How to do things with words 4:
Performative verbs and imperatives

Regine Eckardt & Magdalena Schwager
University of Göttingen

ESSLLI 2009, Bordeaux

Advancing integrated speech act theory

- explicit performatives constrain what are considered possible futures (context set)

  (1)   *I promise to stop talking about 'promise'.*

  technically crucial: propositions; true/false of worlds in the (old) context set

Advancing integrated speech act theory

- explicit performatives constrain what are considered possible futures (context set)

  (1)   *I promise to stop talking about 'promise'.*

  technically crucial: propositions; true/false of worlds in the (old) context set

- implicit performatives:

  (2)   a.   *You must stay for the next week.*

  performative modal

      b.   *Stay for the next week.*   imperative

Advancing integrated speech act theory

- explicit performatives constrain what are considered possible futures (context set)

  (1)   *I promise to stop talking about 'promise'.*

  technically crucial: propositions; true/false of worlds in the (old) context set

- implicit performatives:

  (2)   a.   *You must stay for the next week.*

  performative modal

       b.   *Stay for the next week.*   imperative

    - similar to *I order/request you to. . .*

Advancing integrated speech act theory

- explicit performatives constrain what are considered possible futures (context set)

  (1)   *I promise to stop talking about 'promise'.*

  technically crucial: propositions; true/false of worlds in the (old) context set

- implicit performatives:

  (2)   a.   *You must stay for the next week.*

                                        performative modal

          b.   *Stay for the next week.*   imperative

     - similar to *I order/request you to...*
     - do they express propositions?

Advancing integrated speech act theory

- explicit performatives constrain what are considered possible futures (context set)

  (1) *I promise to stop talking about 'promise'.*

  technically crucial: propositions; true/false of worlds in the (old) context set

- implicit performatives:

  (2) a. *You must stay for the next week.*

  performative modal

  b. *Stay for the next week.* imperative

  - similar to *I order/request you to. . .*
  - do they express propositions?
  - relation to descriptive modal statements?
    (3) *Sarah has to stay for the next week.*

Performative and descriptive modals

Modal verbs: describe obligations   descriptive

(4)   a.   *You need to pay taxes for this (as far as I know).*

       b.   *Peter may come tomorrow (the hostess said: no problem).*

Modal verbs: change obligations   performative

(5)   a.   *You need to pay taxes for this.*

       b.   *Okay, you may come at 11. (Are you content now?)*

Performative and descriptive modals

Modal verbs: describe obligations   descriptive

(4)   a.   *You need to pay taxes for this (as far as I know).*

       b.   *Peter may come tomorrow (the hostess said: no problem).*

Modal verbs: change obligations   performative

(5)   a.   *You need to pay taxes for this.*

       b.   *Okay, you may come at 11. (Are you content now?)*

Truth values?

Performative and descriptive modals

Modal verbs: describe obligations   descriptive

(4)   a.   *You need to pay taxes for this (as far as I know).*
               'That's not true!'
        b.   *Peter may come tomorrow (the hostess said: no prob-
               lem).*
               'That's not true!'

Modal verbs: change obligations   performative

(5)   a.   *You need to pay taxes for this.*

        b.   *Okay, you may come at 11. (Are you content now?)*

Truth values?

Performative and descriptive modals

Modal verbs: describe obligations   descriptive

(4) a. *You need to pay taxes for this (as far as I know).*
         'That's not true!'
     b. *Peter may come tomorrow (the hostess said: no prob-*
         lem).
         'That's not true!'

Modal verbs: change obligations   performative

(5) a. *You need to pay taxes for this.*
         #*'That's not true!'*
     b. *Okay, you may come at 11. (Are you content now?)*
         #*'That's not true!'*

Truth values?

Performative and descriptive modals

Modal verbs: describe obligations   descriptive

(4) a.   *You need to pay taxes for this (as far as I know).*
          'That's not true!'

     b.   *Peter may come tomorrow (the hostess said: no prob-*
          lem).
          'That's not true!'

Modal verbs: change obligations   performative

(5) a.   *You need to pay taxes for this.*
          #*'That's not true!'*

     b.   *Okay, you may come at 11. (Are you content now?)*
          #*'That's not true!'*

Truth values?
          (Performative/descriptive as [+/-change] will be revisited later.)

Split representation approaches

Lewis (1979) *A problem about permission*:

- any utterance context determines:
    - context set (doxastically possible future courses of events, cf. Stalnaker 1978)
    - permissibily sphere *PS* (deontically possible future courses of events)

Split representation approaches

Lewis (1979) *A problem about permission*:

- any utterance context determines:
  - context set (doxastically possible future courses of events, cf. Stalnaker 1978)
  - permissibily sphere *PS* (deontically possible future courses of events)
- performative modals (and imperatives) are part of a language game (master & slave) that modifies the permissibility sphere

Split representation approaches

Lewis (1979) *A problem about permission*:

- any utterance context determines:
    - context set (doxastically possible future courses of events, cf. Stalnaker 1978)
    - permissibily sphere *PS* (deontically possible future courses of events)
- performative modals (and imperatives) are part of a language game (master & slave) that modifies the permissibility sphere
- *must* constrains the sphere (unproblematic)

Split representation approaches

Lewis (1979) *A problem about permission*:

- any utterance context determines:
  - context set (doxastically possible future courses of events, cf. Stalnaker 1978)
  - permissibily sphere *PS* (deontically possible future courses of events)
- performative modals (and imperatives) are part of a language game (master & slave) that modifies the permissibility sphere
- *must* constrains the sphere (unproblematic)
- *may* enlargens the sphere - how? ($=$ problem about permission)

  (6) $PS^{old} \subseteq$ 'slave does not eat apples'
  PERMISSION: *You may eat an apple.*
  $PS^{new} = ?$

set aside: matter of questions under discussion; Ginzburg 1995

Split vs. unified representation

Split representation theories:

(*i*) To model utterance context, we need a different storage site for deontic (preference related) information.

commitment slate: Hamblin

permissibility sphere: Lewis 1979, van Rooy 2000

To Do List: Portner 2004, 2007

(*ii*) Certain linguistic expressions are specified to update the deontic storage site directly.

Split vs. unified representation

Split representation theories:

(*i*) To model utterance context, we need a different storage site for deontic (preference related) information.

commitment slate: Hamblin

permissibility sphere: Lewis 1979, van Rooy 2000

To Do List: Portner 2004, 2007

(*ii*) Certain linguistic expressions are specified to update the deontic storage site directly.

- performative sentences need not work via *CB*-update - they need not express propositions (✓ automatic update, ✓ #true/false)

- logical connective can behave differently (free choice effects)

- needed: link *CB* & deontic sphere (so far: only Portner 2007)

Split vs. unified representation

Unified representation theories:

(*i*) Deontic information is modal information about the worlds in the context set.

(*ii*) Deontic information cannot be modified directly, but works via elemination of worlds from the context set that have different modal properties.

Split vs. unified representation

Unified representation theories:

(*i*) Deontic information is modal information about the worlds in the context set.

(*ii*) Deontic information cannot be modified directly, but works via elemination of worlds from the context set that have different modal properties.

- performative sentences express propositions; we need a pragmatic story for #true/false, automatic update
- explicit performatives: #true/false, yet: corresponding spheres? *I hereby oder/advice/congratulate/... you...*
- most linguistic items do double duty
- modal information is 'stored' for all of W in accessibility relations R of all flavors (simplified, $R \subseteq W \times W$)

Split vs. unified representation

Unified representation theories:
(i) Deontic information is modal information about the worlds in the context set.
(ii) Deontic information cannot be modified directly, but works via elemination of worlds from the context set that have different modal properties.

- performative sentences express propositions; we need a pragmatic story for #true/false, automatic update
- explicit performatives: #true/false, yet: corresponding spheres? *I hereby oder/advice/congratulate/...you...*
- most linguistic items do double duty
- modal information is 'stored' for all of W in accessibility relations R of all flavors (simplified, $R \subseteq W \times W$)

▶️*I am a die-hard unified representationalist.*

Performative vs. descriptive: semantically the same?

'performative modals: free choice effects, descriptive: no' (Kamp 1973)

(7) *You can ask Cécile, or you can email to Elena!* performative
⇒ 'both are options' (FC)

(8) *You can ask Cécile, or you can email to Elena (I forgot which).* descriptive
⇒ 'one's an option, I don't know which' (no FC)

But: descriptive + FC, performative without FC (Kamp 1978, Schulz 2003)

Performative vs. descriptive: semantically the same?

'performative modals: free choice effects, descriptive: no' (Kamp 1973)

(7) *You can ask Cécile, or you can email to Elena!* performative
     ⇒ 'both are options' (FC)

(8) *You can ask Cécile, or you can email to Elena (I forgot which).* descriptive
     ⇒ 'one's an option, I don't know which' (no FC)

But: descriptive + FC, performative without FC (Kamp 1978, Schulz 2003)

(9) *I checked the rules for paying your ticket. You can pay online or you can pay at the police station.* descriptive, Portner (p.c.)
     ⇒ 'both are options' (FC)

Performative vs. descriptive: semantically the same?

'performative modals: free choice effects, descriptive: no' (Kamp 1973)

(7) *You can ask Cécile, or you can email to Elena!* performative
⇒ 'both are options' (FC)

(8) *You can ask Cécile, or you can email to Elena (I forgot which).*   descriptive
⇒ 'one's an option, I don't know which' (no FC)

But: descriptive + FC, performative without FC (Kamp 1978, Schulz 2003)

(9) *You may go to Shoal Creek, or you may go to Shingle Creek, but stay away from the dangerous one.* performative, Kamp 1978
⇒ 'one's an option, I don't know which' (no FC)

Performative vs. Descriptive (2)

'performative modals do not enter the recursive meaning
component' - or: an effect that only surfaces in main clauses

Performative vs. Descriptive (2)

'performative modals do not enter the recursive meaning component' - or: an effect that only surfaces in main clauses
English *must* is always performative in main clauses. . .

(10)   *You must do the shopping today (#as far as I know).*

. . . and in subordinate clauses, it behaves like a descriptive modal

Ninan 2005.

(11)   *Since John must go to confession, he should find a church soon.*

Assumption 1:

The distinction between performative and descriptive modal verbs is pragmatic.

Performative vs. descriptive (3)

Performative does not require change (COMMAND, PERMISSION):

- Portner (2009:136): *I refer to a modal as PERFORMATIVE if, by virtue of its conventional meaning, it causes the utterance of a declarative sentence to perform a speech act in addition to, or instead of, the act of assertion which is normally associated with declarative clauses.*

Performative vs. descriptive (3)

Performative does not require change (COMMAND, PERMISSION):

- Portner (2009:136): *I refer to a modal as PERFORMATIVE if, by virtue of its conventional meaning, it causes the utterance of a declarative sentence to perform a speech act in addition to, or instead of, the act of assertion which is normally associated with declarative clauses.*

Performative vs. descriptive (3)

Performative does not require change (COMMAND, PERMISSION):

- Portner (2009:136): *I refer to a modal as PERFORMATIVE if, by virtue of its conventional meaning, it causes the utterance of a declarative sentence to perform a speech act in addition to, or instead of, the act of assertion which is normally associated with declarative clauses.*

- semantically uniform approach → token distinction; *performative if it occurs in an utterance of a declarative sentence that performs*

- *must* in the absence of change:
  - (12)   A: *How do I get to Harlem?*
            B: *You must take the A-train. It's the only possibility.*

Performative vs. descriptive (3)

Performative does not require change (COMMAND, PERMISSION):

- Portner (2009:136): *I refer to a modal as PERFORMATIVE if, by virtue of its conventional meaning, it causes the utterance of a declarative sentence to perform a speech act in addition to, or instead of, the act of assertion which is normally associated with declarative clauses.*

- semantically uniform approach → token distinction; *performative if it occurs in an utterance of a declarative sentence that performs*

- *must* in the absence of change:
  - (12)   *You must pray every day.*
            priest informs of standing obligation (Portner 2007)

Performative vs. descriptive (3)

Performative does not require change (COMMAND, PERMISSION):

- Portner (2009:136): *I refer to a modal as PERFORMATIVE if, by virtue of its conventional meaning, it causes the utterance of a declarative sentence to perform a speech act in addition to, or instead of, the act of assertion which is normally associated with declarative clauses.*

- semantically uniform approach → token distinction; *performative if it occurs in an utterance of a declarative sentence that performs*

- *must* in the absence of change:
  - (12)   *You must pray every day.*
                 priest informs of standing obligation (Portner 2007)

- no change-examples don't allow for *that's not true*-replies either (tests: non assertive)

Semantic interpretation of modal verbs

1. adopt standard semantics for modal verbs (Lewis 1973, van Fraassen 1973; Kratzer 1978, 1991)
   context dependence in 'flavor':

   (13)   a.   *She has to be in her office.* (given what we know)
          b.   *You have to close the door.* (given my orders)
          c.   *You have to go to the pub.* (given your wishes, and what the possibilities are)

Semantic interpretation of modal verbs

1. adopt standard semantics for modal verbs (Lewis 1973, van Fraassen 1973; Kratzer 1978, 1991)
   context dependence in 'flavor':

   (13) a. *She has to be in her office.* (given what we know)
         b. *You have to close the door.* (given my orders)
         c. *You have to go to the pub.* (given your wishes, and what the possibilities are)

2. An update with a modalized declarative can give rise to an effect on the context set that is to be classified as some speech act other than ASSERTION - 'performative modal'.

Semantic interpretation of modal verbs

1. adopt standard semantics for modal verbs (Lewis 1973, van Fraassen 1973; Kratzer 1978, 1991)
   context dependence in 'flavor':

   (13)   a.   *She has to be in her office.* (given what we know)
          b.   *You have to close the door.* (given my orders)
          c.   *You have to go to the pub.* (given your wishes, and what the possibilities are)

2. An update with a modalized declarative can give rise to an effect on the context set that is to be classified as some speech act other than ASSERTION - 'performative modal'.

3. The standard semantics for modal verbs allows to specify under what conditions modal verbs behave performatively. We will only come back to this in connection with imperatives.

$[\![[must/may \text{ [you go]}]\!]^{c,w} = 1$ iff all/some of a set of possible worlds M verify the proposition you go.   prejacent

Standard semantics for modals (1)

$[\![[must/may \text{ [you go]]}]\!]^{c,w} = 1$ iff all/some of a set of possible worlds
M verify the proposition you go.   prejacent

$M = ?$ - Depends on two contextual parameters:

$[\![[must/may \text{ [you go]}]\!]^{c,w} = 1$ iff all/some of a set of possible worlds M verify the proposition you go.   prejacent

$M = ?$ - Depends on two contextual parameters:

- a modal base f establishes which worlds are to be considered in principle

Standard semantics for modals (1)

$[\![[must/may \text{ [you go]}]\!]]^{c,w} = 1$ iff all/some of a set of possible worlds M verify the proposition you go. prejacent
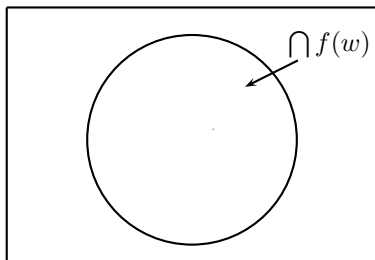
$M = ?$ - Depends on two contextual parameters:

- a modal base f establishes which worlds are to be considered in principle

$f \ldots$ the circumstances
$f(w) = \{no \ coffee \ in \ here,$
$you're \ very \ tired, \ldots \}$

Standard semantics for modals (1) Kratzer 1991

$[\![[must/may \text{ [you go]}]\!]^{c,w} = 1$ iff all/some of a set of possible worlds
M verify the proposition you go. prejacent

$M = ?$ - Depends on two contextual parameters:

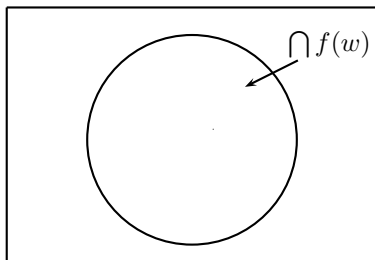- a modal base f establishes which worlds are to be considered
  in principle

f... the circumstances
$f(w) = \{$no coffee in here,
you're very tired,...$\}$

Regine Eckardt & Magdalena Schwager University of Göttingen   How to do things with words 4: Performative verbs and impera

$[\![[must/may \text{ [you go]}]\!]]^{c,w} = 1$ iff all/some of a set of possible worlds M verify the proposition you go.   prejacent

$M = ?$ - Depends on two contextual parameters:

- a modal base f establishes which worlds are to be considered in principle
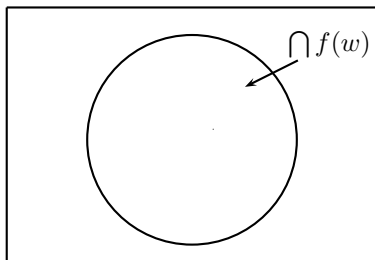- an ordering source g picks out the optimal ones among them

$f \ldots$ the circumstances
$f(w) = \{no\ coffee\ in\ here,$
$you're\ very\ tired, \ldots \}$

$[\![[must/may \text{ [you go]}]\!]^{c,w} = 1$ iff all/some of a set of possible worlds M verify the proposition you go. prejacent

$M = ?$ - Depends on two contextual parameters:

- a modal base f establishes which worlds are to be considered in principle
- an ordering source g picks out the optimal ones among them

f... the circumstances
$f(w) = \{no\ coffee\ in\ here,\ you're\ very\ tired, \dots\}$
g... my wishes
$g(w) = \{you\ have\ a\ coffee,\ you\ listen\ to\ me,\ you\ don't\ fall\ asleep\}$

$[\![[must/may \text{ [you go]}]\!]]^{c,w} = 1$ iff all/some of a set of possible worlds M verify the proposition you go.   prejacent

$M = ?$ - Depends on two contextual parameters:

- a modal base f establishes which worlds are to be considered in principle
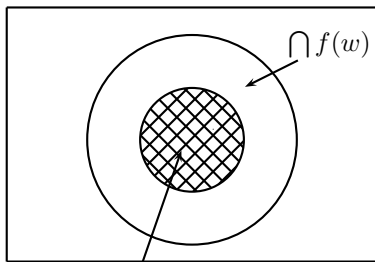- an ordering source g picks out the optimal ones among them

$f \ldots$ the circumstances
$f(w) = \{no\ coffee\ in\ here,\ you're\ very\ tired, \ldots\}$
$g \ldots$ my wishes
$g(w) = \{you\ have\ a\ coffee,\ you\ listen\ to\ me,\ you\ don't\ fall\ asleep\}$

$\bigcap f(w)$

optimal according to $g(w)$
$= O(f,g,w)$

The set of worlds in $\bigcap f(w)$ that are optimal according to $g(w)$:

(under Limit Assumption)

The set of worlds in $\bigcap f(w)$ that are optimal according to $g(w)$:

(under Limit Assumption)

(14) $z <_{g(w)} v$ iff
         $\{p : p \in g(w)\ \&\ v \in p\} \subset \{p : p \in g(w)\ \&\ z \in p\}$

The set of worlds in $\bigcap f(w)$ that are optimal according to $g(w)$:

(under Limit Assumption)

(14) $z <_{g(w)} v$ iff
        $\{p : p \in g(w) \ \& \ v \in p\} \subset \{p : p \in g(w) \ \& \ z \in p\}$

(15) $O(f, g, w) := \{v \in \bigcap f(w)| \ \neg \exists z \in \bigcap f(w): \ z <_{g(w)} v\}$

The set of worlds in $\bigcap f(w)$ that are optimal according to $g(w)$:

(under Limit Assumption)

(14) $z <_{g(w)} v$ iff
        $\{p : p \in g(w) \ \& \ v \in p\} \subset \{p : p \in g(w) \ \& \ z \in p\}$

(15) $O(f, g, w) := \{v \in \bigcap f(w)| \ \neg\exists z \in \bigcap f(w): \ z <_{g(w)} v\}$

contextual parameters: arguments of the modal, introduced by
silent pronouns   von Fintel & Iatridou 2004

The set of worlds in $\bigcap f(w)$ that are optimal according to $g(w)$:

(under Limit Assumption)

(14) $z <_{g(w)} v$ iff
        $\{p : p \in g(w)$ & $v \in p\} \subset \{p : p \in g(w)$ & $z \in p\}$

(15) $O(f, g, w) := \{v \in \bigcap f(w)| \neg \exists z \in \bigcap f(w): z <_{g(w)} v\}$

contextual parameters: arguments of the modal, introduced by
silent pronouns   von Fintel & Iatridou 2004

(16)   a. $[\![must]\!]^{c,w} = \lambda f \lambda g \lambda p_{st} \lambda w. \forall w' \in O(f, g, w) : p(w').$
        b. $[\![may]\!]^{c,w} = \lambda f \lambda g \lambda p_{st} \lambda w. \exists w' \in O(f, g, w) : p(w').$

The set of worlds in $\bigcap f(w)$ that are optimal according to $g(w)$:
                                        (under Limit Assumption)

(14) $z <_{g(w)} v$ iff
        $\{p : p \in g(w) \ \& \ v \in p\} \subset \{p : p \in g(w) \ \& \ z \in p\}$

(15) $O(f, g, w) := \{v \in \bigcap f(w) | \ \neg\exists z \in \bigcap f(w): \ z <_{g(w)} v\}$

contextual parameters: arguments of the modal, introduced by
silent pronouns   von Fintel & Iatridou 2004

(16)   a. $[\![must]\!]^{c,w} = \lambda f \lambda g \lambda p_{st} \lambda w. \forall w' \in O(f, g, w) : p(w').$
        b. $[\![may]\!]^{c,w} = \lambda f \lambda g \lambda p_{st} \lambda w. \exists w' \in O(f, g, w) : p(w').$

(17) $[\![you \ may \ go \ home]\!]^{c,w} = \lambda w. \exists w' \in O(f, g, w) : p(w').$

The set of worlds in $\bigcap f(w)$ that are optimal according to $g(w)$:

(under Limit Assumption)

(14) $z <_{g(w)} v$ iff
$\{p : p \in g(w)\ \&\ v \in p\} \subset \{p : p \in g(w)\ \&\ z \in p\}$

(15) $O(f, g, w) := \{v \in \bigcap f(w)| \neg\exists z \in \bigcap f(w): z <_{g(w)} v\}$

contextual parameters: arguments of the modal, introduced by
silent pronouns   von Fintel & Iatridou 2004

(16)   a. $\llbracket must \rrbracket^{c,w} = \lambda f \lambda g \lambda p_{st} \lambda w.\forall w' \in O(f, g, w) : p(w').$
        b. $\llbracket may \rrbracket^{c,w} = \lambda f \lambda g \lambda p_{st} \lambda w.\exists w' \in O(f, g, w) : p(w').$

(17) $\llbracket you\ may\ go\ home \rrbracket^{c,w} = \lambda w.\exists w' \in O(f, g, w) : p(w').$

Modalized propositions can inform about what w is like with
respect to $f(w)$, or about $g(w)$, or about both.

(18)   *The colonel ordered the private to wash the dishes.*
        $\Rightarrow$ *The private has to wash the dishes.*

according to an ordering $g =$ *the colonel's orders*

(18)   *The colonel ordered the private to wash the dishes.*
        ⇒ *The private has to wash the dishes.*

according to an ordering g = *the colonel's orders*

for all w, t, x, g = *the colonel's orders*:
$p \in g(w, t) \Leftrightarrow \exists e[\tau(e) \leq t \wedge (\text{felicitous(order)})(\text{colonel}, x, p, e)(w)]$

(18)   *The colonel ordered the private to wash the dishes.*
⇒ *The private has to wash the dishes.*

according to an ordering $g =$ *the colonel's orders*

for all w, t, x, $g =$ *the colonel's orders*:
$p \in g(w, t) \Leftrightarrow \exists e[\tau(e) \leq t \wedge (\text{felicitous(order)})(\text{colonel}, x, p, e)(w)]$

$\text{ORDER}(a, b, p, e)(w) \Leftrightarrow \text{UTT}(a, e) \wedge \text{CAUSE}(e, \lambda w . \forall w'[w' \sim_{\tau(e)} w$
    $\rightarrow [p(w') \vee [\neg p(w') \wedge \text{sanctioned}(b)(w')] \vee \text{sth.different}(w')]])$

$\text{sth.different}(w') \Leftrightarrow \text{external disaster}(w') \vee x \text{ affected in } w' \vee$
    $\neg \text{authority-over}(a, b)(w') \vee \ldots$

(18)   *The colonel ordered the private to wash the dishes.*
         $\Rightarrow$ *The private has to wash the dishes.*

according to an ordering g = the colonel's orders

for all w, t, x, $g = $ *the colonel's orders*:
$p \in g(w, t) \Leftrightarrow \exists e[\tau(e) \leq t \wedge$ (felicitous(order))(colonel,x, p, e)(w)]

ORDER(a, b, p, e)(w) $\Leftrightarrow$ UTT(a, e) $\wedge$ CAUSE($e, \lambda w.\forall w'[w' \sim_{\tau(e)} w$
    $\rightarrow [p(w') \vee [\neg p(w') \wedge$ sanctioned(b)(w')]$\vee$ sth.different(w')]])

sth.different(w') $\Leftrightarrow$ external disaster(w') $\vee$ x affected in w' $\vee$
    $\neg$authority-over(a, b)(w') $\vee \ldots$

(19)   *The private ordered the colonel to wash the dishes.*
         $\not\Rightarrow$ *The colonel has to wash the dishes.*

according to an ordering g = the private's orders

(18)   *The colonel ordered the private to wash the dishes.*
        $\Rightarrow$ *The private has to wash the dishes.*

according to an ordering $g =$ *the colonel's orders*

for all w, t, x, $g =$ *the colonel's orders*:
$p \in g(w, t) \Leftrightarrow \exists e[\tau(e) \leq t \wedge$ (felicitous(order))(colonel,$x, p, e)(w)]$

$\text{ORDER}(a, b, p, e)(w) \Leftrightarrow \text{UTT}(a, e) \wedge \text{CAUSE}(e, \lambda w.\forall w'[w' \sim_{\tau(e)} w$
$\rightarrow [p(w') \vee [\neg p(w') \wedge \text{sanctioned}(b)(w')] \vee \text{sth.different}(w')]])$

sth.different$(w') \Leftrightarrow$ external disaster$(w') \vee x$ affected in $w' \vee$
$\neg$authority-over$(a, b)(w') \vee \ldots$

(19)   *The private ordered the colonel to wash the dishes.*
        $\not\Rightarrow$ *The colonel has to wash the dishes.*

according to an ordering $g =$ *the private's orders*

(felicitous(ORDER))$(a, b, p, e)(w) \Leftrightarrow \text{ORDER}(a, b, p, e)(w) \wedge$
authority-over$(a, b)(w)$

Imperatives...

Clause types (sentential moods, Sadock & Zwicky 1985):

(20) a. *You are nice to Auntie.*   declarative
      b. *Are you nice to Auntie?*   interrogative
      c. *Be nice to Auntie!*   imperative
      d. . . .   exclamatives,. . . (?)

Clause types (sentential moods, Sadock & Zwicky 1985):

(20) a. *You are nice to Auntie.*   declarative
      b. *Are you nice to Auntie?*   interrogative
      c. *Be nice to Auntie!*   imperative
      d. . . .   exclamatives,. . . (?)

For a particular language: main clauses grouped together w.r.t morphosyntactic properties, labelled according to what is their prototypical usage.

Clause types (sentential moods, Sadock & Zwicky 1985):

(20)   a.   *You are nice to Auntie.*   declarative
        b.   *Are you nice to Auntie?*   interrogative
        c.   *Be nice to Auntie!*   imperative
        d.   . . .   exclamatives,. . . (?)

For a particular language: main clauses grouped together w.r.t morphosyntactic properties, labelled according to what is their prototypical usage.

- declarative - ASSERTION
- interrogative - QUESTION
- imperative - ORDER

- *Close the door!* ORDER

- *Close the door!*   ORDER
- *Please call me!*   REQUEST

Spectrum of use

- *Close the door!* ORDER
- *Please call me!* REQUEST
- *Take a taxi.* ADVICE

- *Close the door!*   ORDER
- *Please call me!*   REQUEST
- *Take a taxi.*   ADVICE
- *Have fun at the party!*   WISH

- *Close the door!*   ORDER
- *Please call me!*   REQUEST
- *Take a taxi.*   ADVICE
- *Have fun at the party!*   WISH
- *Stay away from the projector.*   WARNING

Spectrum of use

- *Close the door!*   ORDER
- *Please call me!*   REQUEST
- *Take a taxi.*   ADVICE
- *Have fun at the party!*   WISH
- *Stay away from the projector.*   WARNING
- *Please be rich and intelligent!*   SILENT WISH

- *Close the door!*   ORDER
- *Please call me!*   REQUEST
- *Take a taxi.*   ADVICE
- *Have fun at the party!*   WISH
- *Stay away from the projector.*   WARNING
- *Please be rich and intelligent!*   SILENT WISH
- *Come earlier (if you like).*   PERMISSION

- *Close the door!*   ORDER
- *Please call me!*   REQUEST
- *Take a taxi.*   ADVICE
- *Have fun at the party!*   WISH
- *Stay away from the projector.*   WARNING
- *Please be rich and intelligent!*   SILENT WISH
- *Come earlier (if you like).*   PERMISSION
- *Nimm zum Beispiel ein Taxi.*   *non-exhaustive*-ADVICE
  take a cab for example

Spectrum of use

- *Close the door!*   ORDER
- *Please call me!*   REQUEST
- *Take a taxi.*   ADVICE
- *Have fun at the party!*   WISH
- *Stay away from the projector.*   WARNING
- *Please be rich and intelligent!*   SILENT WISH
- *Come earlier (if you like).*   PERMISSION
- *Nimm zum Beispiel ein Taxi.*   *non-exhaustive*-ADVICE
  take a cab for example
- *Ok, then don't come!*   CONCESSION

- *Close the door!* ORDER
- *Please call me!* REQUEST
- *Take a taxi.* ADVICE
- *Have fun at the party!* WISH
- *Stay away from the projector.* WARNING
- *Please be rich and intelligent!* SILENT WISH
- *Come earlier (if you like).* PERMISSION
- *Nimm zum Beispiel ein Taxi.* non-exhaustive-ADVICE
  take a cab for example
- *Ok, then don't come!* CONCESSION
- *Be one minute late and they won't let you in!* Cond.Ant.

- *Close the door!* — ORDER
- *Please call me!* — REQUEST
- *Take a taxi.* — ADVICE
- *Have fun at the party!* — WISH
- *Stay away from the projector.* — WARNING
- *Please be rich and intelligent!* — SILENT WISH
- *Come earlier (if you like).* — PERMISSION
- *Nimm zum Beispiel ein Taxi.* — *non-exhaustive*-ADVICE
  take a cab for example
- *Ok, then don't come!* — CONCESSION
- *Be one minute late and they won't let you in!* — Cond.Ant.
- *Come in time or you'll miss the first slot!* — ADVICE

- *Close the door!* — ORDER
- *Please call me!* — REQUEST
- *Take a taxi.* — ADVICE
- *Have fun at the party!* — WISH
- *Stay away from the projector.* — WARNING
- *Please be rich and intelligent!* — SILENT WISH
- *Come earlier (if you like).* — PERMISSION
- *Nimm zum Beispiel ein Taxi.* — *non-exhaustive-*ADVICE
  take a cab for example
- *Ok, then don't come!* — CONCESSION
- *Be one minute late and they won't let you in!* — Cond.Ant.
- *Come in time or you'll miss the first slot!* — ADVICE
- *Please don't have broken another vase!* — WISH

- *Close the door!*   ORDER
- *Please call me!*   REQUEST
- *Take a taxi.*   ADVICE
- *Have fun at the party!*   WISH
- *Stay away from the projector.*   WARNING
- *Please be rich and intelligent!*   SILENT WISH
- *Come earlier (if you like).*   PERMISSION
- *Nimm zum Beispiel ein Taxi.*   non-exhaustive-ADVICE
  take a cab for example
- *Ok, then don't come!*   CONCESSION
- *Be one minute late and they won't let you in!*   Cond.Ant.
- *Come in time or you'll miss the first slot!*   ADVICE
- *Please don't have broken another vase!*   WISH
- *Werd mal selbst von einem Haifisch gebissen!*   ?
  be bitten by a shark yourself (before you talk like this)

- *Close the door!*   ORDER
- *Please call me!*   REQUEST
- *Take a taxi.*   ADVICE
- *Have fun at the party!*   WISH
- *Stay away from the projector.*   WARNING
- *Please be rich and intelligent!*   SILENT WISH
- *Come earlier (if you like).*   PERMISSION
- *Nimm zum Beispiel ein Taxi.*   non-exhaustive-ADVICE
  take a cab for example
- *Ok, then don't come!*   CONCESSION
- *Be one minute late and they won't let you in!*   Cond.Ant.
- *Come in time or you'll miss the first slot!*   ADVICE
- *Please don't have broken another vase!*   WISH
- *Werd mal selbst von einem Haifisch gebissen!*   ?
  be bitten by a shark yourself (before you talk like this)

Surprising:

- *Close the door!*   ORDER
- *Please call me!*   REQUEST
- *Take a taxi.*   ADVICE
- *Have fun at the party!*   WISH
- *Stay away from the projector.*   WARNING
- *Please be rich and intelligent!*   SILENT WISH
- *Come earlier (if you like).*   PERMISSION
- *Nimm zum Beispiel ein Taxi.*   non-exhaustive-ADVICE
  take a cab for example
- *Ok, then don't come!*   CONCESSION
- *Be one minute late and they won't let you in!*   Cond.Ant.
- *Come in time or you'll miss the first slot!*   ADVICE
- *Please don't have broken another vase!*   WISH
- *Werd mal selbst von einem Haifisch gebissen!*   ?
  be bitten by a shark yourself (before you talk like this)

Surprising: Not all are deontic.

Spectrum of use

- *Close the door!*   ORDER
- *Please call me!*   REQUEST
- *Take a taxi.*   ADVICE
- *Have fun at the party!*   WISH
- *Stay away from the projector.*   WARNING
- *Please be rich and intelligent!*   SILENT WISH
- *Come earlier (if you like).*   PERMISSION
- *Nimm zum Beispiel ein Taxi.*   non-exhaustive-ADVICE
  take a cab for example
- *Ok, then don't come!*   CONCESSION
- *Be one minute late and they won't let you in!*   Cond.Ant.
- *Come in time or you'll miss the first slot!*   ADVICE
- *Please don't have broken another vase!*   WISH
- *Werd mal selbst von einem Haifisch gebissen!*   ?
  be bitten by a shark yourself (before you talk like this)

Surprising: Not all are directive. (Searle 1969)

Spectrum of use
Donhauser 1986, Davies 1986

- *Close the door!* — ORDER
- *Please call me!* — REQUEST
- *Take a taxi.* — ADVICE
- *Have fun at the party!* — WISH
- *Stay away from the projector.* — WARNING
- *Please be rich and intelligent!* — SILENT WISH
- *Come earlier (if you like).* — PERMISSION
- *Nimm zum Beispiel ein Taxi.* — non-exhaustive-ADVICE
  take a cab for example
- *Ok, then don't come!* — CONCESSION
- *Be one minute late and they won't let you in!* — Cond.Ant.
- *Come in time or you'll miss the first slot!* — ADVICE
- *Please don't have broken another vase!* — WISH
- *Werd mal selbst von einem Haifisch gebissen!* — ?
  be bitten by a shark yourself (before you talk like this)

Surprising: Occurrence at sub speech act level.

Regine Eckardt & Magdalena Schwager University of Göttingen   How to do things with words 4: Performative verbs and impera

Meaning: the link between grammatical form and use

- not all are deontic (ADVICE, WISH, Conditional, . . .)
- not all are directive (Searle 1969: installing an (ever so weak) obligation)
- constrain permissible possibilities (ORDER) - open up possibilities (PERMISSION) (Lewis 1979)
- at subspeech act level: Conditional *and*

$\Rightarrow$ No particular speech act. No uniform effect on the discourse setting.

Conclusion: no separate speech act related layer.

Desideratum

Assign an underspecified semantic denotation that - under the respective contextual settings - amounts to the effects observed.

The quest for an underspecified semantics

Imperatives behave a lot like (performative) necessity modals:
abstracting away from PERMISSIONS, *for example*-ADVICE

(21) a. *You must do the shopping!*   ORDER/REQUEST
      b. *Do the shopping!*

(22) a. *You should take the train.*   ADVICE
      b. *Take the train.*

The quest for an underspecified semantics

Imperatives behave a lot like (performative) necessity modals:

abstracting away from PERMISSIONS, *for example*-ADVICE

(21) a. *You must do the shopping!*   ORDER/REQUEST
     b. *Do the shopping!*

(22) a. *You should take the train.*   ADVICE
     b. *Take the train.*

Assumption 2:

Imperatives denote whatever semantic object is denoted by a corresponding sentence with a performative modal verb.

The quest for an underspecified semantics

Imperatives behave a lot like (performative) necessity modals:
abstracting away from PERMISSIONS, *for example*-ADVICE

(21) a. *You must do the shopping!*   ORDER/REQUEST
      b. *Do the shopping!*

(22) a. *You should take the train.*   ADVICE
      b. *Take the train.*

Assumption 2:

Imperatives denote whatever semantic object is denoted by a corresponding sentence with a performative modal verb.

+ Assumption 1 (modals, semantically: performative=descriptive):

You should-reduction   Hamblin 1987: Kant

w.r.t. propositional content: $[\![You\ should\ go.]\!] = [\![Go!]\!]$

For similarity imp.-modals also Han 1999, Aloni 2005, Portner 2007.

- get the analysis to work:

- get the analysis to work:
  - in contrast to modalized declaratives, imperatives cannot be used as mere descriptions of modals state of affairs (always 'performative')

Challenges

- get the analysis to work:
  - in contrast to modalized declaratives, imperatives cannot be used as mere descriptions of modals state of affairs (always 'performative')
  - make sure they can only be used felicitously if a corresponding modal would behave non-descriptively ⇒ add a presuppositional meaning component

Challenges

- get the analysis to work:
    - in contrast to modalized declaratives, imperatives cannot be used as mere descriptions of modals state of affairs (always 'performative')
    - make sure they can only be used felicitously if a corresponding modal would behave non-descriptively ⇒ add a presuppositional meaning component
- evaluate the analysis:

Challenges

- get the analysis to work:
    - in contrast to modalized declaratives, imperatives cannot be used as mere descriptions of modals state of affairs (always 'performative')
    - make sure they can only be used felicitously if a corresponding modal would behave non-descriptively ⇒ add a presuppositional meaning component
- evaluate the analysis: compare the split representationalist approach in Portner (2007): imperatives are a dynamic device that
    - installs obligations for the addressee (of different strength)
    - renders true subsequent descriptive modals of the same flavor

self-verifying/inaccessibilty of truth-value:

(23)   A: *You must go now!/Go!* - B: #*That's not true!*

Performative modality (1)

self-verifying/inaccessibilty of truth-value:

(23)   A: *You must go now!/Go!* - B: #*That's not true!*

subjectivity (deontic Moore's paradox):

(24)   #*You should go to Paris/Go to Paris*
          ... *but in fact, I think it's not advisable.*   Frank 1995

Performative modality (1)

self-verifying/inaccessibilty of truth-value:

(23)   A: *You must go now!/Go!* - B: #*That's not true!*

subjectivity (deontic Moore's paradox):

(24)   #*You should go to Paris/Go to Paris*
          ... but in fact, I think it's not advisable.   Frank 1995

not considered epistemically necessary/impossible:

(25)   #*You must go to confession, but you're not going to.*
                                                          Ninan 2005

Modalized declaratives evoke a non-assertoric effect (COMMAND, PERMISSION, ADVICE,. . .) if. . .

Modalized declaratives evoke a non-assertoric effect (COMMAND, PERMISSION, ADVICE,. . .) if. . .

1. prioritizing ordering source (Portner 2007)

Modalized declaratives evoke a non-assertoric effect (COMMAND, PERMISSION, ADVICE,...) if...

1. prioritizing ordering source (Portner 2007)
2. the speaker counts as an epistemic authority on the issue in question

Modalized declaratives evoke a non-assertoric effect (COMMAND, PERMISSION, ADVICE,...) if...

1. prioritizing ordering source (Portner 2007)
2. the speaker counts as an epistemic authority on the issue in question
3. the speaker is not known to consider the prejacent necessary/impossible

Performative modality (2)

Modalized declaratives evoke a non-assertoric effect (COMMAND, PERMISSION, ADVICE,. . .) if. . .

1. prioritizing ordering source (Portner 2007)
2. the speaker counts as an epistemic authority on the issue in question
3. the speaker is not known to consider the prejacent necessary/impossible
4. the speaker is known to 'agree' with the ordering source

Imperatives. . .

. . . contain a propositional modal operator OP_{Imp}, subject may be replaced by a silent pronoun (Wratil 2005; interpretation: $\approx$ *you*):

(26)   LF for *Go!*:   [OP_{Imp} [*you go home*]]

Imperatives. . .

. . . contain a propositional modal operator OP_{Imp}, subject may be replaced by a silent pronoun (Wratil 2005; interpretation: $\approx$ you):

(26) LF for *Go!*: $[OP_{Imp} [\text{you go home}]]$

. . . express what is best given what we consider possible courses of events cg_F (and possibly further information f)

(cg_F maps each world w to CG in c, the propostions that constitute mutual joint belief in context c, $\bigcap cg_F$ = the context set CS)

(27) $[\![OP_{Imp}]\!]^{c,w} = \lambda f \lambda g \lambda p \lambda w. \forall w' \in O(cg_F \cup f, g, w) : p(w').$
$\cup$ pointwise

Imperatives. . .

. . . contain a propositional modal operator OP_{Imp}, subject may be replaced by a silent pronoun (Wratil 2005; interpretation: $\approx$ you):

(26)   LF for *Go!*:   [OP_{Imp} [*you go home*]]

. . . express what is best given what we consider possible courses of events cg_F (and possibly further information f)

(cg_F maps each world w to CG in c, the propositions that constitute mutual joint belief in context c, $\bigcap cg_F$ = the context set CS)

(27) $[\![OP_{Imp}]\!]^{c,w} = \lambda f \lambda g \lambda p \lambda w. \forall w' \in O(cg_F \cup f, g, w) : p(w').$
$\cup$ pointwise

PERMISSION-imperatives: pragmatics - update effect of necessity statement under particular contextual constellations;

Imperatives. . .

. . . contain a propositional modal operator OP_{Imp}, subject may be replaced by a silent pronoun (Wratil 2005; interpretation: $\approx$ *you*):

(26) LF for *Go!*: $[\ OP_{Imp}\ [\ you\ go\ home\ ]]$

. . . express what is best given what we consider possible courses of events cg_F (and possibly further information f)

(cg_F maps each world w to CG in c, the propositions that constitute mutual joint belief in context c, $\bigcap cg_F$ = the context set CS)

(27) $[\![OP_{Imp}]\!]^{c,w} = \lambda f \lambda g \lambda p \lambda w. \forall w' \in O(cg_F \cup f, g, w) : p(w').$
$\cup$ pointwise

PERMISSION-imperatives: pragmatics - update effect of necessity statement under particular contextual constellations;
for example-ADVICE: cf. below