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handout 1

Seminar Semantic Structure and Ontological Structure
Tropes and their Role in the Semantics of Natural Language

Handout 1:
Tropes and their Role in Philosophy and Linguistic Semantics

1. Tropes what are they?

some 'standard' examples:

the redness of the apple

the intelligence of John

the beauty of the picture

the roundness of the stone

the size of the building

the fatherhood of John

some descriptions:

- concrete manifestations of properties in individuals, 'concretized properties', 'particularized properties'

- abstract particulars: the thing you get when you abstract away from all the properties an individual has except for one

the term 'trope': Williams (1953)

contemporary alternatives: 'abstract particulars' (Campbell), 'attribute instances' (Mertz),

'modes' (Lowe), moments (Mulligan, Simons, Smith1984), 'ways' (Levinson – problematic)

historical alternatives: accidents (Aristotle), modes (medieval and upwards),

some basic facts about tropes:

tropes with abstract bearers

(1) the roundness of the circle

relational tropes:

(2) a. the love between John and Mary

    b. John's anger at Mary

collections of tropes:

(2) a. John's anger and Bill's anger are very different.

    b. John compared two things, the beauty of the picture and the beauty of the landscape.

tropes instantiating complex properties:

(3) John's meanness and injustice toward Mary

higher-order tropes:

(4) a. the unexpectedness of the beauty of the landscape

    b. the extent of the object's unusualness

higher-order relational trope:

(5) the difference / similarity between the beauty of the picture and the beauty of the

    landscape

Relational tropes reducible to nonrelational ones? – a longstanding debate (Mertz 1980)

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2. Tropes vs. properties

What distinguishes tropes from properties

properties: universal, can have multiple instantiations, no location or multiple locations

tropes: are particulars, are as concrete as the individuals that are their bearers

located where the individual bearer is located

If individual bearer is located somewhere, the trope is located there as well

properties: as abstract objects not objects of perception

tropes: objects of perception (if bearer is concrete)

properties: as abstract objects not relata of causal relations

tropes: relata of causal relations (like events)

relation between tropes and predicates
properties as expressed by predicates ('abundant properties):
red, nice, strange, unusual, irregular, dirty
may be indeterminate, unspecific, quantificational, disjunctive

tropes: involve a particularized determinate, maximally specific, nonquantificational property
→ are instances of 'sparse', 'natural' properties

tropes in contemporary metaphysics: instantiations of natural properties
Trope-referring terms like *the redness of the apple* refer to tropes as if they were instantiations of abundant properties
But: the redness of the apple is not the instantiations of just redness in the apple, but the instantiation of whatever the shade of red is that the apple has in the apple

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3. The role of tropes in the history of philosophy

3.1. Aristotle (and Plato)
Aristotle: **four-category ontology**
individuals (substances) – universals with individuals as instances: **secondary substances**
accidents (instances of accidental properties in individuals) – universals: **qualities**
instances of essential properties: **substantial forms**

modern four-category ontologist: Lowe

3.2. Medieval philosophy
nominalism: individuals and tropes as the only real entities
universals in fact predicates (nominalism) or mental concepts (conceptualism) (Ockham)
four-category- or two category ontology

3.3. Early modern philosophy
Spinoza: only one entity that is a nontrope: god
Locke, Husserl

3.4. Contemporary metaphysics

interest in tropes for the purpose of a **one-category ontology** (Williams, Campbell, Bacon)

individuals and universals reduced to tropes

individuals: bundles of compresent / concurrent / co-located tropes

universals: collections of exactly similar / resembling tropes

the foundations of the world: tropes, compresence, resemblance

another parameter distinguishing fundamentally different trope ontologies:

tropes as independent, complete entities: Campbell, Bacon

tropes as predicational / incomplete: Mertz

(5) *John is wise* is true iff there is a wisdom trope t that is true of John.

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4. Tropes and linguistic semantics

4.1. explicit tropes referring terms

The redness of the apple, the wisdom the Socrates as trope-referring terms

Strawson, Woltersdorff, medieval philosophers

temporal / spatial location:

(6) John's happiness lasted only a year.

object of perception:

(7) a. John noted the redness of the apple.

   b. John observed Mary's haste.

object of causal relation:

(8) the redness of the apple made Mary buy it.

another use of trope-referring terms (Woltersdorff):

Socrates' wisdom as a term referring to a more specific universal than *wisdom*:

the property everyone has that is wise in the same way as Socrates

(9) a. John has the wisdom of Socrates.

   b. John needs the wisdom of Socrates.

  c. One only rarely finds wisdom / ? the wisdom of Socrates.

yet another use of trope-referring terms:

referring to 'tropes' as entities with variable manifestations:

(10) a. Mary's competence has increased / diminished over time.

    b. The beauty of the landscape has changed.

4.2. Other semantic roles of tropes

modification:

(11) The rose is deeply / uniformly red.

Do tropes play in relation to adjectives the same role as events in relation to verbs?

(12) a. John walked quickly.

    b. $\exists e(\text{walk}(e, \text{John}) \ \& \ \text{quickly}(e))$ (Davidson)

    c. $\exists t(\text{red}(t, \text{the rose}) \ \& \ \text{deeply}(t))$

(13) a. the rose's deep redness

    b. John's quick walk

tropes as implicit arguments of adjectives

$[\textit{John's happiness}] = \iota t[\text{happy}(t, \text{John})]$

alternative:

tropes introduced by nominalizations

$[\textit{John's happiness}] = f([\textit{happy}], \text{John}, i)$

How is this possible?

tropes as truthmakers:

John's happiness is what makes the sentence *John is happy* true.

'implicit nominalization':

Quantifiers like *something* as nominalizing quantifiers

(14) a. John claimed something shocking.

    b. John's claim is shocking.

    c. ?? The proposition is shocking.

Something ranges over the same things as the corresponding nominalization of the verb, i.e.

John's claim that S or *the claim that* S (Moltmann 2003).

comparatives as involving implicit nominalization (Moltmann ms.)

(14) a. John is happier than Mary.

    b. John's happiness exceeds Mary's happiness

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5. Sharpening the intuitions: tropes and related entities

tropes vs. states

internal complexity / different concrete manifestations:

(15) a. John described Mary's beauty.

    b. ?? John described (the state of) Mary's being beautiful.

(16) a. John compared Mary's beauty to Sue's beauty.

    b. ?? John compared (the state of) Mary's being beautiful to (the state of) Sue's being

      beautiful.

object of perception:

(17) a. John saw the beauty of the rock formation.

    b. ?? John saw (the state of the) the rock formation being beautiful.

same observations with events vs. facts

(18) a. John described Mary's walk home.

    b. ?? John described the fact that Mary walked home.

(19) a. John compared Mary's walk to Bill's walk.

    b. ? John compared the fact that Mary walked home to the fact that Bill walked home.

(20) a. John watched Mary's walk home.

    b. ?? John watched the fact that Mary walked home.

causation:

Helen Steward ('The Ontology of Mind', Oxford UP 1997):

states enter relations of causal explanation

events (and trope one might add) enter causal relations

facts, states as abstract objects (though states have temporal duration)

tropes, evens as concrete objects

sense of abstract: possibly non-specific?
concrete: maximally specific

tropes and qua objects:
qua objects (Fine 1980):
d qua P: the object that exists when d is P and that only has those properties that are 'based on' d being P

John qua being a father / John as a father
(21) John as a father is excellent / is young / ?? is tall.

John qua being a father vs. John's fatherhood
(22) John's fatherhood is ? excellent / * is young.

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6. Tropes and truth making

Mulligan/Simons / Smith (1984):
Tropes or the more general category of 'moments' act as truth makers of sentences

Tropes play an independent role in the world:
- as objects of perception
- as relata of causal relations

the truthmaking intuition:
Truth needs to be grounded: grounded in something in the world
If the truth of a sentence S is grounded in an entity e, then the existence of e entails that S is true.
Tropes ground the truth of sentences like *John is happy*, which means the existence of John's happiness entails that John is happy.

Other kinds of truth makers for other kinds of sentences: individuals
(23) a. John is a man.

   b. John is Mr. X.

   c. There is someone who can do it.

Truthmakers for <u>disjunction</u>s: truthmakers for one of the disjuncts

Truthmakers for <u>conjunction</u>s: collection of truthmakers for the various conjuncts

<u>Some notorious problems for truth maker theories:</u>

- truth makers for negative sentences:

(24) a. John is not happy.

    b. There is noone who can do it.

a specific problem for tropes as truthmakers:

<u>failure of bearer uniqueness (Levinson's 1980):</u>

the sharpness of the knife = the sharpness of the blade = e

the redness of the sweater = the redness of the wool of the sweater = e'

The existence of e does not entail the truth that the knife is sharp.

The existence of e' does not entail that the sweater is red.

<u>The problem does not arise with states, states of affairs , facts as truthmakers:</u>

states / states of affairs:

(the state of) the knife's being sharp =/= (the state of) the blade's being sharp

facts:

the fact that the knife is sharp =/= the fact that the blade is sharp

the fact that the sweater is red =/= the fact that the wool is red

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<u>next time:</u>

The semantics of trope referring terms:

- *the weight of the stone, the size of the sweater, the number of the planets, the extent of*
Mary's anger as trope referring terms, not referring to abstract objects

- problems with standard conceptions of tropes for the view that *John's strength, Bill's*
weakness are trope-referring terms

suggested reading: Moltmann (ms)