INTRODUCTION

One of irony's notorious characteristics is its beguiling nature (cf. Booth, 1974). When speakers assume a different voice, pretense (Clark & Gerrig, 1984; Clark, 1996), or some guise (Haiman, 1990; 1998), they may mislead even the adult addressee,[1] who may not be able to detect the counterfeit and derive the ironic intent.

The deceitful nature of irony has not been lost on artists and writers, who have manipulated it for various purposes, most notably, the insertion of novel, dissident ideas (Giora, submitted; Walker 1991). Irony's indirectness acts as a shield which masks a genuine intent deemed risky by the speaker. Consider the following poem by the Israeli poet, Yona Wallach (1997), which has been taken literally by most readers, but which, in fact, assumes a guise - man's voice, language, and fantasies - to convey subversiveness:

Strawberries[2]

When you come to sleep with me  
wear a black dress  
printed with strawberries  
and hold a basket of strawberries  
and sell me strawberries  
tell me in a sweet light voice  
strawberries strawberries  
who wants strawberries  
don't wear anything under the dress  
afterwards  
strings will lift you up  
invisible or visible  
and lower you  
directly on my prick.

Yona Wallach is one of the most important feminist poets worldwide. Her literary accomplishments rest, among other things, on her ability to integrate the language and
topics of women's and men's poetry (Rattok, 1997: 75). *Strawberries* is exemplary in this respect. It adopts males' pornographic language in order to protest women's oppression by the self-same language and industry. The disguised protest, however, has escaped the eyes of a lot of Wallach's readers, who took her poetry literally as a celebration of sexuality - a topic that has hitherto dominated men's writings. According to Rattok (1997), however, Wallach is ironic. Her critical intent may not be as obvious in *Strawberries* as it is in the following poem, which portrays a pornographic show:

Tefillin[3]

Come to me  
don't let me do anything  
you do it for me  
do everything for me  
what I even start doing  
you do instead of me  
I'll put on tefillin  
I'll pray  
you put on the tefillin for me too  
bind them with delight on my body  
rub them hard against me  
stimulate me everywhere  
make me swoon with sensation  
move them over my clitoris  
tie my waist with them  
so I'll come quickly  
play them in me  
tie my hands and feet  
do things to me  
against my will  
turn me over on my belly  
and put the tefillin in my mouth  
bridle reins  
ride me I am a mare  
pull my head back  
till I scream with pain  
and you're pleasured  
then I'll move them onto your body  
with unconcealed intention  
oh how cruel my face will be  
I'll move them slowly over your body  
slowly slowly slowly  
around your neck I'll move them  
I'll wind them several times around your neck, on one side  
and on the other I'll tie them to something solid  
especially heavy maybe twisting
I'll pull and I'll pull
till your soul leaves you
till I choke you
completely with the tefillin
that stretch the length of the stage
and into the stunned crowd.

In this poem, the speaker is acting out her anger with pornography. At the end of the piece, the speaker strangles her abuser by using the ritual ropes used by men in prayers that exclude women. This poem leaves no doubt as to Wallach's stance: Rather than endorsing it, Wallach dissociates herself from the language and practice of oppressive pornography.

Wallach is by no means the only author whose irony has been lost on most of her readers. Resorting to irony has also cost other authors such as Swift (A modest proposal) and Austin (Pride and prejudice) the price of being misunderstood by their contemporary readers (cf. Booth, 1974).

Though these poetic examples may be suggestive as to why literary irony is easy to ignore, misinterpret, or miss, our daily experience with irony seems to suggest the opposite: irony is ubiquitous and much easier to understand than implied by the above examples (see also Gibbs, 1994).

COMPREHENSION

Indeed, one of the most heated debates within linguistics and psycholinguistics is whether irony (or nonliteral language, in general) requires a special (sequential) process (e.g., Grice, 1975; Searle, 1979), or whether it is interpreted on patterns similar to those induced by literal language (e.g., Glucksberg, 1995; Gibbs, 1986a,b; Sperber & Wilson 1986/95: 239).

Processing models

Direct access view

Researchers attributing to contextual information a primary role in language comprehension assume that literal and nonliteral language involve equivalent processes: In a rich ecology, contextual information affects comprehension very early on so that comprehenders retrieve the contextually appropriate meaning more or less directly, without having to go through an incompatible phase (for a similar view regarding lexical ambiguity see also Vu, Kellas & Paul, 1998). This implies that in a literally biasing context (a sunny day), it is only the literal interpretation ('nice weather' of What a lovely day for a picnic) that is recovered; in an irony inducing context (a stormy day), it is only the ironic interpretation ('lousy weather') that is tapped.
The assumption that context governs comprehension significantly features dominantly in the relevance theoretic account. According to Sperber & Wilson (1986/95), context is not fixed in advance, but is searched for the purpose of rendering an utterance relevant. Utterance interpretation is thus entirely dependent on the contextual information brought to bear. Recruiting the appropriate context results in tapping the contextually appropriate meaning directly without having to go through an incompatibility phase which will require revisitation. As a result, processing irony, i.e., an "echoic interpretive use in which the communicator dissociates herself from the opinion echoed with accompanying ridicule or scorn" (Wilson & Sperber 1992: 75) need not differ from processing a similar utterance in which the communicator endorses the opinion echoed. Both should be interpreted on similar patterns. While irony involves the speaker's dissociation from the opinion echoed, literal interpretation involves endorsement of the echo (Sperber & Wilson 1986/95: 239). The echoic mention view of irony (Jorgensen, Miller & Sperber 1984; Sperber & Wilson 1981, 1986/95; Sperber 1984; Wilson & Sperber 1992; but see Curcó, submitted; Giora, 1997b, 1998a,b; Wilson & Smith, 1992; Yus, 1998), is thus consistent with a direct access view according to which contextual information affects comprehension to the extent that it prevents activation of irrelevant interpretations.

The processing equivalence hypothesis also underlies the allusional pretense theory (Kumon-Nakamura, Glucksberg & Brown, 1995). According to this view, irony alludes to or reminds the addressee of what should have been - of an expectation or a norm that went wrong (see also Kreuz & Glucksberg, 1989). To enable the addressee to appreciate the allusion, irony involves pragmatic insincerity. Positing insincerity allows for various speech-acts beyond assertions to be ironic. For example, when a car driver says I just love people who signal when turning when the car ahead of her makes a turn without signaling, the speaker alludes to a social norm to signal upon turning, while simultaneously pretending to compliment the errant driver. Such view of irony assumes that irony comprehension involves activating the literal meaning of the utterance in order to assess its insincerity and derive the ironic interpretation (see also Glucksberg, 1995). It does not, however, assume the precedence of the literal over the nonliteral interpretation, since initial comprehension does not involve an assumption about the speaker's sincerity. Rather, in any given situation, there is a decision to be made whether the literal meaning is intended sincerely or insincerely. In this way, ironic and literal interpretations involve equivalent processes, resulting in different products, though (Glucksberg, personal communication).

**Standard pragmatic model**

In contrast to the processing equivalence assumption, the hypothesis that understanding nonliteral language is a 'two stage' process, the first - literal and obligatory, the second - nonliteral and optional, implies that understanding literal and ironic language involve different mechanisms, the latter comprising more complex inferential processes. Thus, while literal interpretation includes no contextually incompatible stage, in understanding irony, the comprehender first computes the contextually incompatible literal interpretation ('nice weather' of What a lovely day for a picnic). Since that interpretation is contextually incompatible, it is rejected and replaced by the appropriate meaning
('lousy weather'). This classical processing model, known as 'The standard pragmatic model' originated in Grice (1975) and Searle (1979). The standard pragmatic model assumes that the initial stage of irony comprehension is impervious to context effects (cf. Fodor, 1983), involving (a detection of) a breach of a norm, primarily the truthfulness maxim, which is a signal to the addressee to reject the computed literal meaning and derive the ironic intent.

A more recent proposal entitled 'relevant inappropriateness' (Attardo, in press) goes beyond the rule violation condition and proposes the breach of contextual appropriateness. While assuming Grice's relevance maxim for the integration phase, relevant inappropriateness requires that contextual appropriateness be ostensibly violated at the initial phase, so that the comprehender can detect the overt violation and derive the ironic intent. This violation, however, must be only minimally disruptive, though perceivable as disturbing contextual appropriateness. For example, when, in a drought-stricken area, one farmer says to another Don't you just love a nice spring rain? the utterance may be true, yet inappropriate, given the situation of utterance (it is not raining). According to Attardo, violation of contextual appropriateness includes violation of both sincerity and cultural norms or expectations (assumed necessary for irony interpretation by the allusional pretense, see above) and more (e.g., deictic inappropriateness).

The joint pretense view (Clark & Carlson, 1982; Clark & Gerrig, 1984; Clark, 1996) is also inspired by the Gricean model (Grice, 1978). It assumes a speaker who pretends "to be an injudicious person speaking to an uninitiated audience; the speaker intends the addressee of the irony to discover the pretense and thereby see his or her attitude toward the speaker, the audience, and the utterance" (Clark & Gerrig, 1984: 12. For a similar view see Boulton as quoted in Booth, 1974: 105). By saying What a lovely day for a picnic on a stormy day, the ironist assumes the identity of another speaker addressing a gullible audience. The present addressee, however, is supposed to take delight in recognizing both the pretense and the intended attitude of ridicule toward the pretending speaker, the audience, and the utterance. According to Clark (1996: 368), joint pretense is conceived of as a staged communicative act (see also Kotthoff, 1998) where the actual speaker is also an implied speaker performing a sincere communicative act toward an implied addressee who is also the actual addressee. Both actual participants are intended to "mutually appreciate the salient contrasts between the demonstrated and actual situations", so that if asked, the actual speaker would deny meaning for the actual addressee what the implied speaker means for the implied addressee.

According to this view, irony is a two-layered act of communication in which the literal meaning is activated and retained by both the speaker and the addressee, who reject it as the intended meaning though they pretend otherwise. Though inspired by Grice (1978), it is not quite clear whether this double-layered approach assumes a sequential or a parallel process.

The possibility that irony involves parallel activation of both the literal and ironic interpretations is also entertained by the tinge hypothesis (Dews, Kaplan & Winner,
According to the tinge hypothesis, irony is used to mute the intended negative criticism (for a similar view see Barbe, 1995; for a different view see Colston, 1997). The positive literal meaning of irony (*That was really funny* said on a mean joke) tinges the addressee's perception of the intended meaning. Similarly, the negative literal meaning of ironic compliments (*It's a tough life* said to someone on vacation) mitigates the positively intended meaning. Winner and her colleagues assume that the contextually incompatible, literal meaning of ironic remarks is processed at some level and interferes with the intended meaning. Following Long & Graesser (1988), they propose a dual-process model "in which comprehension may occur after the recognition of an incongruity or simultaneously" (Dews & Winner, 1997: 405). According to the tinge hypothesis, then, the literal meaning of irony is activated initially, either before or alongside the ironic meaning, and is retained in order to dilute either the criticism or the compliment.

Has any of the approaches gained empirical support? So far, findings have not been monolithic. Some studies support the equivalent processes hypothesis. They show that ironic and nonironic utterances took equally long to read (Gibbs, 1986a,b; but see Giora, 1995 and Dews & Winner, 1997 for a critique of some of the findings), and to involve equal response times to ironically and literally related probes (Giora & Fein, in press a). Others are consistent with the different processes assumption (Dews & Winner, 1997, 1999; Giora, 1995). They show that utterances took longer to read in ironically than in literally biasing contexts (Gibbs, O'Brien & Doolittle, 1995; Giora, Fein & Schwartz, 1998; Schwoebel, Dews, Winner & Srinivas, in press), longer to be judged as positive or negative relative to their literal counterparts (Dews & Winner, 1997), and to involve longer response times to ironically than to literally related probes (Giora & Fein, in press a; Giora et al., 1998).

**The graded salience hypothesis**

Recent research however proposes that the apparently conflicting findings are resolvable in terms of the graded salience hypothesis (Giora, 1997a, 1999a,b, in press; Giora & Fein, 1999 a,b; Giora et al., 1998). Rather than positing the precedence of contextual information on the one hand (Sperber & Wilson, 1986/95; Utsumi, in press; Yus, submitted), or the priority of literal meanings on the other (Grice, 1975; Searle, 1979), the graded salience hypothesis proposes that the factor primarily affecting processing is lexical salience. Lexical salience pertains to privileged meanings - meanings foremost on our mind. A meaning of a word or an expression is salient if it is coded in the mental lexicon. Degree of salience is determined by frequency, conventionality, familiarity, or prototypicality. The more familiar, frequent, conventional, or prototypical a meaning the more salient it is. For instance, both meanings of *bank*, i.e., the 'financial institution' and the 'riverside' meanings, are listed in the mental lexicon. However, for those of us from urban communities, in which rivers are less common than financial institutions, the commercial sense of *bank* is more accessible i.e., salient. By the same token, the riverside sense is less salient. In contrast, inferences computed on the fly are nonsalient, since they are not coded in the mental lexicon. The claim is that highly salient meanings would always be accessed initially, irrespective of contextual information. Contextual
information may come into play following the initial access stage, either suppressing or retaining incompatible meanings, or selecting the contextually appropriate meaning. For instance, the following joke hinges on the prototypical/salient 'male' interpretation of *rabbi*:

What's the difference between an orthodox, a conservative, and a reform wedding? In an orthodox wedding, the bride's mother is pregnant. In a conservative wedding, the bride is pregnant. In a reform wedding, the rabbi is pregnant.

According to the graded salience hypothesis, then, interpreting utterances whose multiple interpretations are similarly salient would involve activating these meanings in parallel, irrespective of contextual information. For instance, conventional ironies such as *tell me about it* would involve similar processes in either context. Given that both the ironic interpretation (of the sentence/expression as a whole) and the literal meaning (of the sentence/expression's constituents) are coded in the mental lexicon, these meanings would be activated in both the literal and irony inducing contexts. In contrast, less familiar ironies such as *what a lovely day for a picnic*, whose literal but not ironic meaning is coded in the lexicon, would involve a sequential process: they would be interpreted literally first and ironically second. Their literal interpretation, however, would be tapped directly on account of the salience of its constituents. The graded salience hypothesis does not assume that the literal interpretation of the whole statement need to be computed first before the ironic interpretation is derived. It posits, though, that the salient interpretation (e.g., the literal meaning of *lovely*) should be activated initially.

Predictions

The three processing models sketched above have, thus, different predictions regarding irony comprehension.

According to the equivalent processes/direct access view, given a supportive context,

i. an utterance (*what a lovely day for a picnic*) will not take longer to read in an irony than in a literal inducing context;
ii. readers would always respond faster to contextually appropriate test words, since they activate only the contextually appropriate meaning. In a literally biasing context (sunny day), only the contextually compatible literal meaning (nice) would be activated. In an ironically biasing context, (a stormy day), this utterance will induce only the contextually compatible ironic meaning (lousy); Alternatively, if the equivalent processes hypothesis assumes parallel activation of the literal meaning and the attitude (or sincerity) invoked, response times to literally and ironically related test words should not differ.
iii. these predictions should indifferently hold for salient and nonsalient ironies, because it is context rather than salience that governs comprehension primarily.

According to the various versions of the classical model,

i. an utterance will take longer to read in an irony than in a literal inducing context;
ii. if measured immediately, even in a highly supportive ironic context, readers would respond faster to literally than to ironically related test words, because they always activate the literal meaning first. The ironic meaning will lag behind;
iii. these predictions should indifferently hold for more and less familiar ironies.

Given that the graded salience hypothesis is concerned with degree of salience and is agnostic with regard to literal and nonliteral language, it predicts that

i. nonsalient ironies will take longer to read in an irony than in a literal inducing context, since their ironic meaning is not coded in the mental lexicon, while the literal meaning (of their constituents) is. In contrast, salient ironies (tell me about it) will take equally long to read in either context, because they are coded both ironically and literally: When they are much more salient than their literal equivalents (being as conventional as idioms), they will be processed faster than their literal equivalents;
ii. even in a highly supportive, irony inducing context, readers will respond fast to test words related to salient meanings, regardless of contextual information. Regarding less salient or nonsalient ironies, this should be true of the literal (or any other conventional) meaning. The ironic meaning will take longer to respond to and will benefit from extra processing time. Similarly, in the literally biasing context, the salient (literal) meaning will be responded to faster than the nonsalient ironic meaning. In contrast, response times to literally and ironically related test words of salient ironies will not differ. Neither will they benefit from extra processing time.

Findings

The vast array of findings prevalent in the literature is consistent with the salience-based view. It demonstrates that, irrespective of the tools employed to test the hypotheses, salient meanings are always accessed initially, regardless of contextual information or literality.

Reading times

The most popular measure employed by psycholinguists has been reading times of whole utterances embedded in differently biasing contexts. Most of the evidence demonstrates that nonsalient language (irony) takes longer to process than salient (literal) language. For instance, nonsalient ironies (I'd say women have had real progress), whose literal meaning is more salient than their ironic meaning, took longer to read in an irony (1a) than in a literal (1b) inducing context (cf. Giora et al. 1998; Giora & Fein, 1999 a):

(1a) Just how far have women risen in the film community?

According to M. P., who was at Woman in Film luncheon recently in Los Angeles, it has actually been a very good year for women: Demi Moore was sold to Robert Redford for $1 million in the movie Indecent Proposal... Uma Thurman went for $40,000 to Robert De Niro in the recent movie, Mad Dog and Glory. "Just three years ago, in Pretty Woman, Richard Gere bought Julia Roberts for - what was it? $3,000? "I'd say women have had real progress."
(1b) Just how far have women risen in the film community? According to M. P., who was at Woman in Film luncheon recently in Los Angeles, it has actually been a very good year for women: Demi Moore earned $10 million in the movie Indecent Proposal... Uma Thurman made $400,000 in the recent movie, Mad Dog and Glory. "Just three years ago, in Pretty Woman, Julia Roberts earned - what was it? $130,000? "I'd say women have had real progress."

Similarly, in Gibbs (1986a) such ironies (You are a big help), projecting an attitude of dissociation from what is echoed (2a), took longer to read than their literal equivalents (Thanks for your help. 2b), projecting an attitude of endorsement or acknowledgment (cf. Giora, 1995 for reinterpretation of Gibbs' findings):

(2a) Harry was building an addition to his house. He was working real hard putting in the foundation. His younger brother was supposed to help. But he never showed up. At the end of a long day, when Harry's brother finally appeared, Harry said to his brother: "You are a big help."

(2b) Greg was having trouble with calculus. He had a big exam coming up and he was in trouble. Fortunately, his roommate tutored him on some of the basics. When they were done, Greg felt he'd learned a lot. "Well" he said to his roommate, "Thanks for your help."

Dews et al. (1995), Dews & Winner (1997; 1999) used a different methodology. They asked subjects to judge the intended meaning of utterances and recorded their responses. Results showed that less salient ironies took longer to be judged as positive (It's a tough life said to someone on vacation) or negative (That was really funny said on a mean joke) than their literal interpretations. Such findings suggest that the contextually incompatible, literal meaning of less salient ironies is accessed automatically, and interferes with the process.

In addition Schwoebel et al. (in press), compared reading times of ironic praise (3) and ironic criticism (4) (illustrated by the first phrase in bold) and their literal counterparts (illustrated by the second phrase in bold):

(3) Ironic praise

Sam complained to his mother that he had too much homework. He said it would take him the whole weekend. On Saturday morning, he started his work, and was all done in one hour/ by the end of the day he had finished less than half. His mother said: Your work load is overwhelming this weekend.

(4) Ironic criticism
A new professor was hired to teach philosophy. The professor was supposed to be really sharp. When Allen asked several questions, the professor offered naive and ignorant/incisive and knowledgeable answers. Allen said: That guy is brilliant at answering questions.

They found that participants took longer to read the target phrase (Your work load is overwhelming this weekend) in the ironically than in the literally biasing context, though this difference was significant only for the ironic criticism targets and only by item analysis.

That salience rather than literality is a primary factor affecting initial processing is even more evident when reading times of salient figurative utterance (This one's really sharp) embedded in metaphor inducing contexts (5a) are compared with their reading times in irony inducing contexts (5b):

(5) a. You are a teacher at an elementary school. You are discussing a new student with your assistant teacher. The student did extremely well on her entrance examinations. You say to your assistant, "This one's really sharp."

b. You are a teacher at an elementary school. You are gathering teaching supplies with your assistant teacher. Some of the scissors you have are in really bad shape. You find one pair that won't cut anything. You say to your assistant, "This one's really sharp."

As shown in Gibbs (1999), nonsalient (ironic) targets (5b) took longer to read than their salient (metaphorical) counterparts (5a; see Giora, forthcoming for a discussion).

Pexman, Ferretti & Katz (in press) present similar findings. In their study, salient metaphors (Children are precious gems) took longer to read in an irony (6c) than in a metaphor (6b) inducing context relative to a neutral control (6a):

(6) a. A man was talking to Jodie about his niece and nephew who had visited him recently. During the conversation the man said: Children are precious gems. This made Jodie think about her cousins.

b. A scientist was talking to Jodie about his niece and nephew who had visited him recently. The scientist had really enjoyed having the children around. During the conversation the man said: Children are precious gems. This made Jodie think about her cousins.

c. A scientist was talking to Jodie about his niece and nephew who had visited him recently. The scientist had found the children to be loud and disruptive and had not enjoyed their visit. During the conversation the scientist said: Children are precious gems. This made Jodie think of her cousins.
In both studies, the metaphoric reading was the salient reading, whereas the ironic reading was nonsalient, and probably involved accessing the salient (metaphoric) meaning first before adjusting it to contextual information.

Findings in Gibbs, O'Brien & Doolittle (1995) may also be explained by the graded salience hypothesis. Gibbs et al. investigated comprehension of intended and unintended (situational) irony (I would never be involved in any cheating). An utterance is considered an unintended irony in case it is intended literally but is perceived as ironic by overhearers. In Gibbs et al., intended ironies (7a) took longer to read than their unintended equivalents (7b):

7a. Intended irony
John and Bill were taking a statistics class together. Before the final exam, they decided to cooperate during the test so they worked out a system so they could secretly share answers. After the exam, John and Bill were really please with themselves. They thought they were pretty clever for beating the system. Later that night, a friend happened to ask them if they ever tried to cheat. John and Bill looked at each other and laughed, then John said, "I would never be involved in any cheating".

7b. Unintended irony
John and Bill were taking a statistics class together. They studied hard together, but John was clearly better prepared than Bill. During the exam, Bill panicked and started to copy answers from John. John did not see Bill do this and so did not know he was actually helping Bill. John took the school's honor code very seriously. Later that night, a friend happened to ask him if they ever tried to cheat. John and Bill looked at each other, then John said, "I would never be involved in any cheating".

Though subjects' reports demonstrate that they perceived the unintended irony and considered it even more ironic than the intended irony, it is possible that their reading times reflect only their comprehension of the salient, literally intended interpretation.

Some studies, however, present faster reading times for less salient than for salient language (Gibbs, 1986a,b). In Gibbs (1986a), ironies (You are a big help, 2a) were faster to read than their intended interpretations (You are not helping me, [8]). In Giora (1995), I explained this finding in terms of coherence imbalance. Given the discourse context, the final utterance (You are not helping me) is redundant; the alternative ironic ending (see 2a) is far more informative (on the assumption, of course, that the salient/literal meaning is activated first):

8. Harry was building an addition to his house. He was working real hard putting in the foundation. His younger brother was supposed to help. But he never showed up. At the end of a long day, when Harry's brother finally appeared, Harry said to his brother: "You are not helping me".
(8) and (2a) are, therefore, incomparable.

Similarly, in Gibbs (1986b), targets (Sure is nice and warm here) took longer to read and to make a paraphrase judgments in a literally (10) than in an ironically (9) biasing contexts:

(9) Tony's roommate always kept the windows open in the living room. He did this even if it was freezing out. Tony kept mentioning this to his roommate but to no avail. Once it was open and Tony wanted his roommate to shut it. Tony couldn’t believe that his roommate wasn't cold. He said to him,
Ironic target] 'Sure is nice and warm here'.
[Paraphrase] 'Please close the window'.

(10) Martha went over to her sister's house. It was freezing outside and Martha was glad to be inside. She said to her sister, 'your house is very cozy'
Literal target] 'Sure is nice and warm here'.
[Paraphrase] 'This room is warm'.

Indeed, in the literally biasing contexts, these targets are entirely redundant, being a sort of reiteration of a previous utterance (e.g., 'Your house is very cozy'). In contrast, their ironic counterparts are a lot more informative. It is thus possible that the longer reading times found in Gibbs' studies do not provide for a counter example but were caused by relative incoherence.[4] As for paraphrase judgments, in Giora (1995) I suggest that paraphrase judgments of ironic targets are easier to make, because comprehension of irony involves paraphrasing, i.e., rephrasing the surface (usually literal) interpretation which provides comprehenders with a ready-made paraphrase that is easier to recognize. This is not true of literal targets. [5]

All other things being equal, then, findings from reading times of whole utterances are better accounted for by the graded salience hypothesis. They show that salient utterances are processed faster than their nonsalient equivalents, regardless of context or literality.

Response times

Response times pertains to the time it takes subjects to make a lexical decision as to whether a test word is a word or a nonword. In Giora et al (1998) and Giora & Fein (1999 a), we measured response times to literally and ironically related test words.[6] While nonsalient ironies have only one salient meaning - the literal meaning, salient ironies (tell me about it) have also their nonliteral ironic meaning listed in the mental lexicon. According to the graded salience hypothesis, nonsalient ironies (1a above) should facilitate literally related test words initially while ironically related test words would be facilitated only after a delay. In contrast, salient ironies (11a below) should facilitate both meanings initially, regardless of context. Indeed, nonsalient ironies (I'd say women have had real progress) facilitated only their literally related test word (e.g., 'success') initially (150 msec after offset of the target sentence) in both the literally and ironically biasing contexts. The ironic test word ('regress') lagged behind and was facilitated only 2000 msec after offset of the ironic target sentence. In contrast, salient ironies (Tell me about
it) facilitated initially both their literally ('disclosing') and ironically ('known') test words in both types of context:

(11) a. Ziv visited his friend, Ran, in New York. Ran advised him to use the subway, but Ziv insisted on renting a car. Three days later, Ziv gave up and told Ran: I have had enough. The traffic jam here is incredible. Ran said: "Tell me about it".

b. In the middle of the night Royi woke up and started crying. His mother heard him and went up to his room. "What happened?" she asked. Royi said that he had had a nightmarish dream. His mother said: "Tell me about it"

These findings are accountable only by the graded salience hypothesis. They demonstrate the salient meanings are accessed initially, regardless of either context or literality.

INTERPRETATION

As shown earlier, initial access is automatic. It involves activating both contextually compatible and incompatible meanings on account of their salience. While it is plausible to assume that contextually compatible meanings integrate with the sentence or discourse context and contribute to the utterance interpretation, it is not clear whether contextually incompatible meanings are automatically discarded as irrelevant and excluded from the interpretation processes.

Predictions

According to the tinge hypothesis (Dews et al., 1995; Dews & Winner, 1995, 1997, 1999), the indirect negation view (Giora, 1995, forthcoming; Giora et al., 1998) and joint pretense view (Clark, 1996; Clark & Gerrig, 1984), the contextually incompatible literal meaning is functional in irony interpretation. On the tinge hypothesis, it dilutes the criticism or the praise. According to the indirect negation view, it provides for a reference point relative to which the criticized state of affairs is weighed. According to the pretense view, it allows for intimacy, excluding the uninitiated audiences. Setting out from a functional viewpoint, then, these theories assume that the apparently incompatible literal meaning should not be discarded automatically as might be assumed by the standard pragmatic model (Grice, 1975).[7]

Findings

Giora and her colleagues tested this hypothesis. Giora & Fein (1999 a) and Giora et al. (1998) show that in the ironically biasing context, the literal meaning of both salient and less ironies is active even after a delay (of 1000-2000 msec). Even two seconds after offset of the ironic target sentence, when the compatible (ironic) meaning becomes available, the level of activation of the literal meaning is not reduced.[8]

Using an offline measure, Giora & Fein (1999 b) show that while utterances embedded in literally biasing contexts (12b) are processed only literally, when embedded in ironically
biasing contexts (12a) they retain both their literal and ironic meanings. Having read such passages, participants were able to fill in fragmented words (li--le; s--p) related to both the literal ('little') and ironic ('stop') meanings of the target sentence following the ironically biasing context, while only literally related test words following the literally biasing context:

(12) a. After he has finished eating pizza, falafel, ice-cream, wafers and half of the cream cake his mother had baked for his brother Benjamin's birthday party, Moshe started eating coated peanuts. His mother said to him: "Moshe, I think you should eat something."
b. At two o'clock in the afternoon, Moshe started doing his homework and getting prepared for his Bible test. When his mother came home from work at eight p.m., Moshe was still seated at his desk, looking pale. His mother said to him: "Moshe, I think you should eat something."

Further, findings in Winner (1988), Dews et al. (1995) Dews & Winner (1997; 1999) show that critical and complimentary ironies are considered less aggressive/complimenting than their direct, literal alternatives whose criticism and praise are muted.

Research of naturally occurring discourse is also consistent with the view that the literal meaning of ironies is retained for further processes. For instance, Giora & Gur (submitted) and Kotthoff (1998) show that in friendly conversations, interlocutors rejoin the literal meaning of ironic utterances in order to produce humor. According to Kotthoff, this is not the case when unfriendly conversations are at stake, such as those taking place among hostile interlocutors participating in interview shows.

The following (taken from Kotthoff, 1998) is an example of concurring with the literal meaning, typical of friendly conversations:

(13)
   You have been having such an opulent social life lately.
b. D: total was los grad, weil ich nämlich initiativ
   A lot has been going on lately, because I have taken
c.    geworden bin jetzt.
   the initiative now.
In this extract, the ironic utterance (13a) is responded to literally, invoking self-irony. Given D's known inclination to the opposite, M's description of D's 'opulent' social life is entirely inappropriate. Recently, however, D was involved in two dinner parties. While concurring with M's literal contribution, D further elaborates on it by presenting 'evidence'. His reference to his 'iniútiative', which he apparently lacks, induces laughter.

D's response to the literal meaning is instant. He not only processes M's irony, but immediately counters it by topping it, suggesting that the literal meaning is highly accessible and has not been suppressed by the comprehender.

Indeed, the role irony plays in self-protection (Giora, 1995; Groeben & Scheele, 1984) is highly dependent on comprehenders both accessing and retaining the literal meaning. While the literal meaning may be highly misleading (cf. Wallach's examples above), it nevertheless helps mask subversive ideas when impunity is imminent. Thus, even when laughing at ourselves, we may still dissociate ourselves from the norms echoed, which we have failed to meet (Kotthoff, 1999). Indeed, Kotthoff shows that "female narrators organize their presentations so that other people do not laugh at their expense, but rather at the expense of norms which they mock collectively by laughing at them" (p.).

In all, evidence adduced in the lab as well as in naturally occurring conversations is consistent with the view that contextually inappropriate meanings, activated on account of their salience, are retained in the mind of interlocutors and are utilizable for further processes. Seemingly irrelevant information is not discarded automatically once it may be instrumental.

CONCLUSIONS

Empirical research demonstrates that initial access is automatic, salience sensitive, and impervious to context effects: Comprehension of nonsalient (though commonplace) irony involves accessing the salient (usually literal) meaning initially, irrespective of contextual information. The contextually compatible, nonsalient (ironic) meaning requires extra
processing time for its derivation - it is a post access process affected by contextual information. However, while initial access is automatic, involving both contextually compatible and incompatible meanings, suppression of apparently incompatible meanings is not. Meanings utilizable while constructing the discourse are not discarded automatically.

Such processing mechanisms may explain irony's beguiling nature. Under some circumstances, comprehenders may be content with the salient, literal meaning, terminating search for alternative interpretations. This may hold even for poetic texts (cf. Wallach's poems above) which tend to invite extra processing (Steen, 1994). No wonder irony serves to convey subversive ideas: Being processed saliently first, it has the potential of concealing the authentic intent, which may be missed by the uninformed audiences. Ironically, however, the self-same illusive nature may act like a boomerang. Taken at face value, irony may be risky for its initiator who will be penalized for what she said but did not intend (cf. Hutcheon, 1994).

References


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[1] On how children fail to understand irony see Winner (1988), and Giora (1999b) for a review.
[3] Tefillin are the phylacteries - a religious prop made of strings with which male Jews bind themselves in their Morning Prayer - a ritual which is denied to women. The English translation is taken from Wallach's (1997). The poem was originally published in Hebrew in 1983.
[4] This incoherence, however, escaped the eyes of readers' judgements.
[5] There was another target, which also exhibited longer reading times and judgments times than the ironic target - the nonsarcastic indirect request: 'Why don't you close the window?' However, given the rating study (p. 45), it is not clear whether subjects understood this target as nonsarcastic or as a nonsarcastic indirect request. It is quite possible that they understood it as nonsarcastic question, contextual information being ambiguous between the two alternatives.
The studies were conducted in Hebrew.

On the role of suppression in figurative language comprehension see Gernsbacher, Keysar & Robertson, submitted).

Surprisingly, however, in the literally biasing context the salient ironic meaning of salient ironies was not suppressed after a delay of 1000 msec (Giora & Fein, in press). It is possible that some meanings are so highly salient, they are difficult to discard.