Short-circuited interpretations of modal verb constructions

Some evidence from *The Simpsons*

Bert Cappelle and Ilse Depraetere

In this paper we aim to show how distinct semantic and pragmatic layers of modal interpretation can be fruitfully integrated within a constructionist approach. We discuss in detail a number of cases from the *Simpsons* where a modal verb, as part of a longer expression, has a short-circuited interpretation, that is, where it is conventionally associated with a context-specific modal semantic value and, in some cases, with added pragmatic information. Short-circuitedness is evidenced by the humorous effect that is obtained when a character wilfully or unknowingly ignores standard aspects of interpretation of such a modal verb construction.

Keywords: modal meaning, semantics-pragmatics interface, short-circuited implicature, modal verb constructions, saturation, language humour, *The Simpsons*

1. Introduction

Do modal verbs such as *can* and *could* have a meaning by themselves or is their meaning determined by the grammatical environment they appear in? What theoretical model is best equipped to capture the way in which modal meaning comes about and to represent the nature of the meaning distinctions involved? These are the main questions that we will address in this paper. To give away in advance the essence of our answer, we will argue that modal verbs do have a general meaning, which in the case of *can* and *could* is related to the broad notion of ‘possibility’, but that language users do not necessarily use this meaning as the starting point of a complex calculation to arrive at the final interpretation of a modal verb in a particular context. Rather, the view we will defend is that there are specific *modal verb constructions* which come pre-installed (as it were) with a precise interpretation. These modal verb constructions are linguistic strings containing a modal verb alongside some fixed lexical material and typically one or more positions which allow more freedom as to how they can be filled in. They possibly also contain some optional material, as in *You can say what you want (about X), (but) Y*, instantiated by for example *You can say what you want about my mother, she’s the only one who helped us*. Their unmarked communicative function is a special interpretation, which is related to the general meaning of the modal verb in isolation but which is ‘short-circuited’. That is, we believe that the interpretation of such common sequences is triggered directly by the familiar form, as part of a fast cognitive routine. We are aware that *to short-circuit* can have a negative meaning (‘to impede’, ‘to frustrate’), but we would like to point out from the start that when we speak of ‘short-circuited’ interpretations, the idea we have in mind is *not* that of the hearer being ‘prevented’ from arriving at the intended message. On the contrary, we use the term here in the other, well-established sense of ‘to by-pass (a laborious procedure)’, as when an electrical current follows a path of lowest resistance in a circuit. This is the sense in which Morgan (1977) used it. Just like Morgan, we remain largely agnostic as to the exact cognitive processes involved, which we will not concern ourselves

with here. This said, it is highly likely that a short-circuited interpretation is arrived at faster, with less cognitive effort, than an interpretation which is the result of indirect pragmatic reasoning.

There may not appear to be anything particularly contentious about our proposal that, on the one hand, modals have a general meaning in and of themselves but that, on the other hand, they also occur in specific constructions in which their general meaning is subservient to an interpretation directly associated with that construction. This seemingly uncontroversial position, however, requires us to address a couple of difficult issues.

A first issue we need to discuss is whether the framework of Construction Grammar, which hitherto has only been occasionally used for the study of modal meaning, is compatible with the approach to modal meaning recently proposed in Depraetere (2014), which was not primarily concerned with the notion of ‘construction’.¹ Construction Grammar, as the name of the framework suggests, takes ‘constructions’ as central to the description of languages. These are defined as form-meaning pairings (or more generally, form-function pairings) which occur at different levels of linguistic organization, from single morphemes to complex sentential structures. While the treatment of semantics in Construction Grammar, as we will see, is more sophisticated than we portray it in this introduction, we can allow ourselves here to simplify matters by saying that Construction Grammar emphasizes that a given stored form has a single holistic meaning or ‘function’. How can such an approach be reconciled with the three-layered model of modal meaning described in Depraetere (2014), where a distinction is made between (i) context-independent semantics, (ii) context-dependent semantics and (iii) pragmatic meaning, each representing a separate layer that plays a role in the interpretation of a modal utterance?

A second, related, issue is how an integration of the two approaches – if this proves possible – may advance our understanding of how modal verbs are interpreted. In what way can Construction Grammar benefit from a clearer articulation of the semantics-pragmatics interface? And in what way can Depraetere’s (2014) approach to modal meaning derive an advantage from the appreciation that constructions containing modals, and not just the modals themselves or the context in general, impact on the interpretation process?

We will address these issues first theoretically and then test the viability of our proposal by applying it to some linguistic jokes in the animation series *The Simpsons*, all of which make use of a short-circuited interpretation that is (by definition) conventionally associated with an expression with *can* or *could*.² What creates the humorous effect is the fact that this interpretation is then not picked up on by one of the characters, usually Homer Simpson, the intellectually challenged father, and in one instance by the mischievous son Bart Simpson, who ignores the short-circuited interpretation on purpose. The examples show that while the conventionalized meaning of the modal constructions may be prevalent in normal usage contexts, it is one bridge too far to say that it supersedes or completely wipes out the semantic core or an alternative semantic interpretation. If we could no longer access these non-conventionalized semantic alternatives, we would not be able to ‘get the joke’.

¹ See the introduction to this issue and Boogaart and Fortuin (to appear 2016) for references to work on modality that has been carried out in the framework of Construction Grammar.

² In section 2.3, we discuss the term ‘conventional’ and ‘conventionalized’ and show that these do not necessarily cover the same meaning in all theories. Here, ‘conventional’ should be understood as ‘being standardly associated with’.

2. Theoretical concepts

In the discussion of the cases from *The Simpsons*, we will draw upon concepts from Construction Grammar, modal taxonomy and pragmatic theory. In this section, we will review these in turn, focusing only on what is necessary for our analysis.

2.1 Construction Grammar and the defining criteria of a ‘construction’

Most of the theoretical premises and concepts involved in Construction Grammar have been introduced in the other papers and could be considered to be known sufficiently well to the readership of this journal. Nevertheless, it may be useful to remind ourselves of the definition of a construction, which is any pairing of a form and a semantic or discursive function whereby something about the form or function is not fully predictable either from the parts making up the sequence or from what we know about the rest of the grammar; or any pairing of a form and a semantic function which, even though it does not exhibit any formal or functional idiosyncrasies, is sufficiently familiar to language users to have been committed to their long-term memory as a stored language unit (cf. Goldberg 2006: 5). This latter part is an addition to Goldberg’s (1995) original definition and recognizes more usage-based insights into how frequent exposure to recurrent exemplars of a pattern plays an important role in the representation of these units in speakers’ minds (cf. Boas 2003, Bybee 2006, Perek 2015). To help us decide what does and does not count as a construction, Hilpert (2014) proposes four criteria; as soon as one of the four criteria applies, a construction candidate can be allowed as a member of the *constructicon*, as the inventory of constructions has come to be called. Here are Hilpert’s criteria, along with some of the examples he provides:

1. *Does the expression deviate from canonical patterns?* For example, *by and large* is a construction, as its form (a preposition, a coordinating conjunction, and an adjective) is an unpredictable sequence given the grammar of English. Or consider the sentence *There was cat all over the road*, in which a special construction (called the ‘meat-grinding construction’ in Fillmore et al. 2012) allows the count noun *cat* to be used as a mass noun. As *cat* is basically a count noun, what is unpredictable here is that it cannot be used in this grinding construction with a determiner or with a plural *-s*: *There was a cat all over the road* would nonsensically refer to a single giant, physically intact cat covering the road and *There were cats all over the road* would no longer yield a mass interpretation either and would instead refer to multiple unharmed cats occupying the road.

2. *Does the expression carry non-compositional meaning?* For example, the sequence *We’re back to square one* has an interpretation which is more than the sum total of the meanings of its component parts, so this idiom obviously has to be stored as a construction. Similarly, *John laughed his head off* cannot be taken literally. It makes use of the “body part *off/Out* Construction, whose meaning expresses *excess* directly (cf. Jackendoff 1997); that John laughed excessively is not an interpretation arrived at ‘pragmatically’ by excluding the literal meaning of John’s head being dislocated from his body as being contextually implausible (Cappelle 2014).

3. *Does the expression have idiosyncratic constraints?* For example, the fact that you know you can say *The dog is asleep* but not **the asleep dog* is proof that *asleep* (and other *a*-adjectives such as *afraid*, *alive*, *awake*, etc.) have placement (im)possibilities that are stored in the constructicon as part of your constructional knowledge (cf. Boyd and Goldberg 2011). Likewise, one of the constructional constraints that have to be listed in the grammar is that you can say *I brought John a glass of water* but not *I brought the table a glass of water*.

4. *Does the expression have collocational preferences?* For example, *will* and *be going to* should be treated as distinct future auxiliary + infinitive constructions in that they display tendencies to occur with non-overlapping types of main verbs (Gries and Stefanowitsch 2004; Hilpert 2008). We might

also argue that some of these collocations (e.g. *will continue*, *will provide*, *will receive*, *going to get*, *going to happen*, *going to die*, etc.) are themselves constructions (at a lower level of specificity than the templates *will + V* and *be going to + V*). Such a view is in line with the usage-based view of constructions mentioned above.

Hilpert's (2014) heuristics to decide whether an expression is a construction will come in handy to argue for the constructional status of sequences involving a modal verb. When we mention the collocational strength between two items, we will report the mutual information (MI) score, a standard measure directly provided in the user's interface of Mark Davies's suite of corpora at Brigham Young University.³

2.2 Modal taxonomy: classes and layers of meaning

In our treatment of modal meaning, we will be using the modal taxonomy put forward in Depraetere and Reed (2011), a paper which offers a detailed discussion of non-epistemic root possibility in English. It is argued there that five classes of meaning (ability, opportunity, permission, general situation possibility, and situation permissibility) can be distinguished on the basis of three criteria: (a) source of the modality, (b) scope of the modality and (c) potential barrier. Source of the modality refers to the person or circumstance in which the possibility originates. The source may be subject-internal (as in *I can touch my nose with the tip of my tongue*) or subject-external (e.g. *You can apply for a passport online and avoid the queue*). The scope of the modality may be wide, in which case it scopes over the entire proposition (e.g. *Cracks can appear overnight*, i.e. 'cracks appearing overnight is a possibility'), or it may be narrow, in which case it scopes over the VP only (e.g. *I can speak Russian*). Finally, the feature 'potential barrier' is positive if the source can potentially impose a barrier to actualization, which is the feature from which it derives its source status. In this case (narrow scope) permission or (wide scope) permissibility meaning is communicated. In *You can park here*, the source (traffic regulations) has source status because it can potentially prevent someone from parking in a specific place. This is not the case in *I can speak Russian*, in which the source status of the subject referent is not due to him/her having the potential to impose a barrier to actualization. Table 1 shows how the different meanings can be decomposed in terms of the defining features:

³ <http://corpus.byu.edu/overview.asp>. We use the mutual information score as an alternative to the 'collostructional strength' measure that readers of this journal are perhaps more familiar with (Stefanowitsch and Gries 2003). The MI score, as calculated in the corpora made available by Davies, takes into account the frequency of the node word (e.g. the modal verb *can*), the frequency of the collocate (e.g. the verb *complain*), the frequency of the collocate near the node word (e.g. *complain* near *can*), the size of the corpus, and the span of words (e.g. 6 in the case of 3 words to the left and to the right of the node word); see <http://corpus.byu.edu/MutualInformation.asp> for a worked-out example. In our response to Hilpert's paper in this issue we compare the collexeme score, simple combination frequency and the MI score for collocations with modal *must*. (See also Schmid and Küchenhoff (2013) for a more in-depth discussion of corpus-based measures of the attraction between constructions and lexemes.)

Table 1. Taxonomy of non-epistemic possibility, based on Depraetere and Reed (2011)

	Source	Scope	Potential barrier
Ability, e.g. <i>Tim can't hear very well</i> (Depraetere and Reed 2008)	internal	narrow	-
Opportunity, e.g. <i>Visitors can now connect to free wifi around town</i>	external	narrow	-
Permission, e.g. <i>You can just call me Billy</i>	external	narrow	+
General situation possibility, e.g. <i>The place is so remote that you can't hear a sound at night</i> (Depraetere and Reed 2008)	external	wide	-
Situation permissibility, e.g. <i>We hope that all the Bangladeshi refugees can be repatriated in mid-August 2015.</i> (www)	external	wide	+

While it is one thing to adopt a taxonomy that is descriptively adequate, it is also crucial to look in more detail at the nature of the meaning distinctions involved. The theoretical framework is based on a three-layered model of meaning (Depraetere 2014), which can be summarized as follows. First, modals have a semantic, context-independent core of either possibility (e.g. *can*) or necessity (e.g. *must*). Second, the additional, more specific taxonomic distinctions (cf. Table 1) are determined in context and this constitutes the context-dependent semantic layer. It is argued that each modal comes with a semantic template (corresponding to the features listed in Table 1, to which the feature +/-epistemic has been added) which needs to be contextually filled in. The context-independent meaning of *may*, for instance, is possibility. At the context-dependent semantic layer, *may* can potentially express epistemic possibility, general situation possibility, permission and situation permissibility. The contextual filling in of the template can be captured in terms of saturation (Carston 2009) with lexically regulated valuation (Depraetere 2014). The addition of contextual information ‘saturates’ the semantically underdetermined modal meaning value because it is needed to determine the proposition that is actually communicated and it is lexically regulated in the sense that the number of values that can potentially be assigned to the empty slot is constrained by the modal. Third, an optional pragmatic layer can and should be distinguished, since there are still further contextual meaning distinctions. A modal can undergo contextual strengthening (for example, *You may now kiss the bride* is not an ordinary permissive statement: it would be awkward, if not downright rude, if the groom responded with a mere *No thanks, I'm fine*) or it can in certain contexts receive a special illocutionary reading (for example, *You may want to do something about your hair*, which semantically expresses epistemic possibility, may have directive force, which could in fact also be seen as a (more extreme) case of strengthening). These are just two examples that illustrate the context-dependent pragmatic layer of modal meaning, which encompasses implicated meaning and further contextual elements of meaning that do not impact on truth conditions. In Figure 1, we summarily represent the different layers of meaning, still taking the modal *may* as an example.⁴

⁴ The view of ‘context-dependent semantics’ presented here is in line with the Relevance-theoretic approach (Carston 2009, Sperber and Wilson 1995) in which the notion of explicature encompasses aspects of contextual meaning that contribute to the truth-conditional content of an utterance. Analyses of modals in the framework of Relevance Theory (e.g. Groefsema 1995, Papafragou 2000) tend to take a monosemous approach to the meaning of modals; Depraetere (2014: 165-166), on the other hand, argues that contextualism is not incompatible with

1 st layer: Context-independent semantics	Possibility			
2 nd layer: Context-dependent semantics	epistemic	non-epistemic		
		Permission	General situation possibility	Situation permissibility
3 rd layer: Pragmatic meaning (optional)	<ul style="list-style-type: none"> • effect of illocutionary force • effect of context of speech (e.g. pragmatic strengthening) etc. 			

Figure 1. Layers of modal meaning of *may*, adapted from Depraetere (2010) and Depraetere (2014).

2.3 The concept of short-circuited implicature in pragmatic theory

As announced in the Introduction, one of the aims of this paper is to check to what extent the multi-layered approach to modal meaning which was sketched in Section 2.2 is compatible with the more holistic form-function approach typical of Construction Grammar, a further aim being that of illustrating how constructions with modals impact on the meaning that is communicated. In order to address the latter question, we will make use of the concept of *short-circuited implicature*, introduced by Morgan in a paper (pre-)published in 1977, and of a related concept discussed by Leech (2014), *pragmaticalization*.⁵

If someone says, *Can you tell us what happened?* or *Why don't you have a seat right over there*, the addressee understands the speaker's utterance immediately as an invitation or request to divulge something more about the events referred to or to sit down on the chair or couch indicated, respectively. This interpretation is a conversational implicature which, as Morgan (1977) suggests, is 'short-circuited' by the forms involved (*Can you* + verb phrase and *Why don't you* + verb phrase). As with other conversational implicatures, the directive interpretation could be arrived at by some sort of calculation, based on Grice's (1975) Cooperative Principle and the conversational maxims. Thus, in principle, the addressee could first find it rather too trivial to be asked whether he or she has the physical ability (or even whether he or she is psychologically in the right frame of mind) to tell something about what happened and then conclude that, if the utterance is still to make sense, the speaker just wanted to get him or her to talk about the events. And the addressee could use similar reasoning skills to come to the conclusion that the speaker kindly instructs him or her to take the seat pointed at. While such mental computation could in principle be used, Morgan (1977) argues that "conventions of use" are so strong that the form, while retaining its literal meaning (a yes/no question or a question for information), directly evokes its desired interpretation, which is that the speaker prompts the hearer to a certain action. This is clear from a comparison with paraphrases such as *Are you able to tell us what happened?* and *What's the reason you don't have a seat right over there*,

polysemy. Depraetere and Salkie (to appear) address the more general question whether lexical ambiguity, polysemy, and vagueness illustrate saturation rather than free pragmatic enrichment. It is shown there how the concept of lexically-regulated saturation and the three-layered model presented in Depraetere (2014) can be applied to the analysis of the finite perfect.

⁵ Morgan's paper was later published as: Morgan, Jerry L. 1978. Two types of convention in indirect speech acts. In: Peter Cole (ed.), *Syntax and Semantics, Vol. 9: Pragmatics*, 261-280. New York: Academic Press. We refer to the pre-published version as it is freely available online and so can be accessed more easily by the reader. Our page references are also to the pre-published version.

which do not lead to the invitation interpretation equally fast, if at all. The fossilized forms *Can you...* and *Why don't you...* do make sense, since when we take them literally (i.e., as direct questions), they check whether the preparatory condition and sincerity condition for making a request are met (cf. Searle 1969), namely whether the hearer is at all able to perform the requested action and whether the hearer wants to do it, respectively – note that asking why the hearer doesn't perform the action suggests that he or she might not be willing to do so (cf. Gordon and Lakoff 1971). As Morgan makes us realize, though, we don't actually *figure out* these standard forms starting from their literal meaning, even if we could.⁶

As we pointed out above, Morgan refrains from claiming that the literal meaning of these expressions is supplanted by the so-called indirect speech act: “I will suggest, in short, that “can you pass the salt”, is indeed conventional in some sense, but not an idiom; rather it is conventional to use it (*with its literal meaning*) for certain purposes” (Morgan 1977: 1; emphasis ours). The “conventions of use” that he discusses are “conventions *about* language, that govern the use of sentences, with their literal meanings, for certain purposes” (Morgan 1977: 1). These are “conventions of the culture that uses the language” (Morgan 1977: 12), involving common knowledge about contexts of use. Morgan distinguishes them from “conventions *of* language”, that is “knowledge of the conventions of word meanings and the semantic rules of combination” (Morgan 1977: 30).

Morgan provides many illustrations of how a particular form has a conventionalized, short-circuited implicature. One of his examples is the expression *If you've seen one, you've seen them all*, which common usage has moulded into a standard way of conveying ‘They're all alike, so it's a waste of time to examine them separately’. As Morgan points out, it is obvious that this interpretation could be arrived at by common-sense reasoning; what is more, the literal meaning of the standard expression is also what the speaker still has in mind when he or she conveys what it conventionally does. But in spite of this, even if one changes the form of the expression only slightly while retaining its literal meaning, the implicature that the conventional expression has can only arise afresh, as a result of relatively slow computation. Consider for example such non-conventional alternatives as *If you've seen one, you've seen all of them* or *You've seen them all if you've seen one* (Morgan 1977: 26). It is for this reason – a fixed form conveying a conventional meaning (a specific conversational implicature) – that such an expression qualifies as a construction. Among the other examples mentioned by Morgan (1977) are *You can say that again* (cp. *You can repeat that*) and *It takes one to know one* (cp. *It requires one to recognize one*).

To refer to forms conventionally used to perform specific speech acts, terms such *conversational routines* (Aijmer 1996) or *semi-formulaic expressions of procedural meaning* (Watts 2003) have been used. Leech (2014) speaks of *pragmaticalization*.⁷ These concepts are related to Morgan's conventionalized, short-circuited meaning, but it is important to bear in mind that Morgan's paper is not limited to the discussion of indirect speech acts or typical realizations of specific speech acts in general. Leech (2014: 78) observes that “by the historical process of pragmaticalization, ISAs [Indirect Speech Acts] may become progressively routinized, such that a direct association between the indirect meaning and the formulaic overt form of the utterance becomes established, as a

⁶ Morgan's (1977) view is actually not at odds with Grice's (1975) pragmatic theory, as it must be borne in mind that “Grice's claim is not that hearers always go through a conscious and laborious process of calculation” (Chapman 2011:80); rather, Grice argues that in order for a proposition to count as a conversational implicature, it must (merely) “be capable of being worked out” (1975: 50).

⁷ Leech (2014: 155) cites the following example from Aijmer (1996): *could you*, the most indirect form on the ‘indirect – direct’ cline of requests occurs twice as much as the most direct form, *will you*, with *would you* and *can you* being an intermediate (in)direct category whose status is reflected in their intermediate frequency.

conventional implicature.”⁸ The conventional implicature associated with ‘Can you X?’, for instance, is captured as follows: “The utterance *Could you X* means that *S[peaker]* is politely⁹ requesting *H[earer]* to do *A*’ (2014: 78). Leech speaks of the “the short-circuiting process of pragmaticalization” (2014: 145) and he argues that the entrenchment of pragmatic force makes it plausible that “the process of “working out the meaning” is cognitively short-circuited by a direct associative path” (2014: 315), as Morgan (1977) has pointed out. However, there cannot be question of ‘arbitrary convention’; the indirect directive speech act can be derived from the form of the speech act in a step-by-step fashion. Like Morgan, he emphasizes that not any sentence with the same propositional content gives rise to the same indirect speech act: *Wouldn’t you pass the salt?* does not produce the same effect as *Can you pass the salt?*

This brief overview of Leech’s approach shows that even though his work (or that of the other authors cited) is not embedded in Construction Grammar, it shares common ground with the hypotheses we have formulated. First, the conventional interpretation (which he calls a conventional implicature) is associated with a specific form. We will spell out that observation in terms of *constructions*, which we have defined in terms of the four features put forward in Hilpert (2014), one or several of which have to be present in a construction candidate. A further similarity is that “... like grammaticalization, pragmaticalization can easily coexist with a persisting ungrammaticalized usage, as evidenced by the interrogative meaning of [*Can you close the window?*] (Leech 2014: 306-307).” This observation is in line with our claim that even though one specific implicature or interpretation clearly stands out, the other interpretation(s) remain(s) available and this explains how misunderstandings or jokes can arise. In our proposal, we will argue for applying the term ‘short-circuited’ to more than just implicatures: in the case of semantic ambiguity, for instance, constructions may also come with a strongly preferred meaning. Accordingly, we can speak of ‘short-circuited interpretations’ as a cover term for both semantic and pragmatic aspects of conventional understanding. Whenever possible, we will make it clear at which level the short-circuiting applies. For instance, if we speak of ‘short-circuited semantic interpretation’, it is obvious we have the (context-dependent) semantic level in mind; if we speak of ‘short-circuited implicature’, it is clear that we are talking about the pragmatic level. Even though we understand ‘short-circuited’ as ‘conventional’, we will avoid the latter term, because short-circuitedness could otherwise be interpreted in terms of a ‘conventional implicature’, a term which is standardly used for a non-cancellable inference attached to certain words (e.g. “*Even John was there*” implies that John is one of the least likely persons to have been there). For one thing, we do not share Leech’s view that the indirect speech acts of modal verb constructions are conventional implicatures; we will argue that these are short-circuited *conversational* implicatures, which are (admittedly conventionally) associated with a specific form. For another, in the case of short-circuited *semantic* interpretations, the interpretation in question is clearly part of ‘what is said’ (or the explicature, in Relevance theoretic terms). In other words, ‘short-circuitedness’ does not necessarily have the features Grice associated with conventional implicatures, which are: (a) the interpretations are not cancellable, and (b) they are not part of ‘what is said’. Our use of ‘short-circuitedness’ is to be interpreted in terms of ‘conventions about language’ in the sense of Morgan (1977).

⁸ He also adds that the progressive ‘idiomaticization’ may go hand in hand with a formal or phonetic reduction, as in the case of grammaticalization.

⁹ “The superscript *i* represents a specific degree of pragmalinguistic politeness, such that, for example, *Could you X* is more polite than *Will you X* and is less polite than *I wonder if you could possibly X*.” (Leech 2015: 78).

3. Analysis

In what follows we will provide a detailed analysis of humorous passages involving modals in *The Simpsons*. They will serve to illustrate, and even prove, that constructions have a role to play in the interpretation of modal meanings, in potentially two ways: (a) constructions sometimes give rise to specific implicatures, which we call ‘short-circuited’, in Morgan’s (1977) sense, because they are immediately triggered by the use of a familiar string of words; (b) constructions may trigger an interpretation which, though not an implicature, is no less ‘short-circuited’, in that it allows the hearer to instantly select one of several context-dependent meanings. In other words, we extend Morgan’s notion of ‘short-circuitedness’ from implicatures, which are situated at the 3rd layer (pragmatics) in Depraetere (2014), to interpretations more generally, which may also play a role at the 2nd layer (context-dependent semantics). For instance, as discussed by Wärensby (this issue), an epistemic reading for *may* is short-circuited by the presence of a stative verb phrase (e.g. *She may be an actress*), but this rapidly chosen interpretation is not a pragmatic implicature; instead, it is a case of how the context around the modal disambiguates that modal. Another way of putting this, of course, is that there is a modal verb construction, of the form [NP *may* VP_{state}] and whose meaning can be rendered with the epistemic paraphrase ‘it is possible that...’.

For each of the examples that follow, we will explain why we believe the clause with the modal can be qualified as a construction. We will also show how the construction is responsible for lending the modal verb itself a context-dependent semantic interpretation and/or how, on the pragmatic level, it has a short-circuited implicature.

3.1 The short-circuited interpretation of [NP *can be so* AdjP]

Consider the exchange in (1), from *The Simpsons* episode *Homer the Great* (1995). It takes place right after Homer has been whining to his wife Marge about how he has been excluded all his life, as is clear from an unhappy childhood memory he recounts to her.

- (1) Homer: I felt so left out.
 Marge: *Kids can be so cruel*.
 Bart: [walking by] We can? Thanks, Mom!
 Lisa: [from another room] Ow! Cut it out, Bart!¹⁰

The relevant clause with the modal (*Kids can be so cruel*) immediately gets understood as it was intended, at least in normal circumstances. It gives rise to what we would like to call a short-circuited *semantic interpretation*, applying Morgan’s (1977) notion of short-circuited *implicature* to what we consider here to be something of a semantic nature. The unmarked interpretation of *Kids can be so cruel* is one in terms of general situation possibility: the situation of kids being cruel is possible. However, Bart gives a narrow scope interpretation to the utterance: *Kids* is understood as ‘Us Kids, including myself’ and the modality scopes over the VP: ‘To be cruel is something that it is possible for kids/us to do’, or, ‘For kids/us it is possible to be cruel’. Moreover, he interprets Marge as the source of the possibility because she can potentially impose a barrier on the actualization of the situation. In other words, Bart’s interpretation of the utterance is one in terms of permission (narrow scope, external source, + potential barrier). The joke resides in the fact that the addressee gets the short-circuited, conventional interpretation in terms of general situation possibility, which is intended by

¹⁰ Quoted from <http://www.simpsonsarchive.com/episodes/2F09.html>, last accessed 28 August 2015.

Marge, but Bart forces a narrow scope permission reading, playing on the potential ambiguity.¹¹ This comes as a surprise because of the conventional reading that is associated with the construction. Bart's intentional ignoring of the conventional reading has a humorous impact in several ways: linguistically, because his deliberate misunderstanding is witty in itself, and situationally, because Homer's complaining thereby gets an abrupt ending and because Bart unashamedly takes Marge's utterance as a licence (which it certainly isn't!) to engage in wanton cruelty towards his younger sister. So, what Bart ignores here on purpose is the default, short-circuited interpretation, by turning the generic NP 'kids' into a non-generic one. If we understand *Kids can be so cruel* effortlessly as expressing general situation possibility (with an existential overlay), then this is part of the context-dependent semantic interpretation (i.e., layer 2 in the model sketched in Section 2.3) and not something pragmatic (i.e., layer 3). What makes this example humorous, in other words, is *not* that one of the characters fails to communicate or grasp a short-circuited *implicature*, an example of which we will see in Section 3.2. In fact, *Kids can be so cruel* does not *have* any obvious implicature (other than, perhaps, that the addressee, or someone known to the addressee, should not consider themselves as being singled out as the only target of bullying).

Now, what is the context that allows us to select this kind of possibility interpretation rather than, say, opportunity or permission? It is quite likely that this interpretation is triggered by the use of a generic subject NP and the use of a VP expressing a high degree on some scale.¹² The form of the structure which short-circuits the interpretation can be represented as in (2), which integrates some semantic constraints on some of the parts:

- (2) NP_{generic} can VP_{scalar; high degree}

This pattern licenses such instantiations as are shown in (3):

- (3) a. An enzyme deficiency can be so devastating.
 b. Things can change very quickly in national politics.
 c. Microwaved food can get very hot.
 d. Crushes can be incredibly deceiving.

The pattern is very productive: it is open to any kind of generic NP and any VP that expresses a high degree on a scale. Nevertheless, it is quite likely that there are some stored exemplars of this construction, *Kids can be so cruel* being one of them.

Does the structure used in (1) qualify as a construction? We believe it does, as it passes some of Hilpert's (2014) criteria mentioned in Section 2.2. A slight semantic oddity is that the meaning of, for instance, *Kids can be so cruel* is not really something like '?Kids are sometimes so cruel' or '??Kids tend to be so cruel' but more something like 'Kids are sometimes *very* cruel' or 'Kids tend to be *very* cruel'. In other words, the possibility of using *so* in this construction at all is somewhat unpredictable, given that we cannot easily use *so* non-demonstratively in the close paraphrases. (Of

¹¹ Examples like these have been qualified as 'existential modality' (Wright 1951: 2, Palmer 1990: 107), as in *Lions can be dangerous*, meaning *Some lions are dangerous* or *All lions are sometimes dangerous*. (See Mitchell (2009) for details about the category of existential modality.) In Depraetere and Reed (2011: 22) it is argued that examples of this type do not constitute a separate semantic type. While the idea of actualization is clearly foregrounded, it is found (at least) with examples that illustrate ability and general situation possibility. Their suggestion is therefore to speak of 'existential overlay' rather than 'existential modality'.

¹² This is not to say that this existential interpretation *requires* the use of a generic NP. For instance, *Your daughter can be such a hassle* would be interpreted existentially just as well.

course, *so* can be used in the sense of *very* in exclamations, such as *That's so cool!*.) There is also the idiosyncratic constraint that, while *may* is a regular alternative for *can* in clauses expressing general situation possibility (cf. (4a-b)), it often sounds strange as an alternative to *can* in the construction in (1) (cf. (5a-d)):¹³

- (4) a. Inner ear infections can cause dizziness.
b. Inner ear infections may cause dizziness.
- (5) a. Kids can be so cruel.
b. ??Kids may be so cruel.
c. Things can change very quickly in national politics.
d. ??Things may change very quickly in national politics. (This sentence is acceptable on an epistemic reading.)

Finally, there is the intuition, which should be confirmed empirically, that this pattern has a collocational preference for negatively connoted VPs. In that respect, the pattern may have ‘negative semantic prosody’ (Sinclair 1991). So, while there is nothing especially negative about the pattern in (1), it may very well be the case that you will more likely find utterances such as *Kids can be very mean*, *Kids can be so rude* or *Kids can be such jerks* than *Kids can be very cute* or *Kids can be such angels*, though the latter two examples are certainly not impossible. This intuition cannot be confirmed with data from a standard linguistic corpus, as *Kids can be so X* has only one occurrence in a corpus even as large as COCA (450 million words); however, note that, interestingly, the adjective filling this slot is *cruel* (MI score 14.37), in line with our expectations. For *Kids can be very X*, the only adjectives are *mean* (2 occurrences; MI score 8.62) and *confusing* (1 occurrence; MI score 13.17). The use of the informal, colloquial term *kids* rather than *children* may play a role in this impression of ours, but even with this more neutral subject NP, utterances such as *Children can be such vicious little creatures* and *Children can be very trying* are very typical. The only adjective in COCA to fill the X slot in *Children can be so X* is *intense*. This adjective is less straightforwardly negative but it captures all the same a trait that is not usually appreciated.¹⁴

3.2 The short-circuited interpretation of [*Not if I can help it*]

Consider the following dialogue from *The Simpsons* episode *Jazzy and the Pussycats* (2006), just after Lisa Simpson is informed that the many abandoned animals she has adopted will be rounded up and be put to sleep if no proper home can be found for them.

¹³ Palmer observes that *may* can also be used to express existential modality:

- (i) The process *may* be carried out indiscriminately by the wind or by insects which fly from flower to flower. (Palmer 1990: 108)
- (ii) Or the pollen *may* be taken from the stamens of one rose and transferred to the stigma of another. (Palmer 1990: 108)

Existential sentences with *may* do not have the high-scalar component we posit for *can* existentials.

¹⁴ It may not be a coincidence that the two examples that the LearnEnglish website of the British Council provides for this construction are both negative:

- (i) a. Learning English can be difficult [= Learning English is sometimes difficult]
b. Children can be very naughty [= Children are sometimes very naughty]
(<https://learnenglish.britishcouncil.org/en/english-grammar/verbs/modal-verbs/can-could-and-could-have>, last accessed 9 August 2015)

(6) Lisa: I guess that's it; these animals are all gonna die.

Homer: *Not if I can help it, Lisa.*

Lisa: Do you have an idea?

Homer: Uh, no – sorry if it sounded like I did.¹⁵

In example (6), by saying *Not if I can help it*, Homer arguably uses *can* with an opportunity meaning ('Not if circumstances make it possible for me to avoid this situation from happening'). This aspect of the interpretation involves the selection of one of the context-dependent sub-meanings of non-epistemic possibility (cf. the second layer in Figure 1). The fact that, in this and in practically any other imaginable context, opportunity and not, for instance, ability or permission is conveyed by *can* in this expression testifies to the short-circuited nature of the interpretation. More to the point, for the joke to work, this sentence also communicates (more specifically, it implicates) that Homer is determined to actually do something about the situation; his reply is understood to mean that he will take action and make sure that the animals don't die. In any case, this is the proposition that is inferred by Lisa, and she responds to the implicated meaning. So, in essence, Homer is taken to say 'This won't happen. I will do something about it', which allows Lisa to inquire how he will go about saving the animals. The commitment to taking action to prevent something from happening is clearly implicated, though, witness the fact that Homer cancels the implicated proposition in his reply to Lisa. More than this, he does not seem to be aware of the implicature that the construction has given rise to.

Homer's utterance in (6) can thus be used as evidence for the short-circuited or conventional nature of this implicature. If it was not short-circuited, Homer's explicit cancellation of it would not strike the viewer as comical. Compare with the situation in which someone says, "It's cold in here" and you reply with "Would you like me to close the window?"; if the first speaker then says, "Uh, no, sorry if I made it sound as if you should do that", there is no such comical effect. After all, there are several possible implicatures of the statement "It's cold in here", depending on the context. It can be understood as a hint to find a hotter place to get together, as a suggestion to turn up the heater, as a way of apologizing for a broken heater, as a sexual come-on encouraging the listener to start hugging the speaker, and even (when it's warmer outside than inside), as a hinted request to *open* a window (cf. Green 2012: 111). *Not if I can help it* does not have a similarly wide range of possible communicative purposes. Its implicature is conventionalized, which is why it sounds funny when the expression is used without the implicature.¹⁶

A question we need to address is whether *Not if I can help it* can be qualified as a construction – maybe the implicature just arises from a regular combination of lexical and grammatical parts which doesn't have, as combination, the status of a stored item. There are clear indications, however, that *Not if I can help it* is listed in the constructicon. To see this, we can again use Hilpert's (2014) criteria. This construction candidate meets all four of them. First, the form is rather unpredictable. The part that functions as main clause is simply the negative adverb *not* and not a full clause. An alternative

¹⁵ Quoted from http://www.springfieldspringfield.co.uk/view_episode_scripts.php?episode=s18e02, last accessed 27 August 2015.

¹⁶ One reviewer agrees that the Simpsons examples are special in the sense that the literal reading is much more difficult to get than in the standard examples of indirect speech acts (and in jokes making use of those), and that it may perhaps really not be available at all in ordinary language use. The latter observation, in turn, may explain why the Simpsons examples are so humorous. While we agree with the reviewer's observation that the implicature is clearly short-circuited, we stick to the view that it remains cancellable and that the literal meaning is still available. While there are cases where the literal meaning is clearly backgrounded and the implicature foregrounded, judgments about the relative markedness of interpretations or the relative markedness of cancellability are subjective and require further experimental research.

sentence with a full clause would not be ungrammatical but would lack the immediacy with which we get the implicature ‘I will prevent it’:

- (7) This won’t happen if I can help it.

Second, the meaning of *Not if I can help it* is, to some extent, unpredictable. We have just seen that this expression has a short-circuited implicature. The literal meaning ‘(It will) not (happen) if I can help (i.e. prevent) it’ still makes sense, but unlike the pledge-like implicature (‘... and help it I will’), it leaves open the possibility that the *if*-clause situation may not be realized. It is precisely this difference between the short-circuited implicated meaning (which Lisa has no trouble accessing, demonstrated by the fact that her hopes seem to be temporarily raised) and the literal (compositional) meaning (which Homer has in mind) that creates the humour in this example. And it is the undeniable effect of humour – there is hardly anything which is *not* humorous in *The Simpsons* – which can be taken as evidence for the existence of short-circuited interpretations of modal verb expressions. Note that the non-compositional meaning of the construction is not due to the special meaning of *help* here, namely ‘prevent’, ‘avoid’, ‘cause to be otherwise’ (which is almost the opposite of its common meaning of ‘assist, aid’), as this meaning also occurs elsewhere, for instance in *I appreciate your problem, but it can’t be helped*. If there’s anything unpredictable about the meaning of *Not if I can help it*, it is that the possibility of interpreting the *if*-clause as an open conditional is no longer readily available. In other words, if one intends the *if*-clause to be understood as an open conditional, as Homer does, one actually misuses the expression.

Third, there are idiosyncratic constraints. One of these is that we can’t reverse the order of the main clause fragment and the subclause, at least not if we want to preserve the intended meaning:

- (8) *If I can help it, (then) not.

Other constraints are harder to find, but one could mention the virtual impossibility to provide alternatives such as ?**Not unless I can’t help it*. This said, the idiom does allow some variation. The following alternatives are attested:

- (9) a. Not if I can prevent it.
b. Not if I can avoid it.
c. Not if I can stop it.
d. Not if I can do something about it.
e. Not as long as I can help it.

The sentence in (9e) is perhaps an instance of a semantically related but more open construction, the *Not as long as...* construction, which has such instantiations as *Not as long as I’m around* or *Not as long as I’m the man that I am* and *Not as long as we have each other*.

Fourth, the construction certainly has collocational preferences, so much so that we have treated it here as an almost fixed expression.¹⁷ If we adapt the methodology described in our response

¹⁷ Note, furthermore, that the online dictionary *Dictionary.reference.com* has an entry for this idiom, which it (correctly) considers to be more widely usable than just with *I* as subject of the *if*-clause, as the entry is *Not if one can help it*. (One of the two examples provided there contains a subject other than *I*: “*Is he taking a second job?—Not if his wife can help it*”.) This dictionary proposes the meaning “Only without one’s agreement, only if one cannot prevent it”.

to Hilpert's (this issue) paper, we can clearly see (cf. Table 2) that the mutual information (MI) score of each word in the string collocates with its context: the MI score stays above 3 (3 being the standard threshold for collocational strength). The quantitative data are based here on the Corpus of Contemporary American English (COCA; Davies 2008).

Table 2. Collocational strength (in terms of mutual information score) of any word in the string *Not if I can help it* and the rest of the string, based on results from COCA

Context	collocate	Mutual information
* <i>if I can help it</i>	<i>not</i>	4.63
<i>Not</i> * <i>I can help it</i>	<i>if</i>	6.44
<i>Not if</i> * <i>can help it</i>	<i>I</i>	3.80
<i>Not if I</i> * <i>help it</i>	<i>can</i>	6.42
<i>Not if I can</i> * <i>it</i>	<i>help</i>	8.59
<i>Not if I can help</i> *	<i>it</i>	4.38

In sum, on the basis of all of these observations, we can be confident about our claim that *Not if I can help it* is a construction, or that it is a stored exemplar of the *Not if NP can VP* construction.¹⁸ In (6), the speaker seems to be unaware of its normal implicature ('I will do whatever it takes to prevent this'). That the implicature is conventionalized, or short-circuited, is evidenced by the comical effect of its cancellation by Homer.

3.3 The short-circuited interpretation of [negative face-saving act + *you can't VP*]

The example in (10), from *The Simpsons* episode *When You Dish Upon a Star* (1998), can be analysed along the same lines: the addressee and 'Man' process the sentence with a modal in terms of the conventional, short-circuited interpretation that the construction triggers, but Homer forces an alternative, 'wrong' interpretation:

- (10) Homer rents a boat from a man in a booth, who hands him a key.
 Man: There you go. And I assume you've read the boat safety manual.
 Homer: Oh, yeah. Couldn't put it down. Come on, boy, let's get me a six-pack!
 Man: *Uh, sir, you can't operate a boat under the influence of alcohol.*
 Homer: Oh, that sounds like a wager to me!¹⁹

By saying *Sir, you can't ...* the speaker is communicating permissibility meaning: 'For X to do Y is not permissible', in this particular case, 'for people to operate a boat under the influence of alcohol is not permissible', or, put differently, the situation of people operating a boat under the influence of alcohol is not permissible (or is not allowed, is forbidden). The source of the modality could be the regulations of the boat club, or it could just be general contextual knowledge that it is morally wrong to drink and then operate a boat or that the law forbids operating a vehicle under the influence of alcohol. Here, 'man' uses a well-known politeness strategy of making a generic statement (whereby *you* is used in an impersonal way, as an alternative for *one*) when, in fact, it is the addressee that he

¹⁸ One reviewer observes that it is the *not if* construction that is at stake here rather than one that hinges on the modal verb *can*. While that may be the case, they both exist; how they are linked and what inheritance links are involved is an issue that remains to be addressed in further research.

¹⁹ Quoted from <http://www.simpsonsarchive.com/episodes/5F19.txt>, last accessed 13 September 2015

believes should be reminded of a rule. Homer interprets the modal meaning communicated as involving narrow scope, an interpretation which is possible triggered by the use of ‘Sir’, and takes it that he himself is being addressed by means of ‘you’. Moreover, he assumes that the speaker is claiming that Homer is not able to operate a boat under the influence of alcohol. In other words, he believes the source of the modality is subject-internal and his interpretation is as follows: ‘for you it is not possible to operate a boat under the influence of alcohol (because of lack of skill)’. This explains his (funny) reply: “Oh, that sounds like a wager to me!”, meaning “I take it you are challenging me to show that I can operate the boat under the influence of alcohol”.

Can we really claim that [Vocative, generic pronoun *can’t* VP] or even [*Uh*, Vocative, generic pronoun *can’t* VP] is a construction? Speaking against such a claim is the observation that we cannot find that many utterances of this (more specific) form in standard corpora or on Google. Two web-attested examples are given in (11):

- (11) a. Uh, sir, you can’t park here.
b. Uh, miss, you can’t get on the bus with that umbrella open like that.

In fact, (11b), because of the use of *that umbrella*, referring to the umbrella held by the addressee, does not have a clearly generic pronoun. Moreover, this example could be interpreted as expressing a modal meaning other than absence of permissibility: ‘Uh, miss, with that umbrella open like that, it is difficult if not impossible to...’. On the other hand, the scarcity of such examples may be due to the fact that this kind of utterance is just not typical of written language. Moreover, one does not need to have heard many such occurrences for them to be somehow stuck in our memory, as they trigger a strong emotional response (and, without going into the exact cognitive mechanism of this, they could therefore be mentally repeated by the hearer well after the actual occurrence). Indeed, the interjection *uh* and the vocative jointly work as a hedge, which the hearer knows will be followed by something unpleasant. They form a marker of an upcoming *negative face-threatening act* (Levinson and Brown 1987), such as a request, an order or a suggestion. As such, these two elements taken together function in the same way as other negative face-saving politeness strategies, which indicate that the speaker is about to impose on the hearer, such as a conventional apology for the possible awkwardness or embarrassment and similar hedging devices:

- (12) a. I’m sorry but you can’t take that on the plane.
b. Excuse me but you can’t smoke in the house.
c. I’m afraid you can’t come in.

The weakest claim we can make, then, is that the use of an appropriate negative face-saving act enables a competent hearer to narrow down the possible interpretations of *you can’t* VP. A stronger claim would be that this introductory hedge is part of a construction in which *can’t* is already specified for expressing absence of permissibility.

Remember that a sequence can be a construction on the basis of frequent occurrence. A telling piece of empirical information is that in COCA, *can’t* is the collocate with the highest MI score after *sorry but you* (7.40) and with a quite high score after *I’m afraid you* (4.53). This lends some support to the constructional status of these sequences.

Summing up, in this example, a wrong context-dependent semantic meaning (layer 2) is selected: what is ignored is a conventional context-dependent semantic interpretation, at the expense of which a more unexpected context-dependent semantic interpretation is selected, one that was not

intended by the speaker. The construction also gives rise to a short-circuited pragmatic interpretation, just as was the case in the previous example (*Not if I can help it*), but in this case, it is not *just* this conventionalized pragmatic interpretation that the hearer (wilfully) fails to consider.

3.4 The short-circuited interpretation of [*if I could just VP*]

Consider the following example, from the episode *Much Apu About Nothing* (1996):

- (13) Homer: Ladies and gentlemen, *if I could just say a few words*... I'd be a better public speaker.²⁰

We would like to argue that *if I could just say a few words* triggers a short-circuited semantic interpretation, one in terms of permission. This is due to the sequence *if I could just* combined with *say a few words*, which is usually not indicative of a skill (as most people can talk), but rather of permission (as one is not always allowed to say something). All three semantic criteria for permission (cf. Section 2.2) are met: *If I could just say a few words* has narrow scope, the source does not lie within the subject referent, and the source (possibly the addressee, or the conventions of the speech community) has source status because it can potentially block actualization (i.e., as we will see below, the source could prevent Homer from saying something). However, as the final part of the utterance shows, strictly speaking, an interpretation in terms of ability (with a subject-internal source) is also available. The example is funny precisely because Homer's interpretation deviates from the unmarked, short-circuited interpretation associated with the construction. As in the previously discussed examples, the fact that Homer's utterance does not fail to create a humorous effect is proof that the short-circuitedness of the interpretation is real: if there were no immediate, standard interpretation to begin with, using the sequence in a different sense ('ability') would not be felt to be funny. On the unmarked interpretation, the *If I could just say* construction also comes with a short-circuited pragmatic interpretation: while literally asking for permission to speak, the speaker takes the permission for granted and continues to speak. It will be clear that, since Homer does not intend to communicate permission, the associated context-dependent pragmatic meaning does not arise.

Note, importantly, that the short-circuited interpretation is again two-fold: it is *both* semantic *and* pragmatic. First, we have argued that in the sequence *If I could just say a few words*, the meaning of the modal verb is that of 'have permission to' (rather than 'be able to' or, say, 'have the opportunity to'), so this is a semantic kind of short-circuiting, where *can* (or in this case *could*) receives a somewhat more precise meaning than just that related to 'possibility' by being embedded in a familiar context. This semantic refinement happens at the context-dependent semantic layer in the three-layer model sketched in Section 2.2. Second, as we pointed out, it is clear that *If I could just say a few words* is typically used in a way that goes beyond the meaning of 'If I had permission to say a few words'. This is where short-circuiting at the pragmatic layer comes in. For this sequence to be understood as a turn-taking conditional, its illocutionary force has to be taken into consideration. As hearers, we could probably use general, common-sense reasoning to figure out that *If I could just*... functions as a request. But it takes some exposure to real-life occurrences to acquire the knowledge that *If I could just say a few words* is a standard way not just to request for permission to make an announcement but to actually go on to make that announcement without waiting for a response from a single addressee, let alone from a larger group of people. As Declerck and Reed (2001: 356) mention in their discussion

²⁰ Quoted from http://snpp.zurds.com/index.php?title=07x23_-_Much_Apu_About_Nothing, last accessed 21 September 2015.

of similar cases (e.g. *If you will listen to me for a minute now*), “the ‘request’ is just a gesture to politeness, i.e. a hedge.”²¹

One could wonder whether what has been described here as a conventionalized conversational aspect is really *pragmatic* in nature. Can’t we just say this turn-taking function has become part of the *semantics* of *If I could just...*? We believe the answer is negative. A defining criterion of an implicature (i.e. a pragmatic inference) is that it is cancellable without leading to any clear contradiction. The following exchange shows that the interpretation ‘I will now start speaking, on the assumption that my ostensible request has been granted’ is still only an implicature, which in certain contexts can be cancelled:

- (14) —If I could just mention my restaurant, Bob’s...
 —No, you may not.²²

This example also shows that *If I could just say a few words* belongs to a larger set of expressions involving an act of negotiating the turns in a conversation. Table 3 below presents the verbs that collocate best with *If I could just* in COCA. All of these sequences (except *if I could get...*) are typically used as floor-takers or floor-holders.

Table 3. Collocational strength (in terms of mutual information score) between *if I could just* and the following verb, based on results from COCA (minimum frequency: 10 occurrences)

Verb following <i>If I could just</i>	Mutual information	Comment
<i>finish</i>	7.72	as in <i>finish my thought just for a second, finish this one point</i> , etc.
<i>jump</i>	7.58	<i>jump</i> is part of <i>jump in</i> ‘interrupt’ here
<i>follow</i>	6.59	<i>follow</i> is part of <i>follow up</i> ‘add to (something in the conversation)’
<i>add</i>	6.08	
<i>ask</i>	5.67	
<i>get</i>	4.62	not typically turn-taking, but among the examples, we find e.g. <i>If I could get a word in</i> and <i>If I could just get back to my original question</i>
<i>say</i>	4.15	
<i>make</i>	3.15	most tokens are sequences such as <i>make a point here, make a comment</i> , etc.

Clearly, *If I could just* has strong collocational ties with expressions of (keeping on) speaking in a conversation. Keeping in mind Hilpert’s (2014) fourth criterion for constructionhood, mentioned in Section 2.1, we can treat [*If I could just* VP] as a construction. And it is as a construction – a stored

²¹ In his discussion of pragmatic modifiers, Leech (2014) lists ‘appreciative openings’, which are “designed to sweeten the bitter flavour of a directive, to make *O[ther person than the speaker/writer]* feel better about performing the requested act *A*” (2014: 163). The speaker expresses his gratitude in the main clause if the action mentioned in the *if*-clause actualizes. Leech observes that in these contexts, the hypothetical meaning of an *if* clause may be weakened, and that this is sometimes reflected in the use of indicative mood rather than the ‘hypothetical mood’ (e.g. *I’d be grateful if they can be left to the officers* (BNC)) (Leech 2014: 164).

²² Quoted from [http://tv.ark.com/transcript/bob's_burgers-\(family_fracas\)/45/TOONP/Monday_June_1_2015/782852/](http://tv.ark.com/transcript/bob's_burgers-(family_fracas)/45/TOONP/Monday_June_1_2015/782852/), last accessed 21 September 2015.

form-function unit – that the sequence discussed here has a preselected semantic interpretation (namely permission) and a standard (but still cancellable) pragmatic interpretation (namely that the permission to take or hold the floor is assumed to be granted).

The constructional status of this pattern is also supported by a formal idiosyncrasy (cf. Hilpert's first criterion), *viz.* the fact that it has the form of a subclause but is in practice never followed (or preceded) by the rest of a main clause (which might be something like *it/that would be nice*). This property is shared by a larger family of structures exhibiting so-called 'insubordination' (see, e.g., Verstraete, D'Hertefeld and Van Linden (2012) for complement insubordination in Dutch). This family includes *if*-conditionals with *you* as a subject (e.g. *If you could just sign here, please*), which request for an action to be performed by the addressee and come with a standard assumption that the request will be fulfilled, thus functioning as polite directives.

3.5 The short-circuited interpretation of [*I can't complain*]

In the episode *Pokey Mom* (2001), Homer takes part in a rodeo at a prison, gets severely injured by a bull and is then taken care of in prison so that he can go home soon. We then have the following exchange between Homer, his wife Marge and a prison warden:

(15) Marge: How's your back, Homey?

Homer: *I can't complain*. [indicates a sign which reads, "No Complaining"]

Warden: Ah, that's for the prisoners. You can complain all you want.

Homer: Oh, God, my back! It hurts so much! And my job is so unfulfilling!²³

Again, there is a short-circuited interpretation at the level of semantics. *I can't complain* is an idiomatic expression which, at the literal level, communicates what in Section 2.1 was termed situation permissibility: 'the situation of 'me complaining' is not permissible', or, 'the circumstances are such that 'me complaining' is not permissible'. On top of this, there's also a short-circuited pragmatic aspect, which is foregrounded in this idiom: when someone says *I can't complain*, the hearer understands that what she is saying is that 'all in all, the situation is not bad; everything is quite all right'. In that sense, *I can't complain* has become a common reply to a question such as *How are you?*, where it conveys a meaning similar to *Not too bad*. However, by pointing to the sign, Homer forces a narrow-scope permission reading, and in this way this conventionalized conversational effect does not arise. What is extra humorous here is that if you cannot complain, in the sense of not being allowed to, you have every reason to complain, being deprived of a basic right to vent your pain, emotions and, on top of that, your frustration at not even being allowed to complain about this lack of permission.

Observe that the joke only works for the idiomatic expression *I can't complain* and not for its near-equivalent (*I have*) *nothing to complain about*, which can't be used with an absence-of-permission meaning. Note also that *I can't complain* can be called a construction (defined as a stored form-function pairing) simply on the basis of its frequent occurrence: there are as many as 64 corpus occurrences in COCA for this 4-part string (*I + can + (n)'t + complain*). In COCA, the verb *complain* belongs to the top twenty verbs that collocate most strongly with *I can't* (with a minimum of 10 occurrences in this context), along with such strongly collocating verbs as *imagine*, *believe*, *afford*, *wait* and *stand* (the MI score of *complain* after *I can't* is 5.01).

²³ Quoted from <http://www.simpsonsarchive.com/episodes/CABF05.txt>, last accessed 21 September 2015.

3.6 The short-circuited interpretation of [*How can we VP?*]

A final example of a humorous passage from *The Simpsons* involving the use of *can* or *could* is given in (16), from *I'm With Cupid* (1999), an episode in which Apu showers his wife Manjula with countless valentine gifts and in so doing makes the rest of Springfield's men look bad in comparison. When these then start scheming against Apu's elaborate wooing, Ned Flanders' conscience gnaws at him:

- (16) Ned: Aw, gee, the man's just trying to show his wife he cares for her. *How can we sabotage his labor of love?*
Homer: I dunno. Gasoline, acid, I got some stuff in the trunk.²⁴

Is [*How can we VP?*] a construction? The expression does not deviate formally from canonical patterns (cf. Hilpert's first criterion mentioned in Section 2.1) and it does not show idiosyncratic constraints either (cf. Hilpert's third criterion). However, the MI scores obtained from COCA prove there is a strong collocational preference among the items that make up the expression (Hilpert's fourth criterion): *how* is followed by *can* with an MI score of 3.50 and *how can* is followed by *we* with an MI score of 4.08.

The non-compositional meaning of the construction (cf. Hilpert's second criterion) requires some more detailed discussion. First, this is an interrogative that functions as a rhetorical question and so does not constitute a request for information. Second, as in the previous four examples, the italicized sequence combines a short-circuited semantic interpretation with a short-circuited pragmatic one. A number of factors contribute to the interpretation of the utterance. The construction clearly triggers a short-circuited interpretation in terms of general situation possibility. In the context of example (16), we immediately get the reading: 'how is the situation of all his labor of love being sabotaged possible?' The scope of the modality is wide, the source does not lie within the subject referent, and there is no potential barrier meaning. A first observation is that the construction impacts on the interpretation of the modal. Even though modal meaning is typically non-factual, in this specific construction, the modal appears to refer to a factual situation: *How can you say such a thing?* implies that you did say it; *How can you believe that?* presupposes that you believe it. *How* has a role to play in the communication of what appears to be, rather surprisingly, factual meaning. In non-modalized sentences, *how* is a presupposition trigger (cf. e.g. Levinson 1983: 184): the use of a *wh*-word *how* presupposes that the situation referred in the clause has actualized (*How did you get in?* presupposes *You got in somehow*; *Where did you lose your wallet?* presupposes *You lost your wallet somewhere*). The special construction *How can we VP?* seems to inherit this presupposition of actualization. This is not a property that we can ascribe to all instances of *How can we VP?*, as is witnessed by such questions as *How can we solve this problem?* and *How can we stop world hunger?* In other words, unlike in the latter two questions, the construction under discussion here not only has the form of a mundane, compositional question but also has a semantic specification relating to actualization. Moreover, the construction also triggers a short-circuited pragmatic interpretation, one of reproach: 'We shouldn't be doing this really; it's morally wrong to behave like this'. In effect, the utterance has self-prohibitive illocutionary force ('Let's not do this').

²⁴ Quoted from <http://www.simpsonsarchive.com/episodes/AABF11.txt>, accessed 22 September 2015.

Homer does not get either of the meaning components right. Semantically, he interprets the modal as having narrow (instead of wide) scope. That is, the context-dependent interpretation as far as Homer is concerned is one in terms of opportunity and *how* is interpreted as referring to the subject-external source ('it is possible for us to do X *thanks to Y*'). Pragmatically, such a reading does not give rise to a conventionalized, short-circuited implicature. It will be clear that while Homer's friends get the general situation possibility reading and associated implicature, Homer goes for a simple opportunity interpretation.

4. Summary of findings

4.1. Semantics, pragmatics and Construction Grammar

We have shown that Morgan's (1977) notion of 'short-circuited implicature' meshes well with the constructionist tenet that speakers have stored and make use of vast numbers of chunks that are relatively fixed in form and that have what we could call a pre-programmed function. We do not conceive of this function part of a construction as a rather undifferentiated conglomerate of illocutionary, encyclopaedic, information-structural and all sorts of stylistic aspects of use mixed in with more purely semantic aspects.²⁵ Rather, we have proposed the view that, while we can find both semantic and pragmatic aspects in the functional pole of a construction, these aspects are still to be seen as different in kind (cf. also Cappelle to appear for further discussion).

At the semantic level, we have to make a distinction between the highly abstract meaning of 'possibility' and several more precise meanings, such as 'ability', 'opportunity', 'permission', 'epistemic possibility' and the like. Sometimes, the form of the sentence in which *can* or *could* occurs helps to narrow down the intended meaning of the modal verb, and this is especially the case if that sentence structure is further filled in with lexical items that form a well-known formula (a lexically specific construction). We have given several examples in this chapter (cf. Hilpert [this issue] for a discussion of collocational preferences). For instance, *if I could just say a few words* will routinely be understood in terms of permission and *I can't complain* in terms of situation permissibility. However, it is by no means always possible to disambiguate these meanings by just looking at the clause in which *can* occurs. For example, *Johnny can swim* is ambiguous between at least an ability reading and a permission reading. One fact is clear, though, namely that ability and permission are distinct

²⁵ Construction Grammar typically treats constructions as pairings of form and meaning/function. Cf. e.g. Lakoff (1987: 482): "Grammatical constructions [...] are complex cognitive models with two dimensions: one characterizing parameters of form and one characterizing parameters of meaning". Because of this dyadic view, practitioners of Construction Grammar might be tempted to put all non-formal aspects of a construction under a single header. Cf. e.g. Goldberg (1995: 7): "[a] notion rejected by Construction Grammar is that of a strict division between semantics and pragmatics. Information about focused constituents, topicality, and register is presented in constructions alongside semantic information." A careful reading of this remark, however, allows us to conclude that Goldberg does not necessarily wish to abandon any distinction between semantics and various sorts of pragmatic information within the functional pole of a construction. The strict division she argues against is one in which semantics is construction-internal and pragmatics is construction-external (and therefore can't possibly be treated as a part of our stored linguistic knowledge). In fact, as an alternative to defining constructions as bipartite form-meaning pairings, Goldberg (1995: 229, n. 6) suggests analysing them as "ordered triples of form, meaning, and context." Note that some foundational papers of Construction Grammar do treat the conventional pragmatics of constructions as separate from other stored properties. Fillmore, Kay and O'Connor (1988), for instance, deal with the pattern-specific Gricean-maxim-related pragmatics of the *let alone* construction separately from its semantics and its syntax, and Michaelis and Lambrecht (1996) introduce separate pragmatic attributes, dealing with information-structural properties, in the representation of the Nominal Extraposition construction, alongside (at least) a semantic and a syntactic feature.

semantic notions and not merely contextually modulated manifestations of a single ‘possibility’ meaning. To see this, consider (17) and (18):

(17) Then the dogs and children followed their noses downstairs and over to Isabel’s cottage.²⁶

(18) The dogs and children can swim.

In (17), *their noses* applies to both the dogs and the children, even though a dog’s organ of smell does not quite look like a human’s. This physical difference does not prevent using a coordination structure where the two subjects are conjoined and combined with only a single occurrence of the verb phrase. This suggests that the two contextually distinguishable ‘meanings’ of *nose* are closely enough related to be in fact included in a single overall semantic conceptualisation, which might be something like ‘organ of smell, forming the forward part of the head of a human or animal’ (cf. the similar discussion of *ear* in McGregor (2010)). The meaning of *nose* is vague, in other words. In (18), *can* may express one of several modal notions, including ability and permission, as we pointed out above. For instance, we may be referring to dogs of a certain breed (definitely not bulldogs) and to children of a certain age and having undergone sufficient aquatic education, and say of both these groups (the dogs and the children) that they have the ability to swim. Alternatively, we may be referring to a group of dogs and a group of children, and say of both of them that they are allowed to swim (in a certain place and/or at a certain time not specified in the sentence). These two meanings of *can* are obviously quite different, but what is more, they are much more different than the two ‘meanings’ of *nose* in (17). We cannot make one meaning of *can*, say ability, apply to the dogs and another meaning, say permission, apply to the children in this same structure without creating a strongly zeugmatic effect. Sameness of interpretation under conjunction reduction is a standard test of ambiguity (cf. Zwicky and Sadock 1975), suggesting that ‘ability *can*’ and ‘permission *can*’ are really distinct meanings which have to be stored as such.²⁷ So, *can* is polysemous, which is true of modal verbs in general (see Depraetere 2014). While the larger context of the sentence (not given in (18)) helps to determine which meaning is intended by the speaker, it is decidedly not the case that there is only a single semantically vague meaning (namely ‘possibility’) which may be used with two different sub-senses, one for each of the conjuncts of a coordinated subject. We could also compare *can* and *swim* in (18), and see quite clearly that while *can* has to remain semantically constant, the single use of *swim* may allow for diverse swimming styles, such as dog paddle and breaststroke. While *can* is polysemous, *swim* is vague.

At the pragmatic level, we have shown that *can* (or *could*) may be part of stored expressions that conventionally trigger a specific implicature or a specific illocutionary force. We may be tempted to include this information as part of the semantics of these expressions. Speaking against such a move is the observation that, though short-circuited, the pragmatic interpretation can be cancelled. For instance, *How can we X?* (e.g. *How can we believe such a stupid idea?*) typically has an exhortatory illocutionary force (‘Let’s not X’), but in some contexts, we can do without this extra pragmatic effect, for example when we want to go on with an explanation of how this situation (e.g. a delusional state of mind) could arise: *That’s because Y* (e.g. *That’s because we don’t have access to the facts that contradict it*). In that case, the structure still expresses general situation possibility but has no special illocutionary force (beyond asking a question, which is not an indirect speech act when the structure is interrogative). So, a pragmatic effect (an implicature, a strengthened or weakened reading, etc.) can be

²⁶ Quoted from <http://www.barnesandnoble.com/w/midnight-mystery-gertrude-chandler-warner/1101038017?ean=9781453221525>, last accessed 23 September 2015.

²⁷ Depraetere (2014: 164) uses examples with *do so* anaphors to prove that modal verbs are polysemous. This is another construction that Zwicky and Sadock include in their discussion of the identity-of-sense test.

cancelled, while a context-dependent selection of a semantic value for a modal (ability, opportunity, permission, etc.) cannot; it can only be *replaced* by another value.

The discussion has revealed that Morgan's notion of short-circuited implicature is very useful but too restricted. We have demonstrated that there can be short-circuiting – fast, direct, non-computed meaning determination – of semantic values just as well as for pragmatic inferences. It is for this reason that we have introduced the broader notion of *short-circuited interpretation*.

Our answer to the research questions we set out to answer can be summarized as follows: the analysis of the examples has demonstrated that the more traditional approach to the meaning of modal verbs with due space for the semantics-pragmatics interface (such as that put forward in Depraetere 2014) can gain from insights from Construction Grammar and vice versa; there is no incompatibility between both approaches. The examples show that some facets of the meaning communicated by the modals are clearly implicated while others are part of the truth-conditional content (in the Relevance theoretic sense of *explicature*); both types of meaning should be recognized and be given due space in a constructional account. At the same time, we have seen that constructions have an important role to play, at the level of both the explicature (context-dependent semantics) and the implicated meaning. Put differently, the traditional approach risks missing out on the impact of collocational patterns and non-compositionality if it fails to integrate constructions; failure to differentiate semantics from implicated meaning in treatments of constructions comes at a risk of missing out on finer-grained meaning distinctions.

4.2. Modal constructions

Our paper has shown how modal constructions can be identified and it has demonstrated that differentiating between the semantic and pragmatic level provides a better insight into the functional aspect of the modal construction. We have as yet not been able to spell out in detail what inheritance relations are at work and how the more lexicalized and more schematic constructions interact. While our paper has shown that we arrive at a richer understanding of modal meaning by combining insights from different strands of research, it is in many aspects programmatic and further research into modal constructions is necessary: the papers by Hilpert and Traugott in this issue present a specific methodology to identify constructions with modals and they reflect on how modal constructions can be represented. In Figure 2 below we nonetheless represent a possible representation of modal *can*-constructions forming a partial hierarchical network of constructions. Lower constructions are linked to higher ones by means of instance links, and some of the higher ones are linked to the lower ones by means of subpart links (cf. Goldberg 1995). At the top of the hierarchy, we find the most general construction with *can*, which simply states that *can* is a modal auxiliary expressing possibility. One level 'down' in generality, we make a first broad semantic subdivision between non-epistemic and epistemic possibility, the latter being associated with the (virtual) necessity of negation and a stative verb (see Wärensby, this issue). The non-epistemic possibility meanings can be subdivided, as we have seen, in a number of distinct semantic types: ability, opportunity, etc. So far, in all these constructions, the pragmatic information is left empty. It is only when modal *can* finds itself embedded in a specific lexical environment, as in *How can we VP?*, that the pragmatic attribute may get assigned a specific value. This pragmatic interpretation, in other words, can get short-circuited by the very use of this construction.

Figure 2. Partial constructional hierarchy of *can*-constructions, with at the bottom the *How can we VP?* construction

We hope to have demonstrated in this paper that, while the meaning of a modal auxiliary is itself not vacuous, the hearer needs to look at the context of the modal to select a more precise sub-meaning of ‘possibility’ or ‘necessity’. The humorous examples from *The Simpsons* discussed here should have made it abundantly clear that some of these contexts are stored as specific expressions (e.g. *Not if I can help it*, *If I could just VP*, etc.) which are conventionally associated with rich semantic and often also pragmatic content, involving a standard implicature or a special illocutionary force. The default interpretation of such modal verb construction, we have argued, is then to be analysed not in compositional terms; rather, such an expression then acts holistically as a trigger for a short-circuited interpretation.

References

- Aijmer, Karen. 1996. *Conversational routines in English: convention and creativity*. New York, NY: Addison Wesley Longman.
- Boas, Hans. 2003. *A constructional approach to resultatives*. Stanford, CA: CSLI Publications.
- Boogaart, Ronny. 2009. Semantics and pragmatics in construction grammar: the case of modal verbs. In: Alexander Bergs and Gabriele Diewald (eds.), *Contexts and constructions*. Amsterdam: John Benjamins. 213-41.
- Boogaart, Ronny and Fortuin, Egbert. To appear. Modality and mood in cognitive linguistics and construction grammars. In: Johan Van der Auwera and Jan Nuyts (eds.), *The Oxford Handbook of Modality and Mood*. Oxford: Oxford University Press.
- Boyd, Jeremy K. and Adele E. Goldberg. 2011. Learning what NOT to say: The role of statistical preemption and categorization in *a*-adjective production. *Language* 87(1), 55-83.

- Brown, Penelope and Stephen C. Levinson. 1987. *Politeness: Some universals in language usage*. Cambridge: Cambridge University Press.
- Bybee, Joan. 2006. From usage to grammar: the mind's response to repetition. *Language* 82(4), 711-733.
- Cappelle, Bert. Conventional combinations in pockets of productivity: English resultatives and Dutch ditransitives expressing excess. In: Ronny Boogaart, Timothy Coleman et Gijbert Rutten (eds.), *Extending the Scope of Construction Grammar*, pp. 251-282. Berlin / New York: Mouton de Gruyter.
- Cappelle, Bert. To appear. What's pragmatics doing outside constructions? In: Ilse Depraetere and Raphael Salkie (eds.), *Semantics and pragmatics: Drawing a line*. Amsterdam: Springer.
- Carston, Robyn. 2009. The explicit/implicit distinction in pragmatics and the limits of explicit communication. *International Review of Pragmatics* 1: 35-62.
- Chapman, Siobhan. 2011. *Pragmatics*. Houndmills: Palgrave Macmillan.
- Davies, Mark. 2008-. *The Corpus of Contemporary American English: 450 million words, 1990-present*. <http://corpus.byu.edu/coca/>
- Declerck, Renaat and Susan Reed. 2001. Conditionals: A comprehensive empirical analysis. Berlin: Mouton de Gruyter.
- Depraetere, Ilse and Susan Reed. 2008. Towards a More Explicit Taxonomy of Root Possibility in English". Paper presented at ISLE 1, Freiburg, 8-11 October 2008.
- Depraetere, Ilse and Susan Reed. 2011. Towards a more explicit taxonomy of root possibility. *English Language and Linguistics* 15(1), 1-29.
- Depraetere, Ilse. 2010. Some observations on the meaning of modals, In: Bert Cappelle and Naoaki Wada (eds.) *Distinctions in English Grammar, Offered to Renaat Declerck*. Tokyo: Kaitakusha. 72-91.
- Depraetere, Ilse. 2014. Modals and lexically-regulated saturation. *Journal of Pragmatics* 71: 160-177.
- Depraetere, Ilse and Raf Salkie. To appear. Saturation, free pragmatic enrichment, completion and expansion: a view from linguistics. In: Ilse Depraetere and Raf Salkie (eds.), *Semantics and pragmatics. Drawing a line*. Amsterdam: Springer.
- Fillmore, Charles J., Paul Kay and Mary Catherine O'Connor. 1988. Regularity and idiomaticity in grammatical constructions: the case of *let alone*. *Language* 64: 501-538.
- Fillmore, Charles J., Russell Lee-Goldman, and Russell Rhodes. 2012. The FrameNet Construction. In: Ivan A. Sag and Hans C. Boas (eds.) *Sign-based Construction Grammar*, 283-299. Stanford, CA: CSLI Publications.
- Goldberg, Adele E. 1995. *Constructions: A Construction Grammar approach to argument structure*. Chicago, IL: University of Chicago Press.
- Goldberg, Adele E. 2006. *Constructions at Work: The Nature of Generalization in Language*. Oxford: Oxford University Press.
- Gordon, David and George Lakoff. 1971. Conversational Postulates. Papers from the Seventh Regional Meeting of the Chicago Linguistic Society, 63-84. Chicago, IL: Chicago Linguistic Society.
- Green, Georgia M. 2012. *Pragmatics and Natural Language Understanding*. Second Edition. Hillsdale, N.J.: Lawrence Erlbaum Associates.
- Grice, H. Paul. 1975. Logic and conversation. In Peter Cole & Jerry L. Morgan (eds.), *Syntax and Semantics* 3, 41-58. New York: Academic Press.
- Gries, Stefan and Anatol Stefanowitsch. 2004. Extending collocation analysis: A corpus-based perspective on 'alternations'. *International Journal of Corpus Linguistics* 8: 31-61.

- Groefsema, Marjolein. 1995. *Can, may, must and should*. A relevance theoretic account, *Journal of Linguistics* 31: 53–79.
- Hilpert, Martin. 2008. *Germanic Future Constructions: A Usage-based Approach to Grammaticalization*. Amsterdam / Philadelphia: John Benjamins.
- Hilpert, Martin. 2014. *Construction Grammar and its Application to English*. Edinburgh: Edinburgh University Press.
- Hilpert, Martin. 2016. Change in modal meanings: Another look at the shifting collocates of *may*. This issue.
- Jackendoff, Ray. 1997. Twisting the night away. *Language* 73(3): 534–559.
- Lakoff, George. 1987. *Women, fire and dangerous things. What categories reveal about the mind*. Chicago, IL: The University of Chicago Press.
- Leech, Geoffrey. 2014. *The Pragmatics of Politeness*. Oxford: Oxford University Press.
- Levinson, Stephen C. 1983. *Pragmatics*. Cambridge: Cambridge University Press.
- McGregor, Bill. 2015. *Linguistics: An Introduction*. London: Bloomsbury.
- Michaelis, Laura A. and Knud Lambrecht. 1996. Toward a construction-based model of language function: the case of nominal extraposition. *Language* 72: 215–247.
- Mitchell, Keith. 2009. Semantic ascent, intersubjectivity and In: Raphael Salkie, Pierre Busuttil, Johan van der Auwera. *Modality in English: Theory and Description*. Berlin: Mouton de Gruyter. 55–78.
- Morgan, Jerry L. 1977. Two types of convention in indirect speech acts. Technical report No. 52. University of Illinois at Urbana-Champaign.
https://www.ideals.illinois.edu/bitstream/handle/2142/17765/ctrstreadtechrepv01977i00052_opt.pdf?sequence.
- Palmer, Frank R. 1990. *Modality and the English Modals* (second edition). London: Longman.
- Papafragou, Anna. 2000. *Modality and the semantics-pragmatics interface*. Oxford: Elsevier Science.
- Perek, Florent. 2015. *Argument Structure in Usage-Based Construction Grammar: Experimental and Corpus-Based Perspectives*. Amsterdam / Philadelphia: John Benjamins.
- Schmid, Hans-Jörg and Helmut Küchenhoff. 2013. Collostructional analysis and other ways of measuring lexicogrammatical attraction: Theoretical premises, practical problems and cognitive underpinnings. *Cognitive Linguistics* 24(3): 531–577.
- Searle, John. 1969. *Speech Acts: An Essay in the Philosophy of Language*. Cambridge: Cambridge University Press.
- Sinclair, John. 1991. *Corpus, Concordance, Collocation*. Oxford: Oxford University Press.
- Sperber, Dan and Deirdre Wilson. 1995. (second edition) *Relevance: communication and cognition*. Cambridge, MA: Blackwell Publishers.
- Stefanowitsch, Anatol and Stefan Th. Gries. 2003. Collostructions: investigating the interaction between words and constructions. *International Journal of Corpus Linguistics* 8 (2): 209–243.
- Traugott, Elizabeth Closs. 2016. Do semantic modal maps have a role in a constructionalization approach to modals? This issue.
- Verstraete, Jean-Christophe, Sarah D’Hertefelt and An Van linden. 2012. A typology of complement insubordination in Dutch. *Studies in Language* 36: 123–153.
- Wärnsby, Anna. 2016. On the adequacy of a constructionist approach to modality, this issue.
- Watts, Richard J. 2003. *Politeness*. Cambridge: Cambridge University Press.
- Zwicky, Arnold M. and Jerrold M. Sadock, 1975. Ambiguity tests and how to tail them. In: John P. Kimball (ed.), *Syntax and Semantics* 4, 1–36. New York: Academic Press.

Authors' addresses

Université Lille 3 - SHS
UMR 8163 STL
Pont de Bois
BP 60149
59 653 Villeneuve d'Ascq
France

bert.cappelle@univ-lille3.fr
ilse.depraetere@univ-lille3.fr