

Advanced Course *Minor Entities*

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Handout 5

## Tropes with Intensional Bearers

### 1. Recall: Properties of tropes

- objects of perception
- causal efficacious
  
- no spatial location or extension
- temporal extension?

Do tropes inherit properties of their bearer?

- Tropes do not have the properties they instantiate (only ‘trovers’ (Loux) do)
- but they share evaluative properties:

Predicates of ‘quantitative’, ‘neutral’ comparison *exceed, equal*

- (1) a. John exceeds / equals Mary in eagerness.  
 b. John exceeds / equals Mary in sloppiness.
- (2) a. The eagerness of John exceeds / equals the eagerness of Mary.  
 b. the sloppiness of John exceeds / equals the sloppiness of Mary.
- (3) a. ?? The property of being very eaeger exceeds the property of being not so eager.  
 b. ?? The property of being extremely sloppy exceeds the property of being somewhat sloppy.

Predicates of quantitative, ‘neutral’ evaluation:

- (4) a. The eagerness of John is high / great.  
 b. ?? The property of being very eager is high / great.  
 c. ?? John is high / great in eagerness.

Application to quantitative tropes, number tropes:

- (5) a. The height of John exceeds / equals the height of Mary.  
 b. John exceeds / equals Mary in height.
- (6) a. The number of men exceeds / equals the number of women.  
 b. The men exceed / equal the number of women.  
 c. ?? The number 13 exceeds the number 8.

## 2. The construction

*The number of* terms with intensional verbs

- (7) a. the number of people that fit into the car  
 b. the number of books John wants to write  
 c. the number of assistants John needs  
 d. the number of screws that are missing

*The number of* as a numeral replacement, rather than functional trope expression:

- (8) a. John saw a number of people.  
 b. John kissed a great number of babies.

*The number of* in (7) can be used that way:

- (9) a. The number of people that fit into the car is ten.  
 b. The number of people that fit into the car is less than ten.  
 c. ?? The number of people that fit into the car is the number ten.
- (10) a. Mary counted the number of screws that are missing.  
 a'. Mary counted the number of people in the room.  
 b. ? John did write the number of books he wanted to write.

Functional use:

- (11) a. The number of books John wants to write is constantly changing.  
 b. The number of books that we need is increasing every day.

A potential analysis:

Just like number-comparatives:

- (12) a. John ate more apples than Mary did.

- b. John ate a greater number of apples than Mary did.
- (13) a. John is taller than Mary is.  
 b. For any degree  $n$  such that Mary is tall to degree  $n$ , there is a degree  $n'$ , such that John is tall to degree  $n'$  and  $n' > n$ .
- (14) For any  $n$ , such that Mary ate  $n$ -many apples, there is an  $n'$  such that John ate  $n'$ -many apples, and  $n' > n$ .
- (15) a. the maximal  $n$  [  $n$ -many people fit into the car]  
 a'. the maximal  $n$ [for  $n$ -many people  $x$ ,  $x$  fit into the car  
 b. The maximal  $n$  [for any situation  $s$  exactly satisfying John's needs, John has  $n$  assistants in  $s$ ]

Evidence for a trope-referential use:

- Predicates of neutral comparison:

- (16) a. The number of people that fit into the bus exceeds / equals the number of people that fit into the car.  
 b. The number of people that fit into the bus is high.  
 c. The number of screws that are missing is negligible.  
 d. John compared the number of books Mary wants to write to the number of books Sue wants to write.

- Objects of perception, causation:

- (17) a. The number of people that would fit into the car astonished Mary.  
 b. John noticed the number of screws that are missing.

- Identity / similarity predicates:

- (18) a. The number of women in the room is the same as the number of men in the room.  
 b. ?? The number of women in the room is the number of men in the room.
- (19) a. The number of books Mary wants to write is the same as the number of books Sue wants to write.  
 b. ?? The number of books Mary wants to write is the number of books Sue wants to write.

Other quantitative tropes with intentional bearers:

- (20) a. the height of the building John wants to build  
 b. the height of the desk John needs  
 c. the length of the trip John is planning

d. the length of the time John might be away

(21) The height of the desk John needs exceeds by far the height of the desk John is using right now.

Terms of qualitative tropes with intentional bearers:

(22) a. the originality of the book John wants to write

b. the simplicity of the dress Mar needs for the occasion

c. the elegance of the decoration of the house Mary expects to live in

Comparisons:

(23) a. The originality of the book John wants to write exceeds by far the originality of any book John has so far written.

b. The elegance of the dress Pippa needs as a bridesmaid should not exceed the elegance of the dress Kate needs as bride.

Fictional entities

Fictional entities are causally efficacious, trigger emotions etc.

(24) a. Hercules is more admired than Bacchus.

b. Anna Karenina triggers more sympathy than my neighbor.

Fictional entities are bearers of tropes:

(25) a. the strength of Hercules , the intelligence of Anna Karenina, the beauty of Helena

b. The strength of Hercules exceeds the strength of Bill.

What to with tropes apparently taking intentional objects as bearers?

Just like tropes with fictional characters as bearers?

A problem:

The distinction between intensional verbs and intentional verbs

Criteria for intensionality:

1. Nonspecificity

Intensional verb exhibit nonspecificity of complement, but not intentional verbs:

(26) a. John needs a horse, any will do.

b. John needs at least two assistants.

nonspecificity of the complement of intensional verbs fundamentally distinct from the indeterminateness of the objects that intentional verbs may take as their argument (underspecification with respect to properties)

*Need* : modal verb of absence:

(27) ‘For any minimal situation *s* satisfying John’s needs, there are at least two assistants John has in *s*’ (Moltmann 1997).

other intensional verbs taking quantificational arguments: *owe, buy, sell, recognize, and find* (Moltmann 1997, Zimmermann 2001).

Some intensional verbs may be intentional verbs at the same time, e.g. *want*:

(28) a. John wants the house described in the book.

*want* also takes quantificational complements with nonspecific reading:

b. John wants at least three children.

## 2. Special quantifiers

Intensional verbs require impersonal proforms, regardless of whether the complement is specified as human or not:

(29) John needs something / ?? someone, namely an assistant.

(30) a. There is something / ?? someone John needs, namely an assistant who speaks French.

b. There is something John made reference to, namely a person who speaks French fluently.

intentional verbs involve proforms that match the features of the NP complement they replace:

(31) John mentioned someone / ? something, a woman (in fact, a woman that does not exist).

The proforms that can replace the complement of intensional verbs: special *quantifiers and pronouns*: *everything, nothing, the same thing, that, what*.

## 3. ‘Identity conditions’

Two distinct occurrences of intensional verbs share the same object (‘the same thing’) just in case they would take the same property or quantifier as argument:

(32) Mary needs an assistant and John needs an assistant, thus John and Mary need the same

thing.

- (33) a. John needs the same thing as Bill, namely an assistant that speaks French.  
 b. John mentioned the same thing as Bill, namely a woman that speaks French fluently.

By contrast, for two intentional verbs to share their objects, they either need to share their actual objects or else the intentional acts they describe need to be directly or indirectly coordinated:

(34) John and Mary mentioned the same book.

(35) John mentioned a woman with red hair.

Bill mentioned a woman with red hair.

John and Bill mentioned the same woman.

If John's and Bill's acts are not coordinated, then the conclusion does not follow.

4. 'Nonexistence' only with intentional verbs, not intensional verbs:

- (36) a. There is a book John mentioned that does not exist.  
 b. ?? There is an assistant John needs that does not exist.

#### Reinterpreting intentional and intensional verbs

Intentional verbs may have an interpretation as an intensional verb:

- (37) a. John mentioned what Bill mentioned (a woman with red hair).  
 b. John imagined the same thing as Bill (a woman with blue hair).  
 c. John saw the same thing as Bill (a red spot).  
 (38) a. John imagined a circle. Mary imagined that too.  
 b. John imagined a circle. ?? Mary imagined it too.  
 (39) a. John wants a nice book. Mary wants that too.  
 b. John wants a nice book. ?? Mary wants it too.

psychological verbs of absence may have intentional use:

- (40) There is a book John wants that does not exist.  
 (41) a. There is a woman John is thinking about that does not exist.  
 b. There is a woman John is looking for that does not exist.

#### Conclusion concerning tropes with apparent intentional bearers:

Tropes can take intensional entities, individual concepts, as bearers!

