What is said by a metaphor: the role of salience and conventionality

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Contextualist theorists have recently defended the views (a) that metaphor-processing can be treated on a par with other meaning changes, such as narrowing or transfer, and (b) that metaphorical contents enter into "what is said" by an utterance. We do not dispute claim (a) but consider that claim (b) is problematic. Contextualist theorists seem to leave in the hands of context the explanation about why it is that some meaning changes are directly processed, and thus plausibly form part of "what is said", while some others are not. While granting the role of context in this respect, we contend that there are elements that play an instrumental role in providing direct access to the metaphorical content, namely, the conventionality of the expressions and the salience of the concepts involved. We will start by criticizing Recanati's and Relevance Theory's accounts of metaphor. Then we examine the claims of Carston's and Giora's two-process accounts that set the stage for a revision of the main elements involved, namely, the properties of conventionality and salience. Finally we examine a number of representative examples, explaining why some cases involve a direct access to the metaphorical content and others require an intermediate non-figurative interpretation.

Keywords: what is said; contextualism; metaphor; salience; conventionality.

1. Introduction

"Shrek - For your information, there's a lot more to ogres than people think.

Donkey - Example?

Shrek - Example? Okay, um, ogres are like onions.

Donkey - They stink?

Shrek - Yes-- No!

Donkey - They make you cry?

Shrek - No.

Donkey - You leave them in the sun, they get all brown, start sproutin' little white hairs.

Shrek - No! Layers! Onions have layers. Ogres have layers! (...)"

Donkey doesn't get it. What is fun about this? Even though we don't like to spoil good jokes with explanations, we think that the answer lies in two elements. One is the sheer

fact of Donkey's miscomprehension of the worn-out simile employed by Shrek. The writers expect the audience to grasp easily and quickly the point that the ogre is trying to make, and they exploit this expectation to surprise them with Donkey's misunderstanding. The second element is the new set of comparisons put forward by Donkey. Comparing X with an onion very often focuses on X's having layers, whatever the nature of X –the differences will come from the different ways in which X can have layers. Yet Donkey focuses on properties of onions that are at the same time noticeable of them–stink, make you cry– and easily attributable to the X that Shrek's simile is about –ogres– in a fun way. In other words, (1) the meaning 'ogres have layers' seems to be closer to what Shrek's utterance says than Donkey's alternative interpretations, and (2) these interpretations are apt and easy to grasp given the supportive context –i.e., that it is ogres' properties that are been talked about– that leads the hearer to grasp the significant analogies.

In this paper we want to deal with the issue of what content is more easily and directly conveyed by a figurative utterance. We will concentrate on metaphor, rather than on simile, but our view will be pretty much in line with the moral of our Shrek story – to wit, that there is something in many metaphors that makes them easy and directly graspable to the point that we can talk about "what the metaphor says", and that there are elements both in the context and in the lexical-conceptual system that interact in order to make a novel metaphor easier to process. We will take as our starting point a couple of influential accounts from cognitive pragmatics: Recanati's theory (Recanati 2004) and Relevance Theory (henceforth RT, see Carston 2002a, Sperber and Wilson 2006). These accounts have two assumptions in common. One is that they aim at being psychologically realistic, i.e., they want to provide a plausible overall description of what goes on in the hearer's mind when processing an utterance. The second is that metaphor interpretation is not essentially different from the interpretation of any other kind of utterance, in particular those that involve meaning changes such as loose talk, broadenings and narrowings.³ Consequently, both approaches reject the standard Gricean view that places metaphor interpretation at the level of conversational implicatures, and relocate it at a stage closer to the retrieval of what an utterance says rather than what it implicates. Where the accounts differ is in their reasons for such a relocation. On the one hand, Recanati thinks that metaphor understanding can be automatic and unconscious, so it belongs to what he calls primary processes, which are different from the typically inferential implicature-forming processes (his secondary

processes). In contrast, RT rejects the distinction between pragmatic primary and secondary processes and considers all pragmatic processing as guided by a single overarching principle, the Principle of Relevance. Most recent developments of RT hold that metaphorical content belongs to "what is said" (explicature, in RT terminology) because metaphor-processing can be explained in terms of the retrieval of an ad hoc concept, just as any other meaning change. So it is in this sense that "metaphor' is not a theoretically important notion in the study of verbal communication" (Sperber and Wilson 2006: 172).

There are precedents of this view on metaphor from very different assumptions. In particular, semantic approaches to metaphor agree in seeing it as a phenomenon that is closer to the what-is-said end of the interpretive chain. Leaving aside the early semantic treatments of metaphor that arguably did not take into account the full complexity of the phenomenon, more recent attempts focus on its semantically tractable components. For instance, Asher and Lascarides (2001) argue against the idea that the principles of metaphorical interpretation cannot be formally specified. They claim that there are linguistically productive aspects of metaphor that can be captured in a lexical semantics approach, and that the meaning of metaphors can also be affected by elements internal to the discourse, such as rhetorical relations. Stern (2000), on the other hand, postulates an element of indexicality in metaphor, by means of a 'metaphoricity operator' that makes expressions context-sensitive and lets the interpreter deal with the metaphor's specific interpretive constraints.

While contextualist pragmatic approaches may agree with semantic ones that metaphor is not an implicatural phenomenon, they hold broadly different views on what enters what is said by an utterance. So they accordingly differ on their accounts of what constrains metaphorical interpretation. For the semanticist constraints come in the form of linguistic devices – like the metaphoricity operator – working within the ordinary semantic apparatus. For the contextualist it is context that provides the key elements for interpretability. The upshot is that there is nothing internal to the interpreter that makes a metaphor more or less easily interpretable, and it will not be typically possible to give a systematic account of differences in metaphors in that respect. For instance, as Gibbs and Tendahl (2006: 396) claim, there will be no systematic correlation between amount of cognitive effort and amount of cognitive effects obtained, and "it will be the context that determines how quickly we can process a metaphorical utterance of whatever kind". In this paper we want to help pave the way to a more systematic treatment of the

differences between metaphor interpretation. First, we take it as a fact that some metaphors are easily and directly obtained while others require a more laborious processing. This is a difference that has to be explained. While granting the role of context in this respect, our claim is that there are constraints —derived from the architecture of linguistic processing, the structure of the lexical-conceptual system, and the way they interact with the world— that have some explanatory power in telling when and how a metaphor will be directly accessed.

2. Contextualist approaches on what is said by a metaphor

Recent defenders of contextualism have it that meaning changes - widenings, narrowings, metaphors, and metonymies – may enter into what is said by an utterance, along with unarticulated constituents and some generalized implicatures, inasmuch as they have an effect on truth conditions. There are various reasons for holding this position. Some of them are more technical: for instance, Bezuidenhout (2001) argues that many metaphors are not cancellable, whereas Wearing (2006) shows that they can be embedded in conditionals in a way that implicatures cannot. We take it that a very important reason for contextualist proposals has to do with their commitment to a psychologically realistic pragmatics, which is usually called "cognitive pragmatics" (Kasher 1988). For instance, according to Carston (2002b), a theory of pragmatics should be a theory of communication: how thoughts are expressed and how they are interpreted. Such a theory would dispose of, or re-define, all the notions that come from philosophy of language but do not pick up any psychological kind. One such notion is the idea of "what is said". As Recanati has argued at length, the Gricean notion of "what is said" by an utterance does not correspond to any stage of linguistic processing. In contrast, contextualist proposals put forward what they intend to be psychologically robust criteria. Let us examine two of the most influential ones, Recanati's availability principle and RT's principle of relevance, so as to point out their shortcomings.

2.1. Metaphor and the availability principle

According to the availability principle,⁴ what is said by an utterance is to be identified with the first meaning a normal hearer consciously entertains in a normal context. The point is that the first meaning that is consciously accessed typically includes sense

elaborations (enrichments), sense extensions (loosenings) or metaphors. Take for instance:

(1) The ATM swallowed my card.

The claim is that what is said by an utterance of (1) is the metaphorical content itself. Interpretations of (1) belong to "ordinary cases of sense extension that we don't even perceive". There is a continuum between those extensions and other, "more dramatic cases of metaphor whose nonliteral character cannot be ignored" (Recanati 2004: 77). All the instances within the continuum draw from the same set of processes, which Recanati labels *primary processes*. These processes are associative and subpersonal – in contrast to *secondary* processes, which are inferential and conscious—and they take place before any composition of meaning has been effected.

However, not all cases of modulation of extensions belong to the same psychological kind. To turn the focus on metaphors, some of them seem to be liable to Recanati's analysis in the sense that it is plausible that they could be processed by automatic, associative, non-conscious processes. We think that this is the case of conventional metaphors, such as 'Sue is an angel', but also of some metaphors not yet conventionalized, such as 'swallowed' in (1) the first times it was employed after ATMs were introduced. However, there seem to be other metaphors that resist Recanati's analysis. On the one hand, plenty of non-habitual metaphors such as

(2) Beauty is a passport entry

require more time, yet it seems that the only content the interpreter consciously entertains is the metaphoric content. To accommodate these cases Recanati's model would need to explain them in terms of the very same set of processes that work on conventional metaphors and, at the same time, give an explanation for the time difference. The alternative idea is that many non-habitual metaphors may involve another kind of processing (Coney and Lange 2006). According to many studies (e.g. Schmidt et al. 2007, Mashal and Faust 2008), these metaphors, but also many other non-habitual utterances, involve right-hemisphere processing, while more habitual utterances (metaphoric or not) are subject to left-hemisphere processing. On the other hand, there are other metaphors that are even harder to deal with by Recanati's primary processes, and whose interpretation might belong to a different kind. This is of course the case of poetic metaphors, but it is also plausibly the case of many fresh metaphors. Camp (2006) uses the example of Auden's verse

(3) The hourglass whispers to the lion's paw

But it is also possible to choose examples in which the content is, so to speak, "more prosaic", such as Kavafis's

(4) They have built big and high walls around me

Recanati seems to assume that, as metaphor processing is not driven by the personal inferential processes typical of implicatures, we only entertain one proposition. He admits there is a tension with a different, literal meaning but it is confined to primary processes, giving rise to a sort of *internal* duality – as opposed to the external duality typically exhibited by implicatures, where the interpreter is aware of an inferential chain going from what is said to what is implicated. Yet, it seems to be the case that these metaphors exhibit two features that defy Recanati's explanation. On the one hand, we, as hearers, can offer a reconstruction of the process that takes us from one propositional meaning –the conventional, or more habitual meaning of the utterance– to the other. On the other hand, whether or not our reconstruction is faithful to the actual interpretation process, the processing of these metaphors seems to involve accessing two different propositional contents, one after the other.

This, we think, is enough to cast doubt on Recanati's proposal. For we have that not all cases of meaning changes belong to the same psychological kind: sometimes meaning changes are processed so swiftly that no rival proposition is accessed in time. However, other times metaphors exhibit two minimal features: they can be reconstructed, and they form part of a proposition that is accessed after another, more conventional, one, has been processed. Indeed, in some cases, processing a more conventional proposition is *instrumental* to processing a metaphorical one. This does not mean that the more conventional proposition has to be considered and then rejected, as in an orthodox Gricean account. It simply means that in order to arrive at the metaphorical proposition we make use of the more conventional meaning of the metaphorical utterance.

2.2. Metaphor in Relevance Theory

The problem for Recanati consists in that he draws a definite line between enrichments and meaning changes on the one hand and implicatures on the other, under the assumption that this distinction in kinds is accompanied by a distinction in processing – meaning changes and enrichment belonging to "the normal flow of speech" and implicatures being a disruption in that flow, thus recruiting extra efforts in processing (see Carston 2002b for a critique of this idea). Now, this should not be a problem for RT, since according to RT all pragmatic phenomena are fuelled by just one principle, the principle of communicative relevance. RT distinguishes between explicatures and implicatures. Explicatures are developments of logical forms, built out from encoded meanings and tied to them. Sperber and Wilson (1995) claim that there are various levels of explicatures. The first level can be identified with the propositional content of the utterance (see Carston 2004). So it seems safe to identify first level explicatures with RT's notion of "what is said" by an utterance.

In this model, all implicatures, meaning changes and the provision of unarticulated constituents are accounted in the same way: as far as processing goes, all of them belong to the same kind. Metaphors receive the same treatment in RT as all other explicature-forming phenomena. This does not mean that we can dispense with the notion of metaphor altogether: there are still some elements that are peculiar to metaphors, namely, that they give rise to a set of weak implicatures – so the larger and the more diverse the set, the richer and the more original the metaphor is. Yet having weak implicatures is not *constitutive* of metaphor at large, or of novel metaphors in particular.

Even if this account is different from Recanati's, it can be criticized on similar grounds. It seems reasonable to claim that a meaning change in a word cannot belong to the propositional content that constitutes the first level explicature of an utterance if another, conventional, meaning for that word is entertained first and composed with the rest of the meaningful elements of the utterance into a proposition. While there are some meaning changes that plausibly belong to first level explicatures, it seems there are others that enter into propositions that are processed only after another proposition, closer to the logical form of the utterance, has been processed and entertained. So, some meaning changes would belong to the explicature while some other would not.

RT could forsake the assumption that all meaning changes form part of explicatures. Yet it would still owe an explanation about why some altered meanings are good candidates to form part of explicatures while others are not: what is it that makes some concepts accessible and others remote? In line with experimentalists (Schmidt *et al.* 2007), one may think that speed is a matter of sheer reinforcement of

some connections by means of repeated exposure, but there must be more than that: otherwise, the interpretation of 'swallow' in (1) when first heard would be slow, which we take to be implausible. Another possibility is to explain accessibility in terms of concept-similarity: a concept C is the more easily accessed from another C' the more C's encyclopaedic entry resembles C''s. However, this won't do either, since in

(6) That surgeon is a butcher

'butcher' expresses a concept that shares only a few notes with the alleged encoded BUTCHER concept. Yet, the alleged *ad hoc* concept BUTCHER* is easily accessed. A third possibility is to claim, following the line of Gibbs and Tendahl (2006), that there is no systematic answer to such a question. Accessibility is simply a contextual affair, and there are no neutral contexts to evaluate how much effort is needed by a specific interpretation. So one needs to consider the details of each particular context to determine what will be accessible in it. Just as the trade-off between cognitive effort and cognitive effects will be impossible to generalize "across particular types or forms of language" (Gibbs and Tendahl 2006: 400), one may conclude that concept access will also have to be established on a case-by-case basis.⁵ We will argue that there are reasons to resist this conclusion.

3. Two-process approaches to metaphor

One may think that the problems of the theories we just examined have to do with the fact that there are different types of metaphors, and they demand different processing modes (Bortfeld and McGlone 2001). For instance, Kintsch (2008) expresses doubts about the possibility of having a model of metaphor processing that covers all the different classes. In his view, metaphors of the form *X* is *Y* may receive a computational treatment in terms of an algorithm that works on vectorial representations of words —an algorithm that is also used for non-metaphorical discourse, making literal and metaphorical comprehension basically the same. In addition, metaphors based on simple analogies (*she blew up at me*) could be managed by extending the computational model to solving analogy problems. Yet metaphors based on complex analogies (*the universe is a computer*) or those found in literary texts are simply beyond the scope of such a model, and their processing can be assimilated to problem-solving abilities. In this section we are going two consider two approaches that are in line with the intuition that

there are two different processes. They will provide the background for the reconstruction we will offer in sections 4 and 5.

3.1. Carston's two-process account

Taking RT as the starting point, Carston (2010) has called attention to some unsatisfactory aspects of the theory in order to deal with metaphor. Consequently, she has proposed a modification to cope with the phenomenon. Carston (2010) begins by pointing out the differences between a number of metaphors, from the classical 'X is Y' cases to the most elaborate and literary ones. She rejects, however, that there is a clear-cut distinction to be drawn, and argues instead for the existence of two different routes to metaphor comprehension: "a quick, local, on-line meaning adjustment process and a slower, more global appraisal of the literal meaning of the whole" (2010: 299). It is in positing the second route where her view departs from RT orthodoxy. The reasons for her departure can be seen through one the cases she analyzes, Macbeth's famous lines about life:

(7) Life's but a walking shadow, a poor player That struts and frets his hour upon the stage And then is heard no more: it is a tale Told by an idiot, full of sound and fury, Signifying nothing.

Carston (2010: 308) claims that it "stretches credulity that these cases (...) are understood via the pragmatic mechanism of ad hoc concept construction". The reason, in a nutshell, is that the task would be too complex and costly for such a mechanism, which would require multiple adjustments and readjustments of meanings at different linguistic levels. The costs are even higher when one takes into account the activation of literal meanings associated to words. As the metaphor unravels those literal meanings reinforce each other, eventually ending up in a literal interpretation of the verses. To account for this it is necessary to assume the existence of a second processing system that works on literal meanings and draws a set of implicatures from them. Carston seems to regard the second route as an optional processing mode. The normal mode is still the online formation of ad hoc concepts and the second process kicks in "when a

certain processing threshold or tipping point is reached, when the effort of local ad hoc concept formation is too great relative to the dominance, the high accessibility, of the literal meaning" (2010: 310). It is not completely clear how one is to understand this optionality. On the one hand, the normal mode seems to have a certain mandatoriness in the sense that it always has the task of attempting an initial online interpretation, while the second route might not be engaged at all. On the other hand, RT tends to regard processing in terms of a balance between computational costs and cognitive effects. Linguistic comprehension recruits whatever processes it needs to reach a satisfactorily relevant interpretation and then it stops there. Thus, in a sense, all processes are optional—they are employed on demand according to the cost/benefit balance they can offer—even if processes that become operative earlier appear as less optional. We think that if the latter interpretation is the correct one, it could have devastating consequences for RT at large. The reason is that it would allow the existence of a mechanism that could, in principle, produce a literal interpretation for *any* given utterance—a possibility that contextualists have taken pains to reject.

3.2. Giora's graded salience hypothesis

Giora (2003, 2008) has proposed a model of metaphor processing, based on her Graded Salience Hypothesis, which is grounded on a wealth of experimental evidence. The idea is that metaphorical contents and non-metaphorical ones are processed in parallel and by different means, one top-down and the other bottom-up. However, not all pairs of metaphorical and non-metaphorical contents are processed at the same speed. If the metaphor is especially contextually primed and predictable enough, the addressee may process the metaphorical content much quicker than its non-metaphorical counterpart. Now, according to Giora, it is also possible that the non-metaphorical propositional content is processed before the metaphorical one. If the top-down processes face an unusual content and the non-metaphorical content is highly salient, addressees will entertain first the non-metaphorical content. Our example of Kavafis' verse (4) seems to illustrate this possibility. Other examples, such as (3) or (7), do not offer such a clear case, for their non-metaphorical propositional content is not "highly" salient. However, it is possible to contend that, as its metaphorical content is very far from being easily processed, addressees may well entertain a non-metaphorical proposition first. So far this is in line with Carston's analysis, and it is tempting to conclude that both are

endorsing fundamentally the same position. However, there are some significant differences. First, Giora's bottom-up processes do not work on the same principles as Carston's online mechanism. The former, but not the latter, is based on the idea of a modular linguistic mechanism. Bottom-up processes that access word meanings are encapsulated from top-down processes, so there is a certain automaticity and mandatoriness in lexical access. Lexical pieces activate their conventional meanings regardless of context, and this would explain why those meanings are easily recoverable even when they are not functional to obtain the intended figurative meaning of an utterance. In contrast, even if Carston's online mode were mandatory, this would not mean that it had to be modular, only that it is necessarily activated. Second, in Giora's model there are two distinct processes but they work indistinctly on all kinds of utterances. As we said above, it is unclear whether this is the case in Carston's view. Third, and more important for the purposes of this paper, they differ in their accounts of what is said by a metaphor. In Carston's approach, the answer will differ depending on the complexity of the metaphor: if the online system can provide suitable ad hoc concepts in a reasonable time, what is said will correspond to a contextually adjusted explicature; if the answer of the online system is too costly, what is said will correspond to the literal meaning provided by the slow system. In Giora's model, however, the answer is less clear: what content will be accessed first will depend on what elements are more salient at any given time.

4. The role of salience and conventionality

The account of what is said by a metaphor that we are going to propose complements, rather than contradicts, contextualist explanations of the notion. Although the view we are going to motivate is, as the contextualist approaches we just examined, chiefly theoretical, we think that it is possible to derive from it some predictions that tell it apart from Giora's model. Along with contextualists, we claim that contextual factors can, and typically do, interact with conventional, non-contextual, stimulus-driven elements in getting at the right interpretation. Along with the Graded Salience Hypothesis, we think there are reasons to prefer a model in which it is possible to obtain a conventional truth-conditional interpretation of a metaphor by means of the normal flow of processing— and not as an optional last resort to deal with complicate cases. Our main point is that conventionality and salience provide stable elements to give an account of

what is said by a metaphor. To be sure, we will not be endorsing the view –and we think that nobody does – that they provide any clear-cut boundary to draw. They are stable because they give access to preferred interpretations so that if a speaker wants to communicate a different content she will have to contrive a more elaborate context in order for the alternative content to prevail over the preferred one. Let us take Giora's approach as our starting point.

The Graded Salience Hypothesis relies on the property of salience as the key to determine which meanings will be obtained first. Giora (2003: 10) describes salient meanings as "coded meanings foremost on our mind due to conventionality, frequency, familiarity, or prototypicality". This is a view of salience as (i) an *internal* property of mental representation, (ii) a *dispositional* property: for a representation to be salient it is not necessary to be currently active; and (iii) a *gradable* property: representations have different degrees of salience. So salient meanings are those that are dispositionally more likely to be accessed when the appropriate stimulus –namely, a word– is present. Since salience is graded, it is possible that a number of more salient meanings may reach sufficient levels of activation before less salient ones.

We think that Giora's view needs to be amended because she conflates too many things in that notion, and it will be necessary to tell them apart to have an explanatory account of the greater accessibility of some metaphorical contents with respect to others. First, salience is not necessarily an internal or dispositional property, and it comes in different varieties. Second, conventionality is not a factor of salience, as the theory seems to endorse, but a different sort of property that interacts with salience in distinctive ways.

We agree that salience is an important property to explain what can be accessed easily. However, we think that it is necessary to make a further distinction related to the *kind of element* that has the property of being salient. For instance, salience is typically treated in psychology textbooks both as an internal and external property. In an exhaustive review of the explanatory roles of the notions of salience and accessibility in psychology, Higgins (1996: 133) observes that salience is typically understood as "information which is most easily brought to mind and produces "top of the head phenomena", and notices that most authors include among the determinants of salience both properties of stimuli and properties of perceivers. Likewise, in discourse comprehension literature (Chiarcos *et al.* 2011) salience is related to properties of different discourse entities (e.g., referring expressions), to properties of discourse

structure (e.g., segmentation), and to properties of extralinguistic entities (e.g., visual properties). For the purposes of this paper, we think that it is useful to distinguish three senses of salience, which we will call *lexical* salience, *cognitive* salience, and *stimulus* salience. Lexical salience is a property of mappings between lexical items and their encoded meanings. We take for granted that a given word may have more than one codified meaning. The clearest case comes from homonymous words. Take, for instance, the meanings of 'table' as (a) a piece of furniture or (b) a chart of data. The point is that (a) is arguably more dispositionally salient than (b) in the sense that (a) is more easily activated from the occurrence of the word. Which meaning of a word is more lexically salient is principally a matter of which of its usages are more frequent, entrenched, and the like.

Cognitive salience is a property of mental representations. More to the point, it is a property of conceptual representations and of conceptualizations. Thus, basic level concepts are likely more salient than superordinate or subordinate level concepts; concepts of familiar things are likely more salient than concepts of non-familiar things; concepts with associated imagery are likely to be more salient than wholly abstract concepts, and so on. This means, for instance, that it is more likely to categorize a robin as a bird than as an animal. That is, applying some concepts instead of others depends on their degree of salience. So, some conceptualizations -i.e. some ways of seeing things— are more salient than others, and are thus in a better position to be activated. Lexical and cognitive salience are dispositional, as Giora affirms: they are properties of mappings and concepts, respectively. Yet it is necessary to take into account salience as an occurrent property of the stimuli actually present in a given situation –i.e. stimulus salience as a property of external objects. An object can be more or less salient depending on its relation with the environment or situation in which it is located. For instance, a familiar object will be more salient in an uncommon place, and an atypical object will be more salient in a familiar place. Even if what stimulus is more salient for a subject in a specific situation is partly dependent on cognitive biases in the subject, there are properties of objects that typically lend them more salience, such as brightness or movement.6

It is plain that the three types of salience may coalesce so as to make a certain piece of information more accessible. The interaction between the three of them is apparent in the property of lexical availability, which involves asking language users to generate words from different categories. For instance, in a recent study Hernández-

Muñoz et al. (2006) showed that typicality, concept familiarity, age of acquisition, and word frequency, in that order, were the main predictors of lexical availability. This suggests a general interaction between lexical and cognitive salience, so that cognitively salient (e.g., typical and familiar) information may be easier to verbalize. At the same time, there were interactions between words and category labels, so that a word's availability depends on the category being probed - suggesting thus an interaction between stimulus salience (i.e., the category to which the stimulus belong), and lexical and cognitive salience. Yet the three types of salience do not amount to the same thing and may compete for cognitive resources. To illustrate the contrast between lexical and cognitive salience in a simple manner, let us suppose that lexical access is a matter of mapping words into concepts, and that a single word can have several mappings to several different concepts. One may picture lexical salience as the salience of a mapping relative to the other mappings, and cognitive salience as the salience of the concept relative to the other concepts. Suppose that you master a single-meaning word such as 'aglet'. Having only one mapping into its meaning – namely, the sheath at the end of a shoelace— this mapping is lexically salient so that when you encounter the word that will be the most accessible meaning. Yet the concept itself is not particularly salient.

Given that the types of salience are distinguishable, they may have different ways to explain linguistic phenomena. For instance, the difference between lexical and cognitive salience has explanatory value in the different accounts of the effects of the age of acquisition. Some theories suggest that it is a semantic effect that affects meaning representations themselves (e.g. Brysbaert *et al.* 2000), while others propose that it is a matter of strengthening the mappings between, e.g., the phonological and semantic representations (Ellis and Lambon Ralph 2000). The overall effect could be the same, in terms of better access to early learned words, yet the former seems to explain it as an effect on cognitive salience, while the latter puts the emphasis on lexical salience.

Moreover, distinguishing the three kinds of salience may have an effect on the results that back the Graded Salience Hypothesis. Recall that one of the main findings is that salient meanings are accessed irrespective of their contextual inappropriateness. For instance, experiments by Peleg *et al.* (2001) show that in a context in which the meaning *flower* is primed for 'bulb', the meaning *light* is still accessed by subjects. The conclusion they draw is that top-down knowledge does not interact with bottom-up lexical activation of the most salient meaning. However, one must bear in mind that priming is typically produced by lexical means (e.g., reading a sentence such as *The*

gardener dug a hole). Different results could be obtained if what the experimenters manipulated were stimulus salience, for instance, by having actual bulbs in the environment, showing pictures of flowers, or the like. By considering this parameter separately we can thus generate the following prediction: if, as Giora contends, bottom-up linguistic processes and top-down extralinguistic processes run in parallel, then the presence of physical bulbs should not prevent the activation of the salient "bulb-light" meaning; if, on the contrary, both processes can interact, then the "bulb-light" meaning should receive considerably less activation in the physical bulbs scenario⁸.

Regarding conventionality, Giora takes from Nunberg *et al.* (1994: 492) the idea of conventionality as "a relation among a linguistic regularity, a situation of use, and a population that has implicitly agreed to conform to that regularity in that situation out of preference for general uniformity, rather than because there is some obvious and compelling reason to conform to that regularity instead of some other". As we said, she regards this relation as a factor that contributes to the salience of a representation, just as familiarity or frequency do. We think this is misleading. Whereas one can say 'the more familiar a word, the more salient it is', it makes no sense no assert that 'the more conventional a relation, the more salient it is'. Unlike salience, conventionality is not gradable: either there is a convention or there is not⁹. Similarly, it is a mistake to claim that conventionalized expressions are more salient. Rather, it is the other way round: salient relations are typically conventionalized. Just as conventionality and aptness of metaphors correlate while being distinct properties (Thibodeau and Durgin 2011), it is convenient to keep conventionality and salience separate.

5. The interaction of salience and conventionality in metaphor

In the previous section we provided arguments to back the view that, contrary to Giora's model, bottom-up and top-down processes can interact at the level of lexical structure. Bottom-up processes are based on conventional mappings and provide greater activation for those conventions that have a higher lexical salience; top-down processes resort to cognitive salience and external stimuli salience to constrain the representational space reached by the lexical access. The way that representational space is structured will influence the manner in which bottom-up and top-down processes interact. Our purpose in this section is to show how this interaction facilitates or encumbers the access to metaphorical meaning. This way it will be possible to

characterize what is said by a metaphor. We will take it that for a meaning change to enter "what is said" by an utterance, the "new" meaning must be relatively east to access, and it must elicit relatively wide intersubjective agreement. The former has to do with speed of access to a given interpretation and can be operationalized by measuring time latencies to different semantic probes; the latter reflects the idea that this interpretation is not idiosyncratic. Both notions can be operationalized so as to obtain predictions: e.g., the former by measuring time latencies to different semantic probes, and the latter by asking subjects to provide interpretations or paraphrases and analyzing how close their answers are. However, the definitive *litmus* test for us in order to include a meaning change into "what is said" is that the recovery of the new meaning does not involve entertaining another proposition, one that is closer to the logical form of the utterance. What is said by an utterance will be the first proposition that is calculated. A proposition that is entertained only after another one is processed does not belong to "what is said".

There is one caveat to consider before proceeding. There is considerable consensus that, given a supportive enough context, almost any figurative meaning can be directly reached by the interpreters, with little differences between them. So one may think that 'what is said' by a metaphorical utterance is going to be always context-dependent and therefore it is hopeless to try to provide criteria to delimit cases in which metaphorical content does and does not belong to what is said. It seems to us that Gibbs and Tendahl's (2006) remarks on cognitive effort share in general this pessimistic line. However, we think that there is room for understanding what is said by a metaphor in terms of factors internal to the interpreter that can be preserved from context to context. Even if context may direct the interpreter's attention so as to prime a certain interpretation of a subsequent utterance, this does not mean that there are no context-independent factors – related to conventional meanings of words, or to salient typical ways of seeing things— so that the context finds, so to speak, a certain resistance to defeat. In the sections that follow we will examine a number of examples that are representative of how those factors work.

5.1. Conventional metaphors

In conventional metaphors figurative meaning has become one of the conventional senses of some of the metaphor's terms. (6) is a typical example:

(6) That surgeon is a butcher

A conventional metaphor can be regarded as an expression of one of the least lexically-salient meanings of the word. As Gentner and Bowdle (2001, 2005) point out with respect to the "career of metaphors", a conventional metaphor is a figurative use that started as a novel metaphor and became conventionalized through repeated use. The point is that this use was conventionalized without losing contact with the literal use that it originally had. That is, by giving 'butcher' a metaphorical sense that finally gets settled, one increases the polysemy of 'butcher' to the extent that the new stable sense might be listed in a dictionary. It is not therefore strange that conventional metaphors customarily appear as paradigmatic cases of meaning changes that belong to what is said. After all, their meaning is reached in the same manner as a polysemous sense of a word is –and it can be safely assumed that these senses routinely belong to what is said by the sentence in which they appear. Moreover, conventional metaphors are productive, just as (some) polysemy is assumed to be, and they facilitate the comprehension of related novel metaphors (Thibodeau and Durgin 2008). For instance, (8) and (9) are putative examples of novel uses of 'butcher':

- (8) My mechanic is a butcher
- (9) My computer is a butcher

Our prediction is that novel metaphors of this kind will be primarily understood as applications of the conventional metaphorical sense of 'butcher' typical of (6). In other words, when asked to provide interpretations for (8) and (9) people will do so in terms of the subject (my mechanic, my computer) brutally acting on something under its reach (cars, stored information).

Now, one may wonder what it is that makes (6) a conventional metaphor: is it due to (a) the conventional metaphorical sense of the term 'butcher', or to (b) the conventional mapping of that sense to surgeons? As Thibodeau and Durgin (2011) point out, if we opt for (a) then any metaphor of the form 'X is a butcher' – e.g., 'the sky is a butcher' – would count as conventional, which looks counterintuitive. In our view, the answer has to come from the way the conventional metaphorical sense of 'butcher' interacts with other lexical elements in the utterance, which bring their own lexically

and cognitively salient meanings that constrain the possibilities in ways that facilitate some interpretations and hinder others. Consider again (6) and contrast it with (10):

(10) My neighbour is a butcher

There are contexts in which the interpretation of 'butcher' is similar in (6) and (10). For instance, in both cases it could be related to (i) the meat-seller job, or (ii) a brutal careless person. But notice that for 'butcher' to mean something like (i) in (6) we need a special context such as, say, a conversation about people that have two jobs, or that having a well-paid job takes another one as a hobby, etc. Conversely, to understand (10) in sense (i) does not require much contextual specification, while understanding it as (ii) seems to demand at least some contextual priming about the activity in which my neighbour is said to be brutal. In other words, even if what I intend to convey by (6) is its literal content, what is said by (6) is typically its metaphorical content; conversely, even if I intend (10) as a metaphor, what is said by (10) is typically its literal content.

All this allows us to make two testable predictions. One is that when asked to paraphrase what is said by (6), (8) and (9) there will be substantial intersubjective agreement in people's preference for the metaphorical ('brutal') reading; when asked to paraphrase what is said by (10), in contrast, people will prefer the literal reading. The other prediction is that if we provide an elaborate context to facilitate the metaphorical reading of (10), the literal meaning of the sentential utterance (and not merely of some of its pieces) will be still active in people's minds.

5.2. Cognitively salient metaphors

A metaphor can be conveyed through cognitively salient representations associated to the occurrence of the word yet not conventionalized. There is no mapping linking the word with the intended meaning. Yet the meaning is still easy to recover because there is an accessible conceptualization of the utterance in terms of the metaphorical content. We think that many of the cases dealt with by cognitive linguistics belong to this case. Consider again:

(1) The ATM swallowed my card

A quick search of the net shows that 'swallow' is routinely employed to describe actions of machines with slots or holes where stuff gets in —such as computers, vending machines, or vacuums. Therefore it may be objected that (1) is a case of conventional metaphor, just as (6). We think there is indeed a problem in telling conventionality and salience apart in many particular cases, because even if they are different properties, salient meanings are obvious candidates for conventionalization. However, we can consider a fresher metaphor that says basically the same as (1):

(11) The ATM gulped my card

Even though this is not a conventionalized metaphor – e.g., in a Google search we could find around 7.000 entries for "ATM swallowed my card" but only one for "ATM gulped my card" – it is easy to understand it as expressing the same as (1). The explanation has to do with its cognitive salience. Cognitive linguistics explains these cases in terms of metaphorical structures that organize our cognitive system as entire families (Lakoff and Johnson, 1980). So one might say that describing what the machine did as swallowing or gulping is an example of the "machines are persons" metaphor.

The existence of metaphor families explains metaphor productivity in a different way from convention. In the case of 'butcher' the existence of the convention can be exploited to apply the same predicate to other subjects in ways that make the interpretation predictable. In the case of swallow what is exploited is the cognitive salience of the whole metaphorical domain in order to extend the metaphor to other predicates. For instance, think about one of the famous examples by Lakoff and Johnson, the "argument is war" metaphor. This is a productive metaphor, i.e., a productive mapping that can give new metaphorical meanings to particular linguistic items, such as 'ok. let's put our weapons down'. This may come as a fresh metaphor, at least in the sense that it has not been repeated to the point that it can be considered conventional - indeed, Keysar et al. (2000) contend that such mappings are only employed for non-conventional expressions. Yet, it is rapidly processed due to its being an expression of a general metaphorical projection grounded on the ways we conceptualize certain events. Alternatively, one could resort to a more "local" explanation. For instance, (1) and (11) could be explained in terms of surface similarities between machine slots or holes, and human mouths. The metaphor is still productive in the required sense but the extension could be based on similaritycomputing mechanisms, rather than on conceptual structure, and the allowed extensions of the former would be more constrained than those produced from the latter. In other words, (i) if (1) and (11) are a product of the "machine are persons" metaphor, then it can be assumed that they would prime metaphors that relate machine properties to all sorts of human properties. In contrast, (ii) if (1) and (11) are a product of more local, similarity-based processes, then they would prime only metaphors that relate machine properties to the relevantly similar properties. For instance, for the following continuations of (1):

- (1a) ... and then it looked at me maliciously
- (1b) ...and then it burped loudly

Possibility (i) would predict that the previous apparition of (1) would speed comprehension of both (1a) and (1b) – that is, when compared to 'the ATM looked at me maliciously' and 'the ATM burped loudly' uttered alone— while (ii) would predict that (1) would speed comprehension *only* of (1b).

5.3. Novel non-cognitively salient metaphors

Traditional Gricean views of metaphor supposed that for a sentence to be metaphorical it had to flout one the Maxims, e.g., Sincerity or Relevance, so that its literal interpretation appeared as false, nonsensical or trivial (Grice 1975). Prototypical metaphors thus include examples in which what is predicated of the subject looks a categorial mistake, e.g., saying of a person that he is a bulldozer, or a pig, or the sun. Other metaphors are obviously false but could be true, e.g., the surgeon could actually be a professional butcher. Now, there is a case that we take as somewhat special among the latter: the case of a metaphor in which the metaphorical meaning is conveyed by means of the literal meaning of the uttered sentence. Note that this is different from the traditional Gricean view since this view assumes that the literal meaning has to be computed and rejected to prompt the interpreter to obtain the intended deviant. Yet there are cases in which the literal meaning not only is not rejected but is instrumental to get at the metaphorical content. We said above that what marks an utterance as metaphorical is mainly the speaker's intention, and to this end the speaker may employ different means. One of such means is to convey a metaphorical meaning by inducing

the reader to recover first the literal or habitual meaning of the utterance. This literal meaning will subsequently be instrumental to recover the metaphorical content. There are cases in which it is arguable that the speaker is following precisely this communicative strategy, and in which the metaphor is not conventional. We contend that Kavafis's (4) is such a case:

(4) They have built big and high walls around me

It is not difficult to understand what Kavafis is meaning here: he feels isolated, just as if someone had built big and high walls around him. Yet, when reading the poem, the conventional meaning of 'wall' remains active with some intensity, which serves to magnify the picture of isolation. Kavafis goes on speaking about walls with the new intended meaning, but as we go on reading we "see" how the (literal) walls have been erected. The interpreter hence recovers the sense of isolation that Kavafis intends to convey by means of a literal interpretation, in which, as Carston (2010) contends, mental imagery of actual walls may play a significant role. We think that comprehension of the isolation of the poet is achieved in retrieving the functional properties, which are not as cognitively salient as their visual features. Yet the reader retrieves them after she retrieves the more salient meaning related to physical features.

In cases like Kavafis's walls it is crucial that the interpreter actually recognizes the utterance as a metaphor. This is an effect of metaphor *recognition* (Steen 2004) as opposed to metaphor understanding – the process of reaching the metaphorical content. One might suppose, following perhaps the traditional Gricean view, that it is always necessary that a metaphor be recognized as such in order to be understood. Yet this does not need to be so. Indeed, one can assume that for most conventional metaphors the interpreter more often than not will not realize that a metaphor is at play unless a further factor leads her to focus on this fact (e.g., a joke based on an equivocation with the most lexically salient meaning –as when it is revealed that the butcher surgeon is a meat-seller after all). So our claim that the content of conventional metaphors belongs straightforwardly to what is said can also be seen as a claim that their metaphorical content is "transparent" in this sense.

Matters are different in the case of Kavafis's poem: we think that metaphorical effects such as this are difficult to obtain and some skill is necessary to this end – that is why they are typically associated to poetic contexts, which predispose the reader to find

a "hidden content". As Steen (2004: 1296) points out, adopting a literary reading mode leads to the recognition of more metaphors, and the effect is increased as the reader has greater literary expertise. As a further example, consider Giora's treatment of the poem "Sharon is like a man" (Giora 2008), in which a poetic effect of unreality is obtained by the accumulation of similes between a thing and something that the thing actually is – "the newspaper is like a newspaper", "the teachers are like teachers", and so on. Giora uses this example to back her claim that metaphor "is not the only source of poetics or even of metaphorical interpretations". We think that the latter part of this claim is misleading. Giora talks as if metaphors were a pre-existent set of linguistic entities, so she is suggesting that the Sharon poem is a case of a metaphorical interpretation obtained by something that does not belong to the set of metaphors. Yet we think it more proper to talk of metaphorical uses of linguistic expressions. So we regard the Sharon poem as a case of a metaphorical use of a literal expression. Indeed, we find the means by which the "Sharon is like a man" effect is reached pretty similar to Kavafis's. The poem is exploiting the fact that, as Gentner and Bowdle contend (2001: 233), similes seem infelicitous when they establish a comparison between X and a true predication of X, such as "the movie 'Titanic' was like a blockbuster" because, after all, it was a blockbuster. So it is by obtaining first the literal comparisons that the reader is led to the subsequent metaphorical interpretation of falsity and irreality.

Now, there are examples of metaphors that resemble (4) in most of the above respects, yet, by our own criteria, they do belong to "what is said". Consider (2) again

(2) Beauty is a passport entry

One may claim that this metaphor is conveyed through a conventional and salient meaning of 'passport entry'. It is salient because passports are basically defined by what they can do, i.e., by their *telic quale*, and it is conventional because it is arguably its most lexically salient meaning in the sense of being the mapping primarily accessed. Thus, there may be a difference between this case and the 'walls' case, which, by our lights, implied recovering a non-salient part of the meaning of 'walls'. However, this difference would not explain why the processing of this metaphor, which being non-habitual takes longer to be processed, is nonetheless direct (Coney and Lange 2006).

So, there must be an important difference between (2) and (4) which we have not spoken about yet. The crux of the matter seems to be: while in (4) it is possible to obtain

a coherent literal propositional interpretation, in (2) this does not seem feasible. The fact that the reader can obtain that literal interpretation, moreover, the fact that it seems to be necessary in order to understand the poem, accounts partly for the fact that the metaphor will take more time to be understood. Yet in (2) there is no such effect: the interpreter does not recover a literal interpretation and, as in the case of conventional metaphor, moves to a composition of the metaphorical content but, unlike in conventional metaphors, it takes longer to obtain because the metaphorical vehicle is non-habitual. However, despite the possible similarities in processing speeds, the crucial difference is that in one case a literal interpretation is available while in the other it is not. So, ultimately this seems to be the reason why some metaphors within this class belong to what is said and some do not. This, in turn, explains why the 'walls' metaphor behaves differently from the 'beauty' metaphor in other tests for "what is said", such as cancellability tests. The metaphorical reading of (2) cannot be cancelled: one cannot say, e.g., 'beauty is a passport entry; I mean, literally'. However, one can cancel the metaphorical interpretation of Kavafis' verse. After all, it makes sense that they have built walls around someone, keeping her encapsulated.

6. Conclusion

Contextualist theorists such as Recanati and RT defenders have lately argued that meaning changes, metaphors included, belong to "what is said" by an utterance. We have disputed the intuitive appeal of such a claim and argued that there is a distinction to be drawn within the meaning-change category. Focusing on metaphor, we have argued that whereas many metaphorical contents are directly accessed (with more or less effort), some others are not. In the latter case, we entertain a non-metaphorical proposition before we reach the metaphorical interpretation. In fact, it does seem as though the non-metaphorical content is instrumental to reach the metaphorical content. Then, we have claimed that only directly-accessed metaphors belong to "what is said", at least if we want to define this notion in cognitive terms. After that, we have moved to offer an explanation of what kind of factors can influence the way we process metaphorical contents. We have claimed that the amount of effort required to understand a metaphor, and the way certain of its elements can cooperate or interfere with different interpretations, are not entirely contextual affairs, but arise from demands that belong to the internal milieu in which interpretation takes place. The existence of

conventional senses are among the most restrictive conditions – leaning towards the semantic side of interpretation – in terms of what interpretation will be deemed acceptable, even normatively so. The presence of cognitive configurations systematically related to the conventional meanings of words, as well as the relative salience of conceptual features associated with them, provide ways to entrench interpretations that can be overridden only when the interpretive context deviates from normal in significant ways.

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Notes

¹ Taken from the script at http://www.imsdb.com/scripts/Shrek.html.

² We think that, in principle, most of what we will say can be extrapolated to other figures, such as simile or metonymy, and to many meaning changes in general, such as reference transfer. However, we will not explore this possibility in the paper.

³ There is a partly terminological issue here. What we call 'meaning changes' would be called 'modulations' by Recanati (2004), while Relevance theorists would refer to them as 'construction of *ad hoc* concepts'. Relevance theorists think that in metaphor, loose talk etc. the meaning of the word is not changed: a word consistently means its encoded concept. On the different occasions of its use, however, it may be made to correspond not to its encoded concept but to an *ad hoc* concept construed from it. By 'meaning change' we only mean that a certain word contributes not its alleged 'literal' meaning (or, as we prefer to say, one of its more conventional meanings) to the truth conditions of the utterance it belongs to, but a different one.

⁴ We have expressed doubts about the robustness of the availability principle in Martínez-Manrique and Vicente (2004).

⁵ Relevance Theorists seem to agree with the context dependency of the effort/effect trade-off. See, for instance, the exchanges on 'metaphor and effort' in the website for RT archives: (http://www.phon.ucl.ac.uk/home/robyn/relevance/relevance_archives/), where Sperber spells out three different factors that affect the amount of effort involved in processing an utterance and concludes that these factors can "cause a metaphorical interpretation OR a literal interpretation of the same utterance to involve more or less effort in different contexts".

⁶ Notice that stimulus salience is also a property of linguistic objects as a particular kind of stimuli. For instance, an unfamiliar word will be more salient among familiar words, and the location of a lexical piece will generally have an effect on the attention it receives. See e.g., Steen (2004) for the effect on metaphor recognition of where an expression is located in a sentence, and a sentence in a text.

⁷ This has nothing to do with its being a low frequency word. Lexical salience has to do with how accessible is a meaning in occurrences of the word, not to how accessible is the word itself.

⁸ One might complain that stimulus salience is also processed bottom-up, so it is not possible to recruit it as a possible source of evidence of bottom-up/top-down interaction. However, this would be a misinterpretation of the interaction that is at stake, i.e., interaction between processing of the currently perceived lexical piece and just about every kind of knowledge available, such as general knowledge, knowledge of the discourse context, or knowledge of the physical situation that surrounds the utterance.

⁹ It does not help to argue that degree of conventionality is related to the number of people that agree to the convention. A convention is always relative to a population but

it does not matter how big the population is, only that it is the population of reference for the participants in the communication.

¹⁰ In fact, we think that things are slightly more complex: while (6) strongly suggests an interpretation of 'butcher' as (ii), (10) is possibly only weakly biased towards (i). The reason is that the meanings of 'butcher' and 'surgeon' interact with each other in a way that makes certain aspects more easily accessible, constraining the plausible interpretations. These constraints can be regarded to a great extent as internal to the sentence itself and may be based on semantic processes such as what lexical semantics calls *co-composition* (Pustejovsky 1995) – a process by which it is possible to generate new, non-lexicalised meanings for words. The word 'surgeon' in (6) provides a set of features that constrain the possible meaning of 'butcher' in the direction of (ii) rather than (i), whereas 'neighbour' in (10) simply lets the most entrenched meaning –i.e., (i)—to be routinely selected.

Without consideration, without pity, without shame

they have built great and high walls around me.

And now I sit here and despair.

I think of nothing else: this fate gnaws at my mind;

for I had many things to do outside.

Ah why did I not pay attention when they were building the walls.

But I never heard any noise or sound of builders.

Imperceptibly they shut me from the outside world

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¹¹ The whole poem is:

¹² A way of putting this is that the telic quale (Pustejovsky 1995) that forms part of the concept wall, which sums up the functional properties of walls, is not as salient as are some other features related to their geometrical and visual properties.

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