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Friederike Moltmann

handout 2

Kinds of Tropes and Other Universals

1. A little more about trope reference

1.1. Refinement of Trope Reference

the problem of the identity of 'polar' tropes:

the darkness of the room – the lightness of the room

John's strength – John's weakness

Quantitative predicates like *exceed*, *great*, *negligible* apply in only *one* way

The darkness of the cellar exceeds the darkness of the kitchen.

Thee darkness of the cellar is great / negligible.

difference to

1. ordinary individuals

John's exceeds Mary

- in height
- in strength
- in talent

2. events

John's laughter / action exceeds Mary's laughter / action.

- in intensity
- in time
- in unexpectedness

motivation for qua tropes:

John's strength: John's physical condition qua being a strength

John's weakness: John's physical condition qua being a weakness

Qua trope ensures limitation of trope to one respect:

Can be obtained from the nature of tropes as such?

‘Tropes are obtained by abstracting from all the properties of an object except one’.

alternative:

distinguish between

primary properties (those associated with the property attended to)

secondary properties (those possibly inherited from the bearer), and

tertiary properties: extrinsic properties (being unexpected, being appreciated etc)

qua tropes:

trope as partly conceptual entities

t qua P:

P a universal (a property or rather kind), generally abundant property (content of an adjective)

P induces ordering:

John’s weakness: physical condition qua being a weakness

weakness: denotes sets of ordered physical conditions (standard tropes)

kinds of tropes as ordered sets of tropes

1.2. Ontological dependence and apparent lack of bearer uniqueness

the knife’s sharpness - the blade’s sharpness

ontological dependence of trope on bearer

Every trope must have a bearer and must have a unique bearer.

ontological solutions:

Levinson (1980): tropes relatively independent of their bearers

Lowe: tropes do not determinate identity conditions

problem: what does this mean?

semantic solutions:

Schnieder: the x’s *A-ness* construction denotes a trope with bearer d such that d may just be a designated part of x or constitute x

problem:

the condition overgenerates

2. Tropes and Universals

2.1. Standard contemporary philosophical view

Williams (1953):

Properties are collections of resembling (exactly similar) tropes.

(individuals bundles of compresent tropes)

thus:

one sort of universal, universal constituted by tropes;

individuals constituted by tropes in other ways

medieval (ancient) view:

some universals are instantiated by individuals (sortals)

some universals are instantiated by tropes (accidental properties)

Aristotle: whiteness: instantiated by tropes, predicated of individuals

2.2. Natural Language terms for universals

2.2.1. terms for universals

nominalizations of adjectives: *happiness, roundness* etc

nominalizations of nouns: *fatherhood, womanhood*

→ tropes based on sortals → tropes involving essential properties ('substantial forms')

state descriptions: *John's being handsome, John's being strong*

trope descriptions: *John's handsomeness, John's strength*

states as universals: *being handsome, being strong*

terms for universals corresponding to trope-referring terms:

handsomeness, strength, roundness, fatherhood

linguistic form: bare (determinerless) adjective (noun) nominalization

explicit property-referring terms:

the property of being round

the property of roundness

other terms:

the quality of being gentle, the quality of gentleness

the virtue of being humble, the virtue of humility

the character trait of being impatient, the character trait of impatience

2.2.2. Semantic difference between explicit property referring terms, (universal) state terms and bare nominalizations

In the literature:

Woltersdorff (1960):

notes that terms not in all context interchangeable, maintained that they nonetheless refer to the same entities

Levinson (1979): distinguishes between properties (the property of being humble, being humble) and qualities (humility)

the differences between properties and qualities

1. mass vs count

being wise – no determiner possible

wisdom – some / so much / a little / more / no wisdom

2. partitive vs being involved in its entirety

(1) a. There is some wisdom in the book

b. * There is being wise in the book.

(2) a. John has some wisdom.

b. John has the property of being wise / * being wise.

3. temporal / modal properties

- (4) a. Humility used to be more common / more widespread than it is now
 b. The property of being humble / of humility used to be more common / more widespread than it is now.

4. inheritance of properties

distinguish inheritance properties for different classes of predicates:

i. episodic predicates

- (6) a. John has encountered hostility.
 b. John has encountered the property of being hostile.
 (7) a. Generosity is rarely reciprocated.
 b. The property of being generous is rarely reciprocated.

ii. predicates of evaluation

- (8) a. Friendliness is nice.
 b. The property of being friendly is nice.
 (9) a. Ordinariness is boring.
 b. The property of being ordinary is boring.

iii. intensional predicates

- (10) a. John is looking for honesty.
 b. John is looking for the property of being honest.
 (11) a. John needs efficiency.
 b. John needs the property of being efficient.

iv. existential predicates

- (12) a. Generosity exists.
 b. The property of being generous exists.

v. instance-distribution predicates

- (13) a. Honesty is rare.
 b. Sloppiness is widespread.
 (14) a. ?? The property of being honest is rare.
 b. ?? The property of being sloppy is widespread.

not limited to explicit property descriptions:

- (15) a. John never encountered the attribute of honesty / that property / that entity / that thing.

- b. The attribute of honesty / That property / That entity / That thing is interesting.
- c. John needs the attribute of honesty / that property / that entity / that thing.
- d. The attribute of honesty exists.
- e. The attribute of honesty / that property / that entity / that thing is rare.

parallels to other kind terms (for kinds of substances / individuals):

simple bare mass nouns and plurals:

- (16) a. John found gold.
 - b. John bought apples.
- (17) a. Gold is shiny.
 - b. Apples are healthy.
- (18) a. John needs gold.
 - b. John needs apples.
- (19) a. Yellow roses exists.
 - b. Three-legged dogs exist.
- (20) a. Dinosaurs are extinct.
 - b. Pink diamonds are rare.
 - c. Pigeons are widespread in Europe.

explicit kind-referring terms:

- (21) a. John found this kind of fruit.
 - b. This kind of animal is striped.
 - c. John needs this kind of metal.
 - d. This kind of animal exists.

against making bare nouns ambiguous:

- (22) John found something that is rare, not often needed, and very expensive, namely pink diamonds.

other kind-referring terms:

- (23) a. John never saw this shape.
 - b. ?? John never saw the shape of this object.
- (24) a. John never saw this color.

b. ?? John never saw the color of that flower.

→ relational vs nonrelational alternation

conclusion:

Bare adjective nominalizations as kind referring terms, refer to kinds of tropes

Other terms that refer to kinds of tropes or trope-like entities

(25) a. John never encountered this kind of behavior.

b. This kind of behavior is interesting.

c. John does not need this kind of behavior.

d. This kind of behavior is rare.

(26) a. John never encountered the character trait of shyness / the quality of honesty.

b. John likes the character trait of shyness / the quality of honesty.

Against ambiguity; something as a kind quantifier:

(27) a. John encountered the same thing as Mary, namely hostility.

b. Courage is something that is admirable.

c. John needs something, namely courage.

d. True courage is something that is rare.

(28) a. John never encountered the belief that the devil exists.

b. The belief that the devil exists is unfounded.

c. John lacks the belief that the devil exists.

d. The belief that devil exists is widespread.

(29) a. John never developed the desire to become rich.

b. The desire to become rich is not inborn.

c. John lacks the desire to become rich.

d. The desire to become rich is widespread.

An ontological account:

Kinds crucially inherit properties in one way or another from their bearers, properties are ascribed properties directly

Aristotle's notion of 'secondary substance

Kinds of tropes: secondary tropes

Why?

kinds are not bearers of properties, in certain sense of property

drived applications of predicates:

(30) a. $[P]^{w,t}(d, k) = 1$ iff $\text{Gn } d' [d' I_{w,t} k] [P]^{w,t}(d, d') = 1$ if P is a transitive individual-level predicate.

b. $[P]^{w,t}(d, k) = 1$ iff $\exists d' (d' I_{w,t} k \ \& \ [P]^{w,t}(d, d') = 1)$ if P is a transitive stage-level predicate.

(31) a. John needs honesty.

b. John needs an instance of honesty.

(32) needs(John, int(*honesty*))

(33) $[V]^{w,t}(d, k) = 1$ iff $[V]^{w,t}(d, \text{int}(k)) = 1$ if V is a transitive intensional verb.

(34) $[\textit{exist}]^{w,t}(k) = 1$ iff $[\textit{exist}]^{w,t}(\text{int}(k)) = 1$.

(35) a. Honesty is rare.

b. RARE p d $\exists d' (\text{honesty}(d, d') \ \& \ \text{AT}(d, p))$

(36) c. $[\textit{rare}]^{w,t}(k) = 1$ iff RARE p d $(d I k \ \& \ \text{At}(d, p))$

(37) a. $[V_{\text{ext}}]^{w,t} = \{ \langle d, k \rangle \mid \exists d' (d' I_{w,t} k \ \& \ [V]^{w,t}(d, d') = 1) \}$

b. $[V_{\text{ext}}]^{w,t} = \{ \langle d, k \rangle \mid \text{Gn } d' [d' I_{w,t} k] [V]^{w,t}(d, d') = 1 \}$

c. $[V_{\text{ext}}]^{w,t} = \{ \langle d, k \rangle \mid [V]^{w,t}(d, \text{int}(k)) = 1 \}$

(38) $\mathbf{D} = \mathbf{N} \cup \mathbf{O}$ (where $\mathbf{N} \cap \mathbf{O} = \emptyset$)

(39) $[-\textit{thing}] = \mathbf{N} \cup \mathbf{O}$

$[\textit{thing}] = \mathbf{O}$

(40) For an entity $d \in \mathbf{N}$, $[\textit{property}]^{w,t}(d) \in \mathbf{O}$.

Properties of properties:

(41) a. The property of being pure is negative.

b. Purity is negative

(42) a. The property of being honest is complex.

b. ?? Honesty is complex.

(43) a. The property of being universally recognized is quantificational.

b. ?? Universal recognition is quantificational.

- (44) a. The property of being poor is vague.
 b. ?? Poverty is vague.
- (45) a. The property of fatherhood is relational.
 b. ?? Fatherhood is relational.
- (46) a. The property of being a round circle is contradictory.
 b. ?? Round circles are contradictory.
- (47) a. Courage is an admirable property.
 b. Friendliness is my favourite attribute.
 c. Honesty is a virtue.
- (48) a. Ordinariness is a property that is interesting.
 b. Tallness is a vague property.
- (49) a. admirable property ($\text{reif}([\textit{courage}])$)
 b. the property of courage
 c. $[\textit{Courage is an admirable property}] = \lambda x[\textit{admirable}([\textit{property of}(x)]([\textit{courage}]) = [\textit{admirable}([\textit{property of}([\textit{courage}])$

properties:

no parts, possibly constituted by subproperties, logical structure
 having property = having entire property
 exists in any world , or exists independently of worlds

kinds:

entities across worlds and times
 exist in those worlds in which they are instantiated