

Speech-act operators vs. extra-compositional conventions of use

What are the issues?

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(In large part based on joint work with Cleo Condoravdi)

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The question

The overarching question

Do we need to represent force in the system of semantic composition?

- Condoravdi and Lauer (2011, 2012), Lauer (2013) develop a conception on which the specification of force is carried by **extra-compositional conventions** of use.
- By contrast, Krifka (2014), Cohen and Krifka (2014), Krifka (t.a.) and Krifka (this Saturday) develop a conception on which force is specified via **speech act operators** in the logical form.

Sentential force

- Force, here: **sentential force**.
- Not: High-level illocutionary forces like PROMISE, ORDER, ASSERT, SUPPOSE, ...

- | | | |
|-----|-----------------|------------------------|
| (1) | You leave. | (falling) declarative |
| (2) | Will you leave? | (rising) interrogative |
| (3) | Leave! | imperative |

Sentential force

- Assumption: Sentential force can be characterized in terms of the **commitments** an utterance induces, as a matter of linguistic convention.
(Hamblin, 1971; Gunlogson, 2003, 2008; Beyssade and Marandin, 2006; Krifka 2014, t.a.)
- How are these commitments specified?

The two basic conceptions

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Lauer and Condoravdi: Extra-compositional conventions of use

Extra-compositional conventions of use

Basic picture:

- The system of semantic composition recursively determines a certain semantic object for a (matrix) clause, its denotation.
- A separate convention determines how this object is used.
 - We think of these conventions as **part of grammar**.
 - But they are not part of the system of semantic composition.

Declarative Convention

Declarative Convention

When a speaker utters a (falling) declarative ϕ with denotation $\llbracket \phi \rrbracket^c$ in a context c , he thereby commits to the belief that $\llbracket \phi \rrbracket^c$ is true.

Commitments to beliefs and preference

- Commitments are always *commitments to act* in a certain way.
- Action choices are dependent on the agents' *beliefs* and *preferences*.
 ↪ Beliefs and preferences are the things an agent can be committed to.
- *a is committed to the belief that p*
 \approx a is committed to make his action choices as if he takes himself to be in a p -world.
- We write $PB(a, p)$ for ' a is committed to (act as though he has) the belief that p '.

Declarative convention, restated

Declarative Convention

When a speaker Sp utters a (falling) declarative ϕ with denotation $[[\phi]]^c$ in a context c , he thereby incurs the following commitment:

$$PB_{Sp}[[\phi]]^c$$

Commitments as results

This can be encoded in terms of constraints on models, on a par with result state predicates:

- **Going to the park**

For any w , if an event e of x going to the park occurs in w , the possible futures of w at the end of e exclude worlds in which x is not in the park just after e .

- **Uttering a declarative**

For any w , if an event e of x uttering a declarative with content p occurs in w , the possible futures of w at the end of e exclude worlds in which x does not have the commitment $PB_x(p)$ just after e .

More clause types

Declarative Convention

If u is an utterance of a (falling) declarative ϕ in context c by speaker S_p then:

$$\text{Result}(u, PB_{S_p}(\llbracket \phi \rrbracket^c))$$

Imperative Convention

If u is an utterance of an imperative ϕ in context c by speaker S_p then:

$$\text{Result}(u, PEP_{S_p}(\llbracket \phi \rrbracket^c))$$

where $PEP_a(p) =$ The speaker is committed to act as though he has a preference for p .

Postulates

Doxastic introspection for preference commitment

If an agent is committed to believe that he is committed to prefer that p , he is also committed to prefer that p .

$$PB(a, PEP(a, p)) \Rightarrow PEP(a, p)$$

Doxastic introspection for doxastic commitment

If an agent is committed believe that he is committed believes that p , he is committed believe that p .

$$PB(a, PB(a, p)) \Rightarrow PB(a, p)$$

Upshot

- The dynamic effect of utterances is specified by **conventions of use**.
- The *denotation* is agnostic about the effect, it can be very classical.
 - ▶ e.g., type $\langle e, t \rangle$ for declaratives (and imperatives!).
 - ▶ e.g., type $\langle \langle e, t \rangle, t \rangle$ for interrogatives.
 - ▶ etc.
- We have one such a convention **per matrix expression type**.

The two basic conceptions

Krifka (and Cohen): Speech act operators

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- (Matrix) Sentences contain **illocutionary operators**.
- These denote *speech act potentials*: Functions from indexes to indexes.
 - ▶ **Basic speech acts** manipulate (add to) the commitments of the speaker.
 - ▶ **Meta-speech acts** regulate which future speech acts are permissible/expected.

(4) $\llbracket \text{ASSERT}(\mathbf{John\ smokes}) \rrbracket^c =$
 $\lambda i'. \text{the } i \text{ immediately succeeding } i' \text{ such that at } i \text{ } c_{Sp} \text{ is committed}$
 to **John smokes**

Conversational updates

- Contexts are triples: $\langle c_{Sp}, c_{Ad}, c_i \rangle$
- Updating contexts with speech act potentials:

$$\langle c_{Sp}, c_{Ad}, c_i \rangle + A = \langle c_{Sp}, c_{Ad}, A(c_i) \rangle$$

Speech act convention

When a speaker utters a sentence which denotes the speech act potential A at an index i , the index changes to $A(i)$.

Upshot

- Only single convention / update operation +.
 - Instead multiple speech act operators, at least one per sentence-type.
- Properly more expressive than the C&L set-up.
 - Results of C&L can be simulated by having exactly one speech-act operator, which takes widest scope, and never interacts with any other operators.
 - But nothing rules out such interactions.

Central question

- Do we need the additional expressive power of the Krifka-style approach?
- Must the specification of the commitments created by an utterance be represented in the system of semantic composition?

i.e., does whatever specifies the resulting commit properly interact with other operators?

Additional applications

Set aside here

- Krifka (1999,2001): Quantifying into question acts.
- Cohen and Krifka (2014): Superlative quantifiers like **at least** as operating on speech-act operators.
- Krifka (t.a, Saturday): articulated account of high-negation polar questions, rising declaratives, question tags.

'Direct' motivations

- Explicit performatives.
- Three arguments for embedded illocutionary operators from Krifka (2014):
 - 1 Speech reports.
 - 2 Illocutionary modification.
 - 3 Conditional non-declaratives.

Explicit performatives

Explicit performatives

- Utterances of (5), (6), (7), *bring about* a promise or an order.

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

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

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

- The matrix predicate, the tense, and the type of subject all have to be of the right type for an utterance of these sentences to be performative:

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

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

Which verbs can have performative uses?

(10) I hereby order you to be there at noon. (constitutes an order)

(11) I hereby fry an egg. (does not constitute a frying)

- Naïve reaction to the contrast in (11): ordering is something 'that can be done with words', frying an egg is not.
- But: There are many 'things that can be done with words' that cannot be done with explicit performatives:

- (12)
- # I hereby insult you.
 - # I hereby annoy you.
 - # I hereby frighten you.

- An account of explicit performatives should explain why (10) is an order, but (12-a) is not an insult.

Krifka: PERFORM-operator

- In a Krifka-style system, we can assume that ‘illocutionary verbs’ contain the corresponding speech act operator in their denotation.
 - can be fed into an ASSERT-operator, to yield reportative uses.
 - can be fed into a PERFORM-operator, to yield performative uses.
- The C&L approach appears to be at a disadvantage.
 - because it cannot ‘look into’ the sentence to determine whether it contains a ‘performative’ predicate.

Null hypothesis

- *Explicit performative* sentences are declaratives.
- Ideally, the 'performative effect' should arise from the interaction of
 - the conventional effect common to all declaratives,
 - the lexical meaning of the predicates,
 - the other grammatical features of the sentence.

Null hypothesis

- Attractive idea, proposed time and again since Austin (1962) (Lemmon 1962, Hedenius 1963, Bach and Harnish 1979, Ginet 1979, Bierwisch 1980, Leech 1983, Bach and Harnish 1992, ...):

Explicit performatives are assertions, which, somehow, make themselves true.

An account of explicit performatives

Preliminaries for the proposal in Condoravdi and Lauer (2011), Lauer (2013):

- The (declarative) sentences used in explicit performatives have the same denotation as on descriptive uses .
- Performative verbs are predicates true of *communicative events*.
 - Conceived of as *concrete particulars*.

Commissives: Reportative use

- What has to be the case for (13) to be true?

(13) Peter promised to get the tickets.

- There has to have been a communicative event from Peter (to someone) that created a particular kind of commitment.
- A number of utterances could serve as this event:

- (14)
- a. I promise to get the tickets.
 - b. I will get the tickets.
 - c. You will have the tickets tomorrow.

Commissives: Lexical meaning

(15) $w \models \text{promise}(u, a, p)$ iff

- a. u is a communicative event from a
(typically, an utterance by a)
- b. in its context, u commits a to $PEP_a(p)$
i.e., u commits a to act as though he preferred p to be actualized.

(15) only specifies the truth-conditional part of the meaning of **promise**. There is a presuppositional part, as well, roughly, that a presumes that b has a stake in p .

Commissives: Performative use

- An utterance u^* of (14-a) in context C^* and world w^* by a speaker S has the content in (16).

$$(16) \quad \{w \mid w \models \exists u : CE_S(u) \wedge \text{Result}(PEP_S(\textit{Tickets}))\},$$

where $\textit{Tickets} = \llbracket S \text{ will get the tickets} \rrbracket_{C^*}$

- Since (14-a) is a declarative sentence, we have:

$$(17) \quad w^* \models \text{Result}(u^*, PB_S[\llbracket (16) \rrbracket])$$

$$(18) \quad w^* \models \text{Result}(u^*, PB_S[\exists u : \text{Result}(u, PEP_S(\textit{Tickets}))])$$

$$(19) \quad w^* \models \text{Result}(u^*, PB_S[PEP_S[\textit{Tickets}]])$$

$$(20) \quad w^* \models \text{Result}(u^*, PEP_S[\textit{Tickets}])$$

$$(21) \quad w^* \in (16)$$

Commissives: Performative use

In a nutshell

(22) I promise that p .

- As a declarative, an utterance of (22) commits the speaker to a belief in **I promise that p**
 \approx **An utterance occurs that commits me to $PEP_S(p)$** .
- But then, this utterance **commits the speaker to believe that he is committed to a preference for p** . $PB_S[PEP_S[p]]$
- By our introspection principles, that means it also commits him to **a preference for p** .
- But then, any utterance of (22) is a witness for its own truth!

Assertives

- (23) $w \models \textit{claim}(u, a, p)$ iff
- u is a communicative event from a : $w \models \textit{CE}_a(u)$
 - in $c(u)$, u results in the commitment $\textit{PB}[p]$.

With this:

- An utterance of **I claim that p** will commit the speaker to $\textit{PB}_S[\textit{PB}_S[p]]$.
- Hence, by introspection for commitment to $\textit{PB}_S[p]$.
- Hence, the utterance is a witness for its own truth.

Directives

(24) $w \models \text{order}(u, a, b, p)$ iff

- a. u is a communicative event from a to b : $w \models \text{CE}_{a \rightarrow b}(u)$
- b. in $c(u)$, u results in the commitment $\text{PEP}_a[\text{PEP}_b[p]]$.

With this:

- An utterance of **I order you to p** will commit the speaker to $\text{PB}_S[\text{PEP}_S[\text{PEP}_A[p]]]$.
- Hence, by introspection for commitment to $\text{PEP}_S[\text{PEP}_A[p]]$.
- Hence, the utterance is a witness for its own truth.

Generalization

A verbal predicate will be 'performative' iff . . .

- It describes a communicative event.
- Any additional entailments pertain to *commitments*.

This is why **insult**, **annoy**, etc. are not 'performative': They have entailments that are not about commitments, which block self-verification.

Summary

Condoravdi and Lauer (2011) on explicit performatives

Explicit performatives

- ... denote the ordinary propositions they appear to denote.
- ... have the same conventionally-determined effect as any other declarative.
- ... are self-verifying because they make existential claims about commitment-creating actions.
- Because commitments are introspective, the **fact that the utterance is made** entails that **the content of the utterance is true**.

Explicit performatives

Boolean combinations of explicit performatives

Boolean combinations of performatives

(25) I promise to dance and I promise to sing. (is a promise)

(26) I promise to dance or I promise to sing. (is a not promise)

We directly account for this pattern, with Boolean **and** and **or**:

- An utterance of (25) commits the speaker to a preference for dancing and it commits him to a preference for singing.
 - Because commitment is closed under (obvious) entailment.
- At the same time, (26) is not a promise.
 - Because the sentence does not commit the speaker to either preference.

'Illocutionary denegation' ?

(27) I do not promise to come.

- Used as a motivating example for assuming that there is an 'illocutionary negation' ~ that can be expressed by **not**.
- **Question:** What reason is there to believe that (27) contains a non-Boolean negation?

'Illocutionary denegation' ?

(28) I do not promise to come.

- Hare (1970) articulates the intuition that (28) makes explicit that the speaker does not promise.
- That sounds right. But do we therefore need to assume the speaker performs a negated promise?

‘Illocutionary denegation’?

(29) I do not promise to come.

- On the C&L analysis, (29) is not a promise, because it fails to induce the right commitment.
- And it also makes this *explicit* in the sense that it makes salient the possibility of a promise (while committing to the belief that the speaker is not committed).
- Is there anything else to explain about (29)?

Summary

- In a commitment-based set-up, explicit performatives can be treated as standard assertions.
- This arguably accounts ...
 - for the restrictions on predicates (& tense, aspect, person).
 - for Boolean combinations of explicit performatives.

Illocutionary modification

Illocutionary modification

- Various kinds of operators appear to *modify* the force of an utterance.
- Obviously, this is problematic for the C&L-view.
 - Because operators do not have access to the extra-compositional conventions.

Illocutionary modification by frankly

- Adverbs like **frankly**, on one use, indicate something about the current speech act.

(30) Mary frankly told Bill that he looked awful. ('descriptive')

(31) You frankly look awful. ('speech-act modifying')
 'I tell you frankly that you look awful.'

Illocutionary modification by frankly

- Krifka treats speech-act modifying **frankly** as an operator mapping speech-act potentials into speech-act potentials.
- e.g., an `ASSERTion` is mapped into an `ASSERTion` that is marked as being performed frankly.

Illocutionary modification by frankly

- The existence of adverbs like **frankly** is not a compelling reason to assume speech-act operators, though.
- Because the contribution of **frankly** is *additive*.
- A frank assertion is an assertion.

(32) You frankly look awful.

- a. $PB_S(\llbracket \text{You look awful} \rrbracket)$
- b. The current utterance is made frankly.

Illocutionary modification by *wohl*

- Are there utterance modifying operators whose contribution is *non-additive*?
- Candidate: **wohl** according to Zimmermann (2004).

(33) Hans ist wohl krank.
 H. is WOHL ill.
 'Hans is apparently ill.'

- According to Zimmermann, **wohl** operates on a speech-act operator to weaken the induced commitment.
- But a **frankly**-style treatment seems plausible, if we assume that the DECLARATIVE CONVENTION leaves open the degree of commitment, rather than specifying absolute commitment.

Illocutionary modification by evidentials

- Faller (2002, 2007) argues that evidential in Cusco Quechua act as speech-act operators.
- For the direct evidential **-mi** and the conjectural **-cha**, the contribution is arguably additive.
- Schematically:

(34) John smokes **-mi**.

a. John smokes.

b. I have the best possible evidence for my current claim.

(35) John smokes **-cha**.

a. John smokes.

b. My current claim is made based on a conjecture.

Illocutionary modification by evidentials

- The hearsay-evidential **-si** does not make an additive contribution.
- e.g. a declarative with **-si** is compatible with a denial of its prejacent proposition (from Faller, 2007):

(36) They left me a lot of money **-si**. But that's not true, they didn't leave me one cent.

This seems to indicate that **-si** **completely obliterates** the effect the declarative otherwise would have.

Illocutionary modification by evidentials

- Evidential markers of the Cusco Quechua type seem to provide the strongest case for (non-additive) illocutionary modification.
- But: The really strong argument comes from the hearsay-evidential **-si**.
- Could **-si** be instead analyzed as a quotative marker?

Illocutionary modification: Summary

- It is quite difficult to conclusively show that there are kinds of 'illocutionary modification' that are incompatible with the idea that sentential force is specified by extra-compositional means.
- Such modifiers . . .
 - ▶ . . . have to make a non-additive contribution to the perceived force.
 - ▶ . . . have to occur in more than one sentence type.
 - ▶ . . . have to have meanings that cannot be better analyzed as instances of quotation.

Conclusion

Conclusion

- The question whether we need illocutionary operators in the system of composition is still open.
- Explicit performatives, and Boolean combinations of those can be handled without them.
- Various types of illocutionary modification can also be handled without them.
 - ... but perhaps not all.
- We are just beginning to have models that are explicit enough to even *ask* these questions. Exciting times!

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