

Workshop *The Ontology of the Mind and Its Linguistic Reflection: The Content-Force Distinction*

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Direction of fit and the Role of Emotions

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1. What are content bearers and what are bearers of direction fit?

Directions of fit (Searle 1969, 1980)

Word/mind-to-word direction of fit: representation needs to fit the world

World-to-word/mind direction of fit: world needs to fit the representation

Standard view about content:

- Distinction between content and force
- Propositions as abstract sharable content bearers
- Propositional attitudes as relations to propositions
- Attitudes, speech acts, mental states, events or acts as bearers of direction of fit

The present approach:

- No content-force distinction, no force-free content bearers
 - Content bearers and bearers of direction of fit are attitudinal and modal objects
- Attitudinal objects:* beliefs, claims, assumptions, desires, claims, requests, decisions
- Modal objects:* obligations, needs, offers, invitations
- In addition, *facts* and *states of affairs* may act as *the objects* (but not contents) of *attitudes*

Clausal complements as (*semantic*) *predicates* predicated of modal and attitudinal objects or of facts and states of affairs

2. The semantic role and ontology of modal and attitudinal objects

Standard view about propositional attitudes

Propositional attitudes (beliefs, hopes, desires) are relations between agents and *propositions* - abstract, shareable truth bearers that are also meanings of sentences

The new view

Attitudinal objects take on the role of propositions, but in somewhat different ways.

Modal objects are at the center of the semantics of modals

What are attitudinal and modal objects?

- Intuitively, things we refer to as claims, requests, thoughts, assumptions, beliefs, judgments, desires, intentions, decisions, hopes, impressions, guesses, obligations, needs, permissions, possibilities, abilities, options, etc. – nouns corresponding to attitude verbs or modal predicates
- Their properties are reflected in the predicates applicable to those entities, such as predicates of truth and satisfaction and expressions of parthood.

Distinctions among attitudinal objects

[1] Act-related attitudinal objects

- Cognitive and illocutionary *products*: assumptions, decisions, claims, requests, promises
- *Results*: conclusions, recognitions, persuasions

[2] State-related attitudinal objects

- Beliefs, desires, hopes, fears, intentions

What semantic role do attitudinal objects play in attitude reports?

The present approach:

Focus on *complex attitude predicates*: light verb – noun combinations

(1) a. John claims that S.

b. John makes the claim that S.

c. $\exists d(\text{make}(\text{John}, d) \ \& \ \text{claim}(d) \ \& \ [\textit{that S}](d))$

b. John make-claim [_{DP} ~~claim~~ [_{CP} that [_{FP} ~~claim~~ (+assert) [_{F+}assert] [he is French]]]]

(Arsenijevic 2009)

(2) a. John needs to leave.

b. John have-need [to leave] (Harves and Kayne 2015)

c. $\exists d(\text{need}(d) \ \& \ [\text{John to leave}](d))$

One motivation for treating clausal complements as *semantic predicates* of attitudinal and modal objects

Accounting for *the substitution problem* and *the objectivization effect* (Moltmann 2003, 2017)

(3) a. * John thought the proposition that S.

b. ?? John fears the proposition that S.

Importance of attitudinal objects

[1] Crosslinguistic generalizations

Nouns that correspond to attitudinal predicates (incl. nominalizations) generally stand for attitudinal objects, not propositions or events.

[2] Cognitive role of attitudinal objects

Attitudinal objects, not propositions, play roles in our mental life.

We remember thoughts, desires, experiences, not propositions.

Desires, intentions, decisions play a causal role, not propositions.

3. Notion of situation/action-based content for attitudinal and modal objects and for sentences

Sentence-based truthmaker semantics (Fine 2017)

Truthmakers or satisfiers of sentences: situations or actions

A sentence is associated with a set of truthmakers or satisfiers ($\text{pos}(S)$) and a set of falsifiers or violators ($\text{neg}(S)$)

Object-based truthmaker semantics

Truthmaking or satisfaction (also) as a relation between situations (or actions) and attitudinal or modal objects

An attitudinal and modal object is associated with a set of truthmakers / satisfiers ($\text{pos}(d)$) and a set of falsifiers / violators ($\text{neg}(d)$)

Explanation why different *types of truth/satisfaction predicates* are applicable to different types of modal and attitudinal objects (Moltmann 2021)

[1] Modal and attitudinal objects that have *truth conditions* or can be said to be 'true', 'correct', or 'false'

- have a word/mind-to-world direction of fit (Searle 1969, 1983)
- come with a set of verifiers (pos(d)) and a falsifiers (neg(d))

[2] Attitudinal and modal objects that have *fulfilment conditions* rather than truth conditions i.e. that can be said to be ‘satisfied’, ‘fulfilled’, ‘ignored’, or ‘violated’ (requests, demands, desires, hopes, needs, obligation)

- have a world-word/mind direction of fit
- come with a set of satisfiers and a nonempty set of violators
- come with a modal force of necessity.

[3] Modal and attitudinal objects that come with the *modal force of possibility* (permissions, proposals, invitations, offers, possibilities, options)

- are associated with a set of truthmakers / satisfiers, but only an empty set of falsifiers or violators.
- take different satisfaction predicates: an offer may be ‘taken up’ and an invitation ‘accepted’, but neither can be ‘violated’, ...

4. Factivity

- (4) a. That Mary left was unexpected.
 b. The fact that Mary left was unexpected
 c. That the students left was partly unexpected.
 d . ??? John partly thinks that Mary left.

(5) the unexpectedness (of the fact) that Mary
 Quality of a fact, not an attitudinal object

Factive complements as nominal complements? (Kastner 2015)

‘The fact that S’: the modal object whose satisfiers are the actual situations that are truthmakers of S and that does not have violators

(6) [*the fact that S*] = id [pos(d) = pos(S) \cap {s | s < w₀} & neg(d) = \emptyset]

States of affairs

- (7) a. That S is likely.
 b. the likelihood (of the situation in which) (that) S

The state of affairs in which S (the situation in which S):
 a modal object whose satisfiers are just the situations that make S true.

5. Emotions and attitudinal objects

Emotions as attitudinal objects?

‘Pure emotive verbs’:

generally factive: substitution test, reading of *partly*

- (8) a. John regrets that Mary left.
 b. John regrets *the fact* that Mary left.
 c. John *partly* regrets that Mary left.

Nominalizations of factive emotive predicates do not lead to ‘new’ attitudinal objects:

- (9) a. John’s regret that Mary left was true / fulfilled..
 b. John’s anger that he was robbed was justified / warranted / ?? true / fulfilled.

Potential generalization

‘Pure emotive attitudes’ do not have a content, but are directed toward a content-like object, a fact (or perhaps state of affairs)

Question: Why are pure emotives generally factives?

‘Impure emotives’:

Cognitive attitudes with emotional component: hopes, fears

No substitution possible for hope:

- (10) a. John hopes (* the possibility / proposition) that he will win.
 b. John fears the possibility that he might lose.

Hopes and fears have fulfillment conditions:

- (11) a. John hope was fulfilled / frustrated.
 b. (?) John’s fear became true.

Desires:

No substitution

- (12) John wants (*the proposition) that everyone is happy.

Come with fulfillment conditions:

- (13) John’s desire / wish was fulfilled.
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6. Accounting for the notion of direction of fit

The predicate *correct* is indicative of how the notion of direction of fit is to be understood (Moltmann to appear). Correct generally conveys a normative notion by imposing requirements either on the representational object or the world (actions)

[1] *Correct* applies to all attitudinal objects with a word/mind-to-world direction of fit, conveying truth and only truth Stalnaker (1984: 80, Humberstone 1992: 71, Moltmann 2020)

(14) a. John's belief that S is correct.

c. John's claim that S is correct.

b. Bill's guess / speculation / impression is correct.

d. Mary's answer / hypothesis / assumption is correct.

Correct when applied to a belief or assertion conveys just truth, whether or not the belief or assertion is justified or warranted and to answers, hypotheses, and assumptions whether or not they are 'good'.

[2] *Correct* does not apply with a single reading to attitudinal objects with a world-word/mind direction of fit (request, demand, ...), but may apply to the *satisfiers* of such attitudinal objects, conveying satisfaction:

(15) *Correct* holds of an object *o* just in case *o* fulfills the norm (or standard of correctness) that is associated with *o* or that is relevant in the context.

Truth not as an action-guiding norm, but as an intrinsic teleological norm, that is, a purpose or function, constitutive of a representational object (Jarvis 2012).

Other types of objects associated with other norms, e.g. grammaticality for sentences and laws or moral values for punishments.

(16) Word/mind-world direction of fit as a property of attitudinal objects

An attitudinal object *o* has a *word-world direction of fit* just in case *o* is associated with a constitutive norm *n* and satisfies *n* in a world *w* iff there is a situation *s*, $s < w$, that makes *o* true.

(17) World-to-word/mind direction of fit for illocutionary objects

An illocutionary object *o* has a *world-word direction of fit* just in case any action *a* performed in response to *o* satisfies the norm imposed by *o* in a world *w* iff *a* is part of *w*

and satisfies *o*.

What about emotive attitudes such as desires that S and hopes that S

(17) I hope / wish that I will win.

Hopes and desires imply a positive emotive response to their satisfaction (under normal circumstances),

Impose a requirement or ‘norm’ on the future course of the world, with the emotive response constituting a kind of purpose to be attained by a relevant part of the future course of the world. Can still be subject to fulfilment by an action:

(18) I can fulfill your desire that no one will be poor, by distributing my wealth.

7. Further linguistic importance of the notion of direction of fit

Lohninger / Wurmbrand (to appear)’s study of crosslinguistic types of complement clauses.
Their view of the semantics: proposition-taking vs situation-taking verbs (vs event-taking verbs, e.g. *manage, start, end*)

- (6) a. Proposition-taking admit, affirm, announce, assume, believe, claim, consider, discover, figure, find, forget (factive), imagine, know (factive), observe, say, suppose, tell
 b. Situation-taking: agree, ask, choose, decide, demand, desire, know (modal), need, plan, promise, refuse, want, wish

Alternative view: distinction between the directions of fit of the attitudes involved:

Proposition-taking verbs as verbs that describe attitudes with a word-to-world direction fit

Situation-embedding verbs as verbs that describe attitudes with a world-to-word direction of fit.

8. Conclusion

Importance of notion of direction of fit:

Reflection in different types of satisfaction predicates, in the readings of *correct*, and different types of complement clauses

Emotions play a particular role for the direction of fit in a way still to be further elucidated.

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