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Conference 'Philosophy, Mathematics, Linguistics: Aspects of Interactions'

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Existence, Nonexistence, and Numbers

<u>**Handout 2:**</u>

There-sentences, quantification, and existence statements

1. Other existence predicates than *exist*

1.1. Existence of facts and possibilities

(1) a. The possibility that John is no longer chairman exists.

    b. The possibility that John will become chairman obtains / remains.

(2) The fact that it is raining ? exists / ok obtains / remains.

facts: are not 'in' the world, but 'at' the world (Strawson)

also for possibilities

obtain: locates entities 'at' the worlds, *exist*: primarily 'in' the world

1.2. Existence of laws

validity = existence in the case of laws:

(3) a. The law exists in L.

  b. The law is valid in L.

1.3. Existence of events

exist cannot apply to events

occur and *take place* can apply to some events

(4) a. John's murder * exists / ok occurred.

    b. John's speech * exists / took place this morning.

(5) a. * John's smiling occurred / took place.

    b. * John thinking occurred / took place.

    c. John's thought occurred / * took place.

Take place, occur: describe an event of the same temporal type as the event to which they apply.

Exist: describes a state, not an event, on the basis of the object to which it applies

test: use of progressive:

(6) a. The speech is taking place right now

    b. * The chairman is existing right now.

Exist: describes the state that is the presence of an object at an interval

Take place, occur: describe the transition from the presence of a part (temporal part) of an event located at a subinterval to the presence of another temporal part of the event at a subsequent subinterval

Endurantism: only events, not objects have temporal parts

<u>The lexical meaning of existence predicates on an endurantist view.</u>

(7) a. For an interval t, [*exist*]^t(e, x) iff e is the presence of (the whole of) x at t.

    b. For an interval t, [*take place*]^t(e, e') iff e consists of transitions from the presence of e''
       at t to the presence of é''' at t'' for subsequent subintervals t' and t'' of t and minimal
       parts e' and e'' of e.

exist applied to abstract objects: derivative use (?)

1.4. Explaining a difference in location modifiers of existence statements

There-sentences allow for location modifiers:

(8) a. There are exactly three scientists in this laboratory that can solve the problem.

    b. There are exactly three scientists that can solve the problem. (can be understood as
       'in this laboratory')

Existence statements with *exist* do not:

(9) a.* The man we talked about exists in another city.

    b. * Mary does not exist in Germany.

(10) a. * Every cat we talked about exists in this city.

    b. * The only man that can solve the problem exists in Germany.

(11) a. ?? At least five million people exist in this country.

    b. ?? Three scientists exist in this laboratory.

    c. ?? Several universities exist in this city.

Exist-sentences with singular terms do not allow an implicit location restriction either:

(12) a.* The man we talked about exists. (to be understood: 'in another city').

    b. * Mary does not exist. (to be understood: 'in Germany').

(13) a. ?? At least five million people exist. (to be understood 'in this country').

    b.?? Several universities exist. (to be understood 'in this city').

exception: existence statements with bare plurals and mass nouns:

(14) a. Giraffes exist only in Africa.

    b. Wild ponies do not exist in Germany.

    c. Pure air does not exist in China anymore.

But existence statements with event-related existence predicates do allow for location modifiers:

(15) a. The event occurred in Paris.

    b. The demonstration took place in the center of Paris.

The reason why *exist* does not accept location modifiers:

exist is a (nonlocational) stative predicate

Compare:

 (16) a. ?? John is nervous in Germany.

    b. ? John resembles Mary in France.

    c. * John knows a lot of French in germany.

Existence statements with bare plurals

(17) a. Giraffes exist only in Africa.

b. Syphilis does not exist in Europe anymore.

(18) a. Ants are widespread in Europe.

b. Dinosaurs are extinct.

Geach (1968): *disappear* is a predicate that also applies to individuals and kinds:

(19) a. John has disappeared.

b. Dinosaurs have disappeared.

With kinds *disappear* has the reading of an instance-distribution predicate, not that of an episodic predicate.

Exist allows location modifiers as long as it is treated as an instance-distribution predicate, not an episodic predicate, that is, when its kind meaning is not derived just by existential quantification over instances.

2. Difference in ontological commitment between *there*-sentences (and quantification) and existence statements

The Meinongian statement:

(20) There are things that do not exist.

(20) in principle able to be true

not able to be true:

(21) a. There are tables / people / physical objects that do not exist.

b. There are things that are tables / physical objects that do not exist.

Statements about possible and past objects:

With relative clauses:

(22) a. There are buildings I could have built that do not exist.

b. There are many buildings built in the eighteenth century that do not exist anymore.

With predicate functors:

(23) a. There are possible buildings that do not exist.

b. there are historical cities that do not exist anymore.

Exception:

(24) a. There are philosophers of the past who do not exist anymore.

    b. There are philosophers that do not exist anymore.

    c. Kant is / was a philosopher.

    d. B (who lived in the nineteenth century) was / * is a baker.

Intentional objects:

(25) There are things that John imagined / thought about / made reference to that do not exist.

With sortal quantifier restriction and relative clauses:

(26) a. There are some women John mentioned that do not exist.

    b. There is a poet John made reference to that does not exist.

    c. There is a detective the book is about that does not exist.

With predicate functor:

(27) There are imaginary women that do not exist.

Not able to be true:

(28) There are women / poets / books that do not exist.

Generalizations:

- *There*-sentences and (quantificational NPs) can range over past, possible, and intentional objects that intuitively do not exist, as long as no sortal predicate is predicated of the object that is not in the scope of an intensional or 'intentional' operator.

- Sortal and nonsortal predicates: cannot 'actually' be true of nonexistent objects.

A puzzle:

(29) a. Anna Karenina is a woman that does not exist.

    b. The golden mountain is a mountain that does not exist.

    c. A winged horse is a horse that doe actually exist.