambridge University Press.
- Gibbs, R. W., Jr. (2002). A new look at literal meaning in understanding what is said and implicated. *Journal of Pragmatics*, 34, 457–486.
- Giora, R. (1995). On irony and negation. *Discourse Processes*, 19, 239–264.
- Giora, R. (1997). Understanding figurative and literal language: The graded salience hypothesis. *Cognitive Linguistics*, 8(3), 183–206.
- Giora, R. (1999). On the priority of salient meanings: Studies of literal and figurative language. *Journal of Pragmatics*, 31, 919–929.
- Giora, R. (2003). *On our mind: Salience, context, and figurative language*. New York: Oxford University Press.

- Giora, R. (2006). Anything negatives can do affirmatives can do just as well, except for some metaphors. *Journal of Pragmatics*, 38, 981–1014.
- Giora, R. (2011a). Irony. In J.-O. Östman & J. Verschueren (Eds.), *Pragmatics and practice* (pp. 159–176). Amsterdam: Benjamins.
- Giora, R. (2011b). Will anticipating irony facilitate it immediately? In M. Dynel (Ed.), *The pragmatics of humour across discourse domains* (pp. 19–31). Amsterdam: Benjamins.
- Giora, R. (2014). Literal vs. nonliteral language—novelty matters. In T. Holtgraves (Ed.), *Handbook of language and social psychology* (pp. 330–347). New York: Oxford University Press.
- Giora, R., & Attardo, S. (2014). Irony. In S. Attardo (Ed.), *Encyclopedia of humor studies* (pp. 397–401). Thousand Oaks: SAGE.
- Giora, R., Drucker, A., Fein, O., & Mendelson, I. (2015). Default sarcastic interpretations: On the priority of nonsalient interpretations of negative utterances. *Discourse Processes*, 52(3), 173–200.
- Giora, R., Drucker, A., & Fein, O. (2014). Resonating with default sarcastic interpretations. *Belgian Journal of Linguistics*, 28, 3–18.
- Giora, R., & Fein, O. (1999). Irony: Context and salience. *Metaphor and Symbol*, 14, 241–257.
- Giora, R., Fein, O., Ganzi, J., Alkeslassy Levi, N., & Sabah, H. (2005). On negation as mitigation: The case of irony. *Discourse Processes*, 39, 81–100.
- Giora, R., Fein, O., Kaufman, R., Eisenberg, D., & Erez, S. (2009). Does an “ironic situation” favor an ironic interpretation? In G. Brône & J. Vandaele (Eds.), *Cognitive poetics. Goals, gains and gaps* (pp. 383–399). Berlin: de Gruyter.
- Giora, R., Fein, O., Laadan, D., Wolfson, J., Zeituny, M., Kidron, R., et al. (2007). Expecting irony: Context versus salience-based effects. *Metaphor and Symbol*, 22, 119–146.
- Giora, R., Fein, O., Metuki, N., & Stern, P. (2010). Negation as a metaphor-inducing operator. In L. Horn (Ed.), *The expression of negation* (pp. 225–256). Berlin: de Gruyter.
- Giora, R., & Gur, I. (2003). Irony in conversation: Salience and context effects. In B. Nerlich, Z. Todd, H. V. & D. D. Clarke (Eds.), *Polysemy: Flexible patterns of meanings in language and mind* (pp. 297–316). Berlin: de Gruyter.
- Giora, R., Livnat, E., Fein, O., Barnea, A., Zeiman, R., & Berger, I. (2013). Negation generates nonliteral interpretations by default. *Metaphor and Symbol*, 28, 89–115.
- Giora, R., Raphaely, M., Fein, O., & Livnat, E. (2014b). Resonating with contextually inappropriate interpretations in production: The case of irony. *Cognitive Linguistics*, 25(3), 443–455.
- Givoni, S., Giora, R., & Bergerbest, D. (2013). How speakers alert addressees to multiple meanings. *Journal of Pragmatics*, 48(1), 29–40.
- Grice, H. P. (1975). Logic and conversation. In P. Cole, & J. Morgan (Eds.), *Speech acts: Syntax and semantics* (pp. 41–58). New York: Academic Press.
- Hasson, U., & Glucksberg, S. (2006). Does understanding negation entail affirmation? An examination of negated metaphors. *Journal of Pragmatics*, 38, 1015–1032.
- Horn, L. R. (1989). *A natural history of negation*. Chicago: University of Chicago Press.
- Horn, L. R. (2001). Flaubert triggers, squattive negation and other quirks of grammar. In J. Hoeksema, H. Rullmann, & V. Sánchez-Valencia (Eds.), *Perspectives on negation and polarity items* (pp. 173–202). Amsterdam: Benjamins.
- Horn, L. R. (2016, this volume). Licensing NPIs: Some negative (and positive) results. In P. Larrivé & C. Lee (Eds.), *Negation and polarity: Experimental perspectives* (pp. 281–305). Cham: Springer.
- Israel, M. (2002). Literally speaking. *Journal of Pragmatics*, 34(4), 423–432.
- Israel, M. (2004). The pragmatics of polarity. In L. R. Horn & G. Ward (Eds.), *The handbook of pragmatics* (pp. 701–723). Oxford: Blackwell.
- Israel, M. (2011). *The grammar of polarity: Pragmatics, sensitivity, and the logic of scales*. New York: Cambridge University Press.
- Kotthoff, H. (2003). Responding to irony in different contexts: Cognition and conversation. *Journal of Pragmatics*, 35, 1387–1411.
- Kreuz, R. J., & Caucci, G. M. (2007). Lexical influences on the perception of sarcasm. *Proceedings of the Workshop on Computational Approaches to Figurative Language* (pp. 1–4).

- Kreuz, R., & Glucksberg, S. (1989). How to be sarcastic: The reminder theory of verbal irony. *Journal of Experimental psychology: General*, 118, 347–386.
- Kumon-Nakamura, S., Glucksberg, S., & Brown, M. (1995). How about another piece of pie: The allusional pretense theory of discourse irony. *Journal of Experimental Psychology: General*, 124(1), 3–21.
- Meytes, D., & Tamir, A. (2005). Negation is sometimes faster than affirmation. Ms., Tel Aviv University.
- Moon, R. (2008). Conventionalized as-similes in english: A problem case. *International Journal of Corpus Linguistics*, 13(1), 3–37.
- Partington, A. (2011). Phrasal irony: Its form, function and exploitation. *Journal of Pragmatics*, 43(6), 1786–1800.
- Pexman, P. M., Ferretti, T., & Katz, A. (2000). Discourse factors that influence irony detection during on-line reading. *Discourse Processes*, 29, 201–222.
- Phelan, J. (2009). The narrative turn and the how of narrative inquiry. *Narrative*, 17(1), 1–10.
- Schwoebel, J., Dews, S., Winner, E., & Srinivas, K. (2000). Obligatory processing of the literal meaning of ironic utterances: Further evidence. *Metaphor and Symbol*, 15, 47–61.
- Searle, J. R. (1979). *Expression and meaning: Studies in the theory of speech acts*. Cambridge: Cambridge University Press.
- Sperber, D. (1984). Verbal irony: Pretense or echoic mention. *Journal of Experimental Psychology: General*, 113, 130–136.
- Sperber, D., & Wilson, D. (1981). Irony and the use-mention distinction. In P. Cole (Ed.), *Radical pragmatics* (pp. 295–318). New York: Academic Press.
- Sperber, D., & Wilson, D. (1986/1995). *Relevance: Communication and cognition*. Oxford: Blackwell.
- Veale, T. (2012). *Exploding the creativity myth*. London: Bloomsbury.
- Veale, T. (2013). Humorous similes. *Humor*, 26(1), 3–22.
- Voyer, D., & Techentin, C. (2010). Subjective acoustic features of sarcasm: Lower, slower, and more. *Metaphor and Symbol*, 25, 1–16.
- Wason, P. C. (1959). The processing of positive and negative information. *Journal of Experimental Psychology*, 11, 92–107.
- Wilson, D., & Sperber, D. (1992). On verbal irony. *Lingua*, 87, 53–76.