Mini-course *Transitive Intensional Verbs*Friederike Moltmann
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#### Handout 2

## The 'Objects' of Transitive Intensional Verbs and Definite Intensional NPs

## 1. Classes of transitive intensional verbs permitting sharing

Two verbs of absence

(1) a. John needs what Mary is looking for

Verb of possession – verb of absence

- b. John has / owns / posses what Mary needs.
- c. Mary needs what John has / owns / possesses.

Epistemic verb – verb of absence

- d. John found what Mary needs, a suitable collaborator.
- e. Mary needs what John found, a suitable collaborator.

Verb of creation – verb of absence

f. John found what Bill needs, an assistant / a wife

#### 2. The situations involved

#### 2.1. The role of have

- (2) a. John needs an assistant.
  - b. John needs help.
  - c. John needs advice.
  - d. John needs a kiss.
  - e. John needs recognition

have or receive?

## 2.2. Satisfaction situations involving predication

## Verbs of 'creation':

- (3) a. John is looking for an assistant.
  - b. John is looking for a wife
- (4) a. John found an assistant.

- b. John found a wife.
- c. s satisfaction situation of John's search:  $\exists d \in D(s)$  (Make<sub>s</sub>(John, d, 'assistant'))

## **Epistemic verbs**:

- (5) a. John is looking for a suitable collaborator.
  - b. John found a suitable collaborator (namely his wife)
  - c. s satisfaction situation of John's search:  $\exists d \in D(s)$  (Recognize<sub>s</sub>(John, d, 'collaborator'))

## Sharing predicative satisfaction situations

- (6) a. John found what Bill found, a suitable collaborator.
  - b. John found what Bill found, an assistant.
  - c. John is looking for what Bill found, a suitable collaborator.
  - d. John is looking for what Bill found, an assistant.

shared satisfaction situations for verbs of creation:

situations s such that:  $\exists d \in D(s) \text{ (Make}_s(agent(s), d, 'assistant'))}$ 

shared satisfaction situations for epistemic verbs:

situations s such that:  $\exists d \in D(s) (Recognize_s(agent(s), d, 'assistant'))$ 

## Predicative satisfaction situations and opacity:

opacity with psychological verbs of absence, epistemic verbs

- (7) a. John is looking for an eye doctor
  - b. John is looking for an ophtamologist.
  - c.  $\exists d \in D(s)$  (Recognize<sub>s</sub>(agent(s), d, 'eye doctor'))

#### 3. Definite intensional NPs

## 3.1. The construction

- (8) a. The assistant John needs must be fluent in French.
  - b. The assistant John needs to hire needs to be fluent n French.
  - c. The book John needs to write must have a great impact.
  - d. John book John must write may be short.
  - e. The book John hopes to write might have a lot of impact.

## Characteristics:

- Transitive and clausal-complement-taking verbs
- Modal Compatbility Requirement

- Definite article quasi-obligatory

Standard approach: reference to individual concepts (Moltmann 2008)

## 3.2. Accounting for uniqueness

'The book John needs to write'

'The assistant John needs'

The function mapping a situations s (exactly) satisfying John's need to the unique object d in s that is the book John writes in s / the assistant John has hired in s.

## 3.3. Definite intensional NPs with predicative situations

- (9) a. the assistant John needs
  - b. the collaborator John is looking for

The function mapping a situations s (exactly) satisfying John's need to the unique object d in s such that

- Make<sub>s</sub>(John, d, 'assistant')
- Recognize<sub>s</sub>(John, d, 'collaborator')
- (9) c. the e [John needs e' assistant]
  - d. the e [John is looking for e' collaborator]

small clause structures?

(10) the gifted mathematician John claims to be (Grosu/Krifka 2007)

## 4. Definite intensional NPs and the shared object of transitive intensional verb

Observations about sharing

Verbs of creation

- (11) a. John met the assistant he was looking for.
  - b. John found the assistant he was looking for.
  - c. John hired the assistant he was looking for.

Epistemic verbs

- (12) a. John found the collaborator he was looking for.
  - b. John met the collaborator he was looking for.

Verbs of absence

(13) John needs the assistant he is looking for.

#### Differences:

## Two verbs of absence

- (14) a. John needs what Mary needs.
  - b. John needs the assistant Mary needs.
- (15) a. John needs what Mary is looking for too, a good advisor
  - b. John needs the advisor Mary is looking for.
  - c. John needs the paper Mary promised.
- → John needs Mary's promised paper

#### One verb of absence

- (16) a. John needs what Mary found, a good advisor.
  - b. John needs the advisor Mary found.
- (17) John found the advisor that Mary needs.
- → John found an advisor for Mary

#### Conclusion:

Definite intensional NPs do not allow for sharing of situations with different agents Special NPs allow for sharing of situations with different agents

#### Further difference:

Definite intensional NPs are possible also with clausal-complement-taking verbs, but not special NPs expressing sharing of situations:

- (18) a. John needs the paper Mary promised
  - b. John found what Mary needs, a doctor.
- (19) a. ??? John needs what Mary promised: to write
  - b. \* John found what Mary needs, to write a good paper.

## An account of definite intensional NPs

Using individual concepts:

functions dependent on a need, a promise, a finding etc

- (20) a. the book Mary needs to write.
  - b. the function f mapping any situation s that satisfies Mary's need onto :  $\iota d[paper_s(d) \& writes(Mary d)]$
- (21) a. The assistant Mary needs
  - b. the function f mapping any situation s that satisfies Mary's need onto:

id[Have(Mary, d) & Make(Mary, d, 'assistant')]

- (22) a. the collaborator Mary is looking for
  - b. the function f mapping any situation s that satisfies Mary's search onto :

ud[paper<sub>s</sub>(d) & recognize(Mary, d, 'collaborator')]

## Predicates possible with definite intensional NPs

Predicates with modals:

- (23) a. the paper Mary needs to write must be 20 pages long.
  - b. the paper Mary needs to write is 20 pages long.

Intensional (?) predicates:

- (24) a. John found the assistant Mary needs.
  - b. Mary hired the assistant she was looking for.

Other predicates:

- (25) a. John counted the papers he needs to write before the end of the year.
  - b. John enumerated the papers he needs to write.
  - c. John described the assistant he is looking for.

Trope-referring terms:

- (26) a. the impact of the book John needs to write
  - b. the number of assistants John needs

#### Problems with functions (individual concepts):

- Application of predicates
- Bearer of tropes

Compositional semantics:

- (27) a. the book John needs to write
  - b. the f [for all s, s R w, write<sub>s</sub> (John, f(s)) & book<sub>s</sub>(f(s)))]
  - c. the e [John needs to write e book]
- (28) a. the impact of the book John needs to write
  - b. the e [John needs to write e book impact]

## Intensional definite NPs as standing for variable objects

'the assistant Mary needs ': variable object that in any situation s satisfying Mary's need has as its manifestation a person that is Mary's assistant in s

'the book Mary needs to write ': variable object that in any situation's satisfying Mary's need has as its manifestation a book that Mary writes in s

## 5. An account of sharing with special quantifiers

Make use of kinds:

Special quantifiers with other predicates:

- (29) a. Mary thinks what John thinks
  - b. the thought that Mary has = the thought that John has.
- (30) a. Mary is what John is, very wise
  - b. wisdom, which is what Mary hat = wisdom, which is what John has
- (31) a. John needs what Mary needs, an assistant
  - b. the need for an assistant
  - c. John has the need for an assistant, Mary has the need for an assistant.
  - d. what Mary needs] the function mapping a situation such that s satisfies 'the need for an assistant' to \( \text{ud[have(agent(s), d)} \)
- (31) a. John found what Mary needs, an assistant
  - b. 'the finding of an assistant' shares the same situations with' the need for an assistant'
- (32) a. John has what Mary needs, a car.
  - b. the possession of a car the need for a car: shared situations: situations in which the agent has a car.
- (33) a. John gave Mary what she needed, a car.
  - b. the gift of a car the need for a car: shared situations: situations in which the agent has a car.

# The semantic status of a need, a promise, etc.:

- 1. dependent on the Davidsonian event argument
- (34) 'what John needs'

the  $o_{prod(e)}[\exists e(need(e, John, o_{prod(e)})]$ 

Two functions mapping an event onto a product:

prod<sub>1</sub>: particular product

prod<sub>2</sub>: kind of product

- 2. need = have (a) need (Harves/Kayne, to appear)
- (35) John needs = what John has a need for
- (36) a. John has a need for a car.
  - $b. \exists e (have(John,\,e) \ \& \ need(e,\,o_e) \ \& \ car(o_e))$