

Metaphorical projection, subjectification and English speech act verbs¹

Mikhail Kissine
Université Libre de Bruxelles

Previous approaches to non-illocutionary uses of speech act verbs (SAVs) concentrated on commissive verbs like *promise* and *threaten*, claiming that their non-illocutionary uses result from a subjectification process, and that they therefore describe a subjective relation. Some uses of assertive and directive SAVs do not conform to this pattern: they involve a metaphorical projection whose source domain is the basic level of cognitive apprehension where directive speech acts are perceived as manifestations of an internal necessity and assertive speech acts as direct signs of states of affairs. It is argued that subjectification approaches went wrong when characterising non-illocutionary uses of commissive SAVs in purely subjective terms. Non-illocutionary uses of *promise* and *threaten* are better accounted for by a metaphorical projection whose source domain is the conceptualisation of commissive speech acts as highly reliable signs of future states of affairs.

Keywords: speech act verbs; subjectification; metaphorical mapping; modality; illocutionary acts

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1. Introduction

Most of the time, when we speak we perform, *eo ipso*, illocutionary acts: requests, orders, promises, threats, assertions, suggestions, etc. Such acts are often reported by means of sentences of the form ‘NP V... that/to *p*’; verbs used in such reports, such as *threaten* or *promise*, can be called *speech act verbs* (SAVs for short). In many cases, it is possible to trace the origin of SAVs back to meanings unrelated to speech acts (cf. Traugott 1989, 1991, 1997; Traugott & Dasher 2005: 194–207). However, such non-illocutionary origins of illocutionary uses will not be my concern here; I will rather concentrate on the non-illocutionary uses of SAVs illustrated by the following examples.

- (1) This task *requires* attention.
- (2) These impressive ruins *suggest* that Romans were present here.
- (3) The program of the conference *promises* interesting debates.

These uses seem to be always diachronically posterior to the ‘literal’ illocutionary meanings, and thus to result from a semantic shift driven by the conceptualisation of certain components of linguistic interaction (Kissine 2004; Traugott & Dasher 2005: 204–219).² The scope of this article is restricted to synchronic aspects; it aims at uncovering the cognitive structure that underlies non-illocutionary uses of SAVs and to relate them systematically to the corresponding illocutionary meanings. Such an undertaking is important in two respects. First, if correct, the claims made below entail specific predictions that can be tested by diachronic and typological studies. Second, the very nature of the phenomenon at hand will force a careful examination of the cognitive underpinnings of speech act interpretation – a crucial matter both for historical and non historical pragmatics.

This study will rely on two main analytical tools: subjectification and metaphorical mapping. Since metaphorical mapping will not be discussed until Section 2, let me say a few words about the way the term *subjectifi-*

² For instance, the illocutionary directive meaning of *require* is regularly attested from 1375–1386 up to, at least, 1640, and seems to be chronologically anterior to the meaning illustrated in (1), which, as we will see, is structurally equivalent to *need* (*Oxford English Dictionary*). Incidentally, the same semantic shift can be observed for the Old French *requirer* which, together with the Latin *requirere*, could lie at the source of the English *require*: while the directive meaning is recorded from the eleventh century, it does not seem to be used in a way equivalent to *need* before the end of the sixteenth century (*Französisches Etymologisches Wörterbuch; Dictionnaire de l’Ancienne Langue Française*).

cation will be used here. Disentangling different linguistic facts covered by this term is all the more difficult because the two most authoritative authors writing on the topic – Langacker & Traugott – use it in subtly different ways. I will not assess these differences here (see Traugott & Dasher 2005: 97–99; Brisard 2006; De Smet & Verstraete 2006; López-Couso 2010). I will adopt Traugott’s use here because the term *subjectification* has been applied to SAVs in her acceptance.

Let the term *referent frame* stand for the content of an expression, that is, the situation it describes. An entity belonging to the referent frame is construed objectively if it is not speaker-related, and it is construed subjectively if it is related to “speaker’s belief/attitude” towards the content (Traugott 1989; Traugott & Dasher 2005).³ For the sake of simplicity, I will assume that in all the examples to be treated here, the referent frame is composed of two entities X (semantic content of the subject phrase) and Y (semantic content of the object phrase), standing in a certain relation (semantic content of the main predicate) with respect to each other. (Nothing important hinges on such a naïve symbolisation of sentence structure.) The speaker, or more abstractly, the source of conceptualisation, lies at the origin of the construction of the referent frame, and thus stands in a certain relation to it. Such a pattern is symbolised in Figure 1: the main predicate describes a factual, ‘speaker-independent’ relation, symbolised by an unbroken line; although the speaker stands in a certain subjective relation to the referent frame, this relation, symbolised by the broken line, remains external to it, viz. it does not belong to the utterance’s content. However, in some cases, certain subjective relations form part of the referent frame: Figure 2 represents the case where two objective entities of the referent frame are linked by a subjective, speaker-related relation. Such a pattern is a typical result of a subjectification process.

The foregoing discussion is immediately relevant to the main topic of the article. Previous studies of the non-illocutionary uses of SAVs have concentrated on commissive verbs such as *promise*, *threaten* and *refuse* (Verhagen 1995, 1996, 2000; Traugott 1997; Cornillie 2004). For reasons to which we will turn back in Section 4, these authors relied on a subjectification

³ By contrast, according to Langacker (1990a, b, 2006), the fact that a construction is construed objectively does not mean that it is not speaker-related, but rather that this relatedness is explicitly encoded/mentioned. As a consequence, Langacker thinks of subjectivity as being a gradual phenomenon.

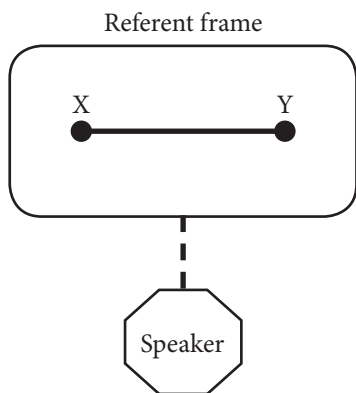


Figure 1.

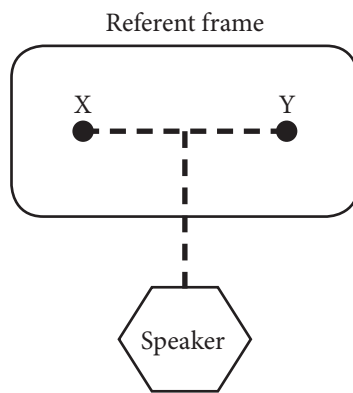


Figure 2.

approach. In subjectification analyses, it is claimed that speech-act reports like (4) trigger the subjective expectation that the event described by the syntactic object clause will take place (Verhagen 1995, 1996; Traugott 1997).⁴

(4) John *promised* that he would come.

However, this expectation is not part of the content of (4). Figure 1 can be taken as representing this analysis of (4): X corresponds to John, Y to the event denoted by the syntactic object clause, the solid line to the relation denoted by *promise*, and the broken line to the subjective expectation that the event in question will actually take place.⁵ As for Figure 2, it is a good representation of what (3) should mean according to the proponents of the subjectification analysis: here, *promise* describes a subjective relation (broken line) which links X (*conference program*) and Y (*interesting debates*).⁶

⁴ Verhagen (2000) claims that this expectation owes more to the speaker–hearer subjectivity, that is, to the argumentative purposes of the utterance, than to the descriptive properties attributed to the referent of the grammatical subject.

⁵ Notice that such expectations can originate from the viewpoint of an off-stage conceptualiser which does not necessarily conflate with the viewpoint of the speaker. As pointed out by Brisard (2006: 47): “[t]he position of this conceptualizer or ‘self’ may naturally correspond with the speaker’s own epistemic stance, possibly by default, but this particular association can be overridden at any time, given that the essence of linguistic subjectivity seems to be about expressing a point of view (not necessarily the speaker’s, though).”

⁶ Actually, subjectification theories have been mainly advanced for subject-raised constructions with *promise*, like (i):

In what follows, it is important to keep in mind that the success of the subjectification analysis of non-illocutionary SAVs depends on whether or not the verb under analysis describes a subjective relation.⁷ It follows that the subjectification analysis of SAVs ought to assign them a speaker-related meaning.

We will start the next section by examining whether such an analysis is adequate for directive SAVs. We will see that in examples such as (1) the main verb does not encode a subjective relation. I will argue that such uses are better analysed in terms of metaphorical projection. However, we will also see that directive SAVs like *urge*, *command* and *invite* have non-illocutionary uses that are amenable to a subjectification analysis. Next, we will turn to assertive SAVs such as *suggest* in (2). I will argue that in such examples the verb encodes an objective meaning relation. Careful examination of the structure of assertive speech acts will also allow a metaphorical-mapping analysis. Finally, in Section 4 we will see that non-illocutionary uses of *promise* and *threaten* are better accounted for by a metaphorical projection whose source domain is the conceptualisation of commissive speech acts as highly reliable signs of future states of affairs.

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- (i) The conference *promises* to be interesting.

An anonymous referee wondered whether it is relevant to even consider the analysis of (1)–(3) in subjectification terms. First, it is doubtful that constructions like (3) require a treatment different from cases such as (i). Traugott & Dasher (2005: 208–210) convincingly argue that subject-raised NP-*promise*-INF constructions stem historically from NP-*promise*-NP constructions like (3), where *promise* also encodes a subjective relation. Second, *require* is equally acceptable in subject-raised constructions:

- (ii) This task *requires* to be performed with attention.

Now, it is true that assertive SAVs, when used non-illocutionarily, like *suggest* in (2), do not seem to occur in such constructions. But since the subjectification story requires the relation encoded by *promise* in (3) – and by extension, the one encoded by *require* in (i) – to be subjective, it is not a trivial question whether a parallel use of *suggest* also encodes a subjective relation. Such a question makes sense especially if NP-V-NP constructions like (1)–(3) are diachronically anterior to subject-raised constructions such as (i)–(ii), which leaves open the hypothesis that (2) is just the first step towards non-illocutionary NP-V-INF uses of *suggest*.

⁷ De Smet & Verstraete (2006) distinguish between ideational and interpersonal semantic subjective relations. Only ideational relations belong to the content; therefore all the subjective relations under analysis here are of this former kind.

2. Directive verbs

2.1. Two types of non-illocutionary use

What kind of subjective expectations are triggered by a directive speech act report like (5)?

- (5) Mary *requires* John to apologise.

A directive speech act is satisfied if, and only if, the addressee (A) brings about the truth of the propositional content with that very illocutionary act as a reason. For instance, if John apologises because he has a pathological tendency to apologise all the time, it is quite doubtful that Mary will ever consider her request as satisfied. Therefore, provided the request in (5) is successful, one can think of it as a reason (not necessarily sufficient, see Searle 2001) for John to apologise (Kissine 2009a). In other words, from a subjective, third-party standpoint, a directive speech-act report creates a disposition of A to act in accordance with the request. The most natural prediction of the subjectification account would thus be that this causal disposition, subjectively inferred from the directive report, is relationally expressed by *require* in (1), repeated here for convenience.

- (1) This task *requires* attention.

Yet, a closer look at (1) reveals that no such relational meaning is to be found. To begin with, there is a straightforward indication that in (1) *require* does not reorganise the referent frame by introducing a subjective component, but rather refers to an objective relation, inherent to the situation described. In examples like (6), *need* is usually said to express a root, 'real-world' modality – a relation which is not arrived at by inference from some epistemic set, but which corresponds to facts external to, and independent of, the speaker (Sweetser 1990: 60–62).

- (6) This task *needs* attention.

Verstraete (2001) argues that the subjective–objective divide in modals must be traced with regard to speaker commitment towards the content of the utterance. Objective modal auxiliaries do not express speaker commitment, whereas subjective ones do. It is clear that in (6) the speaker does not express her judgement with respect to the content; rather the content itself

is that a certain task cannot be performed without attention.⁸ Since the rephrasing in (6) does not alter the meaning in (1), it appears that *require* expresses the same type of objective modality, inherent to the referent frame.

Furthermore, the relation expressed by *require* in (1) does not even correspond to the subjective expectation triggered by reports like (5). We have seen that in (5) the referent X of the syntactic subject is subjectively perceived as a possible cause of the referent Y of the syntactic object. This relation can be described with more precision in Talmy's (2000) force-dynamics framework.

According to Talmy, the same cognitive system underlies the conceptualisation of any situation where two entities interact with force, be it at the physical, social or psychological level. In language, force-dynamics surfaces as a semantic category whose two main roles are the Antagonist and the Agonist, the former exerting pressure on the latter.⁹ Thus in (5), Mary is the Antagonist that exerts pressure on the Agonist (John) to make an apology. However, this force relation does not belong to the referent frame of (5); it is a subjective apprehension of the objective speech interaction described by (5): see Figure 3.

To see the difference between (5) and (1) or, for that matter, (6), it is important to remember that the objective modal *need* – to which *require* is equivalent in (1) – “refers to the necessity for some specific action or object, rather than to restrictions on other possible actions” (Sweetser 1990: 54). Talmy (2000: 440–452) points out that in constructions of the form ‘X modal VP’, the subject X is an Agonist, while the Antagonist is usually left implicit. However, the example in (1) is more complex. Not only does (1) lack an Antagonist, it also exhibits what Talmy (2000: 442) calls ‘Agonist demotion’: the syntactic subject has the semantic role of Patient, controlled by an Agonist left implicit – the task to be performed is such that in any

⁸ *Need* also conforms to the four main syntactic criteria that are traditionally said to characterise objective modality (for a critical survey, see Verstraete 2001): acceptability in interrogatives, acceptability in the antecedents of conditionals, tense and person inflection and embedding under the scope of epistemic modality:

- (i) Does this job *need* attention?
- (ii) If this is a job that *needs* attention, then Peter is the perfect candidate.
- (iii) This job *needed* attention.
- (iv) This job may *need* attention.

⁹ In order to avoid a possible confusion with illocutionary forces, I will use *pressure* instead of *force* while talking of forces in the force-dynamics framework.

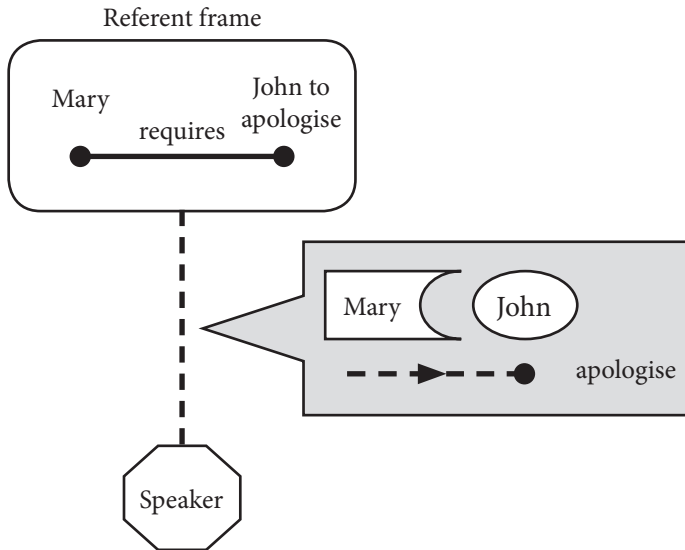


Figure 3.

possible world where this task is performed, its nature forces the performing agents to act carefully. Thus, both (1) and (6) may receive the following paraphrase that brings the Agonist back on the stage.¹⁰

- (7) We/Workers *have to/must* be careful/act carefully when performing this task.

Such a referent frame, represented in Figure 4, is totally different from what we have found in (5). The syntactic object clause of (5) describes the movement the Antagonist impels the Agonist to make, so that the semantic content of this clause must be an action temporally posterior to the force

¹⁰ A referee for this journal objected that the modality in (7) is not objective, in that there is an element of wanting: the workers must be attentive, if they want to perform the task. I do not believe that agency or volition has a bearing on the objective status of the modal. The fact that the necessity relation is conditional upon a certain state of affairs – upon the workers being in a certain volitional state – does not alter the fact that it is inherent to this state of affairs. (7) is not different from (i) or (ii):

- (i) If we want our computers to perform powerful simulations, they *must/have to* be equipped with extra memory.
 (ii) If a young gorilla wants to mate, it *must/has to* avoid the alpha male.

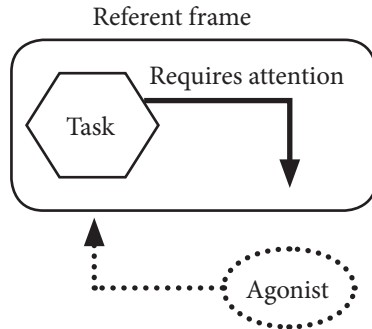


Figure 4.

interaction itself. For instance, in order to interpret (8) one has to suppose that John can somehow control his surprise; and it is hard to make any sense at all of (9).

- (8) ?Mary *requires* John to be surprised.
 (9) ?Mary *requires* John to have apologised yesterday.

By contrast, the syntactic object of (1) describes the content of a necessity which only constrains the possible movements of the Agonist; therefore, this content need not be temporally posterior to the existence of that necessity, nor even be an action.

- (10) From now on, this job *requires* having had training in computational linguistics.
 (11) This task *requires* passion/experience/good reading skills.

Interestingly, some non-illocutionary uses, while exhibiting the same syntactic structure as (1), are more similar to (5) from a semantic point of view:¹¹

- (12) Overall, this ambitious book *commands* attention in its argument and scope . . . (International Journal of Maritime History, <http://yalepress.yale.edu/yupbooks/reviews.asp?isbn=0300107862>)

¹¹ What is intriguing is that, in English, there does not seem to exist any other directive SAVs behaving like *require*. Such verbs are found in French (see Kissine 2004), which supports the general character of the analysis provided here.

- (i) *Ce travail exige/demande de la santé.*
 'This job requires health.'

- (13) These data *invite* inquiry in other areas as well: Do mutations in additional genes that contribute to LTA synthesis/anchoring/regulation influence the invasion phenotype? (Journal of Clinical Investigation, <http://www.jci.org/cgi/content/full/115/9/2325>)
- (14) These facts *urge* broader social involvement by the science community for reasons of enlightened self-interest, if not human compassion. (The Scientist, <http://www.the-scientist.com/article/display/17508>)

As in (5), the syntactic subjects in (12)–(14) can be assigned the role of an Antagonist that exerts pressure on the Agonist (left implicit in (12)–(13)) who is likely to perform the action specified by the syntactic object; see Figure 5. Here are two pieces of evidence that support this claim. First, the opposition between *have to* and *need* is a good test to show that (12)–(14) describe a situation where external pressure is exerted on the Agonist. As noted by Sweetser (1990: 62; see also Talmy 2000: 440–443), *need to* differs from *have to* as to the origin of the pressure in question: with *have to*, this pressure stems from the internal properties of the referent of the syntactic subject; with *need to*, the source of the pressure is some other, external entity. Native speakers confronted with the following pairs of paraphrases of (12)–(14) systematically evaluated the use of *need to* as less natural, which supports the force-interaction pattern we have just posited.

- (15) This book *commands* attention. You *have to/need to* read it.
- (16) These data *invite* inquiry in other areas as well. We *have to/need to* see whether mutations in additional genes that contribute to LTA synthesis influence the invasion phenotype.
- (17) These facts *urge* broader social involvement by the science community. Scientists *have to/need to* pay more attention to the outside world.

Second, since the syntactic object in (12)–(14) specifies the movement the Antagonist incites the implicit Agonist to perform, any replacement by a non-actional term is ruled out.¹²

- (18) This book *commands* attention/?passion/?experience/?good reading skills.
- (19) These data *invite* inquiry in other areas/?surprise/?passion/?good mathematical skills.
- (20) These facts *urge* broader social involvement/?surprise/?passion/?good social skills.

¹² Some might object that the “attention” mentioned in (12), (15) and (18) is a state, not an action; but here, in contrast with (1), *attention* refers to the act of *paying attention* and not to some mental disposition. On attention as a mental act, see Proust (2001).

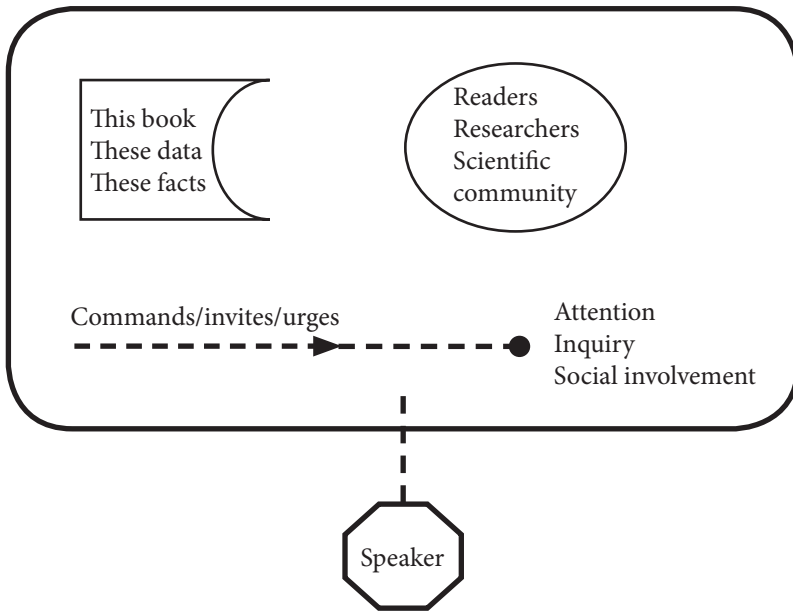


Figure 5.

Yet, there remains a crucial difference between (5) and (12)–(14): while in (5) the subjective force-interaction pattern does not belong to the referent frame, but is only inferred on the basis of knowledge about conversational interaction, in (12)–(14) it is part of the semantic content and is encoded by the main verb (Figure 5).

So far, we have identified two types of non-illocutionary use of directive SAVs. The first one describes a necessity (for an action, an object or a state) which is generated by internal properties of the referent of the syntactic subject. In the second type, the referent frame seems to include a subjective force-interaction pattern that remains subjectively construed in speech act reports. Uses of the first type, exemplified by (1), are not amenable to a subjectification analysis, so that an alternative route, that of metaphorical mapping, will be explored in Section 2.2. By contrast, uses of the second type, exemplified by (12)–(14), clearly support a subjectification analysis: we will see in Section 2.3 that the subjectification process at work derives from the inter-personal dimension of directive speech acts.

2.2. Metaphorical mapping

In the by now classical cognitive framework, metaphor is thought of as a projection from a conceptual source domain into a target domain (e.g. Lakoff & Johnson 1980; Lakoff & Turner 1989; Lakoff 1993; Gibbs 1994). Conceptual domains emerge from the structural organisation of our experiences along some essential dimensions; the metaphorical mapping is said to restructure the target domain in terms of the source domain, which means that some experience, usually more abstract, is conceptualised in terms of an already available conceptual domain: the most famous examples are the conceptualisation of reasoning as perception, of life as a journey, and of arguments as buildings, but one finds many more illustrations in the literature. One of the major claims made by Lakoff is the Invariance Principle, which states that metaphorical projections preserve the cognitive topology of the source domain (1990: 54, 1993: 232, 1998: 60; see also Sweetser 1990: 59–60). Our experiences are constrained, on the one hand, by the characteristics of our perceptual devices, and, on the other hand, by the properties of the perceived situations (for a detailed model applied to vision, see O'Regan & Noë 2001; Noë 2004). Therefore, in what I take to be a plausible interpretation of the Invariance Principle, we can say that for an experience to be conceptually organised in terms of some source domain, the features intrinsic to the experience to which the source domain corresponds and those of the experience to be structured by the mapping (the target domain) must have the same abstract structure.¹³

As pointed out by Barcelona (2003), one can derive from the Invariance Principle a metonymic constraint on metaphorical projection: metaphorical mapping presupposes, on the one hand, that the target domain is understood in terms of its internal structure, and, on the other hand, that the source domain has to undergo a metonymic reconceptualisation in terms of its own structure in order to license the structural similarity with the target domain. This implies that some metaphorical projections involve two domains with the same experiential basis (see Radden 2003): in fact, all the mappings we will encounter in this article belong to this kind.

To make things more tangible, let us come back to (1).

¹³ I believe that such a formulation makes it plain that, despite what is sometimes claimed (e.g. Jackendoff & Aaron 1991: 332–333; Indurkha 1992: 82, 125; Leezenberg 2001: 143–6), the Invariance Principle accounts for the constraints bearing on any metaphorical mapping between two conceptual domains.

- (1) This task *requires* attention.

We have seen above that the referent frame of (1) is the generation, by some entity, of a necessity for an action, an object or a state. This situation corresponds to a certain experiential content whose abstract structure is represented in Figure 4. If we take (1) to result from a metaphorical mapping, the Invariance Principle, as glossed above, entails that the source domain should have the same underlying structure, viz. the perception of an entity as generating some necessity with an unconstrained content.

Whenever a speaker S performs a directive speech act with content *p*, for example, when S asks A to close the window, she represents herself as entertaining a desire with the same content *p*, for instance, S wants A to close the window (Kissine 2009a).¹⁴ Speech Act Theory captures this fact with the help of the Principle of Illocutionary Commitment, which entails that every directive speech act commits S to the expression of the desire that S must entertain in order to fulfil the sincerity conditions associated with her speech act (Searle & Vanderveken 1985: 32–5; Vanderveken 1990: 159).

An interesting feature of desires is the absence of any causal constraint on their satisfaction. If I want a piece of cake, it does not matter for the satisfaction of my desire whether you give me that piece of cake because I wanted it or because you are polite. As a consequence, we can, and often do, have desires with mutually exclusive contents or with contents over which we have no control (see Searle 2001: 248–267 for an extensive discussion). Thus, in a sense, having the desire that *p* amounts to just experiencing an internal need for *p*. We have also seen that performing a directive speech act with content *p* entails representing oneself as having the desire that *p*. So, at some level, experiencing that S performs a directive speech act amounts to perceiving S as the source of some need. This experience has the same abstract structure as the situation described in (1): in both cases,

¹⁴ I leave aside ‘polyphonic’ or ‘echoic’ cases (see Sperber & Wilson 1981; Ducrot 1984: ch. 4), where S dissociates herself from her order. Another potential problem, raised by a referee, is that of permissions: in permitting you to do *p* I do not necessarily express my desire that you do *p*. The illocutionary status of permission is an intricate matter into which I will not venture here (see Dominicy, ms). Let me just mention that for Searle & Vanderveken (1985) permitting to *p* is the illocutionary negation of forbidding to *p*. Since in forbidding to *p*, S expresses the desire that not-*p* be the case, in permitting she does not express a desire that *p* nor the desire that not-*p* (which still leaves open the possibility that she entertains one of these desires). For a treatment of non-illocutionary *permit* in French along these lines, see Kissine (2004).

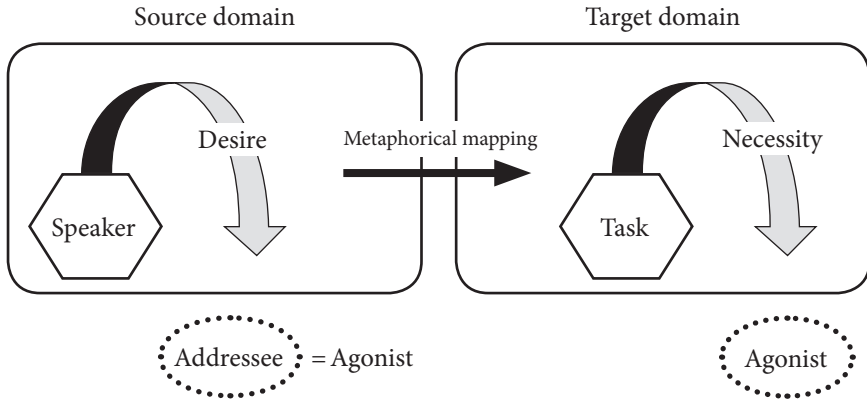


Figure 6.

attention is focused on the source of the necessity and not on the entity on which an external pressure might be exerted in virtue of this necessity. As shown in Figure 6, both experiences form a perfect tandem for a metaphorical mapping, for, in accordance with the Invariance Principle, they display an isomorphic conceptual structure.

2.3. Subjectification with directive SAVs

However, the picture of directive speech acts we have drawn so far is incomplete, because it leaves out an important interactional aspect. This aspect, as we will see in this section, is crucial in order to account for examples like (12)–(14), repeated here for convenience.

- (12) Overall, this ambitious book *commands* attention in its argument and scope . . .
- (13) These data *invite* inquiry in other areas as well: Do mutations in additional genes that contribute to LTA synthesis/anchoring/regulation influence the invasion phenotype?
- (14) These facts *urge* broader social involvement by the science community for reasons of enlightened self-interest, if not human compassion.

Directive speech acts are not mere attempts to satisfy one's desires. They have the communicative function of providing A with a – not necessarily sufficient – reason for action (Kissine 2009a). When performing an order, not only do we want A to bring about the truth of its content, but we also

expect him to do so with our order as a reason (Shwe & Markman 1997 show that around thirty months children try to correct an adult who conveys misunderstanding of their request even though they are handed the requested object). This is the stage where the 'self-referentiality' of directive speech acts, discussed above in connection with (5), comes in. At this second level, directive speech acts are perceived as potential causes for A's action: the underlying force-dynamic structure of this type of conceptualisation is what is represented in Figures 3 and 5. This is why it makes great sense to claim that (12)–(14) are subjective counterparts of (5), and thus result from a process of subjectification.

By contrasting two kinds of non-illocutionary uses of directive SAVs, we have uncovered the two-layered structure of directive speech acts. At a first, basic, level, the speaker of a directive speech act is perceived as expressing a desire; the conceptualisation of this level serves as the source domain for a metaphorical projection whose target is the experience of an entity that lies at the origin of some need or necessity. At the second level, directive speech acts are subjectively perceived as force interaction. The speaker of the directive act provides the addressee with a reason to act, and thus exerts a pressure on him. This subjective attitude is encoded within the referent frame by directive SAVs in examples like (12)–(14). In the next section we will see how the same kind of metaphorical mapping we have posited for (1) accounts for the non-illocutionary uses of assertive SAVs.

3. Assertive verbs

3.1. Natural meaning

Let us start with (2), repeated here for convenience:

- (2) These impressive ruins *suggest* that Romans were present here.

The first thing to note is that the assertive *suggest* may be replaced by *mean* or *indicate*:¹⁵

- (21) These impressive ruins *mean/indicate* that Romans were present here.

¹⁵ Of course, *suggest* also has a directive meaning, as in *John suggested that I get out*. Although the relationship of such uses to assertive ones is extremely intriguing, I believe that they are not relevant to the analysis of (2).

This supports the assumption that what the verb *suggest* denotes here is a natural-meaning relation in the sense of Grice (1957). However, before endorsing this view, as we will eventually do, it is important to come to grips with an apparent objection. If A means naturally B, then A is the cause of B or B is the cause of A (or A and B have a common cause): these clouds mean rain because they cause rain; these spots mean measles because measles is the cause of these spots. Obviously, Rome's presence cannot be caused by the existence of the ruins in question. So the referent frame of (2) should be that Rome's presence *is* the objective causal origin of the ruins in question. But, under such a hypothesis, how are we to account for the very strong intuition that the speaker of (2) only tentatively speculates that Rome was continuously present? The answer to this question is intricate, and we have to move carefully through some details about the interpretation of assertive speech acts before being in a position to solve the apparent clash between the objective meaning just ascribed to *suggest* and its epistemic, subjective flavour.

3.2. Suggesting and asserting

Let me restate the rather uncontroversial fact that, in the same way as performing a directive speech act implies expressing (hence representing) a desire, assertive speech acts are *eo ipso* expressions (hence representations) of S's beliefs. In quite a crude formulation – but sufficient for our present purposes – representing a belief is just representing a state of affairs that this belief is supposed to 'fit' (Searle 1983). In other words, any assertive speech act is also a representation of some informational content. Assertive speech acts are thus representations of beliefs, which, in turn, represent some state of affairs.

This brings us back to the apparent clash between the natural meaning analysis of (2) and its intuitive reading. According to what can be called the 'direct perception' approach to utterance interpretation, a representation of a belief of S automatically (or, at least, by default) causes the hearer to form a belief with the same content (although it can be subsequently revised and reassessed; Millikan 1984: ch. 4, 2004: ch. 9; Gilbert 1993; Recanati 2002; Kissine 2008a, 2009b). Given that any assertive speech act encompasses the representation of a belief of S, this 'direct effect' should hold for any assertive act. But compare suggesting with attesting. By describing an assertive speech act as a suggestion, one sets up a context where it is unlikely that

the representation of S's belief that *p* may be taken by the addressee A as undisputable evidence for *p*. By contrast, when S is said to attest that *p*, it is rather improbable that A should reject *p* without further ado. But how can we accommodate this difference with the claim that assertive speech acts in general, attesting and suggesting alike, are processed as direct signs of their contents?

A short interlude about the social significance of assertions is in order here. The role of an assertive speech act cannot be reduced to that of providing information. As many philosophers have observed, asserting imposes a kind of responsibility on the speaker; this presumption that assertions are grounded allows other speakers to propagate an assertion or to rely on it for some further assertions (Brandom 1983, 1994: 157–175; McDowell 1994; Williamson 1996; Alston 2000: 117–125). However, the normative requirement of justification does not generalise to every assertive speech act: for instance, S is not committed to having good evidence when she is suggesting or guessing (Green 2005).

Now, it is crucial to see that making manifest one's lack of justifications does not prevent one from being fully committed to the truth of the asserted proposition, in the sense of laying oneself open to blame in case the falsity of the assertion becomes manifest. In other words, putting forward a proposition with reservations, which is a rough definition of suggesting *qua* assertive speech act, does not amount to assigning a low degree of probability to that proposition (Toulmin 1958: 41–53). This difference is brought out strikingly by the following pair of examples (for an extensive discussion, see Kissine 2008a).

- (22) It is possible that John was there and it is also possible that he wasn't.
- (23) ?Probably/I suggest that John was there and probably/I suggest (that) he wasn't there.

The 'direct perception' theory of assertive speech acts helps to understand why cancelling one's commitment to having sufficient justifications does not prevent one from being committed to the truth of the communicated content. Cooperative behaviour (for instance, refraining from inducing false beliefs in other minds) is evolutionarily advantageous because it helps organisms to reach long-term selfish gains, even when these are in competition with desire-dependent short-term selfish gains. Failure to respect cooperative conventions, such as repeatedly misinforming, may lead to exclusion from the social group, with all the disastrous

consequences this may entail (e.g. Axelrod & Hamilton 1981; Cosmides & Tooby 1992; Cummins 1996; Ridley 1996; Axelrod 2000; Nesse 2001; Dennett 2003). Consequently, it is understandable that our social practices have evolved so as to reprehend individuals who provide grounds for believing erroneous information. This social pressure has two consequences. First, S is committed to the truth of her assertion. This responsibility cannot be cancelled because any utterance endowed with the informational content *p* automatically prompts A to believe that *p*; moreover, even though beliefs can be reassessed and revised, reassessment is time-consuming and has a certain ‘evolutionary cost’. Second, as we have already pointed out, every assertion is likely to serve as a justification for another assertion; this is why S is committed by default to having grounds for her assertion. But, unlike the first, this second responsibility can be attenuated or cancelled – S can explicitly indicate that she has no sufficient justifications for the asserted content *p*, and that she is therefore not to blame for further assertions of *p* by other people (for more details, see Kissine 2008b, 2009b).

These assumptions predict that suggestions will be processed, like all *bona fide* assertive speech acts, as direct signs of the states of affairs they represent. The fact that a piece of information *p* is revised or is likely to be revised subsequently to its acquisition does not conflict with the fact that it was acquired as a direct sign – this situation only tells us something about the context of the meaning relation. In order to induce a natural-meaning relation, a causal link has to be restricted to a certain epistemic domain. By ‘epistemic domain’ is meant here the set of ‘facts’ with respect to which a certain epistemic relation holds. In particular, for a causal relation to mean so-and-so to X, X must have been exposed to it during a period sufficiently long to automatically produce an association of a certain effect with a certain cause (Millikan 2004: chs. 3, 4). To borrow an example from Dretske (1988: 56–57),¹⁶ a ringing doorbell means that there is someone at the door, and not that a squirrel is jumping around, because usually squirrels do not press door buttons. If it were the case that squirrels usually cause my doorbell to ring, then a ringing doorbell would come to acquire a different meaning.

Even if we experience assertive speech acts as natural signs, we also experience a subjective evaluation of the epistemic domain associated with that natural-meaning relation (see Millikan 2005: chs. 9–11); the scope of

¹⁶ Dretske, by the way, endorses quite a different picture of meaning whose internal inconsistencies are cogently emphasised by Dennett (1995: 404–407) and Millikan (2004: chs. 3, 4).

this epistemic domain might cover any metaphysical configuration one can think of or be restricted to a very thin set of propositions. Therefore, our perception of assertive speech acts has both an objective component – the natural-meaning relation – and a subjective one – the strength of the speaker’s commitment to this relation. Typically, when an assertive speech act is perceived as a suggestion, the epistemic domain within which the speech act goes proxy for its content is quite slim – revision and reassessment loom large.

Exactly the same analysis applies to (2): a certain state of affairs stands in a natural-meaning relation to another one, but this relation has a restrictive epistemic support, outside which it is very likely to be falsified (for a foundational discussion of this kind of non-monotonic epistemic support, see Hempel 1965). The meaning of the non-illocutionary *suggest* thus combines a subjective component with an objective content: in ordinary epistemic constructions like (24), the former role is fulfilled by the modal verb, the latter by the predicate lying in its scope (Langacker 1990a: 334–336, 1991: 269–275).

(24) Romans might/must have built this road.

The paradox exposed at the beginning of this section is thus solved. *Suggest* in (2) describes a natural-meaning relation which involves the objective construction of a (converse) causal relation, while being subjectively limited to an epistemic domain outside which it can (and probably will) be falsified.

As shown in Figure 7, where the dotted elliptical line provides a spatial representation of the epistemic domain, we can now posit a metaphorical-projection mechanism. At a basic level, assertive speech acts are processed as direct signs of states of affairs, this meaning relation being restricted to a certain epistemic domain. We have just seen that examples like (2) have an isomorphic conceptual structure. Using the Invariance Principle, one can claim that a situation where an entity naturally means another one, within some epistemic domain, can be restructured in these terms. Incidentally, this finding illustrates an important methodological principle: the simple observation that a given expression has a subjective component does not suffice for claiming, without further assumptions, that this expression is the output of a process of subjectification.

Interestingly enough, some other non-illocutionary uses of assertive SAVs conform to similar restrictions imposed on the epistemic domain by

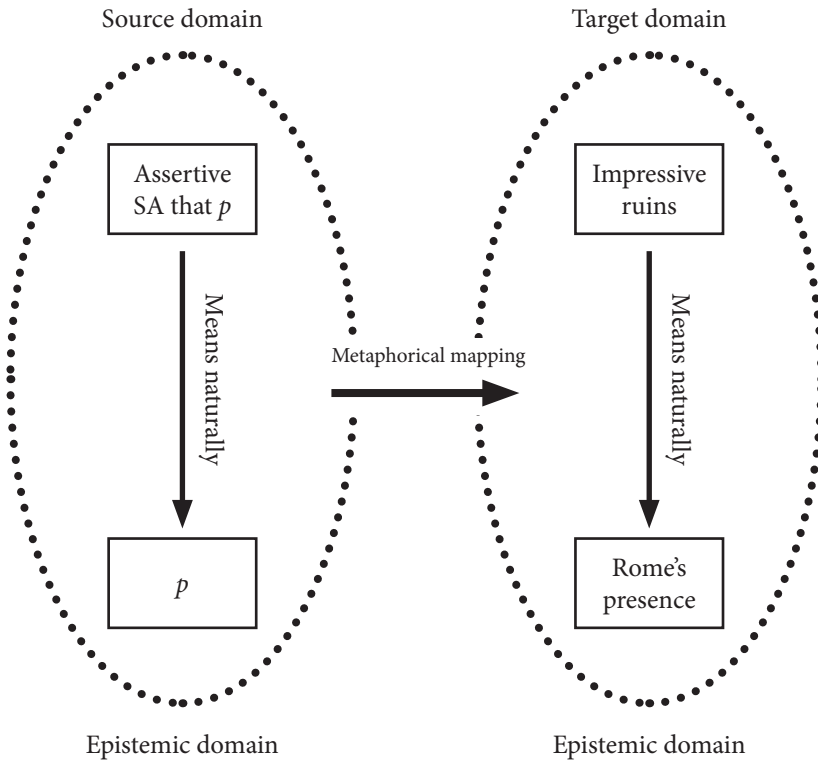


Figure 7.

their illocutionary meanings. In (25), *remind* describes a natural-meaning relation which is circumscribed to an epistemic domain where the referent of the syntactic subject stems from a causal origin, the existence of which has been forgotten by the addressee

- (25) These impressive fortifications *remind* us of Rome's presence.

One of the meanings of *warn*, especially when it is followed by the preposition *of*, refers to an assertive speech act such that the conveyed information is crucial for A's action planning. In (26), *warn* attributes to the referent of the syntactic subject the status of a natural sign of *p* within an epistemic domain where this information *p* can be useful for A:

- (26) [Her] flashing black eyes *warn* of the mass of complexities bubbling beneath the surface. (M. Caine, *A coward's chronicles*, London: Century Hutchinson, found on the British National Corpus on-line.)

Let us sum up the findings of this section. We have seen that, as was the case with directive verbs, the cognitive apprehension of assertive speech acts operates at two levels. At the most basic one, assertive speech acts are perceived as going proxy for the information they convey. At the second level, this natural-meaning relation is restricted to some epistemic domain. I have argued that such a complex conceptualisation of assertive speech acts functions as a source domain for a metaphorical projection whose target domain is a situation in which some entity is perceived as the natural sign of another within a certain epistemic domain. Examples like (2) and (25)–(26) have thus been analysed in terms of metaphorical mapping.

4. Commissive verbs

As mentioned in Section 1, the non-illocutionary use of commissive verbs seems to be very elegantly explained by a process of subjectification grounded on the knowledge of discourse relations. In this last section, I will first point out a problematic aspect of this approach and, next, explain how the structure of intentions and commissive speech acts allows a metaphorical-projection analysis that solves that problem. Finally, I will briefly discuss the contrast between *promise* and *threaten*, which superficially looks like an immediate counter-example to my claims.

4.1. A problem with the subjectification analysis of *promise*

As we have seen, the subjectification analysis assumes that the epistemic uses of *promise* encode our subjective viewpoint on promises – that is, the expectation that the promised action will take place – which, in examples like (3), repeated here, is encoded by the main verb. In other words, the claim is that the non-illocutionary uses of commissive verbs encode the speaker's subjective expectations about the future.

- (3) The program of the conference *promises* interesting debates.

However, it is much more plausible to consider that non-illocutionary *promise* encodes an *objective* aspect of the state of affairs described; in fact, the situation seems to be very similar to what was observed about (2) (see previous section). In (3), the program is a natural sign of interesting debates, as shown by (27):

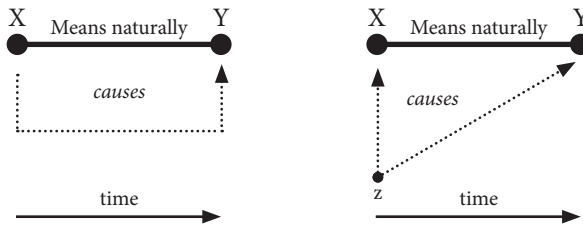


Figure 8.

(27) The program of the conference *means* interesting debates.

An event or a state acquires such an informational status either because it has a common cause with the future state of affairs that it means naturally, or because it is likely to cause it (see Figure 8). Thus *the program of the conference* (arguably, a synecdoche for the whole gathering) designates a potential cause of interesting debates. Furthermore, the subjective attitude linked to commissive speech acts does not seem to correspond to the relation that the non-illocutionary use of *promise* sets between the subject and the object. Certainly, being told that John has promised that *p* can sometimes trigger the expectation that *p* will take place. However, this expectation does not necessarily reach the degree of absolute certainty, for the contingencies of existence might make *p* impossible.

Yet, (28) is very odd, unless it is taken as an example of polyphony where the person who utters (28) dissociates herself from a speaker who would assert that the meeting promises to be interesting, and thus does not endorse the corresponding belief (see Sperber & Wilson 1981; Ducrot 1984: ch. 4).

(28) ?This encounter *promises* to be *probably* interesting.

4.2. The solution

Structurally, the example in (3) is, like every promise, a prediction about one's own action. If we try to apply to (3) the metaphorical-projection analysis we used above, it follows from the Invariance Principle that, at some basic level, commissive speech acts are interpreted as reliable signs of a future state of affairs: the program of the meeting is a totally reliable sign of future interest (cf. the unacceptability of (28)).

In promising to p , S *eo ipso* represents herself as intending to p . If a rational agent intends to p (as opposed to merely wishing or wanting to p), the probability of p (henceforth, $P(p)$), with respect to the set of beliefs against which this intention is formed, equals 1 (e.g. Anscombe 1957: 91–93; Talmy 2000: 277–279; Davidson 2001: 83–102; Grice 2001: 9–10, 51–57, 101–105; Malle & Knobe 2001).¹⁷ Another interesting fact about intentions is that they are satisfied if, and only if, they cause their own satisfaction (Searle 1983: ch. 3; Malle & Knobe 2001). If I intend to lift my arm and someone else lifts my arm with a rope and a pulley, my intention will not be satisfied (although my desire or my wishing to lift my arm may be satisfied).

Therefore, unless A has a reason to believe that S is insincere, or unaware of some facts that make the satisfaction of her intention impossible, S , by communicating her intention to p , induces A to think that $P(p)$ equals 1. As I have already mentioned, in socially organised groups, misinformation is an uncooperative behaviour, and thus is very likely to be quite heavily sanctioned. Consequently, representing an intention to do p commits the speaker to doing p , even if her estimate of the world at the utterance time proves to be wrong (Kissine 2008b). If S makes manifest that the future outcome is far from certain, as in (29), the utterance may have an assertive illocutionary force only, as shown by the contrast between (30) and (31):

- (29) I'll *probably* come to your party.
- (30) I *promise*, I'll come to your party.
- (31) ?I *promise*, I'll *probably* come to your party.

It makes much sense to postulate that the representation of an intention is cognitively processed as a deterministic cause for some future state of affairs, that is, as a natural sign of it. This cognitive scenario, which corresponds to the leftmost structure in Figure 8, fits in nicely as the source domain for a metaphorical projection resulting in (3): the source domain is the cognitive scenario of acquiring information about a future event

¹⁷ This is so even if the agent cannot foresee the sequence of bodily movements necessary for the satisfaction of her intention: "We can be clear what it is that we intend to do while being in the dark as to the details, and therefore the pitfalls" (Davidson 2001: 94). In other words, those factors that determine the physical means to reach a goal are different from the factors that lead to the decision to reach that goal (see also Dretske 1988: 131–146; Dennett 2003: 237–40), which has the undeniable evolutionary advantage of allowing agents to keep a goal constant across internal or external variations (Talmy 2000: 277–279).

through the expression of intentions, and the experiential structure of the target domain is constituted by a state of affairs being a highly reliable sign of another one, located in the future.

4.3. *Threaten vs. promise*

Cornillie (2004) points out that while the epistemic use of *promise* describes a state of affairs that is likely to happen, the epistemic *threaten* may be used to refer to a state of affairs whose realisation is not certain. He explains this effect by the fact that reports of threats generate a weaker expectation with respect to the realisation of the event described in the syntactic object clause (see also Verhagen 2000). Does this observation undermine the analysis offered in the previous section, according to which the epistemic uses of commissive verbs encode the maximal probability?

Clearly, the epistemic use of *threaten* keeps the negative overtone associated with the illocutionary meaning: in (32) the predicted state of affairs is seen as negative for both S and A.

- (32) This encounter *threatens* to be boring.

And, true, there is no certainty that the encounter will be boring.

However, it is crucial to keep in mind that promises are always conditional on the truth of a set of propositions. Promises constitute non-absolute, *prima facie* obligations. In promising to come to your party I commit myself to come, but this commitment is suspended if, for instance, I have to drive a dying person to the hospital. A promise to bring about *p* generates the expectation that the probability $P(p)$ for *p* to be true is 1 with respect to a certain, often implicit, set of propositions. The antecedents of conditionals make such contextual requirements explicit (see Lewis 1975; Kratzer 1991):

- (33) John *promised* that he would come if he doesn't get drunk/unless he gets drunk.

The same holds for threats.

- (34) John has *threatened* Mary to kill her if she doesn't stop dating Peter/
unless she stops dating Peter.

Even in the case where the contextual restriction, implicit or made explicit through the use of the conditional, is not very likely to be met, it remains

true that the commissive speech act under consideration is successful if, and only if, the context at hand is consistent with $P(p)$ equalling 1. Hence, we have the same situation as with assertive speech acts: promises are perceived as signs of future affairs within an epistemic domain, which is subjectively construed and within which the meaning relation involves the highest degree of certainty.

As with illocutionary uses, the domain with respect to which the non-illocutionary uses of *promise* and *threaten* encode a subjective expectation that $P(p) = 1$ can be made explicit in conditional constructions.

- (35) This encounter *promises* to be interesting if Mary doesn't come up again with her favourite topic/unless Mary comes up again with her favourite topic.
- (36) This encounter *threatens* to be boring if no linguist pops up/unless some linguist pops up.

Now, there is a good reason why the contextual requirements for threats are most of the time less likely to obtain than those for promises. Threats almost always aim at the perlocutionary effect of preventing an action of the addressee (Wierzbicka 1987: 178–179; see also Verbrugge et al. 2004). As a consequence, in general, the situation in which a threat is kept is harmful not only for the audience, but also for the speaker. However, as emphasised by Nesse (2001), issuing threats entails no less commitment than making promises, and fulfilling one's threats is as important for one's social reputation as is keeping one's promises. As shown by (37), it is impossible to threaten without postulating that $P(p) = 1$ (provided some conditions obtain).

- (37) ?John *threatened* Mary to *probably* kill her if she doesn't stop dating Peter.

The same holds for the non-illocutionary uses of *threaten*: the referent of the subject indicates that the situation described by the object clause will necessarily take place if some conditions obtain.

- (38) ?This encounter *threatens* to be *probably* boring.

Therefore, promises and threats, or the non-illocutionary uses of *promise* and *threaten*, do not differ at the level of the objective meaning relation – which, in both cases, involves the maximal probability – but at the level of the subjective epistemic domain – that is, of speaker commitment. In general, the epistemic domain includes more possible situations with promises and the non-illocutionary *promise* than with threats and the non-illocutionary *threaten*.

This shows that the non-illocutionary use of *threaten* is not a counter-example to the claim made in the previous section. Non-illocutionary uses of *promise* and *threaten* describe a natural-meaning relation between two states of affairs, such that (a) this relation involves the maximal probability of 1 with respect to the background knowledge, (b) the first state of affairs A is temporally anterior to the second B, A either being the cause of B or having a common cause with B. Such meanings form the target domain of a metaphorical mapping whose source domain is the cognitive experience of promises and threats as deterministic causes of states of affairs. Like *suggest* in (2), both *promise* and *threaten* also have a subjective dimension insofar as they ground the natural-meaning relation within an epistemic domain; but this subjective aspect does not suffice to support a subjectification analysis. This is not to say that the previous analyses of commissive verbs in terms of subjectification are to be dismissed: some commissive SAVs might have genuinely epistemic non-illocutionary uses. But, however things turn out to be, it is pretty certain that *promise* and *threaten* do not conform to this pattern, for the relation described by their non-illocutionary uses is not subjective, speaker-related, but belongs to the factual domain.

5. Conclusion

Previous approaches to non-illocutionary SAVs limited their scope to commissive verbs. A closer look at directive and assertive verbs has proven to be extremely rewarding. It turns out that the traditional subjectification analysis is not suited to all the non-illocutionary uses of these verbs, some of which cannot be said to encode a subjective, speaker-related relation.

Faced with this inadequacy of the subjectification approach for examples like (1) and (2), I have tried to build up an analysis in terms of metaphorical projection. Since metaphorical projection must conform to the Invariance Principle which requires structural similarity between the source and the target domain, we had to pay attention to the cognitive experience of directive and assertive speech acts so as to determine whether plausible source domains for (1) and (2) could be found at that level. It was argued that in fact there is not one, but two experiential apprehensions of each directive or assertive speech act. The first (more basic) cognitive layer accounts for examples like (1) and (2): at this level, directive speech acts are perceived as manifestations of an internal necessity and assertive speech acts as direct

signs of states of affairs. At the second, interpersonal, level, directive speech acts are perceived as causal dispositions for an action of the addressee's, and some assertive speech acts are perceived as warrants for the truth of their content. This dimension proved essential for a subjectification analysis of a second group of directive SAVs which encode the subjective relation that remains external to the contents of the corresponding speech act reports.

The study of the non-illocutionary uses of assertive SAVs like *suggest* has shown that a single verb can contribute both an objective relation and a subjective parameter to the referent frame: namely, a natural-meaning relation and an epistemic domain. The same analysis turned out to be more suitable than previous approaches to handle the non-illocutionary *promise* and *threaten*. Contrary to what has been claimed in the literature, these verbs do not simply encode a subjective relation: they describe an objective natural-meaning relation and, simultaneously, set up the epistemic domain where this relation holds. Given that this structure corresponds exactly to the way commissive speech acts are cognitively experienced, metaphorical mapping seems much more plausible than a subjectification process, all the more so since the subjectification analysis runs against problems that are solved by the metaphorical approach.

Before concluding this discussion, it is worth bringing to light some of the questions that have been left unanswered. First, the two-layered conception of speech-act interpretation deserves further development; for instance, the more basic level can probably be reduced to Austin's (1975) notion of a *locutionary* act (see Kissine 2008c, 2009a). Second, it would be interesting to determine whether some of the patterns of meaning that have been uncovered above also apply to verbs unrelated to speech acts. Finally, and perhaps most importantly, all the claims I have made are in need of cross-linguistic and diachronic confirmation.

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Author's address:

F.R.S.-FNRS
Laboratoire de Linguistique Textuelle et de
Pragmatique Cognitive
Université Libre de Bruxelles, CP 175
50, avenue Franklin Roosevelt
1050 Bruxelles, Belgium
mkissine@ulb.ac.be

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