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7 Know hope: Metaphor, optimal innovation and pleasure

1 Introduction: Processing models

What are the processes involved in language comprehension? Do literal and nonliteral instances of language use require different interpretation mechanisms or do they follow the same processing routes? To illustrate the question, consider the following example:

(1) On Wednesday, February 20th, 2002, Yinnon Hiller, aged 20 and Amir Malenky, aged 18, will appear before the Israeli High Court of Justice... Both ask to be released from military service on the grounds of their pacifist beliefs... Both conscientious objectors ask to perform alternative civilian service instead of military service, but the Israeli army so far refused to allow them this option.

New Profile – Movement for the Civil-ization of Israeli Society supports Yinnon Hiller and Amir Malenky in their struggle. We believe that the State of Israel should recognize that an individual can participate in society in ways other than bearing arms. http://www.gush-shalom.org/archives/forum_eng.html (19.2.02)

How do we make sense of these utterances? What makes us interpret the last word (*arms*) or collocation (*bearing arms*) *nonliterally* (as 'weapons') rather than literally (as 'hands')? Is it contextual information biased toward the military sense of *arms* that makes us select this appropriate sense? Is it the salience or dominance of the military sense of the word that makes that meaning available swiftly? What about the meaning of *struggle*, then? Given the contextual bias toward the military interpretation, would its literal ('battle') meaning be primed during its processing on account of its contextual relatedness?

Whether it is context or the lexicon that affects our understanding primarily has been an enduring debate in linguistics and psycholinguistics for over three decades or so (Gibbs 1994; Glucksberg 2001; Giora 1997, 2002, 2003). Indeed, various models of figurative language have come up with different proposals as to how we make sense of literal and nonliteral utterances.

The Standard Pragmatic Model (Grice 1975; Searle 1979) assumes the temporal priority of the literal interpretation of utterances. In this view, literal meanings are obligatory – they are automatic and immune to contextual information. Nonliteral meanings, on the other hand, are derivative and optional. They are induced only when a literal interpretation fails to resonate with contextual information. In this view, then, it is the literal meaning ('hand') of *arms* that should be accessed first and adjusted to contextual information only as an aftermath; similarly, it is the literal ('battle') meaning of *struggle* that should be induced first and revisited later. The Standard Pragmatic Model thus assumes different processing routes for literal and nonliteral language uses, regardless of strength and bias of context. While both literal and nonliteral utterances are being processed literally initially, only nonliteral language is expected to involve an additional phase of adjustment to contextual information. According to the Standard Pragmatic Model, then, comprehending the *figurative utterances* in (1) should incur some integration difficulty compared to their interpretation in a literally biasing context.

Unlike the Standard Pragmatic Model, the Direct Access View (or its more recent version entitled the Constraint Satisfaction Model) does not assume that lexical processes are immune to contextual information. Rather, context interacts with lexical processes very early on and if it is sufficiently constraining, it should result in selecting the contextually appropriate interpretation exclusively or at least initially. Such a view disputes the temporal priority of literal meanings (Glucksberg 1998, 1995, 2001; Glucksberg, Gildea and Bookin 1982; Keysar 1989, 1994). Instead, in realistic, social contexts, comprehenders should be able to understand the figurative interpretations of metaphors, irony/sarcasm, idioms, proverbs and indirect speech acts directly without having to first analyze and reject their literal interpretations (Ferretti, Schwint and Katz 2007; Gibbs, 1994, 2001; 2002; Katz and Ferretti 2001, 2003). The Direct Access View thus assumes no processing differences for literal and nonliteral language, provided prior context is supportive and specific enough. Rather, both types of language should be comprehended directly, without involving an inappropriate interpretation first. According to this view, then, in the strongly biasing context of (1), the utterance including *struggle* and *arms* should be interpreted metaphorically; no integration difficulties are anticipated compared to their interpretation in a literally biasing context (Ortony et al. 1978).

Following Fodor's modular assumptions (1983), the Graded Salience Hypothesis (Giora 1997, 1999, 2003; Giora and Fein, 1999a, b; Giora, Fein and Schwartz 1998; Peleg, Giora and Fein 2001, 2004; Peleg and Eviatar 2008) assumes that comprehension involves two distinct mechanisms that run in parallel, without interacting initially. One is bottom-up, sensitive only to domain specific (here) linguistic stimuli; another is top-down involving inferential and integrative processes,

susceptible to both linguistic and nonlinguistic information. Diverging from the classical modular view (Swinney 1979), however, the Graded Salience Hypothesis further assumes that bottom-up processes are ordered: Salient responses/meanings are accessed faster than less-salient ones (Duffy, Morris and Rayner 1988; Rayner et al. 1994).

To be salient, a meaning has to be coded in the mental lexicon and be foremost on our mind due to e.g., conventionality, frequency, familiarity, or prototypicality. Coded meanings, low on these parameters, are less-salient and slower to reach sufficient levels of activation than salient meanings. According to this view, then, coded meanings would be accessed automatically upon encounter, regardless of contextual information or authorial intent. Meanings not coded in the mental lexicon, although nonsalient, may be made available via the contextual, predictive mechanism.

Indeed, when specific enough, contextual information may affect comprehension immediately. A highly predictive context would yield meanings on its own accord very early on. However, it would not interact with lexical access and would therefore not block coded but inappropriate responses upon encounter of the lexical stimulus (Giora 2003; Peleg et al. 2001; Peleg and Eviatar 2008).

Given that both the literal and nonliteral meanings of *arms* and *struggle* are salient, the Graded Salience Hypothesis predicts that the metaphorical utterances in (1) should incur no integration difficulties compared to their interpretation in a literally biasing context. Since both meanings should be accessed automatically in both types of context, the contextually appropriate meaning is made available swiftly and effects seamless integration processes.[1]

In sum, whereas the Standard Pragmatic Model assumes that nonliteral language should cohere less smoothly with prior context than literal language, the Graded Salience Hypothesis and Direct Access View have different predictions. Both theories assume equivalent processes for figurative and nonfigurative language, though apparently for different reasons. The Direct Access View attributes to a constraining context the role of neutralizing the differences found between literal and nonliteral language embedded in poorly informative contexts so that when context is sufficiently strong and supportive, literal and nonliteral interpretations cohere as smoothly (Ortony et al. 1978; but see Janus and Bever 1985; Peleg et al. 2004 and Giora et al. 2007 for a critique). Particularly, nonliteral language would be tapped directly without having to involve an analysis of the literal interpretation first (Gibbs 2002). The Graded Salience Hypothesis discards the literal-nonliteral distinction altogether and replaces it with the salient-nonsalient continuum (Giora 1997, 2002, 2003). Diverging from the Direct

1 In Giora (2003) and Giora and Fein (1999a) we further argue that the contextually inappropriate literal meanings should not be suppressed.

access View, it thus anticipates processing difficulties for language uses whose less or nonsalient meanings or interpretations are invited. Given that salient meanings get accessed automatically upon encounter of the relevant stimulus, when contextually incompatible, they would result in extra adjustment processes resulting in less-salient or innovative meanings and interpretations. When such interpretations are invited, processing would be more effort consuming, at least, locally, compared to when salient meanings are invited, regardless of literality or figurativeness.

Given the Graded Salience Hypothesis, then, the idiom *He is singing a different tune* in (2c, taken from Gibbs, 1980), or the fixed expression *black on white* in (3c), or the idiom *you don't know your right from left* in (4c) should cohere more smoothly with prior context (e.g., take shorter to read) following (2a, 3a, 4a) than following (2b, 3b, 4b). Whereas the contexts in (2a, 3a, 4a) invite the salient (figurative) meaning of the idioms and the salient (literal) meaning of the fixed expression, the contexts in (2b, 3b, 4b) invite their low-salience (literal and figurative) interpretations. According to the Graded Salience Hypothesis, reading (2c, 3c, 4c) following (2b, 3b, 4b), then, should involve accessing (and reinterpreting) the salient meaning of the expressions in spite of their contextual incompatibility. Such predictions, however, are not invited by either of the alternative views. Both theories predict equal reading times for (2c, 3c, 4c) in all types of context (either 2a, 3a, 4a or 2b, 3b, 4b). According to the Standard Pragmatic Model, both interpretations of (4c) involve a figurative comprehension phase; hence no processing differences are anticipated. Since, however, there are literality differences involved in idioms, processing difficulties would be predicted only for the figurative reinterpretation. According to the Direct Access View, both interpretations of (2c, 3c, 4c) are invited by similarly strong and supportive contexts; hence no processing differences are anticipated. Findings, however, support the Graded Salience Hypothesis. They show that low-salience interpretations took longer to read than salient alternatives, regardless of figurativeness (Brisard et al. 2001; Frisson and Pickering 2007; Gibbs 1980; Giora and Fein 1999a, b; Giora et al. (2009); Giora et al. 2007; but see Ortony et al. 1978):

(2) a. On TV there was a program discussing Carter's first year in office. One reporter talked about the military budget. "In the campaign Carter promised to cut that budget." "But now that he is the president,"

b. Nick and Sue were listening to Jackson Browne on the radio. "All Jackson Browne songs sound alike." Sue Said. "Now isn't that the same song we heard him do on TV recently."
"No." Nick replied;

c. *"He is singing a different tune."*

(3) a. I want your promise documented
b. This cheese cake with chocolate coating is exactly what you wanted:
c. *black on white*

(4) a. *The Comprehensive Lexicon* will teach you whatever you are interested in
b. Buy *The Comprehensive Guide for the Political Factions in Israel*
c. so that you won't feel *you don't know your right from left*.

Why would speakers make use of utterances that might endanger coherence (even if only momentarily) and involve complex processes when less costly utterances are at hand? The explanation we intend to put forward and test here concerns speakers' pursuit of aesthetic effects. Speakers resort to innovativeness because they wish to disturb without repelling, to attract rather than detract listeners' attention. Apparently, the text in (1) does not resort to any aesthetic device in spite of its occasional figurative language. We claim here that it takes innovativeness rather than figurativeness to affect pleasure.

2 Optimal innovation and affect

Would any innovation be engaging? What kind of innovation will induce highly pleasurable effects? Earlier research (Giora 2003; Giora et al. 2004) demonstrates that it is *optimal innovation* that has the largest affective ratings (Hekkert et al. 2003; for a somewhat different view, see Brône and Coulson 2010).

To be optimally innovative, a stimulus should invoke

(5) a. a novel – less or nonsalient – response to a familiar stimulus, alongside
b. a salient response from which, however, it differs (both quantitatively and qualitatively), so that both make sense (e.g., their similarity and difference can be assessable).

For example, in the Tel Aviv streetart (Know Hope 2006) in (6), the recognition of the salient ("No hope") in the novel (*KNOW HOPE*) makes the (literal) novel highly meaningful, despite its contextual incompatibility – invoking hopefulness in the midst of total destruction. It is this relation between the salient and the novel – de-automatizing the familiar pessimism by highlighting the optimism inherent in it – that is pleasing:

(6)

Similarly, labeling as "the ultimate form of greenwashing" (Blumenthal 2010) the practice, which included planting pine trees on the sites of the hundreds of Palestinian villages the Zionist militias evacuated and destroyed in 1948, must evoke the more salient "whitewashing" for the novel coin to make sense.

Along the same lines, in the contexts of (2b, 3b, 4b), the familiar expressions (2c, 3c, 4c) have an optimally innovative interpretation; in the context of (2a, 3a, 4a), they do not. The contexts of (2b, 3b, 4b) evoke a low-salience sense of the familiar expressions without blocking a salient response (Giora et al. 2004). In contrast, the contexts in (2a, 3a, 4a) are compatible with only the salient sense; the low-salience sense, it seems, does not reach sufficient levels of activation before integration gets underway. (If, however, it does, it would also make up an optimal innovation).

Optimal innovations are most pleasing primarily because of the (surprising) recognition of the salient in the novel (and also the novel in the familiar, Freud 1905). The familiar on its own would thus be less pleasing, because it has little or no novelty about it, but it will be quite pleasing on account of its familiarity; the novel on its own, however, would rank lowest on the aesthetics scale, because it involves little or no familiarity (for somewhat similar and yet different views, see Berlyne 1960, 1971; Miall and Kuiken 1994; Mukařovský 1964, 1978; Schopenhauer 1969; Shklovsky 1917, 1965; Townsend 1997).

Indeed, in Giora et al. (2004), we have shown that optimally innovative stimuli occupied mid position on the familiarity scale but scored most highly on the liking scale. Familiar stimuli came second. Least pleasurable were unfamiliar stimuli. Furthermore, optimally innovative stimuli took longer to read than their associated salient meanings, which they also primed; equivalent novel stimuli did not prime these meanings (Giora et al. 2004). Such findings demonstrate that, as assumed, stimuli rated as somewhat familiar and most pleasing indeed involved processing the salient meaning, which required reinterpretation.

In this chapter, we aim to show that (a) it is not figurativeness that hampers coherence, as would be deduced from the Standard Pragmatic Model. Instead, it is optimal innovativeness that obstructs smooth integration with prior context; (b) it is not figurativeness that induces pleasure, as would be expected from traditional views of 'poetic' language (see Steen, 1994 for a review), but rather optimal innovativeness. Both these predictions do not follow from the Direct Access View, which predicts that a constraining context may bypass contextually inappropriate interpretations (such as the literal interpretation of metaphors) and blur possible differences both in coherence and pleasure appreciation.

To test our hypotheses, we used high and low familiar metaphors and their literal interpretations. The set of items used in our experiments are those used in Giora and Fein (1999a). Although the items were measured only for degree of familiarity of their ~~metaphoric~~ interpretation (see also Experiment 1 below), reading times reassured us of the relative familiarity of their literal interpretations. Thus while equal reading times were found for the familiar metaphors and their literal interpretations, faster reading times were found for the literal interpretation of the novel metaphors compared to their metaphorical interpretation (Giora and Fein 1999a).

In this study, we intend to show that familiar items, whether metaphorical or literal (7a, 8b and 7b below) would be viewed as more coherent with prior context than less familiar items (8a) which would affect lower coherence ratings (2.1. Experiment 1). In addition, however, low coherence but innovative items would be rated as more engaging than equivalent, familiar, high coherence items, regardless of figurativeness (2.2. Experiment 2).

2.1 Experiment 1

The aim of Experiment 1 is to show that coherence is related to degree of salience: familiar targets whose salient meaning or salience-based interpretation (interpretation depending on the salient meanings of the utterance components)

is related to prior context would be rated as more coherent with prior context than targets whose low-salience/innovative meaning or interpretation is related to prior context. Specifically, we aimed to show that similarly familiar items would be rated as equally coherent with prior context, regardless of figurativeness. In contrast, novel items would score lower on the coherence scale compared to their more conventional uses.

To be able to test these predictions, we first aimed at reestablishing degrees of salience in a pretest. The pretest involved 21 native speakers of Hebrew, graduates and undergraduates of Biology and Social Sciences at Tel Aviv University, aged 18–32. They were asked to rate the prospective materials of Experiments 1 and 2 (taken from Giora and Fein 1999a) on a 7 point familiarity scale. They were told that the items, which also have a literal interpretation, were metaphors and that their ratings should reflect the extent to which they were familiar with their metaphorical sense. In addition, they were asked to write down the meaning of each item. The written responses served to confirm that the familiar metaphorical sense of the familiar items was indeed recognized. Items scoring above 5 were considered familiar; items rated below 5 were considered less familiar/innovative. This rating test resulted in 20 innovative items (novel metaphors) and 16 familiar items (familiar metaphors). This division into familiar and novel metaphorical items closely overlaps the division we obtained in Giora and Fein (1999a) in which we found 18 familiar metaphors and 18 less and unfamiliar metaphors. As mentioned earlier, on the basis of the reading times obtained for these items in Giora and Fein (1999a), we assume here similar familiarity of literal and metaphorical meanings of familiar metaphors (which took equally long to read) and higher familiarity of literal interpretations of novel metaphors (which were faster to read than their metaphorical interpretation).

2.1.1 Method

Participants. Fifty-four volunteers served as participants. They were all native speakers of Hebrew, Natural Sciences and Social Sciences graduates and undergraduates of Tel Aviv University, aged 18–32.

Materials. Materials were the items rated for degree of metaphorical familiarity in the pretest (reported above). They were embedded at the end of a context biasing each of them either toward the literal or toward the metaphorical interpretation. They, thus, made up a set of 72 items (see Giora and Fein 1999a). In terms of familiarity, they formed 2 groups. The familiar items consisted of 16

familiar metaphors (7a) and their 16 literal alternatives (7b); the set of unfamiliar items consisted of 20 metaphors (8a) and their 20 literal alternatives (8b):

(7) a. In order to solve the math problem, the student *broke her head* [equivalent to the English *racked her brains*].

b. Because she was so careless when she jumped into the pool, the student *broke her head*.

(8) a. Mary: My husband is terribly annoyed by his new boss. Every day he comes home after work even more depressed than he has been the day before. Somehow, he cannot adjust himself to the new situation. Billie: *Their bone density is not like ours*.

b. Our granny had a fracture from just falling off a chair and was rushed to the hospital. I told my sister I never had fractions falling off a chair. She explained to me about the elderly. She said: *Their bone density is not like ours*.

Two different booklets were prepared, each containing 36 items so that subjects saw only one version of the contextual bias of the target sentences. Only one text appeared on each page.

Procedure. Participants were each presented a booklet and were asked to rate the extent to which the last (target) sentence of each text coheres with prior context on a 7 point coherence scale (1 = incoherent; 7 = highly coherent).

2.1.2 Results

Findings are presented in Table 1. They are consistent with the Graded Salience Hypothesis. Although there was a main effect of sentence type (metaphor/literal) as evident by both subject, $F_1(1,53) = 15.87$, $p < 0.001$ and item $F_2(1,34) = 6.28$, $p < 0.05$ analyses, this effect was only due to the interaction pattern between sentence type (metaphor/literal) and familiarity, $F_1(1,53) = 31.48$, $p < 0.001$, $F_2(1,34) = 3.85$, $p = 0.058$. That is, the metaphoricity effect was produced by the group of unfamiliar metaphors. The unfamiliar metaphors were rated as significantly less coherent with prior context than their literal interpretation $F_1(1,53) = 115.90$, $p < 0.0001$; $F_2(1,34) = 11.23$, $p < 0.005$. However, the familiar metaphors and their literal interpretations did not differ significantly on the coherence scale, as predicted by the Graded Salience Hypothesis, $F_1(1,53) < 1$, n.s., $F_2(1,34) < 1$, n.s.

Table 1: Familiarity and coherence ratings (SD in parentheses)

Item type	Familiar metaphor		Unfamiliar metaphor	
Contextual bias	Literal	metaphorical	literal	metaphorical
Coherence	5.15 (1.08)	5.20 (1.01)	5.70 (0.77)	4.63 (0.83)

2.1.3 Discussion

As predicted by the Graded Salience Hypothesis, low familiar metaphors were rated as less coherent with prior context than their (more familiar) salience-based literal interpretations; in contrast, familiar metaphors and their (familiar) literal interpretations were rated as similarly coherent with their respective contexts. In addition, highly familiar metaphors were rated as more coherent than low familiar metaphors. Such findings cannot be accommodated by either the Standard Pragmatic Model or the Direct Access View. According to the Standard Pragmatic Model, familiar metaphors and their literal interpretations should be viewed as distinguished in terms of coherence. According to the Direct Access View, unfamiliar metaphors and their literal interpretation should be viewed as equivalent in terms of coherence with their biasing contexts. These predictions did not gain support here.

The factor that best accounts for the different degrees of the coherence ratings is the degree of salience of the related stimuli, irrespective of figurativeness. When relevant/related items (Giora 1985) differ in terms of familiarity, it is their degree of familiarity that affects their degree of coherence.

2.2 Experiment 2

Experiment 2 aims to test the Optimal Innovation Hypothesis, which predicts that familiar metaphors and their familiar literal interpretations, rated as similarly coherent, would be similarly pleasing; however, unfamiliar metaphors, rated as less coherent with prior context than their (more familiar) literal interpretations, would be rated as more pleasing than these literal interpretations.

2.2.1 Method

Participants. One hundred and fourteen Linguistics and Social Sciences undergraduates of Tel Aviv University volunteered to act as participants. They were all native speakers of Hebrew, aged 21–26.

Materials. Same as in Experiment 1.

Procedure. Participants were each presented a booklet and were asked to rate the extent to which the last (target) sentence in its given context induces pleasure on a 7 point liking/pleasurability scale (1 = least pleasing; 7 = highly pleasing).

2.2.2 Results

Findings are presented in Table 2. They are consistent with the Optimal Innovation Hypothesis. Indeed, familiarity affected pleasurability. Familiar items were rated as more pleasing than unfamiliar items, $F_1(1,113) = 42.00$, $p < .0001$, $F_2(1,34) = 9.29$, $p < .005$. On the other hand, figurativeness, on its own, had no effect, $F_1(1,113) = 2.62$, n.s., $F_2(1,34) < 1$, n.s. Importantly, however, there was an interaction between sentence type (metaphor/literal) and familiarity, $F_1(1,113) = 7.61$, $p < .01$, $F_2(1,34) = 2.66$, $p = .11$. This interaction was due to the fact that unfamiliar metaphors were significantly more pleasurable than their (more familiar) literal interpretations $F_1(1,113) = 10.75$, $p < 0.005$, $F_2(1, 34) = 3.15$, $p = 0.085$, as predicted. In contrast, the familiar metaphors and their familiar literal interpretations did not vary significantly on the pleasurability scale, neither by subject ($F_1 < 1$) nor by item analyses ($F_2 < 1$), as predicted.

Table 2: Familiarity and pleasure ratings (SD in parentheses)

Item type	**Familiar Metaphor**		**Unfamiliar Metaphor**	
Contextual bias	literal	metaphorical	literal	metaphorical
Pleasure	4.03 (0.87)	3.96 (0.98)	3.52 (0.93)	3.79 (0.49)

2.2.3 Discussion

Novel metaphors meet the requirements of optimal innovation (5): They involve a novel (metaphorical) response to a familiar (literal) stimulus, without blocking its salience-based (literal) interpretation, as can be also deduced from their longer reading times compared to their literal interpretations (Giora and Fein 1999a). Their literal interpretations, however, do not: They involve only their salience-based interpretation. Hence, the difference in pleasurability ratings found between novel and familiar interpretations of the same stimuli.

The familiar metaphors used in this study did not vary salience-wise from their literal interpretations (as can be deduced from their equal reading times shown in Giora and Fein 1999a) and could not be classified as optimally innovative. No wonder they did not vary on the pleasurability scale. Their high ratings (compared to similar ratings of novel metaphors), although, in fact, incomparable, may provide only partial support for the view that familiarity is a crucial factor in pleasurability. In this respect, our view differs from that of other models of pleasurability (Berlyne 1971; Bornstein and D'Agostino 1992; Giora et al. 2004; Harrison 1977; Kunst-Wilson and Zajonc 1980; Zajonc 1968, 1980, 2000). Although these models attribute to familiarity a role in pleasure, they predict low pleasure ratings for high (and low) familiar items. In contrast, the Optimal Innovation Hypothesis predicts moderate pleasure ratings for high familiar items (as shown by Giora et al. 2004).

Additional support for the view that it is not figurativeness that accounts for pleasurability but optimal innovativeness comes from findings in Giora et al. (2004). In Giora et al. (2004), we tested this assumption by using the 10 most familiar and the 10 most novel items of the set used here. We figured that since the most familiar metaphors will be more familiar than their literal interpretations, it is their literal interpretation that would meet the requirements for optimal innovativeness, involving both salient (metaphorical) and low-salience (literal) responses. In contrast, the most novel metaphors will be rated as more pleasing than their literal interpretations, since they involve both a familiar salience-based (literal) interpretation alongside a novel (metaphorical) interpretation, which their literal interpretations do not. Findings indeed show that while novel metaphors were rated as more pleasing than their literal interpretations (Figure 1), most familiar metaphors were rated as less pleasurable than their literal interpretations, which were found to be more pleasing. Increase in figurativeness, then, does not guarantee increase in liking (see Figure 2). Instead, it is optimal innovativeness that incurs pleasure regardless of figurativeness.

In all, these findings support the Optimal Innovation Hypothesis according to which optimally innovative rather than metaphorical interpretations of same stimuli account for pleasurability. Theories assuming that the salience-based (literal) interpretations of novel (metaphorical) stimuli need not be computed in the process of their interpretation and might be circumvented due to a strong context cannot account for these findings.

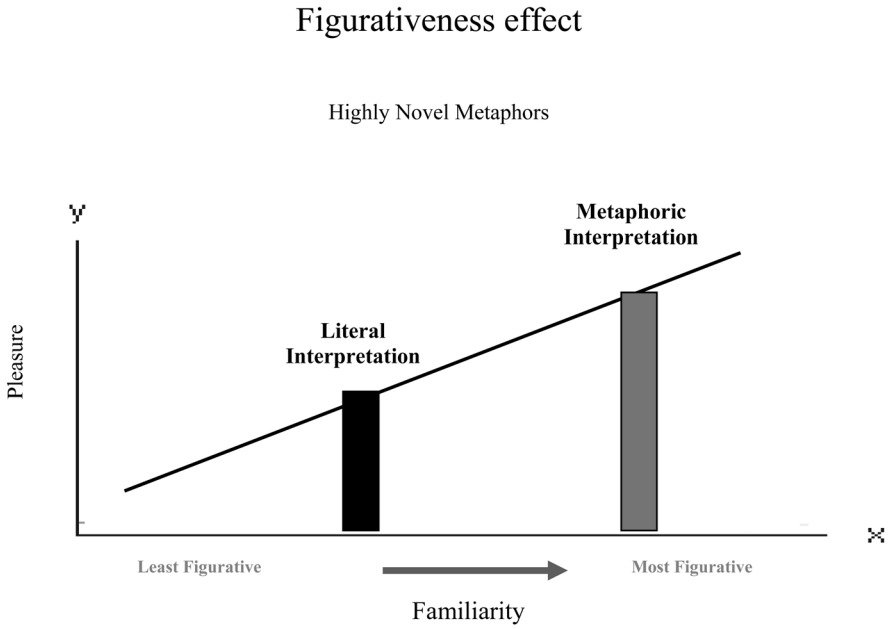

Figure 1: Pleasure ratings are a function of figurativeness

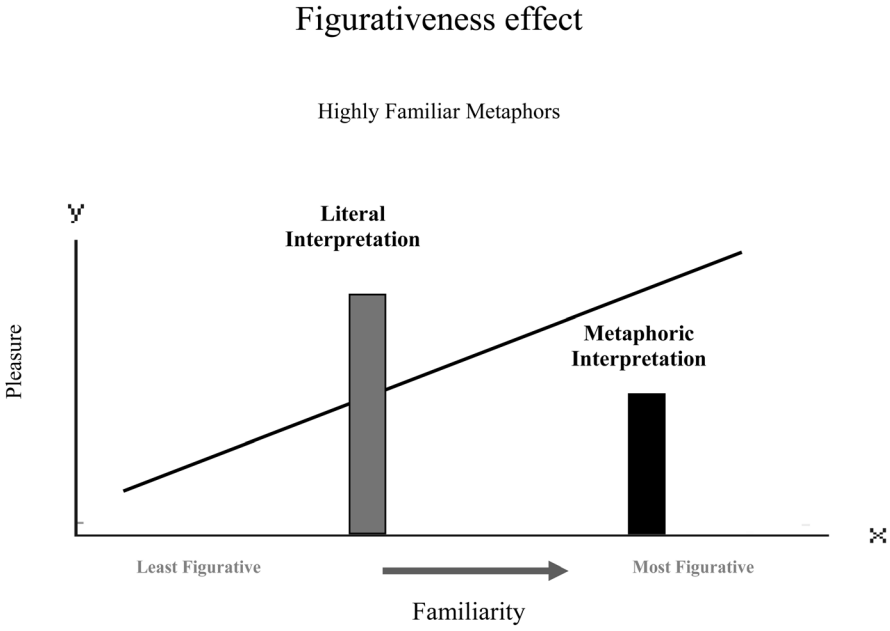

Figure 2: Pleasure ratings are not a function of figurativeness

3 General Discussion

Our studies show that, contrary to the Standard Pragmatic Model, metaphor does not hamper coherence; it is only novel metaphor that is viewed as hampering coherence (Experiment 1; Giora and Fein 1999a), as predicted by the Graded Salience Hypothesis. Complementarily, our studies show that, contrary to the Direct Access View, (given a highly informative prior context) metaphorical and literal interpretations of utterances are not equally coherent; it is only familiar metaphor and its familiar literal interpretation that cohere equally smoothly (Experiment 1; Giora and Fein 1999a), as predicted by the Graded Salience Hypothesis. Assuming similar relatedness to prior context and its discourse topic (Giora 1985), degree of coherence is sensitive to degree of salience rather than to degree of figurativeness. Compared to novel, nonsalient interpretations, salient meanings and salience-based interpretations are viewed as more coherent with prior context, regardless of figurativeness (Gibbs 1980).

Our studies further show that it is not metaphor that is pleasing; it is only novel metaphor that is viewed as likable; familiar metaphors are just as pleasing as their familiar literal interpretations (Experiment 2).

Our studies, thus, suggest that people might use utterances that hamper coherence in order to affect pleasure. Indeed, our studies demonstrate that pleasure ratings are induced by optimal innovation – innovation that allows the recoverability of a (familiar, conventional) response in the process of deriving a novel one, regardless of figurativeness (Giora et al., 2004).

Earlier research also suggests that people use language that hampers coherence in order to produce aesthetic effects. In Giora (1993), analogies were shown to interfere with comprehension. Notwithstanding, when scientific texts contained analogies, they were rated as more pleasing than when they did not.

At first blush, optimal innovations may seem more relevant (à la Sperber and Wilson 1986, 1995) than familiar expressions. Indeed, optimal innovations are rich in contextual effects. However, they are also highly taxing. And although familiar expressions are not as productive, they are still quite likable (Giora et al. 2004), while being less taxing. Contrary to appearances, then, both familiar and optimally innovative stimuli can be equally relevant.

In fact, what's likable about optimal innovativeness is the recognition of the familiar in the novel (Freud 1905; Giora et al. 2004), which is processed on account of its degree of saliency rather than due to its contextual (ir)relevance (e.g., the literal interpretation of novel metaphors; the metaphorical meaning of familiar metaphors and idioms intended literally). The Direct Access View, which assumes that contextually appropriate novel metaphors need not involve

processing their irrelevant literal interpretations in highly supportive contexts and, likewise, that contextually appropriate literal interpretations of highly familiar metaphors embedded in highly supportive context need not involve processing their metaphorical interpretations (for evidence to the contrary, see Gibbs 1980; Giora et al. 2004), will have difficulties accounting for the aesthetic ratings of the optimally innovative stimuli.

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