In Reich, Ingo et al. (eds.), *Proceedings of Sinn & Bedeutung* 15,
pp. 1–15. Universaar – Saarland Unversity Press: Saarbrücken, Germany, 2011.

Performative Verbs and Performative Acts*

Cleo Condoravdi
Palo Alto Research Center &
Stanford University
condorav@parc.com

Sven Lauer
Stanford University
sven.lauer@stanford.edu

Abstract. Searle (1989) posits a set of adequacy criteria for any account of the meaning and use of performative verbs, such as **order** or **promise**. Central among them are: (a) performative utterances are performances of the act named by the performative verb; (b) performative utterances are self-verifying; (c) performative utterances achieve (a) and (b) in virtue of their literal meaning. He then argues that the fundamental problem with *assertoric* accounts of performatives is that they fail (b), and hence (a), because being committed to having an intention does not guarantee having that intention. Relying on a uniform meaning for verbs on their reportative and performative uses, we propose an assertoric analysis of performative utterances that does not require an *actual* intention for deriving (b), and hence can meet (a) and (c).

Explicit performative utterances are those whose illocutionary force is made explicit by the verbs appearing in them (Austin 1962):

(1) I (hereby) promise you to be there at five. (is a promise)

(2) I (hereby) order you to be there at five. (is an order)

(3) You are (hereby) ordered to report to jury duty. (is an order)

(1)–(3) look and behave syntactically like declarative sentences in every way. Hence there is no grammatical basis for the once popular claim that **I promise/ order** spells out a 'performative prefix' that is silent in all other declaratives. Such an analysis, in any case, leaves unanswered the question of how illocutionary force is related to compositional meaning and, consequently, does not explain how the first person and present tense are special, so that first-person present tense forms can spell out performative prefixes, while others cannot. Minimal variations in person or tense remove the 'performative effect':

(4) I promised you to be there at five. (is not a promise)

(5) He promises to be there at five. (is not a promise)

An attractive idea is that utterances of sentences like those in (1)–(3) are *assertions*, just like utterances of other declaratives, whose truth is somehow

* The names of the authors appear in alphabetical order.

guaranteed. In one form or another, this basic strategy has been pursued by a large number of authors ever since Austin (1962) (Lemmon 1962; Hedenius 1963; Bach & Harnish 1979; Ginet 1979; Bierwisch 1980; Leech 1983; among others). One type of account attributes self-verification to meaning proper. Another type, most prominently exemplified by Bach & Harnish (1979), tries to derive the performative effect by means of an implicature-like inference that the hearer may draw based on the utterance of the explicit performative.

Searle's (1989) challenge

Searle (1989) mounts an argument against analyses of explicit performative utterances as self-verifying assertions. He takes the argument to show that an assertoric account is impossible. Instead, we take it to pose a challenge that can be met, provided one supplies the right semantics for the verbs involved.

Searle's argument is based on the following desiderata he posits for any theory of explicit performatives:

(a) performative utterances are performances of the act named by the performative verb;
(b) performative utterances are self-guaranteeing;
(c) performative utterances achieve (a) and (b) in virtue of their literal meaning, which, in turn, ought to be based on a uniform lexical meaning of the verb across performative and reportative uses.

According to Searle's speech act theory, making a promise requires that the promiser *intend* to do so, and similarly for other performative verbs (the *sincerity condition*). It follows that no assertoric account can meet (a-c): An assertion cannot ensure that the speaker has the necessary intention.

> "Such an assertion does indeed commit the speaker to the existence of the intention, but the commitment to having the intention doesn't guarantee the actual presence of the intention."
>
> Searle (1989: 546)

Hence assertoric accounts must fail on (b), and, *a forteriori*, on (a) and (c).[1]

Although Searle's argument is valid, his premise that for truth to be guaranteed the speaker must have a particular intention is questionable. In the following, we give an assertoric account that delivers on (a-c). We aim for an account on which the assertion of the explicit performative *is* the performance of the act named by the performative verb. No hearer inferences are necessary.

[1] It should be immediately clear that inference-based accounts cannot meet (a-c) above. If the occurrence of the performative effect depends on the hearer drawing an inference, then such sentences could not be self-verifying, for the hearer may well fail to draw the inference.

1 Reportative and Performative Uses

What is the meaning of the word **order**, then, so that it can have both reportative uses—as in (6)—and performative uses—as in (7)?

(6) *A* ordered *B* to sign the report.

(7) [*A* to *B*] I order you to sign the report now.

The general strategy in this paper will be to ask what the truth conditions of *reportative* uses of performative verbs are, and then see what happens if these verbs are put in the first person singular present tense. The reason to start with the reportative uses is that speakers have intuitions about their truth conditions. This is not true for performative uses, because these are always true when uttered, obscuring the truth-conditional content of the declarative sentence.[2]

An assertion of (6) takes for granted that *A* presumed to have authority over *B* and implies that there was a communicative act from *A* to *B*. But what kind of communicative act? (7) or, in the right context, (8-a-c) would suffice.

(8) a. Sign the report now!
b. You must sign the report now!
c. I want you to sign the report now!

What do these sentences have in common? We claim it is this: In the right context they *commit A to a particular kind of preference* for *B* signing the report immediately.

If *B* accepts the utterance, he takes on a commitment to act as though he, too, prefers signing the report. If the report is co-present with *A* and *B*, he will sign it, if the report is in his office, he will leave to go there immediately, and so on. To comply with an order to *p* is to act as though one prefers *p*. One need not *actually* prefer it, but one has to act as if one did. The authority mentioned above amounts to this acceptance being socially or institutionally mandated.

Of course, *B* has the option to *refuse* to take on this commitment, in either of two ways: (i) he can deny *A*'s authority, (ii) while accepting the authority, he can refuse to abide by it, thereby violating the institutional or social mandate. Crucially, in either case, (6) will still be true, as witnessed by the felicity of:

(9) a. (6), but *B* refused to do it.
b. (6), but *B* questioned his authority.

[2] Szabolcsi (1982), in one of the earliest proposals for a compositional semantics of performative utterances, already pointed out the importance of *reportative* uses.

Not even uptake by the addressee is necessary for **order** to be appropriate, as seen in (10) and the naturally occurring (11):[3]

(10) (6), but *B* did not hear him.

(11) He ordered Kornilov to desist but either the message failed to reach the general or he ignored it.[4]

What *is* necessary is that the speaker *expected* uptake to happen, arguably a minimal requirement for an act to count as a communicative event.

To sum up, all that is needed for (6) to be true and appropriate is that (i) there is a communicative act from *A* to *B* which commits *A* to a preference for *B* signing the report immediately and (ii) *A* presumes to have authority over *B*. The performative effect arises precisely when the utterance itself is a witness for the existential claim in (i).

There are two main ingredients in the meaning of **order** informally outlined above: the notion of a *preference*, in particular a special kind of preference that *guides action*, and the notion of a *commitment*. The next two sections lay some conceptual groundwork before we spell out our analysis in section 4.

2 Representing preferences

To represent preferences that *guide action*, we need a way to represent preferences of different *strength*. Kratzer's (1981) theory of modality is not suitable for this purpose. Suppose, for instance, that Sven desires to finish his paper and that he *also* wants to lie around all day, doing nothing. Modeling his preferences in the style of Kratzer, the propositions expressed by (12) and (13) would have to be part of Sven's bouletic ordering source assigned to the actual world:

(12) Sven finishes his paper.

(13) Sven lies around all day, doing nothing.

But then, Sven should be equally happy if he does nothing as he is if he finishes his paper. We want to be able to explain why, given his knowledge that (12) and (13) are incompatible, he works on his paper. Intuitively, it is because the preference expressed by (12) is *more important* than that expressed by (13).

Preference structures

Definition 1. *A **preference structure** relative to an information state W is a pair* $\langle P, \leq \rangle$*, where* $P \subseteq \wp(W)$ *and* $\leq$ *is a (weak) partial order on P.*

[3] We owe this observation to Lauri Karttunen.

[4] `https://tspace.library.utoronto.ca/citd/RussianHeritage/12.NR/NR.12.html`

We can now define a notion of consistency that is weaker than requiring that all propositions in the preference structure be compatible:

Definition 2. *A preference structure* $\langle P, \leq \rangle$ *is* ***consistent*** *iff for any* $p, q \in P$ *such that* $p \cap q = \emptyset$*, either* $p < q$ *or* $q < p$*.*

Since preference structures are defined relative to an information state W, consistency will require not only *logically* but also *contextually* incompatible propositions to be strictly ranked. For example, if W is Sven's doxastic state, and he knows that (12) and (13) are incompatible, for a bouletic preference structure of his to be consistent it must strictly rank the two propositions.

In general, bouletic preference structures need not be consistent, and they often will not be. We assume that the desires, preferences, and obligations of various kinds of an agent A are represented by a set $\mathbb{P}_w(A)$ of preference structures, some of which may be inconsistent, internally or with each other.

A consistent preference structure will give rise to a partial order $\prec$ among worlds. There are various ways to define this partial order, but for the present paper, we leave it open which definition is most appropriate. Nothing in what follows hinges on the choice. The basic intuition is that $\prec$ should be 'lexicographic': lower-ranked propositions in the preference structure should only make a difference for the ranking of two worlds w and v if they are on equal footing with respect to all the higher-ranked propositions.

Consolidated preferences

Given the multitude of preference structures influencing an agent's decisions, if an agent wants to *act*, he has to integrate these structures into a global one, resolving any conflict. Thus, a rational agent A in world w has a distinguished, consistent preference structure $\langle P_w(A), \leq_{P_w(A)} \rangle$. We call this *A's effective preference structure* in w.

We require that $P_w(A) \subseteq \bigcup \mathbb{P}_w(A)$ and also that if $p, q \in P_w(A)$ such that there is $\langle P, \leq_P \rangle \in \mathbb{P}_w(A)$ and $p <_P q$ and there is no $\langle P', <_{P'} \rangle \in \mathbb{P}_w(A)$ such that $q \leq p$, then $p <_{P_w(A)} q$, ensuring that no spurious goals are introduced into the effective preference structure and rankings that are consistent are retained.

In w, A's induced preference order $\preceq_{P_w(A)}$ will partially[5]determine the agent's behavior: If A has the choice between w_1 and w_2 (as continuations of w differing in what action, if any, A performs), and $w_1 \prec w_2$, then A will choose w_2. That is, the definition of $\preceq$ is a first step to defining a non-probabilistic kind of *Decision Theory*,[6] with preference structures corresponding to utility functions in classical decision theory, while information states correspond to

[5] Only partially, as an agent may be genuinely indifferent between two possible courses of affairs.

[6] By 'decision theory,' we mean any theory that models how agents choose actions on the basis

subjective probability distributions.

We propose the following desiderata for a more developed version of such a theory:[7]

Positive introspection for effective preferences If an agent *a* effectively prefers *p*, he believes that he does.

Negative introspection for effective preferences If an agent *a* believes that he effectively prefers *p*, he does effectively prefer *p*.

3 Commitments

The idea that a main effect of utterances is to modify the commitments of the interlocutors is an old one, going back at least to Hamblin (1971). More recently, it has been fruitfully developed by Gunlogson (2008) and Davis (2009), who take utterances to update *commitment slates*, typically modeled as sets of propositions.

Commitments as restricting future states of the world

Hamblin and Gunlogson only model *discourse commitments*, that is, commitments that constrain the linguistic actions of the interlocutors in the future of the present discourse. This enables them to characterize commitments simply as a set of 'legal' (Hamblin) or 'expected' (Gunlogson) future discourse states: If the discourse ends up in a state that is not in this set, something is off.

While such a model may be sufficient for what these authors were after, it is not quite enough in general. Commitments arising by linguistic means also constrain *non*-linguistic actions and actions that are performed after the discourse has ended. Promises and orders are particularly obvious examples.

In order to capture this more general notion of commitment, we can think of the taking on of a commitment as excluding *possible future states of the world*, thereby making certain future states of the world *impossible*. Given this conception, we cannot just specify a set of 'good' futures (in which all commitments are honored), for, of course, taking on a commitment does not exclude the possibility of violating it. However, we can think of commitments as excluding those futures in which the agent does not act according to the commitment, yet is not at fault. Before the commitment was taken on, this kind of future was possible, afterwards it is impossible.

Consider the simple case of an agent committing himself to raise his hand when prompted the next time. There are three kinds of possible futures:

---

of their beliefs and preferences. We use the term 'classical decision theory' for what is called 'decision theory' in mathematics and economics.

[7] It should be kept in mind that what we want to model are *conscious* preferences. Thus, these desiderata are appropriate even though an agent may be influenced by factors he is not aware of.

(i) futures in which the agent is prompted and raises his hand
(ii) futures in which the commitment is voided, either by being rescinded before the agent is prompted, or because it becomes evident that the agent will not be prompted
(iii) futures in which the agent is prompted and does not raise his hand, but the commitment was not voided before he was prompted.

Taking on the commitment excludes those futures of type (iii) in which the agent does not count as having violated a commitment.

Keeping a commitment

In the (somewhat contrived) example above, it is clear what 'acting in accordance with the commitment' amounts to (raising the hand when prompted), and also at which time the commitment has to be voided so as to not count as violated (before the prompting).

In general, matters are more complicated. If I promise to meet you at the airport at noon tomorrow, what is required of me is not only to be at the airport at noon. Rather, what is required is a complex ensemble of actions that result in me being at the airport at noon. Suppose the trip to the airport takes an hour, and I sleep in until 11:30. I am at fault, even if you call at 11:35 to tell me that your flight has been delayed by several hours and so I do not have to meet you at noon. You may never *know* that I violated my commitment, but I did violate it. On this conception, there is not only a *time when the commitment was kept*, there is also a *time when the commitment was (first) violated*: The (first) time I fail to act in a way that would ensure my being at the airport at noon.

Commitments are always *commitments to act*. When we say 'an agent is committed to believing the proposition *p*', this is short for 'the agent is committed to act as though he believes *p*'. Similarly, 'an agent is committed to an (effective) preference for *p*' is short for 'an agent is committed to act as though he (effectively) prefers *p* to be actualized.' This is exactly the right notion of commitment for promises and the like. In the example above, what I am committed to is to *act as though* I effectively prefer to be at the airport at noon. Some of the required actions have to happen quite sometime before noon.

So we can characterize the notion of 'taking on a commitment' as follows:

(14) If an agent *a* takes on a commitment, he thereby excludes possible future states in which
  a. the agent does not act according to the commitment AND
  b. the commitment is not voided before the agent fails to act according to the commitment AND
  c. the commitment does not count as violated.

Construing commitments as *commitments to act* means that the features of the decision theory from the last section get 'lifted' to the respective commitments:

Positive introspection for preference commitment If an agent is committed to an effective preference for p, he is also committed to act as though he believes he is committed to an effective preference for p.

Doxastic reduction for preference commitment If an agent is committed to act as though he believes that he is committed to an effective preference for p, he is also committed to act as though he effectively prefers p.

Doxastic reduction for doxastic commitment If an agent is committed to act as though he believes that he is committed to act as though he believes that p, he is committed to act as though he believes that p.

We end this section by introducing the following bit of notation (omitting, for simplicity, a necessary temporal parameter, introduced later):

Definition 3. *We let*

$$PEP_a(p) := \left\{ w \in W \;\middle|\; \begin{array}{l} p \text{ is a maximal element of a's public} \\ \text{effective preference structure in } w \end{array} \right\}$$

(Where p is a maximal element of a's public effective preference structure iff a is committed to act as though p is a maximal element of his effective preference structure.)

Assertions and public commitments

We use a deliberately weak notion of assertion: All that it takes to assert is to (sincerely) utter a declarative sentence. We characterize assertions in terms of their *minimal effect* in the sense of Zeevat (2003). With Gunlogson (2003) and Davis (2009), we take this effect to be the coming about of a doxastic commitment on the part of the speaker. Additional properties of assertions can arguably be explained as pragmatic inferences on the basis of this speaker commitment.[8]

(15) An *assertion* of a declarative ϕ in context C adds $[\![\phi]\!]_C$ to the public beliefs of the speaker, thereby publicly committing the speaker to *act as though he believes* $[\![\phi]\!]_C$.

Assertions are, of course, communicative events. Let the totality of the doxastic commitments of a speaker S resulting from a communicative event u be

[8] A prominent example of such a secondary effect is that it becomes *common ground* that p. We follow Gunlogson and Davis in assuming that an assertion becomes part of the common ground only as a secondary effect, after the hearer has accepted the assertion.

designated as $PB_S[u]$ and PB_S^t stand for the set of beliefs of S that become publicly manifest at time t. We do not identify $PB_S[u]$ strictly with the truth-conditional content of u. Rather, the commitment can come about as a result of the meaning of the utterance plus information available in the context in which it is made.[9]

Part of what it means to say that a commitment results from an event is that the commitment comes about at the very end of the event. We hence assume the following principle, where t_u is the final instant of the runtime of u:

(16) $\quad p \in PB_S[u] \Leftrightarrow (p \in PB_S^{t_u}) \in PB_S[u]$

Analogously, we let $PEP_S[u]$ and PEP_S^t refer to the set of preferences resulting from u and that become publicly manifest at t, respectively, and assume

(17) $\quad p \in PEP_S[u] \Leftrightarrow (p \in PEP_S^{t_u}) \in PB_S[u]$

4 Explicit performatives as self-verifying assertions

In this section, we present our assertoric analysis of explicit performatives using the three verbs **claim**, **promise** and **order**, which are representative, in Searle's (1975) classification, of ASSERTIVES, COMMISSIVES and DIRECTIVES, respectively. What performative verbs have in common is that they all report *communicative events*. In the following, we conceive of these events as *concrete particulars*, and hence take every communicative event u to be associated with a unique context $c(u)$ whose speaker is the agent of u and whose time is the runtime of u. The shape of the argument that the utterance ensures the performative effect will be the same in all three cases, but the lexical semantics for the verb will get progressively more complex. What we have to show in each case is that an utterance of a sentence S with an explicit performative verb is self-verifying, i.e., for any world w, if u is an utterance of S in w, then $w \in [\![S]\!]_{c(u)}$.

Commitment to a belief: 'I claim that p'

The problem posed by assertive performative verbs like **claim** and **assert** is nicely illustrated by what has come to be known as *Cohen's problem* (Lycan (1999), based on Cohen (1964)). On the one hand, **claim** is 'truth-conditionally transparent': the speaker of (18) cannot react to the continued absence of rain by saying 'Well, I only said I *CLAIMED* that it was going to rain'. On the other hand, **claim** obviously contributes to truth conditions: For example, (18)

[9] We leave it open here whether the commitments a speaker takes on with an utterance can be identified with Gricean speaker meaning.

entails that somebody claims that it is going to rain.

(18) I claim that it is going to rain.

Cohen's problem can be solved by analyzing **claim** as a performative verb. The content of (18) is just a statement about what the speaker claims, but there is also a performative effect, through which the speaker also becomes committed to the complement of **claim** in the way we demonstrate below.

The reportative use

What has to be the case for (19) to be true?

(19) Peter claimed that it was going to rain.

There must have been a communicative event u from Peter (to someone). What kind of sentence out of Peter's mouth could verify (19)? (18) would do, but so would any utterance that, in its context, commits the speaker to the belief that it is going to rain.

(20) $w \vDash claim(u,a,p)$ iff

a. u is a communicative event from a: $w \vDash CE_a(u)$
b. in $c(u)$, u commits a to the belief that p: $w \vDash p \in PB_a[u]$.

(18) and the plain assertion of (21) will bring about the required commitment in any context in which they are sincerely uttered.

(21) It is going to rain.

However, recall that the commitments resulting from an utterance can go beyond its truth-conditional content, hence, (19) can be supported by utterances of sentences that have (21) as a contextual implication.

The performative use

The goal is to explain why, by virtue of uttering (18), a speaker is doxastically committed to (21). Let u^* be an utterance of (18) in context C^* and world w^*. The truth-conditional content of (18) is given in (22), where the identification of the run time τ of the two utterance events is contributed by the simple present tense. Given the semantics of **claim** in (20), (22) is equivalent to (23).

(22) $\{w \mid w \vDash \exists u : \tau(u) = \tau(u^*) \wedge claim(u,S,Rain)\}$,
where $Rain = [\![\text{it is going to rain}]\!]_{C^*}$

(23) $\{w \mid w \vDash \exists u : \tau(u) = \tau(u^*) \wedge CE_S(u) \wedge Rain \in PB_S[u]\}$

u^*, as an assertion, commits the speaker to the belief in (22)/(23). The speaker is therefore committed *to the belief in the existence of a communicative event that commits him to the belief that it is going to rain*, i.e.

(24) $w^* \vDash (23) \in PB_S[u^*]$

Therefore, at the final instant t^* of $\tau(u^*)$, we have:

(25) $w^* \vDash \left\{ w \,\middle|\, w \vDash Rain \in PB_S^{t^*} \right\} \in PB_S^{t^*}$

Given doxastic reduction for doxastic commitment, (25) reduces to (26):

(26) $w^* \vDash Rain \in PB_S^{t^*}$

(24) and (26) together imply (27), which by postulate (16) reduces to (28).

(27) $w^* \vDash (Rain \in PB_S^{t^*}) \in PB_S[u^*]$

(28) $w^* \vDash Rain \in PB_S[u^*]$

This means that u^* satisfies the conditions in (23) and hence $w^* \in (23)$, in other words, an utterance of (18) is necessarily self-verifying.

Commitment to an effective preference: 'I promise to p'

Moving to commissives, what has to be the case for (29) to be true?

(29) Peter promised (Mary) to get the tickets.

Once again, there has to have been a communicative event from Peter (to Mary) that creates a particular kind of commitment. And again a number of sentences could have been uttered in order to make (29) true:

(30) a. I promise you to get the tickets.
b. I will get the tickets.
c. You will have the tickets tomorrow.

We propose the following semantics for **promise**:[10]

(31) $w \vDash promise(u, a, b, p)$ iff
a. u is a communicative event from a to b: $w \vDash CE_{a \to b}(u)$
b. in $c(u)$, u commits a to $PEP_a(p)$: $w \vDash p \in PEP_S[u]$

[10] The semantics we give only spells out the truth-conditional part of the meaning of **promise**. There is a presuppositional part, as well. The presupposition, roughly, is that a presumed that b has a stake in p.

Thus, any utterance that verifies (29) publicly commits its speaker Peter (to Mary) to effectively prefer to get the tickets. As before, (30-b,c) will bring about the requisite commitment only if the context is right, while the explicit performative (30-a) will create it in any context in which it is sincerely uttered.

The performative use

An utterance u^* of (30-a) to addressee A in context C^* and world w^* commits the speaker S to acting as if he believes the proposition in (32):

(32) $\{w \,|\, w \vDash \exists u : \tau(u) = \tau(u^*) \wedge CE_{S\rightarrow A}(u) \wedge \mathit{Tickets} \in PEP_S[u]\}$,
where $\mathit{Tickets} = [\![S \text{ will get the tickets}]\!]_{C^*}$

The derivation of the performative effect is as follows:

(33) $w^* \vDash (32) \in PB_S[u^*]$

(34) $w^* \vDash \left\{ w \,\middle|\, w \vDash \mathit{Tickets} \in PEP^{t^*}_S \right\} \in PB^{t^*}_S$

Given doxastic reduction for preference commitment, (34) reduces to (35):

(35) $w^* \vDash \mathit{Tickets} \in PEP^{t^*}_S$

(33) and (35) together imply (36), which by postulate (17) reduces to (37).

(36) $w^* \vDash (\mathit{Tickets} \in PEP^{t^*}_S) \in PB_S[u^*]$

(37) $w^* \vDash \mathit{Tickets} \in PEP_S[u^*]$

We have thus derived that the assertion of (30-a) is a witness for its own truth—and hence, an utterance of (30-a) is necessarily self-verifying.

Commitment to an effective preference for an effective preference: 'I order you to p'

Finally, what has to be the case for (38) to be true?

(38) Mary ordered Peter to sign the report immediately.

As before, there must have been a certain kind of communicative event from Mary to Peter. In the right context, an utterance of (7) or any of the sentences in (8) will suffice.

(7) I order you sign the report immediately!

(8) a. Sign the report immediately!
b. I want you to sign the report immediately!
c. You have to sign the report immediately!

In section 1, we said that **order** requires that the event commit the speaker to a certain kind of preference. We can now refine this claim. The event in question must commit the speaker to effectively prefer that the hearer commit himself to effectively prefer that he signs the report immediately.[11]

(39) $w \vDash order(u,a,b,p)$ iff

a. u is a communicative event from a to b: $w \vDash CE_{a\to b}(u)$

b. in $c(u)$, u commits a to $PEP_a(PEP_b(p))$: $w \vDash \mathbb{P}_b(p) \in PEP_a[u]$, where $\mathbb{P}_b(p) = \{w \,|\, w \vDash \exists t > \tau(u) : \ p \in PEP_b^t\}$

The performative use

An utterance u^* of (7) to addressee A in context C^* and world w^* commits the speaker S to believing the proposition in (40):

(40) $\{w \,|\, w \vDash \exists u : \tau(u) = \tau(u^*) \wedge order(u,S,A,Sign)\}$, where $Sign = [\![A \text{ signs the report immediately}]\!]_{C^*}$

The derivation of the performative effect is like that for **promise** except that, given the lexical semantics we propose for **order**, the equivalent of (33) is (42):

(41) $\{w \,|\, w \vDash \exists u : \tau(u) = \tau(u^*) \wedge CE_S(u) \wedge \mathbb{P}_A(Sign) \in PEP_S[u]\}$

(42) $w^* \vDash (41) \in PB_S[u^*]$

From this, we can derive

(43) $w^* \vDash \mathbb{P}_A(Sign) \in PEP_S[u^*]$

As before, this means that $w^* \in [\![(7)]\!]$, i.e. (7) is self-verifying.

Features of the analysis

Which verbs give rise to explicit performative utterances? Our analysis predicts that it is those verbs that denote communicative events and whose truth-conditional content is fully specified in terms of speaker commitments. While this is the case for verbs like **claim**, **promise**, or **order**, it is not the case for verbs like **insult**, **annoy**, or **frighten**.

Our account, unlike some of its assertoric predecessors, derives the self-verification of explicit performative utterances without assuming that they are self-referential. They can be *made* self-referential, though, by the use of **hereby**, which on the present analysis is best seen as an adverbial modifier that requires

[11] Again, **order** also carries a presupposition, namely that a presumes to have authority over b with respect to p, i.e. that b is socially or institutionally obligated to take on the commitment effectively preferred by a.

the identification of the described event with the utterance event.

Another central issue about explicit performatives that our analysis can explain is their interaction with the progressive. A well-known generalization is that utterances in the progressive cannot (usually) be used performatively. Our account plus the assumption that performative verbs are accomplishments implies that the utterance of a performative progressive sentence does not commit the speaker to the existence of a commitment. This is so because progressive sentences describing accomplishments do *not* entail the culmination of the described event.

Our proposal is similar in several respects to two recent, independently developed accounts by Eckardt (2009) and Truckenbrodt (2009). We cannot undertake a detailed comparison here but we note that it differs in (a) how it derives the self-verifying property of performative utterances, (b) the lexical meaning it assumes for assertives, commissives and directives, (c) in the explanation of how performative utterances restrict possible future states of the world.

5 Concluding remarks

Searle's argument against assertoric accounts relies on the assumption that an *intention* is required for a speech act to happen. We circumvent the problem by requiring only that the speaker be *committed to having a belief or an intention* (in our terms, an effective preference). On our view, what matters for speech acts, or at least the truth conditions of performative verbs, is *public facts*.

Our analysis can also readily meet a challenge brought up by Jary (2007). He argues that explicit performatives cannot be assertions because their content gets added to the common ground automatically, rather than being conditioned on the acceptance of the addressee, as is the case for run-of-the-mill assertions. However, as Jary himself notes, *the fact that the assertion happened* always automatically enters the common ground. Our account then predicts Jary's observation. Since the utterance itself is a witness for its own truth, the content of the assertion is entailed *by the fact that the assertion happened*, and so this content will become part of the common ground automatically.

References

Austin, J. L. 1962. *How to do things with words*. Cambridge, MA: Harvard University Press.

Bach, K. & R. M. Harnish. 1979. *Linguistic communication and speech acts*. Cambridge, MA: MIT Press.

Bierwisch, Manfred. 1980. Semantic structure and illocutionary force. In

John R. Searle, Ferenc Kiefer & Manfred Bierwisch (eds.), *Speech act theory and pragmatics*, 1–35. Dordrecht: Reidel.

Cohen, L. Jonathan. 1964. Do illocutionary forces exist? *The Philosophical Quarterly* 14(55). 118–137.

Davis, Christopher. 2009. Decisions, dynamics, and the Japanese particle *yo*. *Journal of Semantics* 26(4). 329–366.

Eckardt, Regine. 2009. Integrated speech acts. Manuscript, University of Göttingen.

Ginet, Carl. 1979. Performativity. *Linguistics and Philosophy* 3(2). 245–265.

Gunlogson, Christine. 2003. *True to form: Rising and falling declaratives in English*. New York: Routledge.

Gunlogson, Christine. 2008. A question of commitment. *Belgian Journal of Linguistics* 22(1). 101–136.

Hamblin, C. L. 1971. Mathematical models of dialogue. *Theoria* 37(2). 130–155.

Hedenius, I. 1963. Performatives. *Theoria* 29. 115–136.

Jary, Mark. 2007. Are explicit performatives assertions? *Linguistics and Philosophy* 30(2). 207–234.

Kratzer, Angelika. 1981. The notional category of modality. In H. J. Eikmeyer & H. Rieser (eds.), *Words, worlds, and contexts. New approaches in word semantics*, 38–74. Berlin: de Gruyter.

Leech, Geoffrey N. 1983. *Principles of pragmatics*, vol. 30 Longman linguistics library. London and New York: Longman.

Lemmon, E. J. 1962. On sentences verifiable by their use. *Analysis* 22(4). 86–89.

Lycan, William G. 1999. *Philosophy of language: A contemporary introduction*. Routledge.

Searle, John R. 1975. A taxonomy of illocutionary acts. In K. Gunderson (ed.), *Language, mind, and knowledge*, Minneapolis: University of Minnesota Press.

Searle, John R. 1989. How performatives work. *Linguistics and Philosophy* 12(5). 535–558.

Szabolcsi, Anna. 1982. Model theoretic semantics of performatives. In *Hungarian and general linguistics*, 515–535. John Benjamins.

Truckenbrodt, Hubert. 2009. Performatives and agreement. Manuscript, ZAS, Berlin.

Zeevat, Henk. 2003. The syntax semantics interface of speech act markers. In *Proceedings Diabruck, 7th workshop on the semantics and the pragmatics of dialogue*, Wallerfangen.