

How to do things with words 5: Performative modals and imperatives

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- 1 Status: performative modals and imperatives

- 2 Developing the modal operator account MOP
 - Imperatives and contextual parameters
 - The presuppositional meaning component

- 3 To Do Lists for imperatives (Portner 2004, 2007)
 - Portner (2007)
 - Comparing MOP and TDL

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- in particular, imperatives carry a presuppositional meaning component banning them from being used as ASSERTIONS

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Imperatives

$$(1) \quad \llbracket [OP_{Imp} f g [you\ leave]] \rrbracket^c$$

$$(2) \quad \llbracket OP_{Imp} \rrbracket^c = \lambda f \lambda g \lambda p \lambda w. \forall w' \in O(cg_F \cup f, g, w) : p(w').$$

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- in any utterance context c happening in a world w_0 with A the group of speaker and hearer(s):
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(= CS, the Context Set of c)
- the variable assignment of context c interprets the free variables f and g (just like overt pronouns *she,...*)
- normally, $c(f)$ is the empty conversational background e (no additional facts brought in)

$$(3) \quad e = \lambda w \lambda p_{st}. [p \neq p] \quad \text{assigns to every world the empty set of propositions}$$

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- update with the imperative proposition:

$R_A \oplus \lambda w. \forall w' \in O(cg_F \cup f, g, w) : \text{you-leave}(w').$, with $c(f)$

$= e$, and $c(g) = \text{my orders}$

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- for each world w in CS that is considered (keep or not), $g(w)$ orders the same set CS itself, information only about g
only reason to eliminate a world w : ordering source has wrong properties in w
(non-euclidian $CB_{A,w}$ situations: individuals will jump to wrong conclusions about what the actual preferences are)

Various WISHES (expressives)

WISH: $c(f) = e$; $c(g) = \textit{what my wishes are}$:

(3) *Enjoy the talk!*

Given what my wishes are, it is necessary that you enjoy the talk.

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(4) *Please be rich and intelligent.*

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present perfect imperatives work out compositionally; no REQUESTS because the proposition is settled (REQUEST(ϕ) is a context change with unsettled ϕ)

(5) *Please don't have broken another vase!*

Culicover & Jackendoff 1993

Given what my wishes are it is necessary that you are not in the post-state of having broken another vase.

ADVICE: Informative modal base f

A asks an official B: *How do I get to the fair?*

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Given your goal of getting to the fair, given standard preferences about transportation, it is necessary that you take the U4.

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f = facts about public transportation in Frankfurt

Presupp (1): Prioritizing Ordering Source

Imperatives cannot express expectations; no doxastic or stereotypical ordering sources:

- (6) *You should be done by tonight.* (prediction about my student and her homework)
≠ Be done by tonight.

Portner (1997): **prioritizing** for deontic, bouletic and teleological.

Presupposition (1):

g has to be prioritizing.

Presupp (2): Authority

The speaker is known to have perfect knowledge. Groenendijk & Stokhof 1984

(7) The speaker is an authority on a function f in c (happening in w with participants A) iff

$$CB_{A,w}(\lambda w'. \forall p [p \in f(w') \leftrightarrow B_{Speaker}(\lambda w''. p \in f(w''))]) \wedge [p \notin f(w') \leftrightarrow B_{Speaker}(\lambda w''. p \notin f(w''))])$$

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Passes presupposition test (von Fintel):

(8) A: *How do I get to the Pielok?*

B: *Take the S8.*

A: *Hey, wait a minute - even I know that the S8 doesn't go to Bockenheim.*

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Passes presupposition test (von Fintel):

(8) A: *Get me another beer!*

B: *Hey, wait a minute, you don't have to tell me anything.*

infelicitous command

A believes that from her orders it follows that beer needs to be fetched, but this isn't right

Presupp (3): Epistemic Uncertainty

(9) *Get me another beer. #But I know you won't do it.*

Presupposition (3):

It is mutual joint belief that the speaker holds possible both the prejacent and its negation.

for prejacent p and participants A :

(10) $CB_{A,w}(\lambda w.\exists w'\exists w''[B_{Speaker}(w)(w') \wedge B_{Speaker}(w)(w'') \wedge [\neg p(w') \& p(w'')]])$

Presupp (4): Subjective endorsement

Moore's paradox:

Hintikka 1962, Gazdar 1979

(11) *#Elvis is dead, but I don't believe he is dead.*

Deontic modals and imperatives:

(12) *#Go to Paris/#You should go to Paris, but I don't think it's
advisable.* Frank 1995

Presupp (4): Subjective endorsement

But ADVICE: no real endorsement

- (11) A: *How do I get to the Pielok?*
B: *Follow this street to the end and make a left.*

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Problem case: CONCESSION

- (12) *Ok, then go to the party! (I still hate the idea, but...)*

Presupposition (4):

It is not the case that $\neg p$ is a necessity w.r.t. the speakers wishes.
 thanks to N. Asher, p.c.

S may have a clear preference for $\neg p$ which conflicts with higher preferences,
 e.g. no more fights.

If different backgrounds give rise to opposite conclusions as to what is best for
 H, they have to be made explicit, e.g. *if*-clauses, *given*, *according to*.

Presuppositions on f and g

Modal verbs are known to be lexically restricted with respect to what are f and g (Kratzer 1986; e.g. *might*, *may*).

$\llbracket OP_{Imp} \rrbracket^c(f)(g)(p)$ is defined only iff. . .

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⇒ we predict the strong connection to **ORDERS** or **REQUESTS**.

Close-up: context change with imperatives

cf. file orderfigure.pdf

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Portner 2007

Imperatives make true subsequent descriptively modalized sentences of the same flavor:

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- 2 Each participant is associated with a To Do List that stores properties, sorted by flavor: deontic, bouletic, teleological.
- 3 Imperatives denote properties that enter the addressee's To-Do-List (update rule).

To Do List-Account (2)

Portner 2007

Role of the To-Do-List:

- 1 The To-Do-List determines evaluation of an agent's rationality:

Agent's Commitment: For any participant i , the participants in the conversation mutually agree to deem i 's actions rational and cooperative to the extent that those actions in any world $w_1 \in CG$ tend to make it more likely that there is no $w_2 \in CG$ s.t. $w_2 <_i w_1$.
 $<_i$ closer to i 's TDL

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⇒ No truth-value to get rid of; Agent's Commitment immediately predicts subjectivity/endorsement.

Simple imperatives: COMMAND

The two theories agree where a proposition results as self-verifying, e.g. COMMAND:

- (14) a. *Magda, open the door!/I hereby order you to open the door.*
b. *Magda should open the door/has been ordered to open the door/...*

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Self verification of the imperative:

- The imperative proposition is not true before the utterance.
- By uttering a proposition (without overt indication to the contrary - GUESS, CONJECTURE), the speaker is taken to believe the proposition. (Conversational principle)
- The imperative proposition is true (thanks to being commanded by the very utterance) or constitutes a presupposition failure (authority violated).

Effect of an ADVICE?

- (15) a. *A: How do I get to Harlem? - B: Take the A-train.*
b. *(To go to Harlem,) A should take the A-train.*

standard candidate for (15b):

- (16) *Given the circumstances, given your preferences, given your goal of going to Harlem, it is necessary that you take the A-train.*

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Modal Operator Account: B's imperative expresses (16). It is non-descriptive (no assertion) thanks to authority and subjectivity. It is not self-verifying.

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To Do List-Account: the imperative adds a subgoal needed to reach the higher goal Harlem. It validates (17) (from which we can probably then deduce (16))

- (17) *given what I advise you to do (to reach your goal of going to Harlem), it is necessary that you take the A-train.*

WISHES: self-verifying?

WISHES do not seem self-verifying:

- (18) Please, be tall! *blind date scenario*
Given the circumstances, according to what my wishes are, it is necessary that you are tall.
- (19) Please, don't have broken another vase.
Given the circumstances, according to what my wishes are, it is necessary that you haven't broken another vase.

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It is not clear into what part of the TDL they should go. Vacuous effect for agent's commitment.

Meta-level imperatives

(20) *Be altruistic.*

MOP:

(21) *Given the circumstances, according to what I order you, it is necessary that you are altruistic.*

TDL: one property among all the other ones, probably conflicting with the H-bouletic properties.

Imperatives and Questions

(22) A: *What shall I do tonight?*

B: *Geh ins Kino!*

Go.IMP to the movies!

German

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Modal Operator Analysis: straight-forward, the imperative semantically resolves the question.

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- non-standard interpretation of the question (e.g. request to settle the matter)
- *shall* in the question is interpreted w.r.t. $g = \text{what is good for } A$; imperative updates $g = \text{what is good for } A \text{ according to } B$
 $A \text{ shall}^{\text{good-according-to-}B} \text{ go to the movies.}$: indirect answer
 (but: *According to you, what shall I do tonight?*)

Embedded Imperatives

e.g. *He said [yesterday go.IMP there today.]*

- predicted to be: available on the Modal Operator Account;
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- predicted to be: available on the Modal Operator Account; unclear on the To Do List Account
- cross-linguistically rare, but. . .

Pak (2004), Portner (2007): Korean

Schwager (2006): Old Germanic Languages, Japanese,

Colloquial German, Tagalog

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Embedded Imperatives

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- **Modal Operator Account:**
 - interaction with context dependent parameters, e.g. restriction on shift of person parameter (Poschmann & Schwager 2008)

Modal Subordination (Roberts 1989)

(24) A wolf may come in. It would eat you first.

Brasoveanu 2007

Modal subordination of deontic modals with anaphoric elements
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(25) Mary might buy a lottery ticket_i. # (In that case), since Bill is such a careful guy, he should keep it_i. keep it_i.

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stell *ihn*_i einstweilen in den Kühlschrank.
put.IMP it in-the-meantime in the fridge
'Mary might bring some wine_i with her. In that case, put it_i in the fridge in the meantime.'

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Imperatives behave like deontic modal verbs:

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Modal Operator Account: straight-forward; **To-Do-List Account:** unclear (hypothetical subcontexts?)

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Modal Operator Account: both construals that are standardly adopted for conditionals with modalized antecedents carry over immediately Kratzer 1978, Frank 1995, Kaufmann & Schwager 2009

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We hope to have given evidence for...

Credo: Computational semantics can assign the right properties to explicit performatives, modals and imperatives to account for the effects of their use in utterance contexts, as well as for why they cannot be used for other moves.