Advanced Course: *Revisiting Events Semantics*

Friederike Moltmann

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**Handout 4**

**The Part Structure of Events and the Mass-Count Distinction for Verbal Domain of Events**

**1. The Part Structure of Events**

**1.1. Mass-count in the nominal domain**

x v y: the sum of x and y

(3) Cumulativity

 For a set X, if x ∈ X, y ∈ X, then x v y ∈ X

Cumulativity for plurals

(4) John is a student

 Mary is a student

 John and Mary are students.

Cumulativity for mass nouns

(5) The liquid in the glass is water.

 The liquid in the cup is water

 The liquid in the glass and in the cup is water.

(6) Divisiveness

 For a set X, for any x ∈ X, if y < x, then y ∈ X.

Divisiveness for mass nouns:

(7) This liquid in the glass is water.

 The liquid in the glasses is water.

 The liquid in one of the glasses is water.

(8) Homogeneity

 A set if homogeneous iff it is cumulative and divisive.

Atomicity

(9) A set X is atomic iff for any x ∈ S, for any y > x, y ∈ X.

Atomicity as a criterion for singular count nouns?

*Apple*: no proper part of an apple is an apple.

*Fence*: a proper part of a fence is still a fence

*Sum*: a proper part of a sum may still be a sum

*A piece / amount of clay*: a proper part of piece / amount of clay is still

*Portions, quantities, lines, …*

Part-related expressions for all three domains: individuals, luralities, quantities

Partitive construction:

(10) a. part / all of the house

 b. part / all of the water

 c. part / all of the children

Binominal constructions:

(11) a. John gave the children one gift each.

 b. Joe ate the cake one piece at a time.

 c. John drank the water one small cup at a time.

**1.2. Events in the verbal domain**

Reasons for cumulativity for verbs with respect to to the Davidsonian event argument position:

(12) John walked.

 Mary walked.

 John and Mary walked.

(13) John drank the water in the glass.

 John drank the water in the cup.

 John drank the water in the cup and in the glass.

Participants measuring out an event:

(14) a. John drank the water in five minutes

 b. John ate the apple in five minutes.

 c. John ate the apples in five minutes.

(15) Part of John’s eating drinking of the water / eating of the apple / eating of the apples

Certain event participants may individuate the part structure of the event.

Also time and space can measure out the event

(16) a. Part of John’s walk was from 8am to 9am.

 b. Part of the bombardment is taking place in south Gaza.

Event types may individuate event parts

(17) John’s singing and dancing were both slow.

Part-related adverbials

(18) a. The guests left one at a time.

 b. John ate and drank, both without restraint.

Adverbs of completion:

(19) a. John completely forgot the poem.

 b. John partly drank the water.

 c. The guest had completely left.

 d. The dot completely disappeared.

Application to an event type

Relational adjectives:

(20) John bought and sold similar things.

Events may have multidimensional part structures (Moltmann 1997, chap. 5)

What happened if the part structure of an event is individuated in several ways at once?

Multiple readings of the sentence!

Part-related adverbials

(21) John and Mary sang and danced both for one hour.

Relational adjectives

(22) a. John and Mary bought and sold similar things.

 b. Yesterday and today John bought two books at the same store.

Adverbs of completion

(23) The stain completely faded.

Two readings!

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**2.. The mass-count distinction and event nouns**

**2.1. Criteria for the mass-count distinction**

1. Determiner choice

Mass:

(10) a. much, little, small amount of (water/wood/furniture, \*things)

 b. a great deal of trouble / \* of things

Count:

(11) many, few, small number of (things, \*water/wood/furniture)

Numerals only for count nouns: *two, three, second, third*

(12) a. \* two water / wood / furniture

 b. \* the third furniture / wood

2. Plural only for count nouns (things, \* furnitures)

3. Anaphora *they* vs. *it*, *one of*

(13) one of the things / \* the furniture

Gerunds and simple event nominalizations

1. Activities and count nominalizations

*Walking*: mass, *walk*: count

(14) a. much / little walking, \* one walking, \* walkings

 b. a / one walk, walks

*Raining, rain*: both mass

Concrete states and nominalizations

*Sleeping, sleep*: both mass

(15) a. too much sleeping

 b. \* one sleep

Telic events and nominalizations

*Fall*: count, *falling*: mass

(16) a. a fall, several falls, \* little fall

 b. too much falling

Same for *jumping - jump*

Summary

Mass categorization of activities or states

Count categorization:

1. Events with an inherent boundary

2. Temporally maximally continuous events (processes, states)

Other forms of event nominalization

Event collections based on participant collection

German prefix *ge*:

(17) a. das Lachen (laughing) –Gelaechter (collective laughing)

 b. das Reden (speaking) – das Gerede (collective speaking)

Conclusion

Ontological mass-count distinction plays a role for syntactic mass-count choice in nominalizations.

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**3. The mass-count distinction**

**3.1. Views of the mass-count distinction**

**3.1.1. The mass-count distinction as an ontological distinction**

Things that have a boundary vs. things that lack a boundary

Nominal domain:

Things that come with an essential shape vs. things that do not come with an essential shape

Rigid embodiment: composite of matter and form

*Statue – clay*

*Chair – wood*

Problems for the view in the nominal domain

Object mass nouns: *furniture, footwear*

Grain nouns: *sand, rice, pasta*

Sequence-style nouns: *fence, sequence, line*

Portion and collection nouns: *portion, quantity, sum, collection*

Distinguish technical use and ordinary use, but will that solve the issue?

**3.1.2. The mass-count distinction as a distinction among extensions**

For a mass noun N, the extension of N is homogenous: divisive and cumulative

For a singular count noun N: N is atomic

**3.1.3. The mass-count distinction as a ‘language-driven’ distinction**

1. Susan Rothstein (2017)

Mass-count distinction a distinction in ‘grammaticized individuation’

Formally: distinction in semantic type

Count noun: atomic relative to a reference set, of type (<<e, <e, t>>, t>)

Mass noun: no reference set, of type <e, t>

2. Hagit Borer (2005)

Syntactic distinction between mass nouns and count nouns

Count nouns: classifier - noun *ind*– N

Mass nouns: noun only: N

Manifestations of *ind*-category:

Classifier language (Chinese): classifier

Mass-count language: singular determiner *a*, plural morphology

3. ‘Literal’ grammaticized individuation: Moltmann (2021)

Represent language-driven unity at some ontological level

The unity property *U*: ‘being described by a singular count noun in the situation in question’

Situations keep track of uses of nouns:

If an entity *d* is described by using a singular count noun: *d* is *U* in the situation of use.

*U* may, but need not, correlate with integrity, having a boundary etc.

**3.2. How do verbs as event predicates fare with respect to the mass-count distinction on the different views?**

**3.2.1. General fact**

In English verbs do not come with a syntactic-mass count distinction:

verbs do not come with a plural.

In Chinese nouns do not come with a syntactic mass-count distinction and numerals are inapplicable to nouns directly.

Question

Are English verbs as event predicates on a par with Chinese nouns?

**3.2.2. Evidence for verbs as event predicates being mass, rather than dividing into mass and count**

**3.2.2.1. Choice of adverbial quantifiers**

Adverbial quantifiers are mass, rather than count

*Bit, deal*, and *amount* are nouns selecting only mass NPs:

(18) a. John slept a little bit / \* a couple / ok a couple of times.

 b. Last week, Mary worked out a great deal / \* a great number / ok a great number of

 times.

 c. John and Mary argued a good deal / \* a great number / ok a great number of times.

 d. John jumped a bit / \* a couple / ok a couple of times.

 e. John worked out a little bit / \* a great number / ok a great number of times this year.

Restrictions on *amount*: better with nouns than with verbs

(19) a. ? John worked a great amount.

 b. a great deal / amount of work

 c. a good deal / amount of arguing

*Much* vs. *many*, *litte* vs. *few*:

 (20) a. John jumped too much / \* too many / ok too many times.

 b. John slept / worked too little / \* too few / ok too few times.

 c. . John stumbled many / \* a few / ok a few times.

 d. John slept / worked little / \* too many / ok too many times.

 e. John was inattentive too much / \* too many / ok too many times.

Neutral meaning of *a lot*:

(21) a. It rained a lot.

 b. Joe misspoke a lot.

 c. John has negotiated a lot.

**3.2.2.3. No direct application of numerals**

Ordinals:

*First, second*, *third* etc. cannotact as adverbials, meaning ‘for a first, second, third time’

(22) a. ??? Mary stumbled third(ly).

 b. Mary stumbled a third time.

(23) a. ??? John married second(ly).

 b. John married a second time

Cardinals:

*Time(s)* is required:

(24) a. \* John died only one.

 b. John died only one time / once.

(25) a. \* John jumped three.

 b. John jumped three times.

(26) a. \* John ran to the house four.

 b. John ran to the house four times.

*Time* has the semantic function of a numeral classifier

(27) a. John fell three times.

 b. John slept three times today.

 c. Mary worked out three times this week.

 d. John was attentive three times.

 e. John owned the painting three times in his life.

*Times* picks up event units on the basis of one of three conditions obtaining:

[1] having a boundary (or being an atom with respect to the verbal event concept)

[2] being maximally continuous in time

[3] occurring at contextually given occasions

*Time(s)* fails to apply when no individuating conditions obtain:

(28) ??? John knew Bill a few times.

**3.2.2.4. Frequency adverbials**

Observation: Frequency adverbials do not require the classifier time(s)

(29) a. John stumbled frequently.

 b. John slept frequently.

 c. John was rarely awake

Frequency adverbials do not presuppose countability, but rather they ‘introduce’ it, just like *times*.

* Pick up events with inherent boundary
* Count maximally continuous events
* Count events taking place at given (countable) occasions

Frequency adverbially are not syntactically count:

Adjective *frequent* can modify event mass nouns and not just event plural nouns

(30) a. the frequent rain

 b. the frequent fog in this region

 c. the frequent rainfalls

**3.2.2.5. Plural anaphora?**

Plural anaphora as further evidence for the mass status of events.

Geis (1975):

(31) Mary jumped and fell. This happened this morning. / \* They happened this morning.

German *beides*:

(32) a. Das ist beides heute morgen passiert.

 b. \* Sie sind heute morgen passiert.

 c. \* Beide sind heute morgen passiert.

*They* requires nominal antecedent in English (and count NPs in German!)!

(33) a. John bought rice and milk. He forgot to bring them home.

 b. John tried the wine and the juice. Mary tried them too

(34) Hand probierte das Gemuese und das Brot. Marie probierte \* sie / ok das beides auch.

**3.3. Conclusions**

Verbs as event predicates classify as mass with respect to the applicability of quantifiers and numerals.

But the lexically determined individuation of events plays a role for the choice of mass or count for nominalizations.

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