Transitive Intensional verbs and the Distinction between Actions and Products
Friederike Moltmann

1. Act-based conceptions of propositional content

A common approach:
Propositional attitudes as intentional predication relations (Jubien, Hanks, Soames, Moltmann)

Russell’s Multiple Relations Analysis:
An attitude verb does not express a relation between agents and propositions, but specifies multiple relations; in a given syntactic context (in the presence of a particular that-clause) an attitude verb specifies a particular (n+1)-place relation between an agent and n propositional constituents

The Neo-Russellian view of attitude reports (Jubien 2001, Moltmann 2003a, b, to appear)
Attitude verbs taking that-clause complements are multigrade predicate in their second place, an argument place with an unlimited number of positions (Oliver / Smiley 2004)
(1) a. John believes that Mary likes Bill
    b. believe(John; the property of liking, Mary, Bill)

The multigrade attitudinal relation
- allows dispensing with propositions in the analysis of simple attitude reports
- provides the link, ‘glue’ among propositional constituents
- is responsible for the truth-directedness of attitudinal content

Why proposition-like objects are still needed for:
- As truth bearers, as what can be shared by different agents, as what prosentential quantifiers (*something, everything* etc) range over …
- For an account of embedded clauses (coordination, subordination) within the neo-Russellian account …

**Propositions as act-types/ event types / fact types**

E.g. Soames (2010)

Sentences and propositions as event types / fact types

Sentences: types of utterances,

Propositions: types of events (facts) of an agent predicking a property of an object (or alike)

Instances of such event types: events of an agent in a particular context predicking a property of an object

**The problem for the event (fact)-based approach**

Events, facts, actions and are intuitively not true or false:

(2) a. ?? John’s claiming that S is true.

   b. ?? John’s act of claiming is true

(3) a. ?? John’s believing is true.

   b. ?? John’s belief state is true.

Moreover, actions and states cannot be fulfilled or satisfied:

(4) a. ?? John’s requesting was fulfilled / satisfied.

   b. ?? John’s desiring was fulfilled / satisfied.

But:

(5) a. John’s claim is true.

   b. John’s belief is true.

   c. John’s request was fulfilled.

   d. John’s desire was satisfied.

-------------------------------------------------------------------------------------------

2. Twardowski (1912): The distinction between *actions* and *products*
[1] Physical actions – physical products
walking – the walk, racing – the race, jumping – the jump, dancing - dance
*walk, race, jump, dance:
‘do not bring to force the aspect of action, but bring to force a different aspect, the
‘phenomenal’ or ‘static’ aspect’ (Twardovski (1912))
in speaking of the shout, we do in fact abstract from the activity of shouting, treating the
shout as an acoustical phenomenon’ (Twardovski (1912))

[2] Mental actions – mental products:
thinking – the thought, judging – judgment, intending – intention

[3] Psychophysical actions – psychophysical products
screaming – scream, speaking - speech, lying - lie

non-enduring products: exist only for as long as the activity that yields them:
walks, screams, thoughts, beliefs
enduring products: inscriptions, drawings, paintings, …

Distinctive properties of products as opposed to actions (and states)
[1] Only products have truth conditions, satisfaction conditions or representational properties,
or can be implemented
(6) a. John’s expectation was fulfilled.
    b. * John’s (state of) expecting was fulfilled. (Twardowski)
(7) a. John’s resolution was implemented.
    b. * John’s (action of) resolving was implemented. (Twardovski)

[2] Products enter ‘looser’ similarity relations
Distinct products may be (exactly) similar but the corresponding actions generally are not:
(8) a. ?? John did the same walking as Mary.
    b. John took the same walk as Mary.
(9) a. ? Sue’s thinking / Sue’s act of thinking was the same as Mary’s.
    b. Sue’s thought was the same as Mary’s.
(10) a. ? John’s screaming was the same as Mary’s.
b. John’s scream was the same as Mary’s.

[3] Products bear an accidental relation to the time of their occurrence; actions bear an essential relation

(11) a. John could have taken this walk earlier than he did.
    b. *? John could have done this walking earlier than he did.

(12) a. John’s thought might have occurred to him earlier than it did.
    b. *? John’s thinking might have occurred / taken place earlier than it did.

[4] Only products have ‘gestalt properties’ and are evaluated as a whole

(13) a. Mary’s dance was unusual / interesting.
    b. Mary’s dancing was unusual / interesting.

---

3. Attitudinal Objects

Examples of attitudinal objects
John’s thought that Mary likes Bill.
John suspicion / claim / denial / … that Mary likes Bill

Kinds of attitudinal objects:
the thought that Mary likes Bill
the claim that Mary likes Bill

Properties of attitudinal objects
[1] Mind- and / or linguistic-act-dependent, agent-dependent
(14) a. ?? John’s thought that S occurred to Mary.
    b. ?? John’s thought that S would exist even if John never thought that S.

[2] Attitude / speech act type-specific:
(15) a. ?? John’s thought that S is also his remark that S.
    b. ?? John’s claim that it will rain is his hope that it will rain.
[3] Have truth conditions or fulfillment conditions, or more generally *satisfaction conditions*

(16) a. John’s belief that S is true.
   b. John’s desire to become a king was fulfilled.

Truth (satisfaction) conditions also for counterfactual circumstances, in which the attitudinal object does not exist:

(16) c. John’s thought that S would be true even if John had never thought it.

Attitudinal objects involve truth *at* a world, not truth *in* a world (see Iacona 2003).


Perceptual properties:

(17) a. John heard Mary’s remark that S.

Causal properties:

(17) b. John’s claim that S caused astonishment.

Evaluative predicates:

evaluate also attitudinal / illocutionary mode, not just an abstract propositional content:

(18) a. John’s thought that S is unusual.
   b. That S is unusual.
   c. The proposition that S is unusual.

Specificity:

Attitudinal objects are generally more specific than the content of their description, as opposed to facts, states, which are entirely constituted by the content of their canonical description:

(19) a. John’s belief that it will rain is stronger than Mary’s belief that it won’t.
   b. ??John’s believing that it will rain is stronger than Mary’s believing that it won’t.
   c. ?? John’s belief state is stronger than Mary’s.

**The Fregean worry**

How can one account for the sharing of propositional content by different agents?

Two answers using intuitions about attitudinal objects:

[1] (Exact) similarity of attitudinal objects:

(20) a. John’s thought is the same as Mary’s. (the same as = is exactly similar to)

[2] Sharing of *kinds* of attitudinal objects
kinds of attitudinal objects:
John’s thought that S: an instance of the thought that S, a kind of attitudinal object
(20) b. John and Mary share the thought that S

-------------------------------------------------------------------------------

4. The Ontology of Attitudinal Objects

Differences between attitudinal objects and (mental or illocutionary) events
[1] Truth conditions/ satisfaction conditions
[2] Similarity relations
For two attitudinal objects to be ‘the same’ (i.e. be exactly similar), they need to share the
same content and the same attitudinal or illocutionary force (but not the same agent)
[3] Accidental relation to the time of occurrence

Construing events in terms of tropes
First option
Events as instances of dynamic properties such as ‘being P at t and Q at t’ , for t’ subsequent
to t, P and Q incompatible properties.
Problem: gives wrong results concerning predicates applicable to events:
(21) a. John’s becoming ill was sudden / unexpected / happened very quickly.
   b. # John’s healthiness and subsequent illness was sudden / unexpected / happened very
   quickly.

Second option
Events as instantiations of temporal transition relations involving tropes:
(22) The transition of John’s healthiness to John’s illness was sudden / unexpected / happened
   very quickly.

Events as second-level relational tropes
First option
The event that is the change from a being P to a being Q:
the instantiation of the transition relation by two tropes, the trope that is the instantiation of P in a and the trope that is the instantiation of Q in a.

Explaining event properties
- Why no truth conditions? Transitions are not true or false …
- relation to time: temporal relations are constitutive of events

Problem: similarity relations
Similarity among events would require only that that same relation (transition) is instantiated, not that the bearers (the tropes involved) are the same. Thus, all events would come out exactly similar!

Second option
Events as instances of transition relations involving particular property attributions, in times:

simple example: the event that is the change from a being P to a being Q:
the instantiation of \( \lambda t \ t' [P^t(a) \& t < t' \& Q^{t'}(a)] \) in subsequent times \( t_1 \) and \( t_2 \).

**Attitudinal objects as complex tropes**
The approach:
Attitudinal objects as first-level tropes instantiating the multigrade attitudinal relation, in some way

Additional motivation for attitudinal objects as tropes:
Other trope-referring deverbal nominalizations:
(23) a. John smiled.
    b. John’s smile
(24) a. John weighs 100 pounds.
    b. John’s weight of 100 pounds

**Two possibilities of conceiving attitudinal objects as tropes:**

First option
Attitudinal objects as relational tropes
John’s belief that Mary likes Bill: the instantiation of the multigrade belief relation in John, the liking relation, Mary, and Bill

Problem:
Wrong result with respect to similarity relations:
Tropes instantiating the same (natural) property are (exactly) similar:
(25) a. The color of the car is exactly the same as the color of the table.
   b. John’s attitude toward Mary is exactly the same as Mary’s attitude toward John.
   c. John’s relation toward his teacher is the same as Mary’s relation toward her father.

Similarity among attitudinal objects requires sameness of content:
(26) a. * Sue’s belief that it will rain is the same as John’s belief that Mary likes Bill.
   b. John’s belief is the same as Mary’s belief (only if they both believe that S).

Second option

Attitudinal objects as quasi-relational tropes
attitudinal objects as instantiations of properties involving propositional constituents, e.g. the property of believing that Bill likes Mary (\( \lambda x[\text{believe}(x; \text{liking, Mary, Bill})] \))

The difference between relational tropes and quasi-relational tropes:
(27) a. the relation between John and Bill
   b. John’s relatedness to Bill

Explaining remaining properties of attitudinal objects

Similarity relations:
Exact similarity requires same attitudinal relation involved as well as same propositional constituents
Accidental relation to the time of occurrence:
Attitudinal objects are instantiations of a complex property in an agent, at whatever time the property may be instantiated.

Extending the account of attitudinal objects to other products, i.e. physical products

Walking, dancing, screaming:
temporal transitions: instantiations of relation among times, in times:
\( R_1 \) in \( t_1 \) and \( T_2 \), \( R_2 \) in \( t_2 \) and \( t_3 \), ....

Walk, dance, scream:
instantiation of the property of an agent to have particular properties at subsequent times, in a particular agent:
a very simple example: \( \lambda x[\exists t \exists t'(P(x) & Q'(x) & t < t')] \)
similarity relations, relation to time: explained as with mental products
5. The action-product distinction and transitive intensional verbs

Transitive intensional verbs
Verbs of absence: need, lack, is missing
Psychological verbs of absence: desire, long for
Verbs of cognition: see, recognize
Verbs of ownership / transaction: own, have, buy, owe

The interpretation of quantifiers
(28) a. John needs exactly two books.
     b. John needs to have exactly two books.
(29) a. John promised only two papers.
     b. John promised to write only two papers.

Clausal complement-taking need:
Exactly two books specifies propositional constituent

Transitive need:
Exactly two books partly characterizes satisfaction situations
(30) For all s: s |= John’s need \( \Rightarrow \exists x (x \in D(s) & x \in [book]^s & <John, x> \in [have]^s)\)

(31) John bought exactly two bottles of wine (on the internet)

Clausal complement-taking need:
(32) For all worlds w such that for some s < w, s |= John’s need,
     \([John has exactly two books]^w = 1\)
(33) a. The assistant John needs has to be fluent in French
     b. For any situation s exactly satisfying John’s need, the assistant John has in s is fluent in French.
     c. \([the assistant John needs] = \) the function mapping any situation s, s |= John’s need, to the entity d, <d, John> \in [assistant]^s\)
(34) \([\textit{the bottle of wine John purchased}]= \text{the function mapping any situation } s,\]
\[s \models \text{John’s purchase}, \text{to the entity } d, \text{such that } d \in \textit{[bottle of wine]}^s, <\text{John}, d> \in \textit{[have]}^s\]

The ontological and semantic status of products:

As primitives?

Need = have a need
Promise = make a promise
Buy = do a purchase
See = have a perception

Event argument: ‘bring about’, ‘sustain’ a product