Recanati, F. (1993). Direct reference: From language to thought. Cambridge: Blackwell. Searle, J. (1975). "Indirect speech acts". In: Cole, P. and P. Morgan (eds.). Syntax and semantics 3: Speech acts. New York: Academic Press: 59-82.

Searle, J. (1979). "Metaphor". In: Ortony, A. (ed.). *Metaphor and thought*. New York: Cambridge University Press: 92–123.

Sperber, D. and D. Wilson (1986). Relevance: Communication and cognition. Cambridge: Blackwell.

Steen, G. (2002). "Metaphor identification: A cognitive approach". Style 36: 286-417.

1.412 Jajace (21.01)

Noa Shuval and Rachel Giora

Linguistics, Tel Aviv University

BEYOND FIGURATIVENESS: OPTIMAL INNOVATION AND PLEASURE

Abstract

Two studies (Giora Fein, Kronrod, Elnatan, Shuval and Zur 2004; Giora, Kotler and Shuval, in press) show that, contrary to the classical (Aristotle, 350 BCEa) and contemporary view (e.g., Sopory and Dillard 2002), it is not figurativeness that is necessarily aesthetic. Instead, it is optimal innovativeness that accounts for pleasure ratings. According to The Optimal Innovation Hypothesis (Giora 2003; Giora et al. 2004), an optimally innovative stimulus, such that evokes a novel response while allowing for the recovery of a salient one (Giora 1997, 2003), would be more pleasing than either a more or a less familiar stimulus, regardless of figurativeness. In Giora et al. (in press), we show that the metaphoric meanings of novel metaphors, which are, by definition, optimally innovative, were rated as more pleasing than their more salient, literal counterparts. In contrast, no such effect was found for familiar metaphors, which are not optimally innovative, since both their literal and nonliteral meanings enjoy similar salience. Indeed, familiar metaphors and their literal interpretations were rated as similarly pleasing. In Giora et al. (2004), we further show that, for extremely familiar metaphors and their less salient literal counterparts, the effect is reversed; the literal stimuli, which are optimally innovative, were rated as more pleasing than their salient, metaphoric meanings. These studies support the view that figurativeness is neither sufficient nor necessary for inducing pleasure. Instead, pleasure is sensitive to optimal innovation.

1. Introduction

What makes a stimulus pleasing? Is it possible to establish pleasure on the basis of a specific principle? In *Poetics*, Aristotle (350 BCEa) tackled this question, contending that:

The perfection of style is to be clear without being mean. The clearest style is that which uses only current or proper words; at the same time it is mean... That diction, on the other hand, is lofty and raised above the commonplace which employs unusual words. By unusual, I mean strange (or rare) words, metaphorical, lengthened- anything, in short, that differs from the normal idiom. Yet a style wholly composed of such words is either a riddle or a jargon; a riddle, if it consists of metaphors; a jargon, if it consists of strange (or rare) words. For the essence of a riddle is to express true facts under impossible combinations. Now this cannot be done by any arrangement of ordinary words, but by the use of metaphor it can... A certain infusion, therefore, of these elements is necessary to style; for the strange (or rare) word, the metaphorical, the ornamental, and the other kinds above mentioned, will raise it above the commonplace and mean, while the use of proper words will make it perspicuous. (Section 3, part xxii)

Traditionally, Aristotle has been perceived as identifying metaphor with unusual language use, viewing it as something complex and riddle-like, more sophisticated than "ordinary words". Consequently, this has become the classical distinction between metaphoric and literal language. On this view, then, metaphor is complex and poetic. It relies on anomaly or on a divergence from simple or "commonplace" literal language. It involves the representation of one object in terms of another while assuming some similarities between the two different objects. (Section 3, part xxi)

In *Rhetoric*, Aristotle (350 BCEb) continues, saying that: "...[V]ariation from what is usual makes the language appear more stately...It is therefore well to give to everyday speech an unfamiliar air: people like what strikes them, and are struck by what is out of the way" (Book 3, part 2). When discussing "the way to devise lively and taking sayings", Aristotle is assuming that:

[W]e all naturally find it agreeable to get hold of new ideas easily: words express ideas, and therefore those words are the most agreeable that enable us to get hold of new ideas. Now strange words simply puzzle us; ordinary words convey only what we know already; it is from metaphor that we can best get hold of something fresh (Book 3, part 10).

Here, Aristotle further claims that because of its sophisticated nature, metaphor allows us to understand new ideas easily, which makes it the most agreeable linguistic form: "Metaphor, moreover, gives style clearness, charm, and distinction as nothing else can" (Book 3, part 2). While metaphor is not "strange" to the point of becoming incomprehensible because it has a familiar

element to it, it is nonetheless relatively alien and riddle-like, compared to the commonplace discourse (which Aristotle associates with the literal discourse).

In this chapter we challenge the classical claim that metaphoric language is more sophisticated and complex than literal language. Particularly, we argue that the equation between metaphoricity (or figurativity) and pleasure does not hold. We show that figurativity is neither necessary nor sufficient for inducing gratification. Instead, it is Optimal Innovation that pleasure is sensitive to (Giora et al. 2004).

2. The Optimal Innovation Hypothesis

Before defining Optimal Innovation, let us first consider a few examples that tease apart metaphoricity and pleasure:

In the op-ed section of Haaretz – an Israeli daily – Akiva Eldar (2004), a journalist, described Sharon's – Israeli Prime Minister – disengagement plan as a plan to dissect the occupied territories into "Bantustines". The term Bantustines is a neologism made up of "Bantustans", and "Palestine". This neologism brings out the affinities between the Israeli 'peace plan' and the "institutionalized apartheid regime in South Africa" (Reinhart 1994), thus creating a new, **literal** concept.

A different example can be found in a poster created by the Israeli artist David Tartakover (2003) titled *Stain* (1). This poster includes a portrait of the artist smeared by a red smudge in the shape of the map of the occupied West Bank, with the word "stain" written on it. By featuring a literal stain smudged on a man's face, the poster de-automatizes a familiar Hebrew metaphor – stain - that connotes guilt and shame. It is the shape of that stain that is responsible for the de-automatization: It makes it clear that that shame is a consequence of the Israeli treatment of the occupied territories. So even though there is a metaphoric expression involved, the aesthetic pleasure is derived from its less salient **literal** interpretation.¹

¹ It might also be worth noting that at least for non-natives speakers of English, the word Stain seems phonologically similar to the last part of the word Palestine. This phonologic similarity stresses the inseparability of the Palestinian struggle from the Israeli occupation.

(1)



דוד טרטקובר, "כתם", 2003

Another, more comic example is a cartoon by Lee Adam Herold (2004), featuring a (hockey) masked figure holding a knife to a frightened looking child, captioned "While the other kids were cutting math class, butch was cutting Jim". Here, both the image and the spelling (Jim instead of Gym) support the literal meaning of cutting. Nonetheless, we cannot avoid accessing the salient idiomatic interpretation of "cutting Gym" (as in 'not attending class'). The sophistication of this surprising instance of the **literal** use of cutting is what we find gratifying.

(2)



While the other kids were cutting Math class, Young Butch was cutting Jim.

According to the Optimal Innovation Hypothesis (3; and see also Giora 2002, 2003; Giora et al. 2004; Giora et al. in press), pleasurability is a function of optimal innovativeness rather than of figurativity (4):

- (3) "The Optimal Innovation Hypothesis Pleasurability is sensitive to optimal innovation.
- (4) Optimal Innovation

A stimulus would be optimally innovative if it involves

(a) a novel – less or nonsalient – response to a given stimulus, which differs not only quantitatively but primarily qualitatively from the salient response(s) associated with this stimulus

and

(b) at the same time, allows for the automatic recoverability of a salient response related to that stimulus so that both responses make sense (e.g., the similarity and difference between them can be assessable, see also Giora 2002, 2003: 176–184)" (Giora et al. 2004: 116).

For a response (e.g., a meaning) to be salient, it should be coded in the mental lexicon and foremost on our mind due to experiential familiarity, frequency, conventionality, or prototypicality (see Giora 1997, 1999, 2003: 13–38; Giora 2004). Coded responses that are low on these dimensions would be less salient. Uncoded, derived responses are nonsalient. Salient and less salient responses would be accessed automatically when the processor encounters the relevant stimulus, whether the context invites them or not. Their order of activation would, however, be sensitive to salience: Salient responses would be activated faster. To the extent that a linguistic innovation (Bantustines) allows an insight into some salient meanings (Bantustans) while promoting new ones ('the Israeli plan of disengagement is similar to the South African Bantustan policy'), it is optimally innovative.

The notion of optimal innovation thus excludes familiar stimuli (throw him a bone); familiar stimuli do not meet the requirement in (4a), since they offer no novel response. Neither would pure innovations (mow him a bow) count as optimal. Pure innovations do not meet the requirement in (4b), as they do not involve the recovery of any salient response on top of the novel one.

But not any variation of a familiar expression would meet the criteria for optimal innovation: Requirement (4a) states that for stimuli to be optimally innovative, they should be more than just variants of familiar stimuli. Instead, they should be qualitatively different; a variant such as throw him bones, may involve a slight modification of a familiar expression (throw him a bone), but it is not sufficiently innovative. Despite the alteration, it does not result in a novel, qualitatively different response. Because both the familiar expression and its variant refer to the same concept, these responses do not make up an optimal innovation (Giora et al. 2004).

2.1. Is pleasure sensitive to figurativeness or rather to optimal innovativeness?

The Optimal Innovation Hypothesis undermines the classical distinction between simple, literal language and complex, poetic-figurative language. Since optimal innovation is not defined in terms of figurativeness, the pleasure it is expected to induce cannot be accounted for by either figurativeness or literality, but only by the optimality of the novelty. As stated earlier, optimal innovation involves salient and less or nonsalient responses, qualitatively different from each other. Since it is possible for an optimal innovation to involve no figurative meaning, figurativeness is not a necessary condition for optimal innovation. For instance "News from a broad" – the title of the international news column in Bust, a feminist magazine – is based on a literal pun, revealing that the journalist responsible for the column is in fact a woman. This is an optimal innovation even though it involves no figurativeness.²

Alternatively, the reason we find the joke "if the world didn't suck, we'd all fall off" funny, is because it de-automatizes the idiomatic meaning of the verb "suck" by activating its literal meaning, which is much less salient in such a syntactic structure.³

We should note in passing that the classical role of the figurative as pleasing is not a sufficient condition for inducing gratification either. While on the classical view, figurative language as such is more sophisticated and therefore more pleasing than literal language (see also Sopory and Dillard 2002; and see Steen 1994 for a review), on The Optimal Innovation Hypothesis, pleasure is indifferent to figurativeness per se. As a result, the theory would have different predictions for different cases (Giora et al. 2004):

- (5) Novel metaphors would be rated as pleasing more pleasing than their more familiar literal interpretations.
- (6) Familiar metaphors that do not differ in familiarity from their literal interpretations would not differ from them in likeability, as neither of them is novel (4a).
- (7) Highly familiar metaphors, whose metaphoric meaning is highly salient, would be rated as less pleasing than their less salient literal interpretations.

² See the first three experiments reported in Giora et al. (2004) dealing with literal optimal innovations, showing that indeed they induce high pleasure effects.

³ The verb suck requires both an agent and a patient to be interpreted literally.

In order to test the different predictions in the case of metaphors, we conducted a number of experiments. In the first experiment (Giora et al. in press) our goal was to examine the liking predictions (5–6) for two kinds of metaphors and their literal interpretations: novel metaphors (which took longer to read than their literal interpretation, see Giora and Fein 1999) and familiar metaphors having equally familiar literal interpretation (which took equally long to read, see Giora and Fein 1999). The experiment's (originally Hebrew) materials (taken from Giora and Fein 1999) were made up of short stories (about 3 sentences each) followed by the target item: a novel or a familiar metaphor. Each item was embedded in two context conditions: one, supportive of its literal interpretation and the other, supportive of its figurative interpretation.

Familiar item:

(8) Context supportive of the literal meaning:

I had a rough day and I couldn't wait to get home. I left my office and was getting into my car when I saw my neighbor heading towards the bus stop. I honked at him, and asked him if he would like a ride home. He accepted my offer, and after noticing how tired I was he asked if I would like him to do the driving. I agreed, and as we started moving I fell asleep. I did the rest of the way with my eyes closed.

(9) Context supportive of the figurative meaning:

I had a rough day and I couldn't wait to get home. I left my office and was getting into my car when I saw my neighbor heading towards the bus stop. I honked at him, and asked him if he would like a ride home. He accepted my offer, and after noticing how tired I was he asked if I would like him to do the driving. I smiled and said: With you, I will travel with my eyes closed.

Novel item:

(10) Context supportive of the literal meaning:

In a survey taken in July studying the summer recreational habits of the Israeli family, it turned out that the Israeli family prefers traveling abroad. As for the preferred destination, it turns out that in the past 3 years at least one in three families has gone to Antalya.

(11) Context supportive of the figurative meaning:

In an article published in July, Yoel Markus describes a change in Israeli politics: "Ideology has almost ceased to exist within politics".

Israelis prefer their lives to be normal, better and safer. And the ideology? It has gone to Antalya.

We started with a pretest to determine the relative familiarity of the target items: participants received a list of metaphors (taken from Giora and Fein 1999) and were asked to rate each item on a 7-point familiarity scale (where 1 was 'unfamiliar' and 7 was 'highly familiar'). They were told that the items were metaphors. In addition, they were asked to write down the meaning of each item, to confirm that the familiar metaphoric sense of the familiar items was recognized. Items scoring above 5 were considered familiar; items scoring below 5 were considered less-familiar/innovative. This rating test resulted in 20 innovative items ('novel metaphors') and 16 familiar items ('familiar metaphors').

In a second pretest we aimed to establish the set of optimally innovative items. Since an optimally innovative stimulus should invoke a salient but contextually inappropriate response as well as a novel but contextually appropriate response, it would most probably be judged as less coherent in a given context than a salient, but contextually appropriate response.⁴ The assumption was that, in a literally biasing context, a (metaphoric) novel item (has gone to Antalya) would only involve its contextually appropriate literal meaning 'trust': while a (metaphoric) familiar item (with my eyes closed meaning 'trust') would involve its salient and contextually appropriate literal meaning as well as its salient but contextually inappropriate metaphoric meaning. By contrast, in a metaphorically biasing context, a novel metaphor (has gone to Antalya) would involve both its nonsalient contextually appropriate metaphoric meaning and its more salient but contextually inappropriate literal meaning, while a familiar phrase (with my eyes closed) would, again, involve the two meanings, the literal (now contextually inappropriate) meaning, as well as the (contextually appropriate) metaphoric meaning.

Having distinctly different novel and salient interpretations should render these items optimally innovative (4). Thus, an item (i.e., a novel stimulus in a metaphorically biasing context) would be judged as less coherent with its context compared to the same item embedded in a context supporting its salient meaning (i.e., a novel metaphoric stimulus in a literally biasing context). In

⁴ It is important to note that the term salience refers only to the modular lexical access of meaning of words and expressions. This process differs from the independent guessing and inferential process that runs in parallel, enabling the addressee to predict the contextually appropriate meaning. For a further discussion of the differences between these two processes, see Giora (2003: 13–60); Peleg, Giora and Fein (2001).

contrast, for items involving two similarly salient meanings (i.e., a familiar metaphor in a literally as well as in a metaphorically biasing context) there would be no differences in coherence judgments, for in none of these conditions do we find optimal innovations. Although two different meanings are involved here, they are both similarly salient and thus offer no novelty.⁵

The participants received booklets (in complimentary distribution) made up of the familiar and novel items (as rated in the previous pretest) embedded in contexts biasing their literal or metaphorical meanings. Subjects were asked to rate on a 7-point naturally fitting scale (where 7 was highly fitting and 1 was entirely unfitting with prior context) the extent to which each target – the final utterance – was appropriate in or naturally fitting with its given context.

The results of this second pretest showed that, as predicted, the novel items (has gone to Antalya) were rated as significantly less coherent with their prior context when embedded in a metaphorically biasing context (4.31) than in a literally biasing context (5.83). In contrast, the familiar items (with my eyes closed) exhibited no significant difference whether intended literally (5.42) or metaphorically (5.39); in both cases the items they were rated as similarly coherent.

These results established the optimal innovativeness of the novel stimuli in a metaphorically biasing context – the only type of stimuli out of the four tested that met the conditions for optimal innovation. They further established the set of familiar, non-innovative items. Having established these sets, we now tested the predictions of The Optimal Innovation Hypothesis.

Experiment 1 thus aimed to show that: (a) a novel metaphoric interpretation (has gone to Antalya) would be perceived as more pleasing than its more salient, literal interpretation; (b) a familiar metaphor (with my eyes closed), would result in symmetric pleasure effects for both equally salient interpretations.

In the main study of this experiment, participants were asked to rate on a 7-point pleasurability scale (where 1 was least pleasing and 7 was highly pleasurable) the extent to which each target, embedded in either a metaphoric or a literal context, was pleasing or likable.

The results showed that, as predicted, stimuli were judged as significantly more pleasing in a metaphorically biasing context (3.82), which invited their novel interpretation, than in a literally biasing context (3.39), which invited their more salient meaning. In contrast, familiar stimuli were just as pleasing in a literally (3.95) as in a metaphorically biasing context (4.02). It is optimal innovation, then, rather than figurativity that accounts for pleasurability

differences: while novel metaphors, which make up optimal innovations, were rated as more pleasing than their literal salient counterparts, there was no difference in the pleasure ratings for familiar metaphors and their literal counterparts, which did not differ in salience.

It was now left to show that the literal interpretation of highly familiar metaphors would be rated as more pleasing than their more salient, metaphoric interpretation (7; and see Giora et al. 2004). To do that, we used highly familiar metaphors, more familiar than those used in the previous experiment. The assumption was that for these metaphors, the literal meaning would be less salient than the metaphoric meaning, and would thus qualify as optimal innovation. In addition, we also aimed to replicate our findings for novel metaphors. Recall that according to The Optimal Innovation Hypothesis, we should expect novel metaphors to yield higher pleasure ratings than their literal counterparts. Such findings would strengthen the association between optimal innovation and pleasure while questioning the received association between figurativeness and pleasure.

To compile the set of experimental targets, we collected familiarity ratings for 200 metaphors. Subjects were asked to rate each metaphor on a 7-point familiarity scale. In addition, they were asked to write down the meaning of each item, to confirm that the familiar metaphoric sense of the familiar items was recognized.

Results yielded 20 highly familiar metaphors – scoring between 6.44–6.93 on the familiarity scale – and 20 highly novel metaphors – scoring between 1.03–1.97 on this scale. The analysis of the spelled out interpretations confirmed that the metaphors rated as familiar indeed achieved agreement on their salient metaphoric sense as assumed, while the novel metaphors did not. These items also served as the materials for the second pretest.

In this second pretest, as in the second pretest of the previous experiment, we aimed to establish a set of optimally innovative items. As mentioned above, since an optimally innovative stimulus invokes a salient response – contextually inappropriate in this case – on top of a qualitatively different, less or nonsalient but contextually appropriate response, it would be judged as less coherent than a salient, contextually appropriate response in a context biased toward its salient interpretation. For highly familiar metaphors, the less salient response would be their literal interpretation. For novel metaphors, the less salient response would be their metaphoric interpretation

In this pretest, participants were presented booklets (in complimentary distribution) containing 20 highly familiar items and 20 highly novel items (see pretest) embedded in contexts inviting either their literal or their metaphorical meaning. Subjects were asked to rate them on a 7-point naturally fitting scale

⁵ On the automatic activation of the salient response, see Giora (2003); on the involvement of the salient response in metaphor comprehension see Giora and Fein (1999).

(where 7 was highly fitting and 1 was entirely unfitting with prior context) the extent to which each target was appropriate in or naturally fitting with its given context.

Highly Familiar item:

(12) Context supportive of the literal meaning:

Gidi started working this summer as a postman. He really enjoyed his work, but every time he would reach the Cohen residence, the family Doberman would attack him. Gidi felt helpless until Gila suggested that next time he should try to throw him a bone.

(13) Context supportive of figurative meaning:

Gidi and Gila have been studying together in the philosophy department. They both worked in temp jobs, hardly making any money. One day Gila was offered a job in a high tech company. When Gidi heard that Gila has tripled her salary, he asked her if she would be willing to throw him a bone.

Highly novel items:

(14) Context supportive of literal meaning:

Coming back home from work, Shahar brought with him two pita breads with falafel for his and Karen's lunch. After sitting down to eat, Karen tasted her pita and said: "Why do you always have to add Tabasco to everything?"

(15) <u>Context supportive of figurative meaning</u>:

Shahar and Barak just met after a few months in which they haven't seen each other. Shahar told Barak that he looks very well, and that his new fuller look really suits him. To this Barak replied: "Why do you always have to add Tabasco to everything?"

The assumption was that, in a literally biasing context, a highly novel (metaphoric) item (Why do you always have to add Tabasco to everything?) would only involve its contextually appropriate literal meaning, while a highly familiar (metaphoric) item (to throw him a bone) would involve both its less salient, contextually appropriate literal meaning as well as its more salient, contextually inappropriate metaphoric meaning. By contrast, in metaphorically biasing context, a highly novel metaphor (Why do you always have to add Tabasco to everything?) would involve both its nonsalient contextually appropriate metaphoric interpretation as well as its more salient, contextually

inappropriate literal meaning. In such a context, however, a highly familiar metaphor (to throw him a bone) would primarily involve its contextually appropriate salient metaphoric meaning.

Having distinctly different novel and salient interpretations should render these items optimally innovative. Thus, a highly novel stimulus embedded in a metaphorically biasing context or a highly familiar metaphoric stimulus embedded in a literally biasing context would be rated as less coherent than when embedded in a context supporting their salient meaning.

Results showed that highly novel items were rated as significantly more coherent when embedded in a context supporting their literal (14) salient meaning (5.77), than when embedded in a context supporting their metaphorical (15) nonsalient meaning (3.78). In contrast, highly familiar items were rated as significantly more coherent when embedded in a context supporting their metaphorical (13) more salient meaning (5.86) than when embedded in a context supporting their literal (12) less salient meaning (5.25).

This pretest established a set of metaphors and literals that are optimally innovative. Now we could test the prediction of The Optimal Innovation Hypothesis assuming that it is optimal innovation rather than metaphoricity that should account for pleasure ratings.

The aim of the second experiment was to show that pleasure is sensitive to optimal innovation, regardless of figurativeness. Items meeting the optimal innovation requirements (metaphoric interpretations of novel metaphors and literal interpretations of highly familiar metaphors) would be rated as more pleasing than their counterparts (metaphoric interpretations of highly familiar metaphors and literal interpretations of novel metaphors), which do not.

The materials were identical to those used in the previous test. Participants were asked to rate the extent to which each target, embedded in its respective context, was pleasing on a 7-point pleasurability scale (where 1 was not pleasing and 7 was highly pleasurable).

In all, our predictions were confirmed only with regard to novel metaphors and their more familiar literal interpretations. Novel metaphors were rated as significantly more pleasing in a metaphorically biasing context (4.02) than in literally biasing context (3.53). However, for the highly familiar metaphors, the difference (3.64 vs. 3.78), though in the right direction, did not reach significance.

To check if pushing the salience imbalance to the extreme would allow this tendency to reach significance, we selected the 10 most highly familiar metaphors (scoring 6.71–6.93 on the familiarity scale) and the 10 most highly novel items (scoring 1.03–1.62 on that scale) and compared their pleasurability ratings. Indeed, this test resulted in the anticipated pleasure ratings differences.

As expected, extremely novel metaphors were rated significantly more pleasing in their non-salient metaphorically biased context (4.00) than in a more salient literally biased context (3.46). In addition, there was also a significant difference between the two interpretations of the most familiar metaphors: they were rated as more pleasing in a less-salient literally biasing context (4.02) than in a more salient metaphorically biasing context (3.60). Since their literal interpretation is a novelty that evokes the salient, it is more pleasing than their salient metaphorical interpretation, which involves no novelty.

3. Discussion

Taken together, the results of the two studies reported here support our claim that figurativity is neither necessary nor sufficient for gratification. Instead, it is optimal innovation that can account for pleasure ratings. In the first study we showed that items of similar salience (i.e., familiar metaphors and their familiar literal counterparts) yielded similar pleasure ratings; complementarily, items diverging in salience (novel metaphors and their literal counterparts) yielded different pleasure ratings. The same holds for the second study: Items diverging in salience (highly novel metaphors and their more salient literal interpretation and extremely familiar metaphors and their less salient literal interpretation) yielded different pleasure ratings, with the highest pleasure ratings assigned to optimal innovations (metaphorical interpretations of novel and highly novel metaphors and literal interpretations of the most familiar metaphors). Pleasure is indeed sensitive to optimal innovation rather than to figurativeness.

Contrary to the classical interpretation of Aristotle presented at the outset, there is no relation between metaphoricity and pleasure: figurativeness on its own is not necessary for inducing pleasure, as there are cases in which pleasure stems from purely literal optimal innovations. Moreover, figurativeness is not even sufficient for pleasure effects: as shown here, at times, no difference was found between the pleasure generated by familiar metaphors and their literal counterparts. Furthermore, there were other cases in which the literal interpretation of an utterance was even more pleasing than its metaphoric interpretation.

However, a more charitable comment is in order here. Reviewing the conditions specified by Aristotle, ignoring for a moment his claim that "it is from metaphor that we can best get hold of something fresh", we might note that for Aristotle, the most pleasing discourse is not the most unusual or novel one (for we do not know the meaning of strange and unusual words – they "simply

puzzle us"). Neither is the most familiar pleasing (for "ordinary words convey only what we know already"). The most gratifying discourse according to Aristotle is the one combining the familiar with the novel, in other words, the one featuring optimal innovation.

REFERENCES

- Aristotle (350 BCEa). *Poetics*. Translated by Butcher S. H. The internet classic archive http://classics.mit.edu/Aristotle/poetics.1.1.html
- Aristotle (350 BCEb). *Retorics*. Translated by Roberts Rhys W. The internet classic archive http://classics.mit.edu/Aristotle/rhetoric.html
- Eldar A. (17.5.04). "The morning after the demonstration". *Haaretz* (B1)
- Giora, R. (1997). "Understanding figurative and literal language: The graded salience hypothesis". *Cognitive Linguistics* 7: 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. (2002). "Optimal innovation and pleasure". In: Stock, O., C. Strapparva and A. Nijholt (eds.). *Processing of The April Fools' Day Workshop on Computational Humour*. April 2002. ITC-itst. Trento (pp. 11–28). Trento: ITS-itst.
- Giora, R. (2003). On our mind: Salience, context and figurative language. New York: Oxford University Press.
- Giora, R. (2004). "Relevance of the graded salience hypothesis to intercultural pragmatics". *Intercultural Pragmatics* 1: 93–103.
- Giora, R. and O. Fein (1999). "On understanding familiar and less-familiar figurative language". *Journal of Pragmatics* 31: 1601–1618.
- Giora, R., O. Fein, A. Kronrod, I. Elnatan, N. Shuval and A. Zur (2004). "Weapons of mass distraction: Optimal innovation and Pleasure Ratings". *Metaphor and Symbol* 19: 115-141.
- Giora, R., N. Kotler and N. Shuval (in press). "Metaphor, coherence, optimal innovation, and pleasure". In: Andor, L. and P. Pelyvás (eds.). *Empirical, Cognitive-Based Studies in the Semantics-Pragmatics Interface*. Oxford: Elsevier Science.
- Herold, L. A. (2004). http://choppingblock.org/
- Peleg, O., R. Giora and O. Fein (2001). "Salience and context effects: Two are better than one". *Metaphor and Symbol* 16: 173-192
- Reinhart, T. (27.5.94) "The era of the yellow territories". *Haaretz weekend supplement*: 14–15. (In Hebrew).
- Sopory, P. and J. P. Dillard (2002). The persuasive effects of metaphor. Human Communication Research 28(3): 382-419.
- Steen, G. J. (1994). Understanding metaphor in literature: An empirical approach. London: Longman.
- Tartakover, D. (2003). Stain, poster.