

*Philosophy of Language: Natural Language Ontology*

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**Handout 5**

## Parameters of Evaluation

### 1. Summary of last time and some additions

Events as implicit arguments of verbs and modes (tropes) as implicit arguments of adjectives are equally motivated by the semantics of modifiers.

#### Davidsonian and Neo-Davidsonian views of verb semantics

Adverbials as predicates of events

(1) John walked slowly.

Davidsonian:  $\exists e(\text{walk}(e, \text{John}) \ \& \ \text{slowly}(e))$

Neo-Davidsonian:  $\exists e(\text{walk}(e) \ \& \ \text{agent}(e, \text{John}) \ \& \ \text{slowly}(e))$

#### Adjectives

(2) Mary is profoundly happy

Davidsonian style:  $\exists t(\text{happy}(t, \text{Mary}) \ \& \ \text{profoundly}(t))$

Neo-Davidsonian style:  $\exists t(\text{happy}(t) \ \& \ \text{pred}(t, \text{Mary}) \ \& \ \text{profoundly}(t))$

#### Adjectives as predicates of events:

(3) a. John's walk was unusually slow.

b.  $\exists t(\text{slow}(t, [\textit{John's walk}]) \ \& \ \text{unusually}(t))$

Adjectives will denote relations between modes (tropes) and events

#### Problems for the Davidsonian view

Non-permutable stacking of adverbials

Not a problem, given that adverbials and adjectives should always have two arguments:

one for a mode one for the bearer of the mode

(4) a. Mary danced slowly elegantly.

b. Mary danced elegantly slowly.

c.  $\exists m \exists m' \exists e (\text{elegantly}(m', m) \ \& \ \text{slowly}(m, e) \ \& \ \text{dance}(e, \text{Mary}))$

Serious difficulties for the Davidsonian view:

Nominal quantifiers:

(5) John quickly corrected all the mistakes.

Adverbial quantifiers:

(6) Mary sometimes works out rarely.

Negation:

(7) John intentionally said nothing.

Alternative to the Davidsonian view: events as truthmakers.

Two options:

- Take events and tropes to always come into play via truthmaking
- Take both to be lexical arguments; more complex events of states introduced via truthmaking of logically complex parts of sentences containing negation or quantifiers

Other implicit arguments

[1] Location arguments

The verb *rain*:

(8) It is raining

Controversy: location as implicit argument or added to the conveyed content via pragmatic context (Recanati).

[2] Degrees as implicit arguments of adjectives

Controversy: Should adjectives take degrees as implicit arguments or something more concrete, namely modes (tropes) or states

(9) a. Joe is two meters tall.

b. Mary is profoundly happy / \* two degrees happy.

[3] Contextually given standards

(10) Joe is rich. (for a student, for a musician, ...)

[4] Judge or taste parameter

(11) White chocolate is tasty.

[5] Non-individuals as implicit arguments:

Quantifier restrictions as implicit arguments of quantifiers :

(12) Everyone D has left

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## 2. Parameters of evaluation

### 2.1. The semantics of tense

#### Standard semantics of tense

Sentences are evaluated with respect to a domain of times  $(T, <)$ , consisting of moments or time intervals, ordered by a relation of precedence.

- (1) a.  $[John\ was\ sick]^t = \text{true}$  iff for some  $t' \in T$ ,  $t' < t$ ,  $[John\ sick]^{t'} = \text{true}$   
 b.  $[John\ will\ be\ sick]^t = \text{true}$  iff for some time  $t' \in T$ ,  $t < t'$ ,  $[John\ will\ be\ sick]^{t'} = \text{true}$ .  
 c.  $[When\ John\ is\ sick,\ he\ stays\ home]^t = \text{true}$  iff for every time  $t'$  such that  $[John\ is\ sick]^{t'} = \text{true}$ , then  $[he\ stays\ home]^{t'} = \text{true}$ .

#### Critique of the standard view

[1] Involvement of events

Times as (primarily) relations among events

(2) For an utterance  $u$ ,

$$[John\ was\ sick]^u = \text{true} \text{ iff } \exists e (<(e, u) \ \& \ was\ sick(e, John))$$

When clauses restricted to eventive predicates:

- (3) a. When John speaks French, he is admired.  
 b. \* When John knows French, he is admired  
 c. For all  $e$  such that  $speak(e, John, French)$ :  
 $\exists e' (\text{admired}(e', John) \ \& \ e' \text{ temporally overlaps with } e)$ .

[2] Reference to times is more parallel to reference to individuals

Tenses can be referential:

(4) a. I did not turn off the stove.

b. For a particular time  $t$  in the past, I did not turn off the stove at  $t$ .

Tenses can act as bound variables:

(5) a. Whenever I leave, I turn off the stove.

b. For every  $t$ , if I leave at  $t$ , I turn off the stove at  $t$ .

Differences between reference to individuals and reference to times

Reference to times always implicit?

Explicit reference to times: *at that time, during that time, at the time*

The noun *time* has another use, denoting something more concrete: ‘occasions’

Quantification over events, or individual – event pairs:

(6) Every time a student takes the exam, he struggles with the last question.

Compare French *fois* vs *temps*, German *Mal* – *Zeit*

Then

(7) a. John came in. Then Mary came in.

b. When John has left, then Mary can come in.

(8) When will you come? Tomorrow

Alternative to standard tense logic:

Semantics of tense based on relations among events (including utterances)

Reference to times only with the noun *time* and specific time names or indexicals (*Monday, tomorrow, now, 2022, etc*)

Involvement of the silent light noun *TIME* in time names (Kayne):

when (when-TIME), then (then-TIME)

## 2.2. The semantics of modals

Standard semantics of modals

- (9) a.  $[John\ must\ be\ at\ home]^w = \text{true}$  iff for all  $w'$ ,  $w' R w$ ,  $[John\ be\ at\ home]^{w'} = \text{true}$ .  
 b.  $[John\ may\ be\ at\ home]^w = \text{true}$  iff for some  $w'$ ,  $w' R w$ ,  $[John\ be\ at\ home]^{w'} = \text{true}$ .

### Referential uses of modals

- (10) a. I would accept the invitation.  
 b. The light would be on. (As reply to the question 'Is John at home')

### Bound variable uses of modals

- (11) If John was at home, the light would be on.

### Then

Referential world-referring use:

- (12) a. A: I may not go. B: Then I will not go either.

Bound variable use:

- (13) b. If it rains, then we will not go.

Explicit reference to worlds?

*Possible world*: part of the periphery, not the core of language

### Reference to situations:

*Circumstance, situation*

- (14) a. In a circumstance / situation in which...  
 b. In those circumstances / that situation

### Case

Case-referring and case-quantifying NP:

- (15) a. the three cases in which a student failed the exam  
 b. every case in which a student failed the exam

Conditionals:

- (16) In a case in which a student fails the exam, we have to do a review of the teaching.

Anaphora – but not parallel to *would*:

- (17) a. John might not come. *In that case*, I won't come either  
 b. John will come to the party or Mary will. *In either case*, I won't go.

### Further issues

Is there evidence for modals acting as quantifiers over worlds?

Is the domain of worlds parallel to that of individuals?

Is there a domain of situations more parallel to the domain of individuals?

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