

Hereby explained

An event-based approach to performative utterances

Regine Eckardt

Göttingen

reckard@gwdg.de

It has often been observed that performative speech acts can not be called true or false. I take up Jary's (2007) claim that this is due to the *self-referential* nature of performative utterances. Using an event based analysis of performative verbs and *hereby*, I model the self-referential nature of explicit performatives in truth conditional semantics. It turns out that *self-referentiality* in the sense of philosophic literature comprises two factors: truth conditional self-referentiality plus the speaker's act of defining the category of her utterance. As a result, we get an explicated interface between compositional sentence meaning and speech acts.

1. The performative mystery

Utterances can serve to assert certain facts, but also to perform a non-assertive speech act. Both types of utterances are made up from the same linguistic building blocks, as illustrated in (1) and (2). Likewise, a sentence like (2) can be used in a descriptive sense as well as a performative sense.

(1) *Peter promised Susan to leave soon.*

(2) *I promise you to leave soon.*

The descriptive sense of (2) shows up, for instance, when the sentence is used to answer a question like *What do you do if you stay at my house and I need to finish a paper and am getting restless?* (Jary, 2007). A simple check of verbs, tense, signal words or other linguistic parts of an utterance alone can not predict whether or not an assertion is performative. Still, we would say, there is something about the meaning of (2) that turns it into an eligible candidate for performative utterances that (1) does not have. In this paper, I take up a project that was formulated as early as Szabolcsi (1982: 531) and explore how the truth conditional denotation of sentences can help to elucidate their performative uses.

Performative utterances differ from assertive utterances in that they can not be denied by responding *No*.¹ Likewise, it seems inappropriate to agree to a performative utterance. Incoherent discourses like those in (3) are often used to test the performativity of an utterance (Austin 1955[1962], Searle 1969, Jary 2007, a.o.).

- (3) *I invite you to come to my party tonight.* — #*No, that's not true.*
I invite you to come to my party tonight. — #*Yes, correct.*

Such data seem to show that the categories *true/false* are not adequate for performative utterances. Philosophers like Austin conclude that the meaning of performative utterances (= PUs, in the following) can not be modeled by propositions in truth conditional semantics. This is why: If a PU denoted a set of worlds, we would need to be able to determine which set of worlds that must be. Given that sentences in general denote the set of those worlds where the sentence is true, we'd have to conclude that the PU must be true in all worlds in its denotation. But if it doesn't even make sense to ask whether a PU is true, then this criterion is void. Hence, a PU can not denote a proposition. (See Schwager 2006/t.a., chapter 4, for a similar reconstruction of the argument.) If we follow this line of thought, two questions arise: Where does the propositional content of a performative sentence vanish in a PU? and What instead is the content of a PU?

In the following, I will refer to the effect in (3) as the *yes/no-issue* for performative utterances. This label remains neutral as to the reasons for the markedness of discourses like (3) and invites alternative analyses like the one by Jary (2007). He proposes an analysis of the *yes/no-issue* that rests on the self-referentiality of performative utterances (Bach+Harnish, 1992). A felicitous performative utterance of an explicit performative sentence describes itself. Therefore, any hearer witnessing the utterance can not very well disagree with its claim that a *promise, invitation, etc.* has been issued, given that this is exactly what the hearer has just observed. Likewise, there is no point in agreeing to something self-verifying. Jary's analysis entails that the *yes/no-issue* is more a fact about the discourse properties of performatives, and

¹ For the sake of simplicity, I will reserve the term *performative utterances* for non-assertive performative utterances.

less an observation about the ontological status of their denotation. He assumes that the assertive content of a performative sentence is primary but will be “lifted” or “changed” to the self-referential content in performative uses. Jary does not explicitly assume propositional denotations or a truth conditional framework, but his position can consistently be elaborated in this way. In such an explication, we can then ask: Is *self-referentiality* a part of the truth conditional meaning of performative utterances? Philosophers have given a clear negative answer to this question:

To suppose that the self-referentiality of performative utterances is a consequence of the semantics of performative sentences would be to posit a linguistic anomaly, whereby the first person present tense form “I order” would have a semantic feature different in kind from other forms, such as “You order” or “I ordered”, indeed one that is not compositionally determined by the meanings of the words “I” and “order”. (Bach + Harnisch 1992, 100, ftn. 14, echoed in Jary 2007)

In the present paper, I challenge this position. I take performative utterances of sentences like in (2), with and without *hereby*, as my starting point. I will adopt a Davidsonian semantics for performative verbs, and propose that *hereby* denotes the ongoing event of information exchange and instantiates the event argument of the performative verb. This analysis can predict a range of syntactic and semantic observations about PUs which, though uncontroversial, can not be captured by analyses that do not explicate the syntax-semantics interface for performative utterances. More importantly, it offers a truth conditional explication for self-referentiality. In the second part of the paper, I test Jary’s claims about the discourse properties of self-verifying sentences. It will then turn out that the *yes/no-issue* rests on two independent factors: self-referential meanings and a declarative component of the utterances that is subject to the authority presupposition (Schwager 2006/t.a.).

The paper is structured as follows: Section 2 reviews a number of facts about the use of performative verbs, performative utterances and *hereby* which must be captured in a framework that connects syntax and semantics in an explicit way. While most data were known in the philosophical literature since Austin (1955), and none of them are controversial, I know of no linguistic or philosophical analysis of PUs that can predict them or integrates them into a wider range of linguistic phenomena. Section 3 spells

Hereby explained

out the basic assumptions of a linguistic analysis of PUs and self-referentiality. Section 4 is devoted to performative sentences without *hereby* and investigates why quantified subjects block performative utterances, unless *hereby* is used. The resulting truth-conditional account of self-referential sentences will allow us to return to the *yes/no* issue. Section 5 surveys how other recent truth-conditional accounts of speech acts account for the *yes/no* issue. Section 6, finally, demonstrates that self-referentiality alone does not account for the discourse behaviour of performative utterances (3). I propose that performative utterances are not only self-referential but attempts of the speaker to define the category of her own utterance. The resulting picture integrates the truth conditional backbone of self-referentiality with Searle's (1969) descriptive account of speech acts.

2. Some Data

Diversity of performative utterances

Certain linguistic features recur in typical performative utterances. PUs tend to use first person subject and present tense for the matrix predicate. Likewise, the use of *hereby* favors a performative interpretation. (4) shows a sentence that prototypically can figure in performative utterances.

(4) *I (hereby) promise to bring beer.*

However, none of these indicators is a necessary and sufficient criterion to reinforce a performative utterance. The following sentences can be used in PUs even though they fail to show one or more of the typical linguistic indicators. PUs can have third person subjects, have verbs in the future tense or fail to show *hereby*.

(5) *Mr. Jones hereby withdraws from all activities in connection with the planned soul festival.*

(6) *The King hereby promises you a golden goose.*

(7) *All your credit card debts will hereby be forgiven.*

(8) *The king promises you a golden goose.*

Hereby explained

I grant that PUs like (8) might require a special “solemn” prosody which I do not count as an interpreted linguistic element.

Past tense excludes the performative use of sentences. Sentences with quantified subjects are likewise borderline candidates for performative utterances. Here, the presence or absence of *hereby* is criterial for the possibility of a performative use of the sentence. (9) is marginally possible in a PU when uttered by a representative of a group of farmers who authorized that person to speak on their behalf. The speaker refers to that particular group but doesn't want to specify them more precisely (e.g. by listing them all). In contrast, it is not possible to devise any such situation where (10) could seriously be used as a performative utterance.² In all possible uses, the speaker seems to report on tacit vows of the individual farmers.

(9) *Most farmers hereby promise to refrain from the use of chemical fertilizers.*

(10) *Most farmers promise to refrain from the use of chemical fertilizers.*

We will return to such subtle distinctions in section 4. Although minimal pairs like (9)/(10) seem to confirm the performative power of the word *hereby*, even *hereby* can be used in non-performative descriptive sentences.

(11) *The Congo River hereby was a prime target for this new conquest by the European nations.* (hereby = in a „scramble for raw materials“ in Africa)

(12) *So that hereby was fulfilled what has been spoken in effect by several of the prophets ...* (hereby = that Jesus came from Nazareth)

All examples taken together show that there are no simple linguistic signals, features or feature bundles that reinforce or enable performative use. Eventually, comprehension of the literal content of a sentence is mandatory to decide whether that sentence, under suitable circumstances, can be used in a PU. This insight is uncontroversial in the literature on speech acts, but no one so far has asked whether semantic theory can help to spell out what exactly it is about the meaning of a sentence that turns it into a possible candidate for a PU. Instead, authors sidetrack

² The distinction was confirmed by audiences on several occasions when I presented these examples.

linguistic analysis by referring to introspective judgment: A sentence can be used as a PU if native speakers agree that it can be used as a PU. While this is certainly a good empirical basis for an analysis, it should not replace it. In the main part of the paper, I investigate the meaning of *hereby* and its interaction with other parts of the sentence and spell out what makes a sentence potentially self-referential.

Syntax

The adverb *hereby*, when used in performative sentences, is restricted to the modifier position of the performative verb. Unlike other speech act related words, it is not restricted to the matrix clause but can occur in embedded clauses.

- (13) *I am happy to hereby declare you the winner of the race.*
- (14) **I am hereby happy to declare you the winner of the race.*
- (15) *I am awfully sorry to hereby announce my resignation.*
- (16) **I am hereby awfully sorry to announce my resignation.*

If the function of *hereby* solely consisted in drawing attention to the ongoing utterance, we'd expect that it should be allowed in all syntactic positions that are permitted for adverbials. (14) and (16) illustrate that this is not the case. This can not be explained by any theory which views *hereby* as an uninterpreted speech act indicating device. Of course, the restrictions on *hereby* can be stipulated in syntax. But it would be more attractive to derive them from more basic assumptions about its meaning and the syntax-semantic interface.

The lexical meaning of performative verbs

Performative verbs have a meaning that makes them suited to occur in performative utterances. Jary proposes that a performative is “a verb denoting an act which can be performed by communicating the intention to perform that act” (Jary 2007; 225). While this characterization is certainly plausible, it seems to cover cases where we'd hesitate to talk about performative verbs and utterances. Consider the following sentence.

- (17) *“I hereby utter a sentence consisting of nine words”.*

“uttering X” is something that is typically done by uttering X. (17) also seems to be self-referential (it talks about itself). Still, (17) is an assertion. It can be true or false, and it makes sense to wonder whether it is true or false. The addressee can accept it, or deny its truth. An explicit account of self-referentiality will be helpful to understand the difference between self-verifying utterances like (17) and real PUs.

Step from assertion to act

Jary (2007) assumes that all sentences, including performative sentences, can be semantically evaluated and have a literal content. He then asks why hearers can guess or compute the sentence’s performative sense, a sense which Jary takes to be secondary and pragmatically more complex. In order to answer this question, he resorts to Relevance Theory, pointing out that the assertion reading might be simpler but irrelevant in many situations. While this assumption can hardly be denied, it is difficult to tell how much computational effort is assigned to Relevance Theory, as long as there is no specified link between the propositional denotation of a sentence and its performative meaning. The present article contributes to elucidate the gap between asserting and performing in a more explicit manner.

It should finally be mentioned that the demand for an explicit formal interface between assertive meaning and performative meaning was voiced as early as Szabolsci 1982. Szabolsci models performative utterances in Montague semantics by assuming that the utterance of a performative leads to a change of the facts in the world at the time of the utterance. The analysis rests on the *world-to-word fit* of commissive and directive acts (Searle 1969). What is problematic about this approach is the unclear separation between meaning and change-of-fact. While a successful performative utterance will indeed change the facts of the world, the meaning should not be identical to the change. Otherwise, we can not account for misfired performative utterances or even investigate under what circumstances the utterance of a performative sentence will succeed as a performative utterance. On a technical side, the Montagovian format of Szabolsci (1982) does not integrate well with current syntax-semantics interfaces (Heim+Kratzer, 1998). Likewise, she does not make use of events in her semantic analysis, while these will be at the heart of the present proposal. It seems therefore justified to take up Szabolsci’s vision for a semantics-speech act interface in contemporary semantic theory. Similar reservations hold for

Vanderveken's program to develop a logic of illocutionary acts (Searle + Vanderveken (1985), Vanderveken (1990) which addresses internal relations between acts rather than the link between language and performative act.

3. Self-referentiality in event semantics

3.1. The basic account

I will adopt a Davidsonian analysis of verbs, including performative verbs like *request*, *promise*, *resign*, *declare* etc. All these verbs have a Davidsonian event argument. This assumption leads to certain complications at the syntax-semantics interface where the order of arguments codes the thematic roles of arguments (Beaver and Condoravdi 2007, Eckardt 2009). Several solutions to the problem are available but for the sake of exposition here, I will simplify matters by assuming that the event argument is the one-but-last argument of the verbal predicate, with the subject argument being the last one. I do not employ extra phrasal levels to introduce agentive arguments, even though I believe that the present claims are in principle compatible with this type of analysis (Kratzer, 2003). For the sake of exposition, I will moreover present the denotations of verb plus object phrases without spelling out all computational steps. Consider the sentence in (18). (19) shows a part of this sentence, and its truth-conditional denotation.³

(18) *I (hereby) promise to clean the kitchen.*

(19) $\llbracket \textit{promise to clean the kitchen} \rrbracket =$
 $\lambda e \lambda x. \text{PROMISE}(x, e, \lambda w'. \text{CLEAN}(x, \text{THE.KITCHEN}, w'), w_o)$

It can easily be checked that this denotation will also be adequate in descriptive utterances. (20) shows a present progressive descriptive example, and (21) a simple past use of the verb phrase. I chose to represent tense and aspect in a Reichenbachian format (Reichenbach 1966, extended in Kamp + Reyle 1993). While this is again a simplification, it allows to separate temporal reference times from the world

³ The representation is again simplified in that the promised proposition "to clean the kitchen" should contain another existentially bound event argument which is moreover at a time after the time of utterance.

Hereby explained

parameter w_o and likewise from the event argument of the verb which can then easily and independently be manipulated.

(20) a. *Peter is promising to clean the kitchen.*

b. $\exists e [\text{PROMISE}(\text{PETER}, e, \lambda w'. \text{CLEAN}(\text{PETER}, \text{THE.KITCHEN}, w'), w_o) \wedge R \subseteq \tau(e) \wedge R = S]$

(21) a. *Peter promised to clean the kitchen.*

b. $\exists e [\text{PROMISE}(\text{PETER}, e, \lambda w'. \text{CLEAN}(\text{PETER}, \text{THE.KITCHEN}, w'), w_o) \wedge \tau(e) \subseteq R \wedge R < S]$

This shows that a Davidsonian semantics for performative verbs does not entail any semantic anomaly in the sense of Bach + Harnish. We are working on the assumption that performative verbs are just like any other verb.

Let us now address the literal meaning of (22) in a performative utterance. The missing semantic ingredients are spelled out in (23.b) to (23.d). They depend on the utterance context c which specifies, among other things, the speaker of the utterance, the addressee, utterance time S and—as I will assume—the ongoing act of information exchange in the utterance situation c . The result of composition is shown in (23.d).

(22) *I hereby promise to clean the kitchen.*

(23) a. $\llbracket \text{promise to clean the kitchen} \rrbracket^{w,c} =$

$\lambda e \lambda x. \text{PROMISE}(x, e, \lambda w'. \text{CLEAN}(x, \text{THE.KITCHEN}, w'), w_o)$

b. $\llbracket I \rrbracket^{w,c} = \mathbf{sp}$ (the speaker of the utterance)

c. $\llbracket \text{hereby} \rrbracket^{w,c} = \mathbf{e}$ (the ongoing act of information exchange in the utterance)

d. $\llbracket \text{simple present} \rrbracket^{w,c} = \lambda e. \tau(e) \subseteq R \wedge R = S$

Hereby explained

e. [PROMISE(SP, e, $\lambda w'. \text{CLEAN}(\text{SP}, \text{THE.KITCHEN}, w')$, w_0) $\wedge \tau(\mathbf{e}) \subseteq R \wedge R = S$]

The sentence denotes the set of all those worlds w_0 and utterance contexts c where the actual ongoing act of information exchange in c constitutes a promise by **sp** to the addressee. The *promised content* is that the speaker clean the kitchen. (Searle (1969) uses the term *propositional content* for my *promised content*. In the present framework, I find Searle's term misleading because we also consider the propositional content of the performative utterance.) We can now turn to ask whether and why (23.e) is true in a context c where (22) is uttered. Our main source of information will be our introspective judgments about the extension of *promise* in English. Consulting this source, we'd say that (23.e) does indeed hold true in an utterance situation c and world w under the proviso that we have no reason to doubt the sincerity of the speaker ("that s/he is not joking, lying etc"). In this respect, (22) differs from fully self-verifying sentences like "*I am here now*". The analysis strings together utterance context c and meaning by taking into account that in any context c where (22) is uttered, an event of someone uttering (22) takes place. *hereby* makes reference to this utterance event, and turns it into an argument of the denoted predication. This is how self-referentiality enters the analysis.

Before we turn to further cases which refine the analysis, let me add a first corollary of the analysis. In adopting the truth conditional framework, we also adopt its standard perspective on word meaning. While the analysis of verbs like *promise*, *order* etc. has to be faithful to the compositional potential of the word, the matter of determining the verb's extension and intension is relegated to the observable and consensual intuitions of speakers of English. These alone determine whether an actual act constitutes a promise, or an order, or an act of resigning. In truth conditional semantics, lists of necessary and sufficient conditions which define the extension of verbs are not a prerequisite for semantic analysis. To put it dramatically, we could say that Searle (1969)'s efforts to characterize the meaning of performative verbs appears to be replaced by "the set of social practices that establish the extension and intension of *promise*, *order*, *resign*, ...". In adopting truth conditional semantics, the status of *lexical definitions* of performative verbs has changed. The move is in line with the more general imperative to avoid linguistic anomalies. Interestingly, results in psycholinguistics suggest that it is also an empirically adequate move. Astington

(1988), working on the acquisition of performative verbs, reports that not only children but also adult subjects offer judgments about the use and extension of *promise* and other performative verbs which are not in line with the definitions proposed by Searle (1969). Her data suggest that speakers show similar vagueness, uncertainties and variation when talking about the extension of *promise* as they do for other content words like *cup*, *dog*, *mug*, *chair* etc. The reductionist view on lexical meaning will only be challenged in Section 6 when we investigate the difference between true self-referential assertions and declarative acts of self-referential content.

3.2. Third person subjects: utterance \neq information transfer

Sometimes, speakers speak on behalf of someone else. In this case, speaker and acting party are different. Our judgments about the social nature of such acts suggest that it is not the physical act of uttering something that is at stake, but the more abstract act of establishing a social agreement (Searle, 1995; see also Truckenbrodt, 2009).

(24) Speaker A: *King Karl hereby promises you a cow.* (to farmer Burns)

Some appropriate and inappropriate paraphrases of this act feeds my analysis.

(25) Appropriate:

The king promised Burns a cow

A announced the king's promise

Inappropriate:

A promised Burns a cow. (A is not responsible for providing the cow.)

A caused the king to promise Burns a cow.

A caused that the king promised Burns a cow.

If we analyze (24) along the lines suggested in 3.1, we will get (24.b). It remains to be discussed which event should instantiate argument position ϵ .

Hereby explained

- (24) b. [PROMISE(**KING**, ϵ , $\lambda w'$.GIVE(**KING**, **COW**, **BURNS**, w'), w_o)
 $\wedge \tau(\epsilon) \subseteq R \wedge R = S$]

If we identify ϵ with the physical utterance act, we run into trouble. In the physical act of uttering, the speaker A is the agent of that act. The paraphrases however show that the agent of the promise is not A but the King. They likewise suggest that no causal relation between the utterance and the promise is at stake.⁴ I propose that ϵ is the act of information transfer between the King and farmer Burns that is established by the actual physical utterance. The transfer only counts as felicitous if the speaker has permission to speak on behalf of the King. The King delegates the speaker to inform on his behalf. Delegation can happen instance by instance, or generally. “Licence to talk” is exemplified in all cases where the King does not even know that some utterance is made on his behalf. For example, in Spanish universities the final Bachelor and Master degrees are “assigned by the King of Spain” even though the King never knows any of the students or their scholarly achievements.⁵

The distinction between utterance and informing may seem ontologically dubitable. In fact, however, we face yet another reason why locutionary act (= the physical utterance) and illocutionary act (= the mutual agreement between two parties) need to be distinguished, as Austin proposed on basis of somewhat different arguments. Speech acts with inclusive plural subject *we* offer a similar case of delegated speech.

- (26) a. *We hereby promise to clean our desks.*
b. [PROMISE(**SP**, e , $\lambda w'$.CLEAN(**SP**, $\sum x.\exists a(a < \mathbf{SP} \wedge \text{DESK-OF}(x,a))$), w'), w_o)
 $\wedge \tau(e) \subseteq R \wedge R = S$]
with **SP** = the plurality denoted by *we*

This can be paraphrased as ‘the ongoing informing e is a promise by plurality **SP** to the end that this plurality will be agent in an act of cleaning the sum of all desks of members in **SP**’. I deliberately refrain from any further claims about the internal

⁴ Natural language paraphrases might not always be reliable when it comes to diagnose causal relations. A more modest diagnosis could be: paraphrases do not immediately create the necessity to include causal relations into the semantic analysis.

⁵ I thank Paula Menendez-Benito for this example.

structure of such collective promises and other collective commitments, and specifically will not assume that the collective promise (26) must always break down into individual promises by individual persons about their individual desks. The content in (26.b) is true if there is a collective commitment by **SP** to the hearer about the future state of a plurality of desks. (26.b) leaves it open who will be responsible for which desks and whether individual commitments have been established, and all more detailed claims will require empirical exploration of our intuitions about collective action. It seems clear, however, that one physical speaker can be authorized to speak on behalf of a specific group of persons. This assumption will be corroborated by borderline instances of speech acts that we will investigate in section 4.

3.3. Syntactic positions of *hereby*

The proposed syntax-semantics mapping for *hereby* will immediately predict the syntactic limitations of the word. It has to be placed in a position where its referent — the ongoing illocutionary act — can instantiate the event argument of a suitable performative verb. Data suggest that this is only possible from the modifier position of the verb. Data do not suggest that we should allow for movements or remote instantiation of the event argument.

- (27) *I regret to hereby inform you that you've been sacked from the company.*
(28) **I hereby regret to inform you that you've been sacked from the company.*
(29) **I am hereby pleased to invite you for a job interview.*

Let me simply repeat that this distribution of *hereby* is not predictable by a “flagging” analysis like Jary (2007) where the word *hereby* simply serves as an attention raising device (perhaps similar to *damn* or *fuck*). A wider range of examples moreover suggests that *hereby* can also refer to the event ϵ of presupposition accommodation, as an instance of information transfer in a wider sense. Both (30) and (31) can be used to successfully open the exhibition.

- (30) *I hereby open the exhibition.*
(31) *I am pleased to hereby open the exhibition.*

Hereby explained

If we adopt the standard analysis of *pleased to* we'll predict that (31) presupposes rather than asserts that the speaker opens the exhibition. The utterance however asserts that the opening is going on at the time of the utterance and hence the presupposed content can not be part of the common ground already. The only way to make sense of (31) is to assume that *hereby* denotes the act of information transfer that happens by presupposition accommodation.

The next pair of sentences shows that the same act, in this case an act of sacking, can be achieved either by a performative utterance (33) or indirectly as the result of informing the addressee.

(32) *I hereby inform you that you are sacked.*

(33) *I inform you that you are hereby sacked.*

For the time being, I think that it is cleanest to assume that the extension of SACK and INFORM are disjoint: An illocutionary act can either be a sacking or an act of informing (which may indirectly lead to an act of sacking). Naturally, an event of INFORMING like (32) and an event of SACKING (like 33) will lead to practically identical states of affairs for all involved parties. Given that (32) and (33) as strings of words-to-be-uttered are distinct, an utterance of (32) is never the same as an utterance of (33) and vice versa, so the disjointness assumption is guaranteed in this example. Section 6 will offer more reasons why an act of informing and an act of sacking are not the same even though they can lead to identical results.

4 Explicit performatives without *hereby*

In this section, I take a closer look at performative utterances like (34). The sentence does not contain *hereby*. It can be used in a PU, and in such utterances seems to be self-referential. How can we reconcile these observations?

(34) *I promise to bring beer.*

b. $\lambda e \lambda x. \text{PROMISE}(x, e, \lambda w'. \text{BRING}(x, \text{BEER}, w'), w_o)$

As before, the verbal predicate in (34.b) will be computed in the course of semantic evaluation, and we will have to decide how the event argument is instantiated in such examples. Two strategies could be pursued.

- We could assume a tacit *hereby* where a silent event PRO is interpreted like overt *hereby*: PRO would refer to the relevant ongoing act of information transfer and instantiates the event parameter of the verb. Making this assumption, we'd expect no semantic or pragmatic differences between (34) and its variant with *hereby*.
- We could alternatively assume that the event argument of *promise* in (34) undergoes existential closure. Self-referentiality could arise in an indirect manner by the obvious presence of a suitable exemplar that verifies the existential statement. Similar uses of nominal indefinites can be found in examples like the following:

Mother (smelling at her son): '*Someone needs a bath here.*'

Under the quantificational analysis, we would expect that the event argument of the performative verb shows interaction with other scope-bearing operators, because it is no longer an indexical. Under the PRO-analysis, we'd expect no such interaction. In order to decide between the two possible analyses, it is therefore necessary to explore possible differences between performatives with and without *hereby*. I will discuss two detectable differences in 4.1 (Negation) and 4.2 (quantified subjects). They will establish scope interactions and therefore offer arguments in favor of the existential closure analysis. Let me review the data.

4.1. Negation

The first difference between *hereby*-PU and *hereby*-less PU (\emptyset -PU in short) arises in negative sentences.

(35) *I do not promise anything. / I am not promising anything.*

(36) *#I hereby do not promise anything.*

The utterances in (35) convey that the speaker wants to refrain from all binding utterances that could count as a promise. (36) is less clear and, upon some reflection, makes a strange statement: The speaker seems to say that this utterance is not a promise. This is tautological: the speaker can easily ensure that any utterance of hers is not a promise, simply by not intending it to be one (sincerity condition). At the same time, it is not very informative: the speaker could indeed *give* a promise with her very next utterance. To state that some particular utterance is not a promise does not offer too much information. In the present analysis, (36) denotes the following proposition:

$$(36) \quad \text{b. } [\neg \exists q (\text{PROMISE}(\text{SP}, \mathbf{e}, q, w_o) \wedge \tau(\mathbf{e}) \subseteq R \wedge R = S)]$$

(36.b) can be paraphrased as “ w_o is a world and \mathbf{e} is an event in which no proposition q whatsoever is promised by the speaker”. This denotation does justice to the quizzical message “the ongoing act of information exchange \mathbf{e} isn’t a promise.” I am aware of the fact that an actual utterance of (36) might be charitably re-interpreted so as to mean “with this utterance \mathbf{e} I will declare that I will refrain from making any promises (about the subject at hand)”. In this re-interpretation, it is a promise-not-to-promise, so to speak. I do not intend to explain such secondary ways to make sense of the use of *hereby* and will restrict attention to the quizzical reading in (36.b).

Returning to our original question, we will note that (35), unlike (36), is a reasonable utterance. This suggests that we should at least allow existential closure of the event argument as one possible option. Given that existential closure is one of the standard ways to treat event parameters in general, allowing for it is also in line with our general motto “no linguistic mystery”. (35) then results in the following representation (in the simple present tense version).

$$(35) \quad \text{b. } [\neg \exists e \exists q (\text{PROMISE}(\text{SP}, e, q, w_o) \wedge \tau(e) \subseteq R \wedge R = S)]$$

This can be paraphrased as “at the moment, there are no actions or propositions q such that I, by this action, would promise q ”. While this claim is still restricted to events at S , it is at least more general than (36) in that it denies the existence of promises in

general instead of simply denying the ongoing utterance the status of a promise. Possibly, the utterance also relies on futurate interpretations of present tense forms and thereby achieves to deny the existence of upcoming events of promising, too. I will not explore these interpretative options here (see Copley 2002 for a recent discussion of futurate uses of various tense/aspect forms).

To sum up, we can conclude that existential closure of the event parameter of the performative verb is possible. The question is: is it necessary?

4.2. Quantified subject DPs

In this section, I will review performative verbs with quantified DPs in subject position. The data will be somewhat tricky, but we will find more differences between *hereby*-PUs and \emptyset -PUs. Remember, for a start, that plural and third person subjects are possible in delegated performative utterances. Sentences with or without *hereby* can felicitously be used in a performative utterance.

(37) Messenger: “*The king hereby promises to give you a cow.*”

(38) *We promise to refrain from using drugs.*

(39) Messenger: “*The king promises to give you a cow.*”

(40) *The students of South Park Elementary promise to refrain from using drugs.*

While the use of *hereby* “boosts” the performative intention of the utterance, utterances of (38) – (40) can also be performative. Possibly, the speaker might want to look more solemn or talk with a deeper voice to strengthen the performative character of the utterance. Apart from that, there is no difference between the *hereby*-variants and the \emptyset -variants.

If the sentence contains a quantified subject DP and *hereby*, performative utterances are still possible. The following sentences offer test material.

(41) *Most students hereby promise to refrain from using drugs.*

Hereby explained

- (42) *Several farmers hereby open a „Besenwirtschaft“ („brush pub“).*⁶
(43) *Several pupils of South Park Elementary hereby declare war on the „Club of Smart Girls“.*

These sentences seem marginal and require special interpretation. Let me therefore take the time to consider in detail what a PU of (41) might look like. Imagine that a student representative shows up at the dean's office. She is dressed neatly, gives a sane impression, stands still, looks at the dean, takes a deep breath and utters (41). What has happened? To my intuition, the speaker has to have a specific group of co-students in mind for which she is authorized to speak. This group covers more than half of the students and can therefore correctly, if somewhat unspecific, be characterized as "most students". She is offering her promise on behalf of this group, and she achieves a promise which was not established earlier.

Intuitions change when *hereby* is left out. These are the \emptyset -versions of our earlier test sentences.

- (44) *Most students promise to refrain from using drugs.* (descriptive only)
(45) *Several farmers open a „Besenwirtschaft“* (descriptive only)
(46) *Several pupils of South Park Elementary declare war on the „Club of Smart Girls“* (descriptive only)

Imagine that (44) is uttered under the same circumstances as we assumed for (41). To my intuition, the student representative can only report that individual promises were given on earlier occasions. The resulting state of affairs is very similar to the one after (41) where the promise was achieved by the utterance. The difference between (42) and (45) is equally clear. While (42) can count as the opening of pubs under suitable circumstances, (45) seems at best possible as a futurate present that reports certain plans of several farmers. (I ignore uses of (45) as historical presents.) Another minimal pair that illustrates the difference is drawn from German, where I have a better active command for matrimonial ceremony.

⁶ In Germany, wine farmers have permission to open private pubs for some weeks when wine from the preceding year can first be tested. These are called "Besenwirtschaft", referring to the tradition to announce them by attaching a brush over one's door. The example rests on the assumption that the opening of such pubs is minimally bureaucratic but has to be officially announced in order for the Besenwirtschaft to exist.

(47) *Einige Ritter halten hiermit um Ihre Hand an, mein Fräulein.*

'Several knights hereby propose to you, My Highness'

(48) *Einige Ritter halten um Ihre Hand an, mein Fräulein.*

'Several knights propose to you, My Highness'

While (47) can constitute a valid multiple proposal, (48) strangely presupposes that proposals can be made by filling forms, or writing letters. Making this assumption, we can understand (48) to report that several knights have handed in such documents.

I take minimal pairs like these as the starting point for the following analysis. In making this decision, I am aware of the fact that there is a vast range of vague utterances where the diagnosed difference is blurred, mostly because it may be difficult to localize the actual point of social commitment. For instance, how can we ever be certain that the no-drug commitment in (44) has come about earlier while it is established only at the time of speech in (41)? Can the speaker in (41) announce this promise without individual promises having been made before? Different performative verbs give rise to different intuitions, too. While *promising* can be a pre-arranged act, the *opening* of exhibitions and pubs is tied much more precisely to the utterance and hence gives rise to more reliable intuitions. In view of these complications, I refrain from developing further tests or criteria to further establish the differences between (41)/(44), (42)/(45), (47)/(48) and other minimal pairs. This is what I will assume in the following:

- If a sentence with a performative verb and quantified subject in addition contains *hereby*, it can serve as a performative utterance.
- Sentences without *hereby*, with performative verbs and quantified subjects can only be used in descriptive utterances.

4.3. Self-reference without *hereby*

Let me now turn to an analysis for felicitous, self-referential performative utterances of performative sentences without the adverb *hereby*. The event argument of the performative verb undergoes existential closure, as shown in the following example.

- (49) *I promise to bring beer.*
 b. $\lambda e \lambda x. \text{PROMISE}(x, e, \lambda w'. \text{BRING}(x, \text{BEER}, w'), w_o)$
 c. $\exists e(\text{PROMISE}(\mathbf{sp}, e, q(\mathbf{sp}), w_o) \wedge \tau(e) \subseteq R \wedge R=S]$
 with $q(\mathbf{sp}) = \lambda w'. \text{BRING}(\mathbf{sp}, \text{BEER}, w')$

I will not assume that performatives like (49) are instances of specific event indefinites. All available treatments of specific indefinites (Fodor and Sag 1982 as indexicals; Reinhart 1997, Kratzer 1998, Matthewson 1999 and others as choice functions) will make false predictions for the examples discussed above, and in part are tailored to generate intermediate scope readings that are not needed for the present case. Instead, I propose that utterances like (49) denote existential statements that are verified by offering a sample. Let e be a (sincere) utterance of (49). Then

$$\begin{aligned} & \llbracket \exists e(\text{PROMISE}(\mathbf{sp}, e, \mathbf{q}(\mathbf{sp}), w_o) \wedge \tau(e) \subseteq R \wedge R=S \rrbracket^{\mathbf{M},g} = 1 \text{ because} \\ & \llbracket (\text{PROMISE}(\mathbf{sp}, e, \mathbf{q}(\mathbf{sp}), w_o) \wedge \tau(e) \subseteq R \wedge R=S) \rrbracket^{\mathbf{M},g(e/e)} = 1 \end{aligned}$$

for assignment $g(e/e)$ like g except that e is mapped to e . Both speaker and addressee should be aware of this reason for (49) being a true utterance.⁷ Hence, a sincere utterance of (49) is self-referential in an indirect way. It does not denote a proposition where it literally occurs as one of the arguments of the verb. Instead, the utterance denotes a proposition about the existence of a certain kind of event and, at the same time, *is* such an event. I think that this formalization comes close to what Jary (2007) had in mind when stating that performative utterances are undeniably true because you just see the thing happen.

The formal spell-out of these ideas, however, helps us to understand subtle differences between various kinds of performative sentences. Note that, under the present analysis of (49), the proposition is an existential statement. As a consequence, the existential quantifier takes low scope if LF structure requires. This offers the basis to explain why quantified subjects block performative uses of sentences without *hereby*.

⁷ ... unlike in the case of specific indefinites, where it is assumed that only the speaker has to know the intended referent.

4.4. Quantified subjects block performative use

The examples in (44) to (46) provide evidence that quantified subjects block performative uses if the word *hereby* is not part of the sentence. I will use (45), repeated below, as an example. If we compute its denotation, we arrive at the proposition in (45.b). Existential closure of the event takes narrow scope below the subject, and the subject quantifier is interpreted in the standard way (i.e. not as referring to specific groups).

(45) *Most farmers open a Besenwirtschaft.*

(45) b. $\lambda w. \text{MOST}[\lambda x. \text{FARMER}_w(x) ;$

$$\lambda x \exists y \exists e (\text{PUB}_w(y) \wedge \text{OPEN}(x, y, e, w) \wedge \tau(e) \subseteq R \wedge R=S)]$$

This can be paraphrased as “most of those who are farmers are such that they are agents in some event of opening a pub right now”. In section 4.2, we pinpointed the intuition that wherever these openings may happen, they can not be the ongoing utterance of (45). This intuition offers evidence about the nature of collective commitments. One individual can convey information on behalf of a plurality X and thereby issue a promise, a declaration of war, an opening ... on behalf of plurality X . This is what we found in section 3.2. The present examples suggest that agency does not distribute in such collective commitments. If a collective X makes a promise in \mathbf{E} , then the individuals x that are part of X do not make individual promises in \mathbf{E} . In other words: (50) does not entail (51).

(50) $\lambda w_o \text{PROMISE}(X, \mathbf{E}, q, w_o)$

(51) $\lambda w_o \text{PROMISE}(x, \mathbf{E}, q, w_o)$ for $x < X$

Similar regularities hold for other speech acts. On basis of this insight about the ontology of social commitments, we can explain why the proposition in (45) can not be verified by the ongoing utterance of (45). Assume that some speaker sincerely utters (45). The speaker may even be a representative of the farmers. Still, he can only be the agent in one event of information transfer e . However, the content in (45.b) does not rest on any event description that could fit the ongoing utterance. It asserts

Hereby explained

the existence of many individual openings by several farmers. Due to the assumption that agency does not distribute, the witnessed event e can not be what makes these existential statements true. That is,

$$\llbracket \exists y \exists e (\text{PUB}(y) \wedge \text{OPEN}(x, y, e, w) \wedge \tau(e) \subseteq R \wedge R=S) \rrbracket^{M, g(e/e, x/a)} = 0$$

for all farmers a that could be assigned to x . Therefore, the utterance can not be intended to be “true by offering a sample” in the way that we saw in (49). Hence, (45) and other, similar sentences can not be self-referential in the indirect way of (49) and so they can not constitute performative utterances.

It remains to be explained why *hereby* can coerce a definite reading of quantified subjects and allow for performative uses for sentences with quantified subjects. At present, I will assume that such coercions are costly and only accessible if required by other overt material in the sentence. The presence of *hereby* offers such material: it states that the ongoing utterance is *about* the ongoing utterance. Unless the quantified subject is coerced and refers to a specific plurality, the utterance would never have a chance to be self-referentially true. Hearers seem to apply charitable interpretive strategies, assuming that the speaker would not bother to make a self-referential utterance which is necessarily false.

We now possess a semantic treatment of *hereby* and performative verbs that allows to capture the observation that performative utterances refer to themselves (Bach + Harnish 1992, Jary 2007; see Reichenbach’s 1966 notion of token reflexivity as a predecessor). I suggest that there are two ways to achieve self-referentiality: If *hereby* is used, it refers to the ongoing event of information transfer and instantiates the event argument of the performative verb. In explicit performative statements without *hereby*, the event argument is existentially bound but the sentence is self-verifying by offering a suitable sample. Due to the logic of speech acts, a single utterance can count as an act on behalf of a collective. The utterance can not constitute an individual commitment for several agents. Therefore, a single utterance can not offer a sample for existential statements about *several* ongoing speech acts. This explains why quantified subjects block performative uses. Only the presence of *hereby* can coerce

Hereby explained

the quantified subject to refer to a definite plurality on behalf of which the speaker can issue an act.

Let us now return to the initial question of how self-referentiality relates to the *yes/no* issue for performative utterances. So far, my implicit assumption was that utterances (of the specific kind of sentences that we look at) can not be performative unless they are self-referential. Hence, self-referentiality is a necessary requirement for performativity. Jary (2007) suggests that self-referentiality is also sufficient in order to go beyond assertions. In the next section, I will briefly review other, truth conditional approaches to speech acts and their account of the *yes/no* issue. We will see that particularly analyses of imperatives require an alternative approach to the *yes/no* issue, mainly because imperatives do not allow *hereby* at all and hence can never be self-referential. In Section 6, I will collect more evidence which suggests that self-referentiality and performativity are not identical. Taking up ideas from Schwager (2006/t.a.), I finally argue that performativity requires self-referentiality plus an act of declaration.

5. Other truth value based theories of speech acts: The *yes/no* issue

5.1. Truckenbrodt

Truckenbrodt (2009) proposes that performative sentences denote and establish joint *plans*. Plans, in turn, can be viewed as a particular type of proposition about the future. When a performative sentence is uttered, the common ground gets updated by the respective proposition about the future. If speaker and hearer accept this future proposition, they not only agree about the truth of certain statements about the future but also commit themselves to act so as to make the proposition true ('behave according to plan'). The paper is presented as a formal spell-out of Searle's (1995) view of speech acts as social contracts. For instance, an utterance of (52) contributes the propositional content that is paraphrased below.

(52) *I hereby bequest you my golden watch*

Propositional content: *All future worlds are such*

Hereby explained

*that you get my watch after I die and no one challenges you;
or else worlds in which something has gone wrong, relative to my current
plans.*

The self-verifying nature of performatives is attributed to the fact that an agreement is agreed on as soon as everyone believes the content of the agreement. This does not, however, explain why agreement can not be refused by answering “*False.*” to an unwanted plan. Truckenbrodt refers to Jary (2007) as an explanation of the *yes/no* issue that covers his account. The semantic analysis of Truckenbrodt does not make use of Davidsonian event arguments and hence falls short of explicating self-referentiality, the backbone of the Jary-analysis. In this sense, my own proposal and the Truckenbrodt approach can be viewed as orthogonal to each other and compatible.

5.2. Schwager, on imperative mood

Schwager elaborates a modal analysis for sentences in the imperative mood in her dissertation (Schwager 2006/t.a.) as well as subsequent papers. She assumes that imperative mood introduces the skeleton of modal necessity statements. Independent linguistic and contextual factors serve to spell out the modal base and ordering source of the modal statement and hence can predict the wide range of root and embedded uses of the imperative mood. In the simplest cases, imperatives express what is true in all those possible worlds that are closest to the worlds that the speaker would find ideal. The following three sentences are predicted to be similar in truth conditional content.

Open the window!

You must_{speaker-buletic} open the window.

I wish you'd open the window.

The use of *hereby* is prohibited in all sentences in the imperative mood. Examples like the following are crushingly bad.⁸

⁸ Note as an aside that these data are predicted by an event-based analysis of self-referentiality. The predictions of non-formal analyses of the function of *hereby* for this observation is at least open.

- (53) **Hereby clean your room!*
**Hereby take a rain coat, or you'll get wet!*

Schwager does not take self-referentiality as her starting point to explain the *yes/no* issue of performative utterances. Instead, she proposes that the non-deniability of performative utterances follows from what she calls the *Authority presupposition*: “Speaker is presupposed to be an authority on facts that determine the truth of the imperative.” These facts concern the speaker’s desires and preferences, and are facts to which the speaker has privileged access. Comparable cases of privileged access have been proposed for speaker oriented adverbs and personal taste predicates. All give rise to propositions that can not be agreed to or objected to. The reason for this, Schwager proposes, lies in the fact that the hearer can not possibly know anything about the content of these utterances because he fails to have privileged access to those facts in the world that determine the truth of such statements. The *yes/no* issue is hence viewed as a fact about felicitous discourse moves (like Jary does) more than as an ontological matter (as Austin might have proposed). Schwager’s analysis leaves it open how sentences in the imperative mood relate to explicit performatives like *I order you to open the window* and to descriptive sentences like *He ordered her to open the window*.

5.3. *Condoravdi and Lauer, Portner*

Like Schwager, these authors focus on sentences in the imperative mood and other varieties of directives. Unlike Schwager and Truckenbrodt, the analyses of Portner (2005, 2007) as well as Condoravdi and Lauer (2010 a, b) include components that go beyond the truth conditional content of descriptive statements and serve to keep track of the public commitments that are at stake. Condoravdi + Lauer (2010a, b) assume that the content of an imperative will feed the “preference list” of the addressee. This list of propositions is used to predict the truth and falsity of modal statements (Kratzer 1981), but is also a list of propositions that the addressee should strive to make true. These lists are under public surveillance and there is a moral obligation for all agents to favor actions that bring about states of affairs that are high on their preference list.

Hereby explained

Portner's theory includes a To-Do list for all agents. Again, the content of directive utterances will feed the To-Do list and the general public has the power to motivate agents to work down their To-Do lists.

The use of such extra components results in a semantic theory where the denotation of performative utterances (at least directives) is different in logical type from the content of assertions. Hence, all differences between informing and performing can in principle be attributed to the fact that only the latter updates the *preference list / To-Do list*. While the authors do not comment on the *yes/no* issue extensively, the setup of their theory offers them a natural starting point for an explanation.

Schwager, Condoravdi + Lauer, and Portner limit their perspective to directive acts, expressed by specific grammatical means. The authors do not link their analyses to the semantics of explicit performatives like *I (hereby) order you to open the window*. The approaches moreover do not extend easily to speaker deontic performatives (*promise, plan*), joint commitments (*bet, invite*) and other complex forms of social agreement (*fire, open, bequest, sell ...*). The approaches relate to each other in the following way:

- Schwager, Condoravdi + Lauer, Portner: “What do worlds look like that the speaker wants the addressee to achieve?” (= directives) The descriptions of *target-worlds* leave it completely open how these worlds should be reached.
- Truckenbrodt: “How do *future actions* evolve according to joint plans?” Some of these plans have the goal to force the addressee to bring about the speaker's target worlds, but there are many more kinds of joint plans.
- Eckardt: “What kinds of actions serve to establish such joint plans, and how do we talk about them?” which includes an analysis of explicit performatives as descriptions of *events where people agree on future actions*.

Under this perspective, the listed theories do not compete but complement each other and offer a promising novel effort to understand the performative mystery, to which I will return in the final section.

6. Self-referentiality wasn't enough

My point of departure was Jary's analysis of performative utterances on basis of self-referentiality. His notion of self-referentiality was unexplicated. We have now developed a truth conditional notion of self-referential utterances and can ask: Is self-referentiality in the truth conditional sense sufficient to characterize performative utterances? Are all self-referential utterances performatives? If so, then we'd expect that all utterances that are self-referential should give rise to the *yes/no* issue. It should be incoherent to agree to their content, or to deny them. A brief survey of data reveals that this is not so.

First, we find sentences that give rise to self-referential utterances which are intuitively *true* and can be agreed to. Consider (54).

(54) *I hereby utter a sentence with eight words.*

Faced with an utterance of (54), you'd first of all start counting the number of words uttered, and then lean back with a sense of relief: It's true, the number was right. I take this as evidence that the categories *true/false* are appropriate for (54) and similar sentences. Yet, it makes sense to interpret *hereby* as referring to the utterance, and take it as an argument of the verb *utter*. The sentence is self-verifying in that it can never fail to hold in any situation where it is uttered. And still, it is not a performative.

Second, we find similar sentences that are self-referential but false. (55) offers but one of many possible examples.

(55) *I hereby utter a sentence in Chinese.*

Wherever (55) is uttered self-referentially, it will be false. This is predicted by the event-based semantic analysis of self-referentiality. As soon as *hereby* refers to the ongoing utterance and instantiates the event argument of *utter*, the property expressed by the sentence does not characterize the utterance. The sentence is self-referential, self-falsifying and not performative.

Hereby explained

Third, we met another variety of sentences in 4.2. that could be self-referential and true but are still weird.

- (56) *I hereby do not promise to buy you ice-cream.*
I hereby do not invite you to my party.
I hereby do not close my zipper.

If these sentences are used in a self-referential utterance, the content of the utterance denies the utterance a certain property (“being a promise”, “being an invitation”, “being a closing-of-the-zipper”). While the content of the utterance is undeniably true, it is dubitable whether the first two are performative utterances and the last one definitely is not. (You could respond “*yes, you’re right — but so what?*”.)

Fourth, lack of sincere intention can also lead to self-referential but infelicitous utterances. Imagine the following sentences uttered in a situation where the speaker signals independently that s/he does not really plan to live up to the promise or order.

- (57) *I hereby promise to buy you an ice-cream.*
I hereby order you to leave the room at once.

It may be debatable whether such utterance are false or unsuccessful. In terms of truth conditions, however, matters are quite clear: The sentences denote a proposition which does not hold true in the utterance context. For instance, the denotation of the first example can be paraphrased as “The ongoing information exchange *e* constitutes a promise to buy you an ice-cream”. But that can only be true if the speaker seriously intends the utterance to constitute such a promise. If the speaker winks her eyes, or smiles ironically, or shows her entirely penniless pockets, then the hearer will correctly understand that serious intention is lacking. Searle captured this by the sincerity condition.

Finally, utterances can be self-referential and truth conditionally false for “other reasons”. Consider the following sentences.

Hereby explained

(58) *I hereby promise to kill you.*

I hereby invite you to the birthday party of Barack Obama.

The first sentence can be uttered with performative intentions but it is unclear whether the word *promise* is used in the literal sense. We'd hesitate to describe such an utterance as "*She gave him a promise*" or "*A promise was made*". In the second case, we may reasonably doubt whether the speaker is authorized to issue invitations to parties of the president of the USA. Such utterances violate conditions on speech acts that were listed in Searle (1969) as felicity conditions and propositional content conditions. We can verify Searle's characterizations by testing that self-referential utterances do not fulfill their own description if too many conditions are violated.

These examples show that self-referentiality in the truth conditional sense, self-verification and performativity are three distinct phenomena. This is a sobering intermediate result which, however, can help us to propose a more precise characterization of performativity. What characterizes the difference between a self-referential true utterance like (49), (52) and a self-referential true performative like (seriously uttered) (59)?

(59) *I hereby invite you to come to my house on Saturday evening.*

Here, we need to return to Searle's sincerity and felicity conditions and their impact on the truth of an utterance of (59). Sincerity can be rephrased as "the speaker intends that the ongoing utterance falls under the predicate INVITE". This intention is not about the Gricean Maxim of Quality, about making true or false statements. Instead, I propose, the issuing of a speech act shows parallels to other acts of creation. This is one parallel: Psycholinguistic studies of categorization take an interest in how we talk about and classify new objects that we've never seen before. Such studies revealed that when we categorize an artifact, the declaration of the creator ranks high among the criteria we use in categorizing (Bloom 1996, 1998). The creator has the first vote in categorizing her artifact. To put it simply, if somebody creates a small fluffy object and calls it "*Rabbit P*", we are more likely to accept that object as a rabbit than if no such declaration had taken place.

These observations can be transferred to the case of performative utterances. The speaker is the creator of her own utterances. As a creator, she has, to a certain extent, the definitional power to decide to what category her creation (the utterance) belongs. It is the speaker's intention that turns an utterance of (59) into an element of the category INVITATION. She has privileged access to her intentions (Authority in the sense of Schwager, 2006/t.a.). Hence, there is in principle no point for the listener to agree or object, and for the same reasons as those given by Schwager for the case of imperatives. A performative utterance consists in *declaring that* the ongoing utterance has a certain property. It is a definitional act. The speaker defines "this is a new event in the large sea of events of the world, and I, as the agent, declare it to be of a certain kind."

Yet, there are limits to the definitional power of the speaker. This is where Searle's felicity conditions come in. Let us take a clear example. Imagine that I utter (60) with serious intention to a silly shop assistant who has just given me stupid advice.

(60) *I hereby fire you from the shop.*

No matter how much I might want this utterance to constitute an act of firing the assistant, there are requirements to events of firing that are not met here and are so substantial that I can not overwrite them with my intentions. For instance, I need to be authorized by the shop owner if I want to execute a firing and I can not declare an utterance a firing unless this condition is met. Again there are similarities to acts of creation in general. Even for the creator of a piece of art, there are limits to what s/he may declare that piece of art to depict. For example, consider the famous painting by Magritte which shows a pipe, subtitled by "*Ceci n'est pas une pipe*". This picture is extremely disturbing because the depicted object is so obviously a pipe that the painter does not seem to have the authority to deny this, no matter how much he is the creator of the painting.⁹ If we apply this insight to performative utterances, we see that Searle's felicity conditions are more than just a definition of lexical content. They also

⁹ I admit being on slippery ground here. There are interpretations of the painting where the subtitle is true; e.g. some art critics claim that the title means "this is not a *real* pipe, but a painted one". I find such explanations dubitable on semantic grounds but do not want to start a serious argument here. My point is simply that Magritte would have caused much less puzzlement, had the subtitle been "*Ceci n'est pas un chien*" — this is not a dog — because this categorization goes conform with the general use of the word *chien*.

serve to specify the limits within which a speaker can make use of her power to define the category of her utterance. This is the overall emerging picture:

- (i) truth conditional meaning: A proposition which attributes a certain property to an event of information transfer, namely the property of being a certain kind of performative act (content)
- (ii) status: The speaker attempts to establish – by definition – that this property holds true of the event of information transfer (sincerity)
- (iii) uptake: The listener(s) can refute this attempt if the situation falsifies important aspects of performative at hand (felicity)

In summary, I propose that explicit performative utterances are characterized by two things: They are self-referential *and moreover* constitute an attempt to define the category of the utterance. In the absence of evidence to the contrary, we believe that the speaker is sincere in making this attempt. He has the speaker's Authority. Once the attempt succeeds, the performative act has come about. The truth conditional denotation of the utterance can help us to describe and understand when such definitional acts succeed, and what they express. Corroborating evidence is offered by the discourse properties of misfired performative utterances. The following dialogue shows what listeners feel about a misfired PU.

- (61) me: *I hereby fire you from the shop.*
assistant: *Hey, you can't.*

What is denied is the speaker's ability to declare her utterance as an element of the extension of *promise, baptize, fire, declare, invite, etc.*, and the addressee can do so if she knows that some high-ranked felicity condition is not met.

7. Conclusion

In the first part of the paper, I proposed a truth conditional analysis of self-referential utterances. I assume that utterances can be self-referential in two ways. If they contain the adverb *hereby*, it can denote the ongoing act of information exchange and feed the event argument of the modified verb. This leads to a predication about the ongoing act

of information exchange. Explicit performative sentences that do not contain the adverb *hereby* will denote existential statements. They claim the existence of an act, and at the same time constitute the act. They are indirectly self-referential by offering a suitable sample. The analysis can explain why the use of *hereby* can force performative uses for sentences with quantified subjects, whereas their *hereby*-free versions are not suited to issue a speech act.

In the second part, I investigated whether self-referentiality in this truth conditional sense is necessary and sufficient for an explicit performative sentence to be uttered in a performative sense. Comparison to other self-referential utterances strongly suggests that self-referentiality does not *per se* exclude assertive senses. I propose that performativity arises by the speaker's attempt to *define* the nature of her utterance (rather than just *describing* it). Searle's sincerity and felicity conditions find a natural role in this analysis. Sincerity checks whether the speaker seriously wants to define her utterance as being a promise, offer, firing, bet, etc. The speaker has privileged access to her intentions (speaker's Authority) and therefore can not be challenged on these grounds, unless s/he gives clear hints that the utterance isn't serious. Felicity conditions, in contrast, demarcate the limits within which speakers can exert their definitional powers. If the ongoing utterance does not meet crucial criteria for the intended act, then the hearer can deny the speaker the power to define.

The analysis integrates earlier informal accounts of performativity and truth conditional semantics. The advantages of a formal explication of self-referentiality showed at several points in the course of the paper. The analysis can make use of the powerful toolbox of truth conditional semantics. It can explain, rather than observe, the syntactic distribution of *hereby*. It can help to understand the demarcation between self-referentiality and performativity. It elucidates the limits of performative utterances, and allows new insights in how we perceive the nature of collective social commitments. Further links to other truth conditional approaches to speech act theory remain to be explored.

References:

- Astington, Janet. 1988. Children's understanding of the speech act of promising. *Journal of Child Language* (15): 157 – 173.

- Austin, John L. 1955[1962]. *How to Do Things With Words*. Edited by J.O. Urmson, M. Sbisà. Oxford: Clarendon (1962).
- Bach, Kent + Robert M. Harnish. 1979. *Linguistic Communication and Speech Acts*. Boston: MIT Press.
- Bach, Kent / Harnish + Robert M. 1992: How Performatives Really Work: A Reply to Searle. In: *Linguistics and Philosophy* 15, 93 – 110.
- Beaver, David and Cleo Condoravdi. 2007. On the logic of verbal modification. In: M. Aloni et al. (eds.) *Proceedings of 16th AC*: 3–10. University of Amsterdam.
- Bloom, Paul. 1996. Intention, history, and artifact concepts. *Cognition* 60 (1): 1 – 29.
- Bloom, Paul. 1998. Theories of artifact categorization. *Cognition* 66 (1): 87 – 93.
- Condoravdi, Cleo and Sven Lauer. 2010a. Speaking of Preferences. Imperative and Desiderative Assertions in Context. Extended handout, Lichtenberg Kolleg Göttingen, June 2010. (available on author's homepage)
- Condoravdi, Cleo and Sven Lauer. 2010b/t.a.: Performative Verbs and Performative Acts. Talk presented at *Sinn und Bedeutung 15*, September 9-11, 2010, Universität des Saarlandes, Saarbrücken, Germany. Handout available at authors' homepages.
- Copley, Bridget Ann. 2002. *The Semantics of the Future*. PhD dissertation, MIT.
- Davidson, Donald. 1980. The logical form of action sentences. In: *Essays on Actions and Events*. Clarendon Press, Oxford: 105 – 122.
- Eckardt, Regine. 2009. Easy Linking Logic. In Aloni, M. et al. (eds.) *Proceedings of the Amsterdam Colloquium 2009*: 247 – 257. Extended version available at Semantics Archive.
- Eckardt, Regine. 2010/t.a. Hands Up Imperatives. Paper presented at *Sinn und Bedeutung 15*, September 9-11, 2010, Universität des Saarlandes, Saarbrücken, Germany. To appear in I. Reich (ed.): *Proceedings of SuB 15* (2010), Saarbrücken.
- Fodor, Janet D. + Iwan Sag. 1982. Referential and quantificational indefinites. *Linguistics and Philosophy* 5: 355 – 398.
- Heim, Irene + Kratzer, Angelika. 1998. *Semantics in Generative Grammar*. Malden, Blackwell.
- Jary, Mark. 2007. Are explicit performatives assertions? *Linguistics and Philosophy* 30: 207 – 234.
- Kamp, Hans + Uwe Reyle. 1993. *From Discourse to Logic*. Dordrecht, Kluwer.

- Kratzer, Angelika. 1981. The notional category of modality. In H.-J. Eikemeyer and H. Rieser (eds.), *Words, Worlds, and Contexts*, Berlin: de Gruyter, pp. 38 – 74.
- Kratzer, Angelika. 2003/in prog. *The Event Argument and the Semantics of Verbs*. Semantics Archive.
- Kratzer, Angelika. 1998. Scope or Pseudo-scope? Are there wide-scope indefinites? In Susan Rothstein (ed.): *Events in Grammar*, 163 – 196. Kluwer, Dordrecht.
- Landman, F. 2000. *Events and Plurality. The Jerusalem Lectures*. Kluwer, Dordrecht.
- Lauer, David. 2000. Rekonstruktion eines aufgegebenen Begriffs: Zur Diskussion von Performativa und Performativität in der Sprachphilosophie nach Austin. Ms, FU Berlin. (bonus reference)
- Matthewson, Lisa. 1999. On the interpretation of wide scope indefinites. *Natural Language Semantics* 7: 79 – 134.
- Portner, Paul. 2005. The semantics of Imperatives within a theory of clause types. In: *Proceedings of SALT XIV*. CLC Publications, New York.
- Portner, Paul. 2007. Imperatives and Modals. *Natural Language Semantics* 15: 351 – 383.
- Reichenbach, Hans. 1966. *Elements of symbolic logic*. New York: Free Press.
- Reinhart, Tanja. 1997. Quantifier scope: How labor is divided between QR and choice functions. *Linguistics and Philosophy* 20: 335 – 397.
- Schwager, Magdalena. 2006/t.a. *Interpreting Imperatives*. Doctoral dissertation, University of Frankfurt/Main. With revisions, under contract with Springer (series: Studies in Linguistics and Philosophy).
- Searle, John. 1969. *Speech Acts*. Cambridge: Cambridge University Press.
- Searle, John. 1995. *The Construction of Social Reality*. New York: The Free Press.
- Searle, John + Daniel Vanderveken. 1985. *Foundations of illocutionary logic*. Cambridge, England: Cambridge University Press.
- Stalnaker, Robert. 2002. Common Ground. *Linguistics and Philosophy* 25: 701 – 721.
- Szabolsci, Anna. 1982. Model Theoretic Semantics of Performatives. In: Kiefer, Ferenc (ed.) *Hungarian Linguistics*. Amsterdam, John Benjamins: 515 – 536.
- Truckenbrodt, Hubert. 2009. Performatives and Agreement. Ms, Humboldt University, Berlin.
- Vanderveken, Daniel. 1990. *Meaning and speech acts. Volume I: Principles of language use. Volume II: Formal semantics of success and satisfaction*. Cambridge: Cambridge University Press.