Tropes, Events, and States in the Semantics of Natural Language
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Handout 5

Tropes and Truth-Making

1. Different kinds of sentences and their truth makers

Truth makers of simple sentences
(1) a. John is happy.
   b. John walks.
Truth makers:
- the situation in which John is happy / walks (and nothing not sufficiently involved in that is the case)
- the fact that John is happy / walks
- the state of John’s being happy / walking.
- John’s happiness (trope), John’s walk (event)

How to decide
- intuitive notion of situation, state
- truth making for the semantics of adverbials
- truth making for the semantics of nominalizations
- truth making conditions on more more complex sentences

(1) c. John exists.
   d. John is a man.
Truth maker: John

Quantification:
(2) a. Someone is happy.
Truth maker same as for certain atomic sentence
(1) b. Finally everyone is happy.
Truth maker for corresponding conjunction plus ‘allness condition’ or ‘domain condition’
fusion of two situations, event, trope with a ‘gloss’, fusion with higher-level trope …

2. Application to adverbials

2.1. The constructional meaning of adverbial modification

(3) a. John walks slowly.
   b. $\exists s (s|=\text{John walks} \& \text{slowly}(s))$
adverbials are predicates of events or ‘situations’, verbs are not

Nominalizations:
Davidsonian account:
(4) a. $[\text{John's slow walk}] = \text{sum e[walk(e, John) \& slow(e)]}$
truth maker account:
(4) b. $\text{sum } s[s|=\text{John walks} \& \text{slow}(s)]$

Stacked adverbials
(5) a. John carefully opened the book with both hands.
The problem for the Davidsonian account
Adverbials will generally need to have two argument positions for events.
(5) a’. $\exists e \exists e'(\text{careful}(e) \& \text{with both hands}(e, e') \& \text{open}(e', \text{John, the book}))$

The truth maker account:
(5) a’’. $\exists s (\text{careful}(s) \& s|=\text{John opened the book with both hands})$
s $|=\text{John opened the book with both hands} \iff$
$\exists s' (s|=\text{John opened the book with both hands} \iff$

Adverbs modifying quantified VPs
(5) b. John quickly ate all the chips.
The problem for the Davidsonian account: all will need an additional event argument position

(5) b’. ∃e (quickly(e) & ALL(e) x ∃e’(e’ < e & eat(e, John, x))

Truth maker account:

(5) b’’. ∃s(quickly(s) & s |= John ate all the chips)

Stacked frequency adverbials

(6) John sometimes trains frequently:

Sometimes s s |= John trains frequently.

s |= John trains frequently iff frequently s’ < s s’ |= John trains.

2.2. Some issues

Negative truth makers

(7) a. John carefully did not object.

Truth makers of negative sentence: falsifiers of sentence without negation (Fine)

Nominalizations

(7) b. John’s failure to act
       c. John’s lack of attention
       d. John’s hesitation to agree

Different kinds of truth makers for the same sentence

(8) a. The landscape is extremely beautiful.

truth maker 1: the extreme beauty of the landscape

truth maker 2: the extremeness of the beauty of the landscape

(8) b. The sweater is red.

truth maker 1: the redness of the sweater

truth maker 2: the redness of the wool of the sweater

Or: only the sweater being red

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3. Truth-making with stative verbs

Two kinds of stative verbs
Concrete state verbs (fully specific states): *sit, stand, sleep*
Abstract state verbs: *believe, know, own, exist, be + adjective*

The stative adverb gap:
Only concrete state verbs, not abstract state verbs allow for location modifiers, manner modifiers, can act as complements of perception verbs (Maienborn)

Both kinds of verbs allow for nominalizations:
(11) a. John’s sleep / sleeping
    b. John knowledge of French / knowing of French
    c. John’s belief that p / believing that p

The problem for truthmaking
Abstract states are not fully specific, are just the holding of a property (non-natural) of an object, thus are abstract and not part of the world.

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4. The problem of lexical meaning and particular truth-making conditions

Gradable adjectives:
*tall, heavy, ...*
contextual standard, measure phrase:
(11) a. John is two meters tall.
truth maker: John’s height, measuring two meters
    b. John is tall.
truth maker: John height, John’s height exceeding the standard
- fusion of two truth makers?

Comparatives:
(12) John is taller than Mary.
Truth maker of comparative sentences based on truth makers of attributions of positive adjectives:
John’s height, Mary’s height, John’s height exceeding Mary’s – in tallness

Positive and negative adjectives

(13) a. John is tall.
    b. John is small.

Partial and total adjectives:

clean – dirty
closed – open
straight – bent

partial adjectives: involve existential quantification over instances of a particular condition
total adjectives: universal quantification: complete absence of instances of the condition

(14) a. d is dirty.

Truth making condition:
For some part d’ of d, there is an instance t of C with d’ as bearer?
T is the truth maker of (14a)

Nominalization the dirtiness of the glass
Cannot refer to the truth-making trope

(14) b. d is clean.
‘Clean’ = ‘not dirty’
Truth maker = falsemaker of d is dirty

Comparatives:

(15) John is stronger than Bill.
Truth maker: the physical condition of John, the physical condition of Bill instantiating the comparative concept