

Klaus-Uwe Panther*

How to Encode and Infer Linguistic Actions

Abstract: This contribution discusses a fundamental semiotic problem, i.e., how much of a linguistic message is explicitly coded and how much content is implied by the speaker and has to be inferred by the addressee. This coding problem is demonstrated with two types of speech act constructions, viz. (i) explicit performative utterances in which the illocutionary act performed by the speaker is overtly *named*, and (ii) hedged performatives in which the illocutionary verb is hedged by a modal or attitudinal expression. One focus of the contribution is on performative utterances that are hedged by *can* and *must*, in particular, cases where the illocutionary act denoted by the performative verb is not affected by the modal (illocutionary-force preserving hedged performatives). Notwithstanding, the modals contribute substantially to the overall meaning of the utterance. The modal *can* pragmatically implies a positive evaluative and emotive stance on the illocutionary act and its propositional content, whereas *must* often implies a negative evaluation and feelings of discontentment and displeasure. The results of this study confirm the thesis that pragmatic, in particular, metonymic, inferencing plays a central role in the elaboration of linguistic meaning.

Keywords: coding problem; explicit performative utterances; hedged performatives; illocutionary-force preservation; metonymic and pragmatic inferencing; speech act constructions

*Corresponding author, Klaus-Uwe Panther: University of Hamburg,
Email: panther@uni-hamburg.de

1 Introduction: The coding problem

In an effective act of communication, speakers encode the intended meaning of their messages in such a way that hearers do not need to invest too much cognitive effort in order to interpret the speaker meaning. The discrepancy between the low transmission rate of linguistic units and the richness of semantic-pragmatic information conveyed from speaker to hearer necessitates an economical solution to the *coding problem*: speakers cannot encode everything *explicitly*; much of what is communicated (intentionally or not)

remains unsaid, but it can, with reasonable certainty, be inferred by the hearer (see also Levinson, 2000: 6–7, 28). In contemporary linguistic pragmatics, e.g. Gricean pragmatics and relevance theory, it is therefore assumed that explicitly coded meanings function as vehicles for pragmatically implied senses, variously called *sous-entendus* (i.e. ‘understood’ senses) by the French linguist Ducrot (1972), *implicatures* by Grice (1975), and *invited inferences* by Geis and Zwicky (1971).

In this contribution, I illustrate the coding problem with linguistic signs “in action” that philosophers of language such as John Searle (1969) regard as the fundamental communicative units of language, viz. speech acts, more specifically *illocutionary acts*, such as asserting, requesting, promising, apologizing, and declaring a meeting open – to name just a few of the hundreds of linguistic actions that humans are able to perform.¹ For reasons of space, this article cannot provide a comprehensive survey of coding procedures, but the data analyzed provide evidence that the analytical distinction between (explicit) coding and (implicit) inferencing has to be incorporated in an adequate semiotic model of natural language (see also Panther, 2005). In my exploratory study, I resort to insights from both pragmatics and cognitive linguistics, illustrating the coding problem with a range of authentic speech act data from English.

The focus of this contribution is on utterances whose illocutionary force is coded by *lexical means*. The utterance types whose coding properties are discussed in more detail in this contribution are the following:

- *Explicit performative utterances*, i.e. utterances of the sort *I apologize for my behavior* (an apology), but also nominal performatives such as **Congratulations!** (an act of congratulation), and past participle performatives such as **Promised!** (an act of promising); i.e. acts, whose illocutionary force is (more or less) explicitly named in the utterance.
- *Hedged performatives*, i.e. utterances in which the verb that names the speech act performed is modified by modal expressions such as in *I **can** assure you that your train leaves on time* (an act of assuring) or *I **must ask** you to leave this room right now* (an act of asking or requesting).²

¹ The terms ‘speech act’ and ‘illocutionary act’ are used interchangeably in this essay.

² The phenomenon of hedged performatives also includes attitudinal hedges as e.g. in *I **regret to inform** you that you failed the test* (an act of informing someone about something) or

The organization of the article follows from the above-named topics. In section 2, I briefly introduce the concept of *usage-based* model as understood in cognitive linguistics and the *use* theory of meaning embraced by speech act theorists. This is followed by a brief discussion of the concept of action as understood by laypersons in contrast to speech act theorists. I demonstrate that the notion of action as used in speech act theory is only partially compatible with the *folk* or *cultural model* of action, which denies speech acts the status of “real actions”. In section 3 the coding devices of (more or less) explicit performative utterances are investigated. Following Searle (1969), I distinguish between the illocutionary force *F* of a speech act and its propositional content *p*. The focus of my analysis is on the lexical devices that code *F*, rather than those that code *p*. The analysis distinguishes between components (or parts thereof) that are explicitly coded and those that remain implicit but are inferentially accessible to language users on the basis of the (extralinguistic) situation and/or the (linguistic) context. Section 4 is dedicated to an analysis of hedged performatives, i.e. cases where the hedge *can* or *must* has no effect on the illocutionary force coded by the performative verb although the hedges contribute substantially to the overall (non-compositional) meaning of the utterance. Section 5 concludes with some desiderata for future research and the consequences that follow from the distinction between coding and inferencing for the overall architecture of language.

2 Language as use and action

The notions of use (or usage) and that of action play a key role in the semiotics of communication. As far as the concept of action is concerned, it is worth comparing the folk or cultural model of what constitutes “real actions” with the conceptualization of linguistic actions in contemporary speech act theory.

2.1 Meaning as use

One of the fundamental tenets shared by various schools of cognitive linguistics and pragmatics is their commitment to *usage-based* models of language. The more or less equivalent German term *Gebrauch* (‘use’) was probably first

multiple hedges as in *I am afraid I must inform you that you failed the test*. For reasons of space these phenomena cannot be discussed in this contribution.

proposed by the philosopher Ludwig Wittgenstein (2009[1963]: 25) in his treatise *Philosophische Untersuchungen* as a key factor in the constitution of meaning. The relevant passage in the English translation of this work, i.e. *Philosophical Investigations*, reads: “For a large class of cases of the employment of the word ‘meaning’ – though not for *all* – this word can be explained in this way: the meaning of a word is its use in the language” (ibid.: 25^e). Generalizing from words to linguistic units of any complexity, Wittgenstein’s dictum can be reformulated as follows: the meaning of a linguistic sign is its use in a language.

Wittgenstein’s use theory of meaning was embraced by philosophers of language such as John L. Austin (1962) and his student John R. Searle (1969), and developed into a theory of linguistic actions. Austin’s best known work *How to do things with words* (1962) has had a deep impact on theorizing in linguistic semantics and pragmatics. As can be read off from the title of Austin’s book, its author contends that the use of language involves the performance of *actions*. When verbally interacting with others, people perform *speech acts*.

2.2 Folk and expert models of action

The assumption that talking is a kind of action does not square very well with what ordinary language users regard as actions. A brief glance into Internet corpora such as the *Corpus of Contemporary American English* (COCA) and *WebCorp* yields data like the following (*italics* and the year of attestation added):

- (1) A U.N. convoy came under attack in Syria, another reminder that all the talk of a ceasefire is *just talk*. (COCA 2012)
- (2) He told delightful stories, mostly about animals who *talk* and *act* a lot like humans. (COCA 2000)
- (3) Let’s be candid about this: We’re all full of it. We *just talk, talk, talk*, but *don’t act*. (WebCorp 2006)

In sentence (1), talk of ceasefire is derogatively characterized as “just talk”, i.e., it is implicitly contrasted with “real” action – in this case the actual implementation of a ceasefire. In example (2), the coordination of the verb forms *talk* and *act* indicates that they are conceptualized as separate semantic categories, implying again that talking is not acting. And in sentence (3), the writer explicitly asserts that talking is *not* acting. By means of sheer repetition of the word *talk*, the uselessness of talking, as contrasted with real-world acting, is emphasized. To mention one more case in point, it is a common stereotype that

politicians promise all kinds of things during their electoral campaigns, but that they rarely keep their promises, that is, in common parlance, their *words* are often not followed by *deeds*.

Utterances (1)–(3) show that ordinary language users tend to regard speaking and acting as separate categories. There is a deeply ingrained *folk* or *cultural model* of linguistic communication that construes talking and acting as incompatible concepts, as diagrammed in Figure 1.

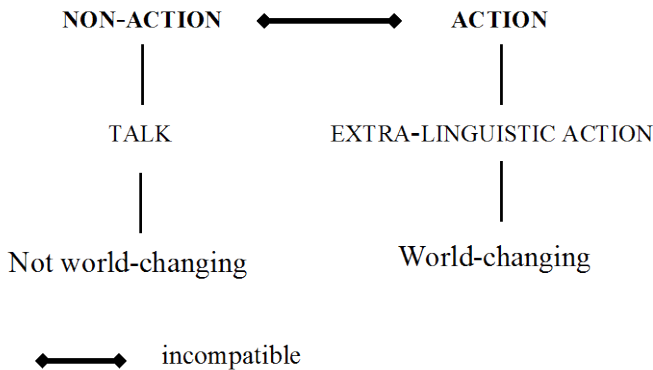


Figure 1: Folk model TALK VS. ACTION

However, from another vantage point, the concept TALK can also be analyzed as a *hyponym* (subordinate sense) of the *hyperonym* (superordinate sense) ACT. In other words, there are linguistic acts and non-linguistic acts, the latter including physical actions like running, grasping, or swimming, and mental actions such as thinking, reasoning, or drawing inferences. That the uttering of words constitutes *deeds* is a simple but ingenious idea, which has important consequences for the analysis of natural language. Figure 2 represents, in a simplified way, one crucial property of this “expert model”, viz. *speech act theory*, that talking is a kind of action; and it is this fundamental insight that is adopted here in the analysis of the specific kinds of speech acts that are known as *illocutionary acts* and that are coded in *illocutionary constructions*.

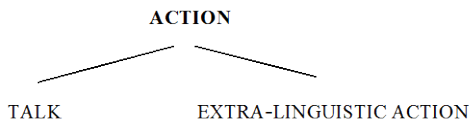


Figure 2: TALK as a kind of ACTION

3 Coding performative utterances

As mentioned in section 1, following Searle's (1969) distinction between illocutionary force (*F*) and propositional content (*p*), the question of how illocutionary acts are coded can be divided into two sub-questions, namely: (i) How is *F* coded, and (ii) how is *p* are coded? In what follows, by way of introduction, I discuss three sentences that illustrate whether and how *F* and *p* are coded.

The two components *F* and *p* are easily identifiable in utterances like the following:

- (4) I promise you that I will try my very best (COCA 2014)

In (4), *F* is coded by the verb *promise* (in the present tense), i.e., the utterance counts as an illocutionary act of promising, and the propositional content *p* is the complement clause *I will try my very best*, headed by the conjunction *that*. The illocutionary force and the propositional content are explicitly coded in this case. Utterance (4) is a case of what Austin (1962) calls an *explicit performative utterance* (see section 3.1 for more details).

The illocutionary function of (4), viz. a promise, could alternatively be conveyed by a sentence like (5):

- (5) I promise to try my very best.

Utterance (5), like (4), constitutes an act of promising; however, the coding of (5) is less explicit than that of (4). First, unlike in (4), there is no second person pronoun *you* that refers to the addressee; and second, the propositional content *p* is coded by the subjectless infinitival clause *to try my very best*. Yet, these non-coded elements can be easily inferred. Under normal circumstances, a promise has an addressee, and the non-expressed agent of the predicate in the non-finite clause is the speaker, who in uttering (5) commits herself to performing a future action.

As a third example, consider (6), which, like (4) and (5), may communicatively function as a promise:

(6) I will try my very best.

In (6), the illocutionary force *F* is not explicitly coded as a promise but, in a given situation and/or context, this force can be inferred. What is explicitly coded is *p*, the future action of the speaker. Furthermore, (6) is a declarative sentence, which is typically coded in English by the constituent order *Subject-Verb-X*. Declarative sentences usually have as their main function the representation of a propositional content *p* as true, i.e., in the terminology of speech act theory, they code the illocutionary type ASSERTIVE or REPRESENTATIVE. In contrast to (4) and (5), in (6), there is no clear *formal* differentiation between the coding of *F* and that of *p*. In other words, the force *F* and the propositional content *p* are formally *blended* in (6). In this article, I will not pursue the issue of sentence types (declaratives, interrogatives, imperatives) and the way their illocutionary force and propositional content is coded (for this topic, see e.g. Panther and Köpcke, 2008).

Figure 3 gives the reader a general idea of the richness of coding devices for *F* and *p* in a natural language like English.

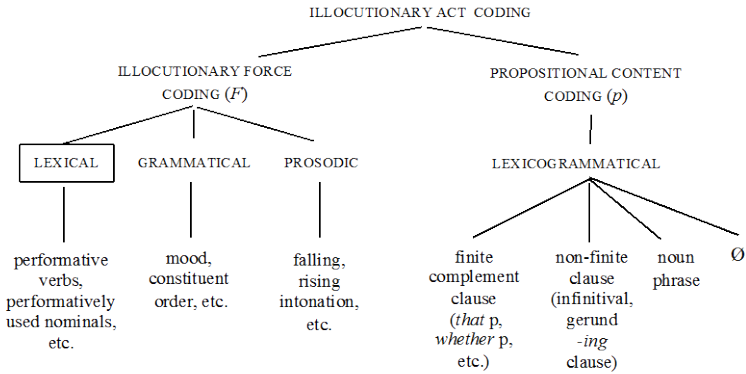


Figure 3: Illocutionary force and propositional content indicators

Figure 3 demonstrates that a full-fledged study how illocutionary acts are coded is a book-length project. In this contribution, my main focus is on the left-most branch of Figure 3, viz. *lexical means* that code the force *F* of the

illocutionary act.³ Occasionally, the lexicogrammatical properties of the propositional content *p* are also considered.

3.1 Explicit performative utterances

We have seen that in an *explicit performative utterance*, the speaker prototypically refers to himself (and possibly also to the hearer) and *names* the illocutionary act he performs by means of an illocutionary verb in the present tense (Austin, 1962). Explicit performative utterances, briefly *explicit performatives*, are contrasted by Austin with *implicit performatives*. For example, the imperative utterance *Switch off the computer before you leave* does not contain a performative verb of asking, requesting, or ordering, but conveys its directive illocutionary force by means of word order, mood, and intonation.

Explicit performatives look like statements (see e.g. Heal, 1974: 126); i.e., they have the grammatical structure of declarative sentences. One could indeed argue, as do e.g. Akmajian et al. (2010: 395), that explicit performatives have a truth value – just like ordinary declarative sentences. In the case of the explicit performative (7), one could assume, following and adapting Akmajian and his co-authors' proposal that, in the default case, the performative force of the utterance as a promise comes about in the following way (ibid.: 395):

- (7) a. The speaker is stating she is promising to try her very best.
- b. If her statement is true, then she must be promising to try her very best.
- c. Presumably the speaker is being truthful.
- d. So the speaker must be promising to try her very best.

Austin (1962) himself believed that although explicit performatives grammatically look like statements, they do *not* bear truth values, but are characterized by *felicity* conditions for their successful performance.⁴ The

³ The data presented are mostly (but not only) American English, and retrieved from *the Corpus of Contemporary American English* (COCA) (<http://corpus.byu.edu/coca>), *Corpus of Global Web-Based English* (GLoWbE) (<http://corpus.byu.edu/glowbe>), and *WebCorp* (<http://www.webcorp.org.uk/live>).

⁴ Actually, Austin (1962) does not use the term 'felicity', but he discusses the ways illocutionary acts may fail, i.e., he characterizes them in terms of 'infelicity'. The issue whether explicit performatives are bearers of truth values, which would imply that their illocutionary force is inferentially derived, is not discussed in this contribution.

question whether even explicit performative utterances are inferentially derived or whether their utterance as such in the right circumstances constitutes the illocutionary act named by the performative verb, is not pursued further in this article. Whatever the answer to this question is, performative utterances are the most explicit coding means available to language users to make their illocutionary point crystal-clear.

The authentic utterances (8)–(12) can all function as explicit performatives (*italics* are added).

- (8) [...] I *claim* that he took the money without her knowledge.
(COCA 1993)
- (9) [...] I *promise* you that I will never, ever do it again. (COCA 2009)
- (10) I *urge* you to get help. (COCA 2001)
- (11) I *apologize* for sending a recorded message [...]. (COCA 2011)
- (12) I *declare* this tunnel open. (COCA 1998)

In each of utterances (8)–(12), their respective illocutionary force is coded by means of a performative verb in the present tense: *claim* in (8), *promise* in (9), *urge* in (10), *apologize* in (11), and *declare* in (12). The propositional contents in (8)–(12) are coded to different degrees of explicitness. The most explicit coding of *p* is found in utterances (8) and (9) where *p* is expressed by means of a finite complement clause (cf. example (4) above). The complement clauses contain an overt subject, i.e. *he* in (8) and *I* in (9), and an overt tensed predicate, i.e. *took the money without her knowledge* in (8), and *will never, ever do it again* in (9).

In (10) and (11), *p* is coded by means of a non-finite clause, i.e. an infinitive and a gerund clause, respectively (see the same type of example in (5) above). In (10) and (11) the coding of *p* is less explicit than that in (8) and (9), since in the former the subject of the complement clause is merely “understood”, i.e., its referent has to be inferred from the linguistic context (the addressee in (10) and the speaker in (11)). Note that the predicates are also less explicit in (10) and (11), in comparison to those in (8) and (9), because they are non-finite, i.e. not tensed. Furthermore, the interpretation of the complement clauses in (10) and (11) is more context-dependent than that of (8) and (9). That is, in (10), the complement clause does not contain explicit information “for what” the hearer needs help, and in (11), the recipient of the recorded message is not mentioned explicitly (although certainly derivable from the context).

In example (12), the propositional content is coded as a “small clause”, i.e., there is an understood copular link between *the tunnel* and *open*. The propositional content can be paraphrased more explicitly as ‘This tunnel is open’ (as a result of the declaration of an officially authorized speaker).

In the following sections the coding structure of explicit performatives is investigated in more detail. I adopt the classification into five illocutionary types proposed by Searle (1976, 1979: ch. 1). However, in contrast to Searle (1979: 21ff.), who analyzes explicit performatives in terms of their syntactic “deep structure” (i.e. roughly in the sense of Chomsky, 1965), I view explicit performatives as constructions in the sense of e.g. Goldberg (1995, 2006), i.e. as conventional pairings of form and meaning. Searle postulates the following illocutionary types (which he believes are universal): assertives, commissives, directives, expressives, and declarations. What these categories prototypically convey becomes clear when individual instances of them are presented and dissected in the following subsections.

3.1.1 Assertives

As an example of an explicit assertive performative utterance, consider (13):

- (13) I contend that a weekly magazine is harder to put out than a newspaper. (COCA 2009)

The schematic structure of (13) can be represented as (14):

- (14) S V_{ASS-PRES} that CL_{FIN}

The constructional schema (14) contains (i) an explicit reference to the speaker, (ii) an assertive verb such as *claim*, *state*, *assert*, *contend* in the present tense, and (iii) the complementizer *that* followed by (iv) a finite clause.⁵

Interestingly, there are also explicit performatives that Searle (1979: 24) regards as a subtype of performative assertives – although they cannot be coded according to schema (14):⁶

- (15) a. I call him a liar.
b. *I call that he is a liar.
- (16) a. I diagnose his case as appendicitis.
b. *I diagnose that his case is appendicitis.
- (17) a. I describe John as a fascist.
b. *I describe that John is a fascist.

⁵ For an exhaustive list of symbol abbreviations used in this article, see the Appendix.

⁶ Ungrammaticality is marked by an asterisk.

Here are two additional examples of this construction:

- (18) I classify business as pigs and cows. Banks are pigs because they only get fatter. The car business is a cash cow. (COCA 2004)
 (19) I identify myself as a Mexican American. (COCA 2008)

In uttering the first clause of (18) (from the business magazine *Forbes*) the speaker (metaphorically) classifies business as either pigs or cows. Whatever the truth value of this utterance, there is no doubt that the speaker commits himself to the truth of the propositional contents ‘Banks are pigs’ and ‘Car businesses are (cash) cows’. In other words, the verbs *call*, *diagnose*, *classify*, *describe*, and *identify* in (15)–(19), appear to have an assertive force. Schematically, the construction in which they occur can be represented as in (20):

- (20) S V_{ASS}-PRESNP (as) PRED (where PRED = NP or ADJ).

Constructional schema (20) is discussed in more detail in connection with the illocutionary type of declarations in section 3.1.5.

3.1.2 Commissives

An example of an explicit performative commissive act is given in (21), which instantiates the constructional schema (22) (see also (5) above):

- (21) I promise to give up ice cream and go on a serious diet. (COCA 2011)
 (22) S V_{COM} to VP_{ACT-INF}

Pattern (22) occurs with 149 hits in the COCA, but interestingly there is not a single instance of the pattern in this American English corpus, in which the addressee (H) is explicitly coded:

- (23) S V_{COM}-PRES H to VP_{ACT-INF}

This distribution seems to hold for British English as well. A search in the 100 million word version of the *British National Corpus* (BNC) (1980s–1993) yields 44 tokens for pattern (22), but none for (23).

The search results from the COCA and the BNC should however not lead to the conclusion that pattern (23) is ungrammatical. The following example is found in the American television series *Grey’s Anatomy* (italics added):

- (24) *I promise you to lay my heart in the palm of your hands [...].*
(WebCorp 2007)

However, by and large, it seems that in present-day English the pattern (22) with a “silent” addressee slot is preferred over the more explicit pattern (23).

A more explicit coding than either (22) or (23) can be achieved by means of finite complement clauses of the constructional type (25) where the marker FUT refers to auxiliaries or verbal expressions such as *will*, *shall*, and *be going to*.

- (25) S V_{COM}-PRES (that) S FUT VP_{ACT}

Instances of constructional schema (25) are:

- (26) And I promise you that I will never ever do it again. (COCA 2009)
(27) I promise you that I will never leave you. (COCA 2003)
(28) I promise you that I shall never set anything before you that I haven't subjected to rigorous chemical analysis. (COCA 2002)
(29) I promise you that I will give you a government that understands the West. (COCA 1992)

It is important to point out that in present-day English the verb *promise* is not necessarily used with a commissive force. Consider the following explicit performative utterance:

- (30) I promise you that I am not embarrassed.

In (30), the verb *promise* is not used in the sense that the promisor commits himself to a future action benefiting the hearer. The propositional content of (30) refers to a state of the speaker's mind that holds at the time of the utterance. The illocutionary force of (30) is thus more like that of an *assurance* rather than that of a promise.

Another, perhaps even more striking example of deviation from the prototypical illocutionary scenario of (commissive) *promises* runs as follows:

- (31) And I promise I didn't run to the dictionary. (COCA 1999)

Utterance (31) occurred in 1999 on a Public National Radio (US) broadcast titled “Amy Ziffer calls in to test her science knowledge”. The caller, Ms. Ziffer, displayed an impressive knowledge of Latin and Greek scientific terms, and it is in this context that she affirmed that she did not (secretly and illicitly) consult a dictionary during the quiz. What makes (31) different from prototypical commissive promises is that it refers to the *past*. The speaker might have been suspected of having consulted a dictionary, but denies this allegation. This

scenario is clearly different from that of genuine promises, which are future-oriented, i.e., they refer to future actions after the time of the utterance. To conclude, cases such (30) and (31) do not code commissive, but assertive speech acts.

3.1.3 Directives

Performative directive speech acts are exemplified by utterances such as (32)–(34):

- (32) I order you to step off this balcony [...]. (COCA 2007)
- (33) I urge you to seek help [...]. (COCA 2012)
- (34) I ask you to journey to our village tonight. (COCA 2008)

In (32)–(34), the object of the matrix clause, here the hearer *you*, determines the reference of the understood subject of the infinitival clause. The underlying constructional schema can be symbolized as follows:

- (35) S V_{DIR-PRES} H to VP_{ACT}

Performative directives can also exhibit the syntactic structures given in (31) and (32), respectively (where SUBJ stands for the subjunctive mood):

- (36) S V_{DIR-PRES} (that) S VP_{ACT-SUBJ}
- (37) S V_{DIR-PRES} (that) S FUT VP_{ACT}

The two constructional patterns are exemplified by utterances such (38)–(43):

- (38) I order that you be held on a new bond of twenty thousand dollars. (COCA 2003)
- (39) I urge that we invest just as much energy to ensure that we continue to benefit as a society from what our citizens with disabilities have to offer just as they are. (COCA 2009)
- (40) [...] I request that the attempted murder charges against my client be dropped. (COCA 2005)
- (41) I ask that you hold other presidential candidates to the same standard. (COCA 2007)
- (42) [...] I beg that you will humour me far enough to fill me in on the details of both crimes. (COCA 2009)
- (43) I recommend that people visit that Web site. (COCA 2009)

Note that in examples (38)–(43) the addressee is not named in the matrix clause; in fact, in the American English corpus COCA, not a single example is found of the form I order/urge/request/ask/recommend you that p, suggesting that in English constructional schema 44) is unacceptable:

- (44) *S V_{DIR-PRES} (that) S VP_{ACT-SUBJ} /FUT VP_{ACT}

3.1.4 Expressives

Explicit performatives with an expressive force are schematically coded as in (45):

- (45) S V_{EXPR} (P) H VP_{ACT-ING}

The propositional content of the construction is typically coded by means of a gerund clause with an understood subject whose reference is “controlled” by either the subject argument or the object argument of the matrix clause. Examples are:

- (46) I apologize to you for speaking so bluntly [...]. (COCA 1994)
 (47) I thank you for responding to my message. (COCA 2011)
 (48) Laurie, I congratulate you on taking care of those 150 kids [...].
 (COCA 2010)

In (46), the speaker *I* determines the referent of the understood subject of the gerund clause, i.e., it is the speaker who “spoke so bluntly”. In (47) and (48), the addressee is the one who “responded to the message” and “took care of those 150 kids”, respectively.

It is noteworthy that Searle (1979: 15) claims that the propositional content of performative expressives cannot be coded by a finite complement clause (*that* clause). However, the following data show that this generalization is not empirically correct:

- (49) I apologize that this program may affect your standing as a season ticket holder. (COCA 2011)
 (50) I apologize that my housekeeper won't be there [...]. (COCA 2008)
 (51) I apologize that I cannot report on Japan, which is foremost on the American mind when we think of foreign competition in business or education. (COCA 1992)

Notice also that in (49)–(51) the presupposed state of affairs coded in the *that* clause does not refer to the past but to a possible future in (49), a negated future state in (50), and the inability to do something in (51).

Another set of examples in which *p* is coded by means of a finite complement clause is given in (52)–(54):

- (52) Sir, I thank you so much for your concern. And I thank you that you intervene. (COCA 2012)
- (53) Lord, I thank you that I was born a man. (COCA 1994)
- (54) Father God, I thank you that this is not anyone's coalition but yours. (COCA 1993)

While (52) abides by the Searlean constraint regarding the possible format of complements of explicit performative expressives, (53) and (54) both violate the constraint because they occur with finite complement clauses. Notwithstanding, (53) and (54) seem perfectly natural.

3.1.5 Declarations

Performative declarations typically have the following structure:

- (55) I V_{DECL-PRES} NP (as) PRED

Examples are:

- (56) I find you guilty as charged.
- (57) I pronounce you man and wife.
- (58) I appoint you head of the Department of English.

The structure of declarations as represented in (55) and instantiated in (56)–(58) is analogous to that of a subclass of assertives, exemplified in (15)–(19), whose schematic structure has been given in (20) (section 3.1.1). The structural parallelism between examples (15)–(19) (provisionally classified as assertives in section 3.1.1) and examples (56)–(58) raises the interesting question whether there is actually a clear-cut pragmatic difference between the putative assertives (15)–(19) and the declarations instantiated by (56)–(58).

This problem cannot be discussed exhaustively in this contribution, but its significance for an adequate categorization of illocutionary types and their coding properties can be elucidated by comparing, by way of example, the following two illocutionary acts: a doctor's *diagnosis* (an assertive in Searle's

sense) and a judge’s *verdict* (a declaration in Searle’s classification). What do they have in common, what makes them different?

One property shared by the two illocutionary categories is that both the doctor’s diagnosis and the judge’s verdict are expected to be based on solid empirical evidence. The only difference between an “assertive” diagnosis and a “declarative” verdict seems, at first sight, to be that the latter presupposes an institution, i.e. a court or tribunal, whereas the former does not. However, one could argue for some of Searle’s assertives of the type illustrated in (15)–(19) that they are embedded in various institutional frameworks. The doctor who claims that a patient has appendicitis is trusted to make a correct diagnosis on the basis of his or her belonging to a body of specially trained experts, a training that takes place in medical schools and hospitals. Patients rarely dare to challenge the pronouncement of a medical expert, and in this sense, a diagnosis made by a doctor *creates* the fact that the patient has appendicitis, just as the verdict of the judge *creates* the fact that the defendant is guilty as charged. Both a verdict and a diagnosis have consequences for the life of the defendant and the patient, respectively. For example, the latter might have to be operated upon, and the former might have to go to jail.

Table 1 summarizes what a doctor’s diagnosis and judge’s verdict have in common.

Table 1: Doctor’s diagnosis vs. judge’s verdict

	Doctor’s diagnosis	Judge’s verdict
Institutional background	Medical profession, hospital, family practice, etc.	Legal institutions, courts
Evidence	Scientific evidence	Witnesses, scientific evidence
Factuality	Medical condition of patient is a fact produced by doctor	Legal status of defendant is created by court
Consequence for Undergoer	Patient undergoes treatment / operation	Defendant is acquitted / punished / goes to jail

As Table 1 reveals, a doctor’s diagnosis comes very close to a declaration. The case of calling someone a liar (see (15a)) is somewhat different. It is assertive, i.e., the proposition that the person named referred to by the pronoun *him* is claimed to be true by the speaker. In contrast to the act of diagnosing someone as having appendicitis, calling someone a liar is not grounded in any specific institution or does not require any expertise.

To summarize, the evidence points to some conceptual-pragmatic overlap between assertives and declarations. Acts such as classifying, diagnosing, and categorizing are claims about reality but their factuality is also *created* by the speaker. In this sense, they are like declarations such as finding someone guilty, pronouncing a couple man and wife, and appointing someone chair of a committee. The category boundaries between (certain) assertives and (certain) declarations appear to be fuzzy. There is a cline between asserting, i.e. making the claim that *p*, and declaring, i.e. making the claim that *p* is a fact and, at the same time, actually creating *p* as a fact. It is thus not fortuitous that, given that certain assertives and certain declarations have common pragmatic functions, this common pragmatic function is reflected in the same syntactic structure. In other words, the syntax of assertives that are coded by schema (14) is *motivated*, at least partially, by their overlapping illocutionary function with declarations (see schema (55)).

3.2 Explicit performatives without coded propositional contents

The examples discussed in section 3.1 are – to slightly varying degrees – highly explicit in their coding of both illocutionary force and propositional content. In maximally explicit cases (e.g. (26)) the speaker, the hearer, the illocutionary force and the propositional content are coded – although it has to be kept in mind that there are always elements whose precise denotation or reference is to be determined inferentially (e.g. deictic pronouns). For example, in (26), repeated here as (59), knowledge about the extralinguistic situation determines who the speaker and the hearer are, and, in the complement clause, the exact denotation of the units *do* and *it* can likewise only be inferred on the basis of contextual clues.

(59) I promise you that I will never ever do it again.

Notwithstanding the context-dependence of even explicit performatives as discussed in section 3.1, there is a stark difference between them and examples such as (60)–(64):

- (60) I apologize. (COCA 2015)
- (61) I agree. (COCA 2015)
- (62) I promise. (COCA 2015)
- (63) I beg you. (COCA 2015)
- (64) I thank you. (COCA 2015)

In (60)–(64), the speaker, the performative verb, and, optionally, the hearer are explicitly coded; however, the propositional content is not syntactically integrated into the sentence as a complement clause but has to be inferentially retrieved in the given context and/or situation.

The underlying schema of cases such as (60)–(64) can be represented as (65):

(65) S V_{ILLPRES} (H)

3.3 Nominal explicit performatives

The illocutionary force *F* of an utterance can also be named by other means than a performative verb. It is quite common to encounter single- or two-word expressions with a *nominal* head that designates the illocutionary function explicitly. In English, the nominal is often but not exclusively marked in the plural. The propositional content *p* can be embedded syntactically under the noun phrase, but it may also be omitted if it is easily retrievable from the context. I call this type of illocutionary construction *nominal (explicit) performatives*. The general schema including optional expansions is given in (66):

(66) (POSS_{IPS}ADJ) N_{ILLPL} (p)

The following are typical English examples:

- (67) a. Thanks! (COCA 2015)
- b. Thanks for the background information. (COCA 2015)
- (68) a. Congratulations! (COCA 2015)
- b. Congratulations on the album. (COCA 2015)
- (69) a. Condolences! (COCA 1998)
- b. My condolences. (COCA 2012)
- c. My deepest condolences. (COCA 2012)

In uttering (67)–(69), the speaker performs acts of thanking, congratulating, and condoling, respectively. An important difference between nominal performatives and verbal explicit performatives, as discussed in section 3.1, is that the latter are marked by the present tense (PRES), i.e. the time of the utterance, whereas nominal performatives lack any reference to time. When using nominal performatives, the speaker *refers* to illocutionary acts as

established communicative entities (“things”) and, in doing so, invites the inference that he performs a token of the act designated by the nominal.

Interestingly, nominal performatives seem to be restricted to expressive illocutionary acts, i.e., assertives, directives, commissives, and declarations are not usable in this constructional format. For example, the following are not felicitous acts of stating, promising, and requesting, respectively:

- (70) *Statements.
- (71) *Promises.
- (72) *Requests.

A discussion of the *motivation* of and *constraints* on formal properties of nominal performatives constitutes a fascinating topic in its own right but is beyond the scope of this article. Perhaps, one reason for nominal performatives to be restricted to expressives is that their expressive potential is effectively conveyed by condensed nominal expressions as (67)–(69) rather than longer verb-based explicit performatives.

3.4 Past participle performatives

There is also a small class of performatives that code the illocutionary verb in the past participle. Consider the following examples (with the performative italicized):

- (73) [T]he time of year for good intentions. From January 1st everything will change. *Promised*. No more fags, no more junk food, more exercise, lose weight (GLoWBE, GB 2009)
- (74) OK, the record labels don't give fair deals. *Agreed*. But what about indie label owners like you and me? (GLoWBe, GB 2009)
- (75) The crime problem in the US is real. *Granted*. (GLoWBe, US, no date)

In (73)–(75), the speaker does not name the linguistic action itself but focuses instead on the result or outcome of the linguistic act, which is grammatically coded by means of the past participle form of the illocutionary verb. The inference from the completion of the illocutionary act to its performance is a case of a highly productive *conceptual metonymy* operating in English, the RESULT FOR ACTION metonymy, a special case of the EFFECT FOR CAUSE metonymy (see e.g. Panther & Thornburg, 2000).

4 Hedged performatives

4.1 Preliminary remarks

English and many other languages allow the illocutionary verb in explicit performative utterances to be “hedged” by modal or attitudinal words or expressions without any change in the illocutionary force of the utterance in question. In one of the first pioneering studies on this subject, Fraser (1975: 187) provides (made-up) examples such as the following (my numbering and italics):

- (76) a. I *can* promise that we will be there on time.
 b. I *must* advise you to remain quiet.
 c. I *have to* admit that you have a point.
 d. I *wish to* invite you to my party.
 e. I *will* henceforth *stipulate* that $x = 4.5$.
 f. I *might* suggest that you ask again.

Fraser observes that “[e]ach example sentence has the general form of a performative sentence, and each may count as the performance of the illocutionary act denoted by the performative verb [...]” (187). The sentences (76a–f) differ from explicit performative utterances “in that each contains a modal or semi-modal” (ibid.: 187). Fraser also notes that in (76a–f) the modals are not semantically empty elements but contribute to the overall meaning of the utterance. For example, (76a) has the illocutionary meaning ‘I promise that we will be there in time’, but some additional meaning is provided by the modal *can*.

In utterances (76a–f), the illocutionary force denoted by the performative verb is not affected by the modal hedge. I call such cases *illocutionary-force preserving hedges*. In contrast, in other cases, to be discussed below, the hedge has the effect of *canceling* the illocutionary force denoted by the performative verb, resulting in a change of illocutionary force of the utterance in question. The reasons why the illocutionary force denoted by the performative verb remains unaffected in some cases, and is canceled in others, are discussed in the subsequent sections.

A good test for illocutionary force preservation is to check whether the (hedged) performative verb is compatible with the instrumental adverb *hereby*, which is a well-known a test criterion for explicit performative utterances. Two authentic examples are given in (77):

- (77) a. I *can hereby confirm* that our customers appreciate our specialist expertise [...]. (WebCorp)
 b. I *can hereby report* that the distance between today and yesterday, or at least between 2000 and 1900, is exactly 541 footsteps. (COCA 2002)

The illocutionary force of confirming in (77a) and reporting in (77b) is not affected by the modal *can*. In this respect then, (77a) and (77b) behave in the same way as their corresponding explicit performatives in (78):

- (78) a. I hereby confirm that our customers appreciate our specialist expertise.
 b. I hereby report that the distance between today and yesterday, or at least between 2000 and 1900, is exactly 541 footsteps.

Another hedged performative where the performative verb *recommend* is modified by *hereby* is (79):

- (79) I *can hereby recommend* that you do not feed pasta to your snails [...]. (WebCorp)

The following example would also easily pass the *hereby* test; i.e. (80) is clearly a case of illocutionary force preservation:

- (80) I *can recommend* the octopus and cress salad, and juicy scallops on a johnnycake (a cornmeal pancake). (GLOWbE 2011)

Sentence (80) is from a newspaper article on the sights of the Southern Californian city of San Diego, here about a restaurant. It appeared in the British newspaper *The Telegraph* in 2011. The writer *recommends* the octopus and cress salad, etc., on the menu, although he literally merely says that he *can* recommend these menu items. This interpretation is the result of a ubiquitous *inferential* principle in English and other languages, i.e. the conceptual metonymy ABILITY TO ACT → ACTUAL ACTION (see Panther & Thornburg, 1999, who call this metonymy POTENTIALITY FOR ACTUALITY).

If the generally accepted postulate in cognitive linguistics is correct that every linguistic element is meaningful, then the modal auxiliary *can* contributes to the overall meaning of (80). The author of (80) implies that he is competent to recommend the menu items in question because of his expertise as a travel writer and food critic. Furthermore, *can* reinforces the pragmatic implication that what is recommended, i.e. the food items, is beneficial and good for the

addressee. To summarize, the explicit performative *I recommend x* and the hedged performative *I can recommend x* share the property that they are used to make an actual recommendation. They differ in that the hedged recommendation conveys additional pragmatic effects of competence and positive evaluation. Indeed, as I argue below, an important feature of *can* is its strong association with positive evaluations and corresponding emotions of contentedness, if not happiness.

But now consider the pieces of narrative discourse in (81) and (82):

- (81) “I’m the captain of this craft,” Pancho said firmly. “*I can order* you to stay inside.” (COCA 2001)
- (82) He gave her a crooked grin. “And I’m the owner. *I can fire* you.” “Not till we get back to Selene.” (COCA 2001)

In (81), the character named Pancho *does not* order his interlocutor to stay inside, but *can* signals that he, as “the captain of the craft”, feels authorized to do so. Analogously, in (82), which is taken from the same narrative, Pancho gives his interlocutor to understand that he is entitled to fire her, but in saying *I can fire you* he does not actually fire her. The utterance is more like an implicit threat that he might do so in the future if the interlocutor does not behave according to his wishes, but it is definitely not an order.

A third possibility is exemplified by the contrast between (83a–c):

- (83) a. I cannot lift this log alone. *I beg* you to help me, for only you are strong enough. (COCA 2010)
- b. I cannot lift this log alone. [#]*I can beg* you to help me, for only you are strong enough.
- c. And now, gentlemen, as I am exhausted, I *must beg* you to excuse me. (COCA 2002)

Performative uses of the *I beg you to VP* are well-attested in the COCA (67 tokens), whereas there is no example of *I can beg you to VP* and only one example of *I must beg you to VP*, i.e. (83c). The modal *can* in (83b) feels pragmatically incompatible with *beg* (as indicated by the superscript ‘#’) and it has the effect of canceling the illocutionary force of begging. Hence, *I can beg* does not license a metonymic inference to ‘I (hereby) beg’, and even the non-performative sense ‘I feel authorized/legitimized to beg you to VP’ seems somewhat outlandish. The schema *I must beg you to VP* seems to be rare in corpora; nevertheless, it sounds idiomatic in (83c), and, moreover, it is

illocutionary-force preserving, i.e., *I must beg you to VP* metonymically evokes ‘I beg you to VP’ via the metonymy OBLIGATION TO ACT FOR ACTUAL ACTION).⁷

To conclude then, in the analysis of hedged performatives three interpretive possibilities have to be kept apart:

1. The modal is compatible with the illocutionary verb and does not affect the illocutionary force expressed by the performative verb, i.e., it is illocutionary-force preserving. Such cases can be called *genuine hedged performatives*.
2. The modal is compatible with the illocutionary verb, but has the effect of *canceling* the force denoted by the illocutionary verb, leading to a different illocutionary force.
3. The modal verb is semantically and/or pragmatically *incompatible* with the illocutionary verb.

In the following sections 4.2 and 4.3, the effect of hedges on performativity are discussed and exemplified in more detail. The analysis is, for reasons of space, restricted to the pragmatic effects of the modals of ABILITY(*can*) and OBLIGATION (*must*) on performativity. The modals *can* and *must* trigger certain pragmatic inferences that give illocutionary-force preserving hedged performatives a certain *evaluative* and *emotive* bias. The thesis that I argue for in this contribution and support with empirical data is that *can* evokes positive values (GOOD/BENEFICIAL) and emotions (HAPPINESS/CONTENTMENT), whereas *must* suggests negative values (BAD), and corresponding negative attitudes (RELUCTANCE, UNWILLINGNESS, UPLEASANTNESS). Note that these inferences are not entailments, i.e., they are not conceptually necessary but typically pragmatic in the sense that they are defeasible under contextual and situational conditions.

4.2 Performatives hedged with *can* (ABILITY)

The general inferential schema for illocutionary-force preserving hedged performatives is given in Figure 4.

In Figure 4, a distinction is made between the source meaning, i.e. the literal modal sense, and the inferentially elaborated target meaning. Since the illocutionary act is evaluated as positive for the speaker and/or the hearer, i.e. as a good and appropriate thing to do, and, hence causes a feeling of

⁷ The Corpus of Global Web-based English (GloWbE) (1.9 billion words) has 11 instances of the pattern *I must beg you to VP* (accessed September 1, 2014).

contentment or pleasure, the speaker wishes, or is even eager, to perform the speech act denoted by the performative verb and actually *does* so (target meaning). In what follows, the abstract schema in Figure 4 will be illustrated with examples that instantiate Searle's five illocutionary types.

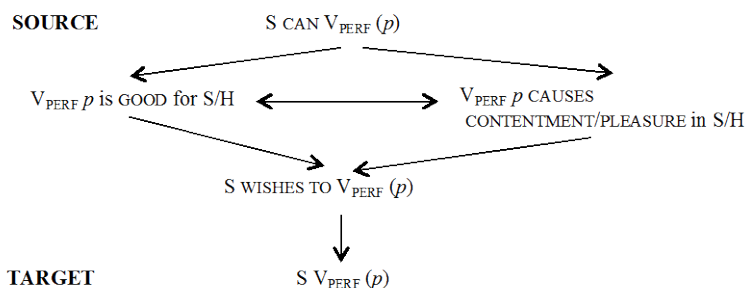


Figure 4: Inferential schema for performatives hedged with *can*

4.2.1 Assertives

The modal *can* is used quite productively with illocutionary verbs of assertion:

- (84) I *can inform* you that the government of Australia has changed for just the seventh time. You obviously enjoy hearing it [...].
(WebCorp, <http://www.pm.gov.au/media/2013-09-07/election-night-victory-speech>)

Utterance (84) is a transcript from a speech given by the newly elected Prime Minister of Australia on September 7, 2013. In the first sentence, the Prime Minister-Elect *informs* his followers that the government of Australia has changed, i.e., *can inform* evokes the actual act of informing. Furthermore, given the results of the election, the speaker of (84) is in a position to inform his audience about the change of the government, i.e. the preconditions for a felicitous act of informing are fulfilled. This is one of the functions of the modal *can*, as already observed in section 4.1. Last but not least, the use of *can* with the performative verb *inform* has yet another pragmatic effect: it conveys that the act of informing and, by inheritance, its propositional content, is *evaluated* as good news, which, in turn, correlates with positive emotions such as contentedness and happiness.

Schematically some of the inferences involved in utterances of the type instantiated in (84) can be diagrammed as in Figure 5, where the arrows indicate

relations of metonymic inference (see Panther & Thornburg, 1998, 2007, for a justification of this view).

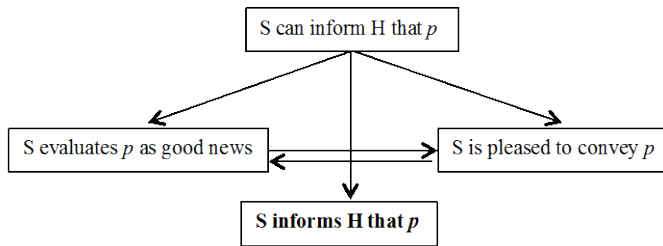


Figure 5: I can inform you that p

The pragmatic inferences at work in Figure 5 can be regarded as what Linda Thornburg and I consider to be *conceptual metonymies* (see e.g. Panther & Thornburg, 1998, 2007). The following metonymic reasoning principles are slightly adapted and elaborated from Panther (2015: 144):

- (85) a. ACTUAL ACTION (a special case of the metonymy potentiality actuality)
- b. $F(p) \rightarrow \text{EVALUATION-of } F(p)$
- c. $F(p) \rightarrow \text{EMOTION-caused-by } F(p)$
- d. $\text{EVALUATION-of } F(p) \leftrightarrow \text{EMOTION-caused-by } F(p)$

The double-headed arrow in (85d) indicates that the metonymic relation is bidirectional from EVALUATION to EMOTION, and, conversely, from EMOTION to EVALUATION (see Panther, 2015).

To conclude this section with another example, in (86) an act of assurance is performed that essentially works the same way as (84) (see Figure 5):

- (86) Based on 30 years of Arctic research, I *can assure* you that factual evidence of permafrost thawing exists. (COCA 2012)

For a scientist, it is obviously good and happy news to learn that “factual evidence” for a perhaps hitherto unconfirmed hypothesis exists. The verb *assure* is fully compatible with *can* with regard to its positive implications.

4.2.2 Commissives

Example (87) functions in the same way as (84) and (86). The speaker of (87) promises something; and a genuine promise is a positively evaluated speech act.

- (87) I *can promise* you that we won't give up [...]. (COCA 2001)

The use of *can* in (87) conveys, among other things, that the speaker feels confident that crucial preconditions of a felicitous promise are fulfilled: e.g. that the speaker is able to perform the action in question and that she believes that the action will benefit the hearer. In this sense, the content of this promise is good news for the hearer and triggers emotions of contentment. The same pragmatic inferences hold for (88) and (89), which count as acts of guaranteeing and offering, respectively.

- (88) And I *can guarantee* you that I will not be the only Democrat working for his re-election. (COCA 2004)
- (89) I *can offer* you a month's wages and the fare for your transportation home to New England. (COCA 1994)

Interestingly, not all commissives lend themselves to hedging with *can*. The verb *pledge* is usually used performatively without a hedge, as e.g. in a speech given by U.S. President Obama:

- (90) I *pledge* to cut the deficit in half by the end of my first term.
(COCA 2012)

The use of *I can pledge* with the illocutionary force of a commissive speech act exists, but it is relatively rare in comparison to e.g. *I can promise*. This is probably due to the fact that *pledge* expresses a more formal and solemn self-commitment than *promise*. The following is an exceptional authentic example of *I can pledge* with the performative force 'I (hereby) pledge' (British English):

- (91) A right can only be exercised if you know about it. So I *can pledge* my department will be talking direct to tenants to inform them of their Right-to-Buy. (GLOWBE)

4.2.3 Directives

As already observed at the beginning of section 4.1, directives with a relatively low degree of imposition on the hearer, i.e. "weak" directives (or 'consultatives')

such as *recommend* may be hedged by *can* and preserve their performative character. This is in line with the semantics and pragmatics of recommendations: their propositional content is good for or beneficial to the hearer and they hence cause corresponding positive emotions and feelings.

Things look differently in the case of “stronger” directives, i.e. directives with a high degree of imposition on the hearer. Example (81) in section 4.1 illustrates case where the hedge *can* cancels the performativity of *order*. Cancellation of performativity also holds for *ask* in its ‘request’ sense in the following example:

- (92) That is what one does when one insults races/whole female gender. I *can ask* you to change your way of thinking about it like that, but it won't do any good. (GloWbE)

In (92), the speaker is not *asking* the addressees to change their way of thinking. The verb *ask* is conceptually-pragmatically compatible with *can*, but the modal hedge preempts a requestive interpretation of the second sentence in (92). Rather, the sentence is used as an assertive illocutionary act, a kind of statement, i.e. something that can be true or false. Indirectly, it is possibly also a warning about what the speaker should heed doing in the future. I suggest that the reason why (92) is not an illocutionary-force preserving case resides in a rather negative evaluation of the propositional content of (92) and corresponding “bad feelings” about it. The speaker explicitly concedes that *p*, i.e. a change in the hearer's way of thinking, *won't do any good*.

Interestingly, with the help of a little bit of additional hedging, there exist contexts in which *I can ask you to VP* has the force of a polite request, and this directive meaning appears to be non-cancelable. Consider the following utterance, from an interview of CNN journalist Jim Clancy with Mary Robinson, UN Commissioner for Human Rights, in 2002:

- (93) All right, Mary Robinson, *if I can ask* you to stay right there, we're going to take a short break. (COCA 2002)

Jim Clancy's utterance clearly counts as act of asking or requesting the hearer (Mary Robinson) to stay on the air. The crucial trigger of this interpretation is the *if*-clause, under which *I can ask you to stay right there* is embedded. The hypothetical meaning of the *if*-clause and the meaning of *can*, which comes close to the sense ‘may, be allowed’ in this context, jointly motivate the reading of this example as a polite directive speech act. In other words, (93) is an illocutionary-force preserving example.

Hypotheticals like (93) are conceptually and pragmatically related to interrogatives of the following sort:

- (94) *Can I ask you to read from your book?* (COCA 1993)

Example (94) functions as a polite request in the same way as the conditional clause in (93). Utterances (94) and (94) instantiate cases of *double hedging*: (i) hedging by means of a non-assertive mood operator, i.e. hypothetical and interrogative, respectively; and (ii) hedging by the modal auxiliary *can*. Doubly or even multiply hedged performatives constitute an article-length subject of their own and they can only be mentioned in passing in this contribution.

4.2.4 Expressives

Expressive performative verbs co-occur with *can*, as the following examples show:

- (95) I can't apologize to everybody I hurt? But I *can apologize* to you. (COCA 2012)
- (96) I *can* only *apologize* for the inconvenience, but it's due to issues beyond our control. (GLoWbE, US)
- (97) This time, Sheri Fink, I *can thank* you very much for your time today and mean it. Appreciate your effort, and thank you for joining us here. (COCA 2011)
- (98) Well, I *can forgive* you for saying those things to me. (COCA 1997)

Do (95)–(98) constitute acts of apologizing, thanking, and forgiving, respectively? In the case of (95), one could argue that it is more likely an indirect *offer* to apologize rather than an actual apology. The *hereby* test is not quite conclusive in this case:

- (99) But I can hereby apologize to you.

In contrast, (96) can be interpreted as a genuine apology (with the caveat elaborated below). Note first that in an apology *p* as such is, of course, not evaluated positively (witness the use of the nominal *inconvenience*, which expresses a negative evaluation of *p*). Nevertheless, the act of apologizing itself, i.e. the effort of showing contrition for something bad done to the addressee, is evaluated positively. Second, in (96), the focus adverb *only* plays a crucial role. It indicates that the speaker, a city clerk interviewed by a newspaper, feels that

his only *option* is to apologize and in saying so he actual does apologize. Third, the force of the apology is however considerably weakened by the immediately following claim that the events for which the city clerk apologizes were “beyond our control”.

Utterances (97) and (98) are well in accord with the inference schema in Figure 4 at the beginning of section 4.2. In (97), both the act of thanking and its propositional content are positively evaluated (*p* is GOOD/BENEFICIAL for S) and convey corresponding emotions of contentment and happiness. The act of forgiving (98) is also positively evaluated even if the propositional content ‘Yopu said these things to me’ is obviously, in evaluative and emotional terms, loaded for the speaker.

4.2.5 Declarations

In general, declarations are not illocutionary-force preserving when hedged with *can* because they are grounded in e.g. social, legal, and religious institutions. Example (82) in section 4.2, part of which is repeated here, is an example:

(100) I can fire you.

Utterance (100) does not constitute an act of firing the hearer, but the speaker simply warns the hearer that he might do so.

I have been able to find only one example of a hedge declaration, that is illocutionary-force preserving:

(101) By the power invested in me by the great state of Oklahoma, it is official, I *can hereby pronounce* you are husband and wife together. You should kiss your bride. (WebCorp)

A clear indication that the act of pronouncing a couple husband and wife takes place is the use of the instrumental *hereby*. As far as the function of *can* is concerned, it has the usual metonymic implications, viz. of positive evaluation (the propositional content (event) *p* is evaluated as GOOD, and the event is cause for joy and happiness).

4.3 Performatives hedged with *must* (OBLIGATION)

In contrast to performatives hedged with *can*, performatives modified by *must* convey a usually negative evaluation of the illocutionary act. The speech act and its propositional content convey something that is evaluated as BAD by the speaker and/or the hearer and corresponding emotions and feelings of discontentment and displeasure. Furthermore, the illocutionary act is typically performed with some reluctance, i.e., *must* connotes that the speech act is performed because of an existing obligation rather than of the speaker's own accord. Nevertheless, in illocutionary-force preserving cases, the speech act, as named by the performative verb, actually comes about. This situation is diagrammed in Figure 6.

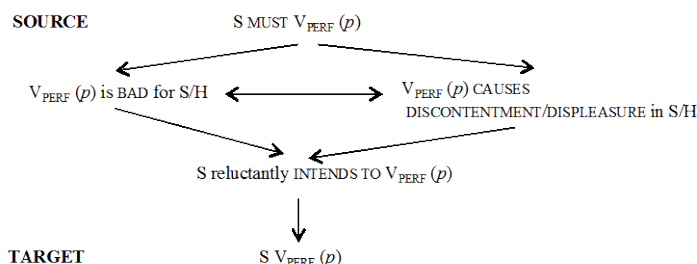


Figure 6: Inferential schema for performatives hedged with *must*

In the following subsections, following the organization of section 4.2, the Searlean illocutionary types are checked one by one as to their capacity to collocate with *must*.

4.3.1 Assertives

As a first example of an performatively used assertive verb hedged with *must*, consider (102):

- (102) I *must inform* you that we are under no obligation to provide you any other documents other than those directly related to the payment of the invoice [...]. (GloWbE, GB)

Example (102) is illocutionary-force preserving; and this is generally the case with utterances of the type *I must inform you that p*. How does *I must inform*

you that p contrast with the equally illocutionary-force preserving *I can inform you that p*? The answer is that the pragmatic, i.e. metonymic, implications of the two minimally contrasting constructions are quite different. The interpretation ‘I (hereby) inform you that p’ of *I must inform you that p* is sanctioned by the metonymic inference schema OBLIGATION TO ACT → ACTUAL ACTION, which is, a high-level predication metonymy in English and other languages (see e.g. Panther, 2015). Furthermore, in addition to creating an ACTUALITY effect, the modal *must* often correlates with a negative evaluation of the speech act and its propositional content *p* (see Figure 6). In using the modal *must* the speaker implies that she would rather not or only reluctantly perform the speech act because it conveys news that is BAD for the addressee. In a way, the speaker *distances* herself from her own illocutionary act, implying that it is the consequence of circumstances beyond her control. Notwithstanding, in stating her duty to perform the illocutionary act of informing, it is actually brought about.

The following example can be analyzed along the same lines:

- (103) Although I am loath to broach this subject, I *must notify* you that the timely removal of his personal property will obviously impact the amount of money I am able to return to you. (COCA 2007)

Example (103) is to be interpreted as an act of actual notification (i.e. not just as a statement of obligation to perform this speech act). The propositional content is, at least potentially, negatively viewed, but, at the same time, the speaker/author gives to understand that the bad news for the addressee is not his or her responsibility.

In the following example, the reluctance to perform the illocutionary of admitting is already implied by the performative verb itself, but it is reinforced by the use of *must*:

- (104) I *must admit* you did it quite cleverly, but it was a wicked thing to do nonetheless. (COCA 2005)

There is also an implicit evaluation in (104), but, different from (102) and (103), where the propositional content is in some sense deemed BAD for the addressee, the speaker of (104) evaluates the action ‘You did it quite cleverly’ as BAD, i.e. negative, for his own self-image, as becomes clear from the ensuing context, which qualifies the action carried out by the hearer as *a wicked thing to do*.

We have seen that the use of *must* in hedged performatives conveys a negative evaluation of the propositional content of the illocutionary act. This is possibly also an implied interpretation of the following example:

- (105) I *must warn* you that this is not a propitious time to sell – in the middle of a war [...]. (COCA 2004)

Utterance (105) is not just a statement of the speaker that he must warn the hearer (source meaning), but it constitutes an actual warning (target meaning). Warnings are *hybrid* illocutionary acts because, on the one hand, they have an assertive force, i.e., they have a truth value; but, on the other hand, they implicitly pertain to the illocutionary category of directives (see Panther & Köpcke, 2008: 106). In (105), the propositional content *this is not a propitious time to sell* licenses the inference ‘Do not sell’. The guiding question of this contribution arises again: What motivates the use of the hedge *must* in connection with *warn*? A closer look of what is conveyed in (105) suggests the following answer: The speaker knows/believes that the hearer wants to sell. But selling in the middle of a war is BAD for the hearer, because he would probably not get the desired price. The speaker therefore feels it is his duty/obligation to warn the hearer of the bad consequences of an action that the hearer might intend to perform. The schematic structure of this inferential chain is represented in Figure 7:

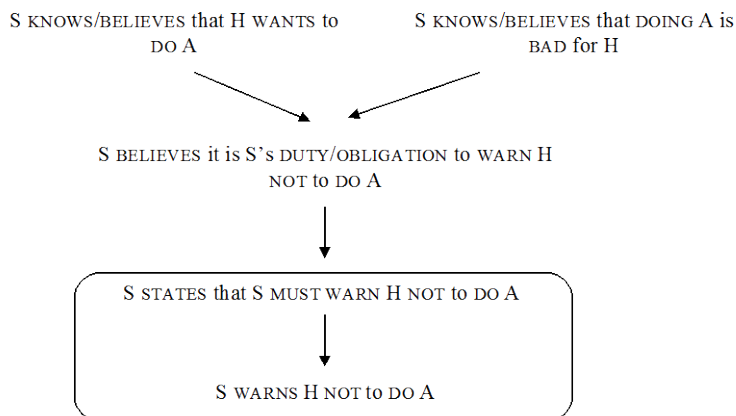


Figure 7: I must warn you not to do A

4.3.2 Commissives

Commissive verbs cannot be hedged with *must* without losing their illocutionary force as commissive speech acts. Utterance (106) does not constitute a promise, but merely states the obligation to promise – the act of self-commitment is not performed.

- (106) I *must promise* myself not to even try to comment on such a deep subject on my cell! (WebCorp)

The reason why *I must promise* is not illocutionary-force preserving is, I propose, due to some pragmatic incompatibility between *must*, which implies a negative evaluation of the speech act and the felicity condition for promises that the act performed is beneficial, i.e. GOOD, for the hearer and should therefore readily be performed by the speaker.

4.3.3 Directives

Typical directive verbs such as *ask (to)*, *insist (on)*, and *urge* co-occur quite readily with *must* to yield hedged performatives:

- (107) Once again, I *must ask* you to lower your voice. (COCA 2011)
 (108) Mr. Podgers, I *must insist* on your giving me a straightforward answer to a question I am going to put to you. (COCA 2003)
 (109) I *must urge* you, too, to seek counseling, Mrs. Abbott. (COCA 1994)

Even the consultative verb *recommend* occasionally collocates with *must*, as attested in the science fiction movie *The Fifth Element*:

- (110) I *must recommend* a full trinuclear assault. (COCA 1997)

In analogy to the assertive examples, what all of the given directives (107)–(109) pragmatically imply that the speaker would rather not perform the directive speech act, but out of a sense of duty, does in fact do so. The use of *must* in combination with *recommend*, as in (110), looks somewhat odd at first sight (overwhelmingly one finds the collocation *I can recommend* rather than *I must recommend*). However, the use the hedge *must* makes pragmatic sense in a context where a negatively evaluated propositional content is conveyed, which is here evoked by the use of the event nominal *a full trinuclear assault*.

4.3.4 Expressives

Expressive speech act verbs are quite productively hedged with *must*. However, in contrast to what we have seen in the case of assertive and directive verbs, expressives hedged by this modal do not necessarily signal reluctance or unwillingness to perform the illocutionary act denoted by the performative verb. Thus, examples such as (110)–(114) signal that the speaker feels it is his or her moral or social duty to perform the speech act in question and the speaker performs the illocutionary act quite willingly.

- (111) I *must apologize* for not being here in person, but I am surprised, even astonished, and honored, to be making this acceptance speech here this evening. (COCA 2001)
- (112) I *must thank* you for the dance, and even more for your conversation, Miss Bennett. (COCA 2008)
- (113) I *must congratulate* you on your choice of marriage partner, Blake. (COCA 2001)
- (114) Things are well. I *must congratulate* you on your successful trip through Europe. (COCA 2001)
- (115) Higgins, I *must compliment* you, you have an excellent crop of students [...]. (COCA 1993)

The expressives in (111)–(115) are all illocutionary-force preserving. However, different from the assertives and directives hedged with *must*, the expressives do not convey the implication that the expressive speech act is performed reluctantly. These corpus data demonstrate that the metonymic inferences of negative evaluation and emotion and the resultant unwillingness to perform the illocutionary act are in fact cancelable inferences (i.e. they are *not* entailments). To pick just one example, the act of congratulation performed in uttering (113) conveys the implication that the speaker evaluates the propositional content expressed by *your choice of marriage partner* as GOOD and feels HAPPY about it, and joyfully fulfills the obligation or duty to perform the expressive illocutionary act. Even the apology (111) is delivered with an overtone of joy and enthusiasm. Analogously, positive evaluations and emotions are also connoted by (112) and (114–115).

4.3.5 Declarations

As already observed in section 4.2.5, hedged declarations do not occur frequently because of their institutional grounding. The only clear example I have found for an illocutionary-force preserving declaration that is hedged with *must* is (116):

- (116) Although I will miss adult psychiatry and many of the staff at John George, I *must hereby*, reluctantly, *submit my resignation*.
(WebCorp)

The utterance of (116) (actually, part of a letter) clearly constitutes an act of actual resigning of the writer (note *hereby*!) from the staff of the hospital – it is not just a statement of an obligation. Furthermore, (116) conveys a typical pragmatic implication triggered by *must*, which in this case is even explicitly coded, viz. the reluctance to perform to resign from the post in question, an act, which is negatively evaluated and emotionally experienced by both the writer and the recipient of the message.

5 Conclusion and outlook

The conceptual-pragmatic analysis of (more or less) explicit performatives in section 3 and hedged performatives in section 4 has revealed the relevance of an approach to utterance meaning that distinguishes between coding and inferencing. Part of the overall meaning of speech acts is not coded, i.e. not compositionally computable, but only inferentially accessible. In the present contribution, the significance of inferential meanings has been illustrated with two modal hedges on performatives, viz. *can* and *must*. In addition to their conventional literal (source) meaning, these modals are metonymically associated with values such as GOOD vs. BAD, mental attitudes such as WILLINGNESS vs. RELUCTANCE (to perform the speech act in question), and emotions such as CONTENTMENT vs. DISCONTENTMENT, all of which contribute to the intended target meaning of hedged performatives.

The pragmatic interpretations proposed in this article are by no means exhaustive; they will certainly have to be improved or even revised in various respects and to be bolstered by statistical analysis. My study has been primarily qualitative and exploratory. A task for the future is to refine the conceptual-pragmatic apparatus proposed in this contribution and apply it to other types of

performative hedges, in particular to multiple modal and attitudinal hedges, which abound in natural language.

Acknowledgments: This contribution is dedicated to Professor Jie Zhang, Dean of the School of Foreign Languages and Cultures, who invited me to spend twelve months as Distinguished Visiting Professor at Nanjing Normal University over a period of three years (2012–2014). I am very grateful for Professor Zhang's hospitality and support, which allowed me to work on the beautiful Suiyuan campus, to present my research to doctoral students and interested faculty, and to collaborate with colleagues in various publication projects. The following reflections on the semiotics of speech acts are intended as a homage to Professor Zhang's outstanding academic leadership that has made Nanjing Normal University a center for semiotics and cognitive linguistics in China.

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Bionote

Klaus-Uwe Panther

Klaus-Uwe Panther (b. 1942) is Professor Emeritus at the University of Hamburg, was president of the International Cognitive Linguistics Association (2005–2007) and the German Cognitive Linguistics Association (2004–2008), and Distinguished Visiting Professor at Nanjing Normal University (2012–2014). His research focuses on cognitive linguistics, pragmatics, and the motivation of grammar. Publications include “Metonymic relationships among actuality, modality, evaluation, and emotion” (2015) and “‘Quo vadimus?’ from a cognitive linguistic perspective” (2016 in *CSS*).

Appendix: List of abbreviations

A	Act
ACT	Action
ADJ	Adjective
ASS	Assertive
CL	Clause
COM	Commissive
DECL	Declaration
DIR	Directive

EXPR	Expressive
F	Illocutionary Force
FIN	Finite
FUT	Future
H	Hearer
ILL	Illocutionary
INF	Infinitive
ING	Progressive
NP	Noun Phrase
P	Preposition
p	propositional content
PERF	Performative
PL	Plural
PRED	Predicate
PRES	Present Tense
S	Speaker
SUBJ	Subjunctive
V	Verb
VP	Verb Phrase