

Live metaphors*

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1. Introduction

Accounts of metaphors can be distinguished on the basis of whether or not they propose that metaphors are interpreted through a specific interpretation process, different from the one used in non-metaphorical utterances. Accounts that defend such a specific interpretation process are *discontinuity* (or *discontinuous*) accounts, while accounts that reject the notion of an interpretation process specific to metaphors are *continuity* (or *continuous*) accounts.

In the present paper, I shall mainly be interested in a specific continuity account, the account originally given of metaphor in Relevance Theory (see Sperber & Wilson 1995), as well as its recent modifications as proposed by Carston (2002).

I shall begin by introducing classical accounts of metaphors in terms of *figurative meaning*, as well as discontinuity accounts building on them (e.g., Searle 1985). I shall show that the first such accounts meet with major difficulties, due to the fact that figurative meanings are dangerously near to paraphrases (indeed, it is difficult to see what else they could be) and that it is a well-known fact about metaphors, at least live ones, that they cannot be paraphrased without loss. One objection to the second kind of accounts is that they propose to recover figurative meanings through interpretative processes triggered by the necessary falsity of metaphors. However, not all metaphors are false and, what is more, for those that are false, negating them does not usually make them non-metaphorical. Then I shall outline the two successive accounts given of metaphors in Relevance theory and show why the second account is less successful than the first, while the first has nothing to say about the non-propositional effects of

* On December 21st 1990, I defended my Ph.D. thesis and became Kevin Mulligan's first Ph.D. in Geneva, and to my knowledge, his first Ph.D. ever. My Ph.D. thesis was concerned with fiction and metaphor, and, though I came back to fiction fairly regularly throughout the years, it is only recently that my interest in metaphor was revived. So this paper goes back to the year 1990 and to metaphor, and is, of course, dedicated to Kevin.

metaphors (about the non-propositional effects of metaphor, see, e.g., Davidson 1978, Guttenplan 2005).

2. Discontinuity accounts

Traditional accounts of metaphor have claimed that metaphors have two meanings:

- a *literal meaning* (which is generally false);
- a *figurative meaning* (which can be true or false, but which is generally true).

Let us begin with an example¹:

The sleep of reason begets monsters.

Suspending the activity of reason produces massive irrationality.

(1) is the metaphor, and if interpreted literally, it is false, probably necessarily so: reason is not the kind of entity that can sleep, neither can it beget (in the biological sense) anything. By contrast, (2), the so-called "figurative" meaning of (1), seems true (if not trivially true). What is more, some fairly recent accounts (e.g., Searle 1985) have defended the idea that it is the falsity (or conceptual incoherence) of metaphors that triggers the interpretation process through which figurative meaning is retrieved.

This approach, however, meets with two important difficulties, both to do with the notion that falsity is the central characteristic of metaphor. The first one is that all metaphors are not false, as shown by example (3)²:

No man is an island.

Another, and potentially more devastating objection, is that if metaphors *had* to be false, given the semantics of negation, (false) negated metaphors should stop being metaphors. As shown by examples (4) and (5), this is not the case:

John is a bulldozer (he does not care for other people's feelings).

¹ This is the English translation of the sentence Goya inscribed on the frontispiece of his *Caprichos*.

² This sentence, from Donne's XVIIth meditation, has been widely used to prove exactly the point I am making, i.e., that all metaphors are not false (thus, this is neither a new example nor a new argument).

John is not a bulldozer (he is a sweet and sensitive man, considerate of other people's feelings).

The fact that metaphors can be true makes the classical position with its hypothesis of double meanings, as well as any hypothesis positing a specific interpretation process triggered by falsity, rather fragile to say the least.

There is an additional problem for such discontinuist accounts of metaphors, which is that they cannot account for a major feature of metaphor, i.e., the fact that a metaphor cannot be paraphrased without a loss. This can be seen with example (1) above, which, arguably, is a live and creative metaphor, whose paraphrase in (2) seems to lose all creativity and liveliness. In addition, the very notion of a figurative meaning seems understandable only as something that can be linguistically formulated, which strongly suggests that it is a (if not *the*) paraphrase of the metaphor. So neither of those two discontinuist accounts can explain the impossibility of paraphrasing a metaphor, which is hardly surprising as they probably would have either to deny that metaphors cannot be paraphrased, or that figurative meaning is a paraphrase of the metaphor. I shall return below to the question of paraphrase and its link with metaphor (see § 6).

3. Metaphors in Relevance Theory: the original account

In the present paper, I shall mainly be concerned with the account of metaphor given in Relevance Theory (see Sperber & Wilson 1995). This, in contrast with the analyses discussed above, is what has come to be known as a *continuity* hypothesis, the hypothesis that metaphors are interpreted just like any other utterance, or, in other words, that they do not call for a specific interpretation process. This, of course, has to depend on a rather specific view of figurative utterances, and in Relevance theory, metaphors are treated as a species of vague communication. The idea is that all utterances are *interpretations*³ of a thought of the speaker, but they can be more or less literal, depending on the similarity with that thought. The notion of *similarity* is, of course, a vexed one (see Goodman 1970) and it was given the following meaning in Relevance Theory:

³ In a specific, technical, sense of the term "interpretation", which has to do with the relation between two representations, one of which is the representation (the "interpretation" in Sperber & Wilson's sense) of the other.

Similarity between two propositional representations is defined as depending on the number of implications the two representations would share when interpreted relative to the same context⁴.

There are then three possibilities:

- when the utterance is a *literal* interpretation of the thought, the set of implicatures of the utterance and the set of implicatures of the thought (interpreted relative to the same context) are identical;
- when the utterance is a *less than literal* interpretation of the thought, the set of implicatures of the utterance and the set of implicatures of the thought (idem) have a non-void intersection (or, in other words, an intersection different from the null set);
- when the utterance is not an interpretation of the thought (and there is *no resemblance* between the utterance and the thought), there is no intersection between the two sets of implicatures of the utterance and of the thought (idem; in other words, the intersection is the null set).

This means that all utterances can be localized along a continuum that goes from complete literality (a limit point) to the case in which the utterance is not an interpretation of the thought anymore (the other limit point): most utterances (including metaphors, and more generally tropes) will come in between as less than literal interpretations of the speaker's thought.

This view of communication and utterances claims that implicatures are central to any account of metaphor, just as they are central to any account of linguistic communication. Indeed, a specificity of metaphors relative to vague utterances, according to Relevance Theory, is that they communicate weakly a potentially unlimited array of implicatures, while vague utterances strongly communicate one or two implicatures. The basic idea is that a proposition is strongly implicated by an utterance if it has to be recovered for the

⁴ The notion of context in Relevance theory is not, as it is in some semantic theories, the immediate environment in which the communication is taking place. In Relevance Theory, the context is a set of mental representations in propositional forms taken from three sources: the perception of the environment in which the communication is taking place; the interpretation of previous utterances in the ongoing conversation; knowledge of the world as represented in long-term memory.

utterance to have a relevant interpretation; it is weakly communicated if its recovery can participate in the construction of a relevant interpretation, though the utterance suggests a range of other implicatures, any of which would do as well. Thus weakly communicating a wide array of implicatures leaves the hearer a greater liberty of interpretation than communication generally does.

In other words, metaphors communicate a wide array of implicatures none of which has to be specifically recovered for the utterance to meet the expectations of relevance, while vague utterances strongly communicate an implicature that has to be specifically recovered for the utterance to meet the expectations of relevance.

Let us have a look at some examples:

It is 5h30.

Caroline is a princess.

Let us suppose that when (6) is produced, it is in fact 5:28. Most of the implicatures of *It is 5:30* are the same as those of *It is 5:28*, for instance that one should hurry up (or, alternatively, that there is no need to hurry, one is on time). (7), if said of a commoner, is presumably a metaphor. One interpretation would be that Caroline is a spoilt girl, unlikely to dirty her hands to help anyone. Other interpretations are available, nevertheless, for instance that she is well dressed or elegant, etc.

A second specificity of metaphors relative to vague utterances is the reason the speaker choose to use them:

- regarding vague utterances, the reason is one of economy: the vague utterance is sufficiently similar to the thought and is less costly to process;
- regarding metaphors, the reason is that there was no other way of expressing the speaker's thought, because it was too complex to be expressed literally.

But, the main conclusion, as said above, is that metaphors do not need a specific interpretation process: they are interpreted, just as all utterances are, through the derivation of implicatures.

So, in sum, the original account of metaphors in Relevance Theory is that metaphors weakly communicate a wide array of implicatures, which is why they cannot be

paraphrased and why there cannot be a figurative meaning for a metaphor (none of its implicatures is strongly communicated enough to count as a figurative meaning). There is no literal way of expressing the speaker's thought.

4. Metaphors in Relevance Theory: the new account

This was the account Relevance Theory proposed of metaphors until Carston's (2002) book. She proposed a highly different account, still claimed to be squarely in the theoretical framework of Relevance Theory, but different from the original account in some major ways. On the face of it, Carston's account⁵ does keep quite a few things from the vintage account: hers still is a continuity account (it still claims that metaphors are interpreted just as are other utterances); again, it does not explicitly reject the idea that metaphors cannot be paraphrased, nor the hypothesis that there was no other way of expressing the speaker's thought, or the idea that metaphors weakly communicate a wide array of implicatures.

There is, however, a major departure between the vintage and the current accounts: while the vintage account insisted that metaphors were interpreted just as utterances in general are because they give rise to *implicatures* (and are thus in need of pragmatic interpretative processes), the current account insists that metaphors are interpreted just as utterances in general are because they give rise to *explicatures* (and are thus again in need of pragmatic interpretative processes). Explicatures are taken to be part of what is explicitly communicated, developments of the *logical* or *propositional form*⁶ of an utterance. The pragmatic processes implicated in these developments are *broadening* (widening a concept extension) and *strengthening* (reducing a concept extension).

The current view is that what happens when such pragmatic processes are operating in the interpretation of an utterance is that a concept in the propositional form (the

⁵ I shall call the account Carston proposes the "current Relevance Theoretic account" (or the "current account"), by contrast with the original account that I shall call the "vintage Relevance Theoretic account" (or the "vintage account"), in what follows.

⁶ In Relevance Theory, there is a distinction between the *logical form* of an utterance, which is the result of the linguistic (phonology, syntax, semantics) interpretation process, and the *propositional form* of the same utterance. Both are made of concepts. While the logical form of the utterance may be in need of complementation to be truth-evaluable, the propositional form is not: it is the result of the enrichment of the logical form, a pragmatic process, which corresponds, to a minimum, to the attribution of referents, and to lexical disambiguation and can include enrichment processes, i.e., broadening and strengthening.

concept that is the object of broadening or strengthening) is replaced by a so-called *ad hoc* concept. The notion of an *ad hoc* concept was introduced by Barsalou (1983), but I shall limit myself here to the account of the notion given by Carston (2002). According to that account, *ad hoc* concepts are constructed on the fly, through the processes of broadening and strengthening, which are themselves triggered and guided by the context and expectations of relevance. Thus, the current Relevance Theoretic account of metaphors comes to this: *metaphors are interpreted through the inclusion in their propositional forms of one (or several) ad hoc concepts replacing some (standard) concepts in the logical or propositional form.* This is also true of vague utterances, which explains why Carston's account is still a continuity account.

Let's begin by a vague utterance:

This steak is raw.

THIS STEAK IS RAW^{*7} (RAW^{*} = UNDERCOOKED)

The concept RAW^{*} is obtained by broadening, i.e., in this specific instance, by widening the extension of the concept RAW to include undercooked dishes.

Let's now go back to our example of a metaphor:

Caroline is a princess.

CAROLINE IS A PRINCESS^{**} (PRINCESS^{**} = A WOMAN NOT FROM A ROYAL FAMILY, SPOILT AND SELFISH, UNLIKELY TO HELP)

The explicature in (11) is obtained by a double process of first broadening the concept PRINCESS to include commoners (i.e., the resulting *ad hoc* concept PRINCESS^{*} includes all women, regardless of their family origins), and then strengthening the concept PRINCESS^{*} by including in its definition that it denotes SPOILT AND SELFISH WOMEN, UNLIKELY TO HELP (here the extension is reduced by taking a feature widely believed to be true of

⁷ I use small capitals, as is usual, to indicate concepts. The star after a concept indicates that it has undergone an operation of strengthening or broadening and has thus been replaced by the resulting *ad hoc* concept. Two stars after a concept (as in (11)) indicates that the *ad hoc* concept is the result of both broadening and strengthening operations, which have been applied in succession.

princesses and making it a definition of the *ad hoc* concept PRINCESS* yielding the final *ad hoc* concept PRINCESS**).

In the vintage Relevance Theoretic account, metaphors were supposed to have two distinguishing features:

- they weakly communicate a wide array of implicatures (which is why they cannot be paraphrased without loss);
- the speaker used a metaphor because his thought was too complex to communicate literally.

It is not at all clear that these two features of the vintage account can be preserved in the current one, despite the fact that they have not been explicitly repudiated. Additionally, it is not clear that the notion of an *ad hoc* concept, as described by Carston (2002), is really coherent with the Relevance Theoretic view of concepts, which has remained stable throughout the years, and which she claims to support.

5. *Ad hoc* concepts and Relevance Theory

From its origins, Relevance theory has adopted a Fodorian (see Fodor 1998) view of concepts according to which *concepts are atomic*, that is, they cannot be decomposed: they are *not* collections of features characteristic of the objects falling in the category corresponding to the concept⁸. In other words, *concepts are not definitions*. The standard Relevance-Theoretic view of concepts, supposedly based on Fodor's theory, claims that atomic concepts consist of an address or node in memory, giving access to three kinds of information:

- a *logical* entry, consisting of a set of inference rules (or meaning postulates), which capture analytic implications of the concept, usually not amounting to a definition;
- an *encyclopaedic* entry, consisting of a hodge-pot of assumptions and experiences;
- a *lexical* entry, specifying the phonetic, phonologic and syntactic features of the linguistic encoding of the concept.

⁸ I shall use the term *category* for the extension of a given concept.

On the face of it, this may seem contradictory with the view that concepts are not collections of information. However, this is not necessarily correct. For instance, Millikan (2000), who also defends an atomic view of concepts⁹, makes a distinction between a *concept* and the information that can be gathered about the members of the corresponding category. She calls that set of information the *conception* and carefully distinguishes it from the concept. Arguably, the lexical entry is neither part of the concept (defined as a mental representation nomologically linked to the category), nor part of the conception: rather it has to do with the lexical item corresponding to the concept. But both the logical and the encyclopaedic entries fall in the conception and not under the concept itself, in keeping with Fodorian atomism.

As said above, Carston (2002) endorses this view of concepts. Yet, it is not clear that her account of the two pragmatic processes of broadening (also sometimes called *loosening*) and strengthening are entirely consistent with either the Fodorian view of concepts or the Relevance-Theoretic formulation of it, as can be seen from the following quotation (Carston 2002, 339):

An *ad hoc* concept formed by strengthening a lexical concept seems to involve elevating an encyclopaedic property of the latter to a logical (or content-constitutive) status (...); an *ad hoc* concept formed by the loosening of a lexical concept seems to involve dropping one or more of the logical or defining properties of the latter.

On that description, the notion of an *ad hoc* concept seems to violate the Fodorian view of concepts, adopted by Relevance Theory, in what is central to it, i.e., its atomicity. That is because Carston's definitions of strengthening and loosening heavily rely on the notion of "content-constitutive" or "defining" properties in direct contradiction with Fodorian strictures. What is more, Carston claims that *ad hoc* concepts themselves are atomic, which, on her account of how they are built, seems plainly impossible.

Before I continue to dissect Carston's views on metaphor, I would like to make a (brief) digression on metaphor and paraphrase.

⁹ Though on different grounds than Fodor, see Reboul 2007.

6. Metaphor and paraphrase

As said above (see § 2), it is a widely accepted fact that it is impossible to paraphrase a metaphor without loss. An intriguing question, however, is what is lost in the paraphrase relative to the metaphor. Another, easier, question is whether all metaphors are indeed impossible to paraphrase without loss. Let me first propose the following definition of a paraphrase (built from its dictionary definition in the French Larousse, 2011):

A paraphrase is a different formulation of an utterance without any alteration of its meaning.

As pointed out above (see § 2), one of the main criticisms of the vintage RT account of metaphors against the classical accounts in terms of figurative meaning is that such accounts posit that there is a single legitimate meaning for a given metaphor, i.e., the figurative meaning. Thus, so-called figurative meanings are nothing more or less than paraphrases of the corresponding metaphors. In other words, such classical accounts are "paraphrastic" accounts of metaphors. But paraphrastic accounts are only tenable if paraphrasing a live metaphor, in agreement with the definition given above, does not actually change its meaning. There are, however, serious doubts that this is possible for all metaphors. For instance, it is most certainly not possible to paraphrase a live, creative, metaphor such as (1) without loss, which suggests that the meaning of the metaphor is altered in the paraphrase (for instance (2)). On the other hand, it is far from clear that this is the case for dead metaphors: thus, (4), (5) or (10) can be paraphrased respectively as in (12), (13) and (14):

John does not care for other people's feelings.

John is a sweet and sensitive man, considerate of other people's feelings.

Caroline is a selfish and spoilt woman, unlikely to help.

I shall come back below to the distinction between live and dead metaphors. Right now, let me just note that the best way of destroying a live or creative metaphor is to paraphrase it, which raises a serious problem for any paraphrastic account of metaphors.

The central question however is why it is impossible to paraphrase a metaphor without loss. There are two (not incompatible) ways of answering it:

- The first answer, directly derived from vintage Relevance Theory, is that paraphrasing a metaphor leads to a loss of propositional effects;
- the second answer is that paraphrasing a metaphor destroys all the non-propositional effects triggered by a metaphor.

I shall come back below (see section 8) to non-propositional effects. Regarding propositional effects, the idea is that the paraphrase reduces a metaphor to a single interpretation (or implicature), while a metaphor, especially when it is creative, triggers a myriad of interpretations. Thus, paraphrasing a metaphor reduces this potential multiplicity to a single implicature, and, what is more, a *weakly* communicated implicature, hence an implicature whose recovery was not essential to the successful interpretation of the metaphor. (This is, of course, directly linked to the other specificity of metaphor in vintage RT, that is, the impossibility of expressing literally the speaker's thought.) By contrast, non-figurative utterances are usually possible to paraphrase because they do *strongly* implicate a single (or at most a few) proposition(s).

This was the vintage account, but in the current account, the *implicature*-based analysis has been replaced by an *explicature*-based analysis and thus the current account meets with a problem that seems very similar to that encountered by the figurative meaning account. Even though there is nothing to prevent a metaphor from having several explicatures, it does not seem likely that the explicature-based account allows as much liberty of interpretation to the hearer as the vintage Relevance-Theoretic account did. In other words, it is not clear why the explicature is not a paraphrase. Thus, it is not clear either that the current account can explain why paraphrasing a metaphor leads to an interpretive loss. Additionally, this problem is specific to the current account, being blocked in the vintage account by the notion of a weakly communicated implicature. Finally, the mechanisms of interpretation described in the current account seem rather more complicated than those of the vintage account.

Briefly, the two accounts share the idea that to interpret a metaphor (or any other utterance, given that both are continuist accounts) one should access the logical and encyclopaedic entries of the concept (e.g., PRINCESS) from the logical form of the

utterance and select among the informations in the encyclopaedic entry one appropriate given the context (e.g. *A princess is lazy, spoilt, and unlikely to help*). However, in the vintage account, there was no modification of the conceptual entries themselves, while in the current account, there is one (or two) modification(s) of the logical entry (leading to the *ad hoc* concept, e.g. PRINCESS**). Given that Relevance Theory is supposed to be geared toward cognitive economy, this is rather disturbing.

There is worst, however. The notion of an *ad hoc* concept seems to reintroduce some kind of mental paraphrase, on a par with theories of figurative meaning. It thus becomes difficult, not only to see what the notion of an *ad hoc* concept brings to the analysis, but also to explain why metaphors cannot be paraphrased without loss. How does CAROLINE IS A PRINCESS** differ from *Caroline is a spoilt and lazy woman unlikely to help* if PRINCESS** = SPOILT AND LAZY WOMAN UNLIKELY TO HELP? In addition, given that the notion of an *ad hoc* concept leads to the production of a *single* (true or false, but appropriate) explicature of a metaphor, it is difficult to see how this single interpretation is different from a figurative meaning. If this is the case, the current version of Relevance Theory only differs from the classical theory of figurative meaning in that it supposes that *all* utterances are interpreted through the production of *ad hoc* concepts.

7. Taking stock

Thus, to sum up the conclusions reached up to now:

- the notion of an *ad hoc* concept is inconsistent with one of the basic tenets of Relevance Theory, i.e., the *atomicity* of concepts;
- if the explicature is a paraphrase of the metaphor (and it is hard to see how it could be anything else), then the current account contradicts one the three main tenets of the vintage account, that is the impossibility of paraphrasing metaphors (also widely recognized outside of Relevance Theory);
- additionally, it also contradicts the vintage notion that metaphors are produced when there was no other way of expressing the speaker's thought.

There is more, however. There does not seem to be any way in the current account that metaphors can transmit an array of weak implicatures. This is because:

- on Relevance Theory, implicatures are produced as synthetic inferences from the context and the logical form of the utterance;

- the context is built (in part) from the encyclopaedic entries of the concepts in the logical form;
- on the current account, the logical form of the utterance is the explicature with the *ad hoc* concept;
- but, *ad hoc* concepts, on Carston's account, have no encyclopaedic entry.

Thus, there is no way, on the current account, that metaphors can produce an array of weak implicatures.

8. Non-propositional effects

Paraphrase and translation are two ways of *samesaying*:

Galileo said: "Eppur si muove"

Galileo said: "And yet it moves"

Galileo said: "And yet it is not static"

(16) is a translation and (17) a paraphrase of (15). Most utterances can be both paraphrased and translated without any major loss. However, as we have seen, metaphors cannot be paraphrased without loss. Nevertheless, they can be translated:

ROMEO: But soft, what light through yonder window breaks?

It is the East, and Juliet is the sun.

Mais attends, quelle lueur passe par cette fenêtre?

C'est le levant et Juliette est le soleil.

Translation preserves the metaphorical effects of the metaphor, while paraphrase destroys them. There are two possible explanations for that difference. The first goes through propositional effects and comes basically to the vintage Relevance-Theoretical account: the paraphrase reduces a metaphor to a single interpretation (or implicature), while a metaphor, especially when it is creative, triggers a myriad of interpretations. The second one goes through non-propositional effects and says that the paraphrase destroys all the non-propositional effects triggered by the metaphor. The notion that metaphors have non-propositional effects is hardly new: Davidson (1978) already noted that metaphors have non-propositional, sensory, effects. Davidson, indeed, thought that

this was what metaphors were about and repudiated the idea that metaphors have any propositional effects. Guttenplan (2005) also gives sensory effects a prominent place in his account of metaphors.

Here, a potential problem with Sperber and Wilson's analysis, as well as with Carston's, lies in their choice of examples. Most of their examples are of dead metaphors and in the rare cases when they give examples of live metaphors, these are not analysed. Dead metaphors have both few propositional effects and no non-propositional effects. Live metaphors are quite different and are often accompanied by strong non-propositional, sensory, effects, as can be seen by the following examples:

The sleep of reason begets monsters.

The yellow fog that rubs its back upon the window-panes

The yellow smoke that rubs its muzzle on the window-panes

Licked its tongue upon the corners of the evening

Lingered upon the peel that stand in drains

Let fall upon its back the soot that falls from chimneys

Slipped by the terrace, made a sudden leap,

And seeing that it was a soft October night,

Curled once about the house and fell asleep.

(T.S.Eliot, *The love song of J. Alfred Prufrock*)

(20) not only has visual effects, it was also accompanied by an illustration, appearing on the frontispiece of Goya's *Capricios*. (21), which is not, also gives rise to visual effects, and it is hard to read it without imaging a very big, very fat, yellow cat.

But such effects are not limited to metaphors, as can be seen from the following examples of Haikus:

Cold winter shower

See all the people

Running

Across the Seta Bridge.

(Joso)

This snowy morning

That black crow

I hate so much...

But he's so beautiful!

(Basho)

Though some haikus are metaphorical, most are not, and the examples in (22) and (23) certainly are not and they both have strong sensory (visual) effects. Hence, metaphors are not the only utterances to have sensory effects. What is more, those sensory effects, given that non-metaphorical haikus have them, are not specific to metaphors. What, I will claim, is specific to (live) metaphors, is the combination of an array of weakly communicated implicatures (in keeping with the vintage account) and sensory effects (as advocated by Davidson). Both of these features of metaphors do not lead to a discontinuist account: regarding the first one, the weak communication of a wide array of implicatures, Relevance Theory vintage account is perfectly adequate; regarding the second one, sensory effects, any account of it will have to explain why, *ceteris paribus*, (apparently) similar effects are to be found in non-metaphorical utterances such as haikus.

For reason of space, this is no the place to try and give an account of why there are sensory effects in live metaphors and haikus (and presumably other types of utterances yet to be identified) and not in other utterances. My own rather tentative view is that this is due to the grounding of concrete concepts in perception (see Reboul 2007). Recent work in neurolinguistics (see, e.g., Hauk et al. 2004, Nazir et al. 2008, submitted) has shown that the audition of different kinds of words (e.g., action words vs. object words) will activate the sensorimotor areas corresponding to the perception or action designated, which goes some way to corroborate this view. The differences noted above between paraphrase and translation regarding metaphors might thus be explained by

the fact that changing the words of the sentence also changes the concepts in the logical/propositional form in paraphrase, thus cutting access to the sensory effects associated to these concepts, while changing the words in translation will not necessarily change the concepts, thus leaving intact the sensory effects of the metaphor. What remains mysterious, however, is why these sensorimotor brain activations do not reach consciousness in the processing of most utterances, while they do in the case of, at least, metaphors and haikus, but that will the matter for another paper.

9. Conclusion

To sum up what I've tried to show in the present paper, the vintage Relevance-Theoretic account of metaphor entirely failed to account (it did not even notice) the sensory effects, which seem typical of live metaphors. However, it did provide a rather convincing account of the propositional effects of metaphors, notably of live metaphors, through the notion of an array of weakly communicated implicatures. This notion also allowed it to explain why paraphrastic accounts of metaphors, including classical accounts in terms of figurative meaning, will not work.

By contrast, the current account does not provide a convincing account of metaphors: it seems to fail to account for either the impossibility of paraphrasing metaphors, or the sensory effects of metaphors, and, indeed, it is hard to see why it is not merely a more or less cognitive or "up to date" version of figurative meaning accounts. Additionally, it seems more complicated than the vintage version in terms of the mechanisms involved, which makes it rather unattractive.

One central (though not specific) characteristic of metaphors is their visual effects. Both the vintage and the current Relevance-Theoretic accounts of metaphors entirely ignore it, possibly because, as do most accounts of metaphors, they tend to concentrate on examples of dead metaphors, rather than live ones. So an account of metaphor that will combine a healthy attention to their sensory effects without neglecting their propositional effects, relying on examples of live metaphors, is more necessary than ever.

References

- Barsalou, L.W. (1983) Ad hoc categories. *Memory & Cognition* 11/3, 211-227.
- Carston, R. (2002) *Thoughts and Utterances: the Pragmatics of Explicit Communication*. Oxford: Basil Blackwell.
- Davidson, D. (1978) What metaphors mean. *Critical Inquiry* 5/1, 31-47.
- Fodor, J.A. (1998) *Concepts: Where cognitive science went wrong*. Oxford/New York: Oxford University Press.
- Goodman, N. (1970) "Seven strictures on similarity", in Foster, L. & Swanwon, J.W. (eds), *Experience and theory*. London, Duckworth, 19-29.
- Guttenplan, S. (2005) *Objects of metaphor*, Oxford, Clarendon.
- Hauk, O., Johnsrude, I. & Pulvermüller, F. (2004) "Somatotopic representation of action words in human motor and premotor cortex", *Neuron* 41, 301-307.
- Millikan, R.G. (2000) *On clear and confused ideas: An essay about substance concepts*. Cambridge/New York: Cambridge University Press.
- Nazir, T.A., Hauk, O. and Jeannerod, M. (2008) "The role of sensory motor systems for language understanding", *Journal of physiology — Paris*, 102, 1-3.
- Nazir, T.A., Douissembekov, E., Fargier, R. Silber, B.Y. and Paulignan, Y. (submitted) « Stop moving and you will understand: Selective deterioration of action word processing during overt motor behaviour ».
- Reboul, A. (2007) *Langage et cognition*, Grenoble, Presses Universitaires de Grenoble.
- Searle, J. (1985) Metaphor, in *Expression and Meaning: Studies in the Theory of Speech Acts*. Cambridge/New York: Cambridge University Press, 76-116.
- Sperber, D. & Wilson, D. (1995) *Relevance: Communication and Cognition*. Oxford: Basil Blackwell (2nd edition).