The macro-event property and the LSC

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Overview

- the macro-event property
- the MEP and the LSC
- single-core constructions
- multi-core constructions
  - English: infinitival complements
  - Ewe: serial verb constructions
  - Japanese: converb constructions
- summary and discussion

The macro-event property

- typologists and their intuitions about events

"(...)
true SVC structures and covert coordination structures seem to feel different to native speakers. The covert coordination tends to be perceived as a sequence of distinct events, whereas the SVC is perceived as a single event (...)
" (Baker 1989: 547; emphasis J&B&RDVV)

"An SVC consists of more than one verb, but the SVC is conceived of as describing a single action." (Dixon 2006: 339; emphasis J&B&RDVV)

"Although two or more verbs are present, the sentence is interpreted as referring to a single action rather than a series of related actions. Although the action may involve several different motions there is no possibility of a temporal break between these and they cannot be performed, for example, with different purposes in mind." (Sebba 1987: 112; emphasis J&B&RDVV)

- but what is a "single action/event"?
  - and how do we know that a linguistic expression is a description of a "single action/event"?

The macro-event property (cont.)

- the problem of upper bounds in mereology
  - in the object domain: shape permanence and "common fate"
    - the legs are part of the table
    - the table is part of the kitchen furniture – but that’s not the same sense of "part"
      - I can move part of the kitchen furniture, leaving the rest behind
      - and that rest can still be referred to as kitchen furniture
  - in the event domain: ???
    - e.g., this talk is a part of the 2009 RRG Conference
      - which in turn is sort of a part of the 2009 Linguistics Institute
      - and it’s a part of our lives; your life; the history of the universe...
    - the events in (1.1) can always be understood as part of the same "journey"

(1.1) a. Floyd left Nijmegen. He passed through Utrecht and then reached Amsterdam
b. Floyd went from Nijmegen to Amsterdam, passing through Utrecht on the way
c. Floyd went from Nijmegen to Amsterdam via Utrecht

The macro-event property (cont.)

- cf. Casati & Varzi 1999 on mereology
  - we could use the "describability" of the event by particular constructions as a criterion
    - but that would render the above quotes circular
    - since it is precisely constructions of event descriptions that are supposed to be distinguished here
  - wanted: a measure of event segmentation
    - that is sensitive to the syntax of event-denoting constructions
    - but applicable across languages regardless of construction type
The macro-event property (Cont.)

- the solution: the **Macro-Event Property**
  - a property of construction types
  - that assesses the semantic event representations a construction type can encode
  - on the basis of its compatibility with those expressions
    - that are directly sensitive to the “ontological” properties of event representations
    - i.e., temporal expressions – expressions of location in time, duration, and boundaries in time
  - the MEP applies to constructions that package the parts of an event so tightly
    - as to not permit individual access by temporal expressions (adverbials, temporal clauses, tenses)

(1.2)a. Floyd went from Nijmegen to Amsterdam at eight. He passed through Utrecht at nine and reached Amsterdam at ten via Utrecht at nine.

(1.2)b. Floyd went from Nijmegen to Amsterdam at ten.

(1.2)c. In the morning, Floyd went from Nijmegen to Amsterdam via Utrecht.

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**The MEP and the LSC**

- is there a “macro-event phrase”?
  - i.e., is there a construction or syntactic unit that is associated with the MEP across languages?
- we show below that neither (simple) clauses nor (simple) VPs are “macro-event phrases”
- the hypothesis we wish to explore here

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**The MEP and the LSC (cont.)**

- the intuition behind this idea
  - simple cores are the right size for the MEP
    - nuclei are too small to be tested for the MEP since their peripheries do not host time-positional modifiers
    - clauses are too large since they may contain multiple cores
  - simple cores are the right stuff for the MEP
    - cores are constituted by the expressions of the elements of eventuality descriptions – predicates and arguments
      - unlike simple VPs, simple cores cannot contain multiple independent eventuality descriptions
    - the complexity of what can be expressed in cores is constrained
• the program for this presentation
  – single-core constructions
    • show that simple cores, unlike simple VPs, must have the MEP
    – drawing on data from English event nominalizations
  – multi-core constructions
    • show that multi-core constructions generally lack the MEP
    • examine an important class of exceptions:
      – drawing on data from
        – English complementation constructions
        – Ewe serial verb constructions
        – Japanese converb constructions

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Single-core constructions

• the Core-MEP Hypothesis predicts that single-core expressions cannot lack the MEP
• e.g., single-core expressions do not accept multiple independent time-positional modifiers
  (3.1) Floyd left Buffalo (at 8:00). He arrived in Rochester (at 9:15)
  (3.2) a. Floyd went from Buffalo (?at 8:00) to Rochester (?at 9:15)
       b. Floyd went from Buffalo to Rochester (in the morning)

• multiple independent time-positional modifiers in the periphery of single cores are disallowed
  – it is conceivable that this constraint may be a special case of a more general principle
  • see the discussion at the end of this paper

• however, this constraint does not necessarily hold for simple verb phrases (in English)
  (3.3) Floyd complained from his departure in Buffalo (at 8:00) to his arrival in Rochester (at 9:15)

• VPN with non-sentential periphery \( \Rightarrow \ [+\text{MEP}] \)
• VPN with event nominalizations \( \Rightarrow \ [-\text{MEP}] \)
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Multi-core constructions

- constructions that comprise multiple cores generally lack the MEP
  - consider (4.1)-(4.2), featuring an event nominalization and a clause as core arguments
    (4.1) Floyd’s behavior at the party on Monday still angered Sally three days later
    (4.2) That Floyd kissed Harriet at the party on Monday still angered Sally three days later
- in such structures, each core introduces its own periphery
  - which may host independent time-positional modifiers

Multi-core constructions (cont.)

- however, there is an important exception
  - across languages, core cosubordinations appear to have the MEP

(4.3) Preservation-under-cosubordination Hypothesis:
Core cosubordination preserves the MEP.

- in the following, we present supporting evidence for (4.3) from
  - English infinitival complement constructions
  - Ewe serial verb constructions
  - Japanese converb constructions
- a question for future research
  - does cosubordination necessarily involve a single shared periphery?
    - is that what’s responsible for (4.3)?

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English: infinitival complements

- core coordination under a clause node
  ⇒ [- MEP]
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Ewe: serial verb constructions

- the two types of serial verb constructions of Ewe illustrated below are both mono-clausal
  - yet the first has the MEP, the second does not

  (6.1) Circle lá mlitsó blut ᴺᵇ ᴶᵃ le m’a ḋ℞ [DEF roll from blue place LOC road on]
  ᴶᵃ ḋ℞ le ga enyĩ me vë tă x-a ᴶⁿ ḋ℞ le ga asiéke me [DEF skin at-eight]
  ᴶⁿ ḋQPushButton(348, 375) le ga ewó me.‘
  [ITL VEN arrive triangle DEF place at ten]
  ‘The circle rolls from the blue one on the road at eight, passing the house at nine, arriving at the triangle at ten.’

  (6.2) *Circle lá mlitsó blut ᴺᵇ ᴶᵃ le m’a ḋ℞ [DEF roll from blue place LOC road on]
  ᴶⁿ ḋQPushButton(348, 375) le ga enyĩ me vë tă x-a ᴶⁿ ḋ鼩 le ga asiéke me [DEF skin at-nine]
  ᴶⁿ ḋ鼩 le ga ewó me.‘
  [ITL VEN arrive triangle DEF place at ten]
  intended: ‘The circle rolls from the blue one on the road at eight, passing the house at nine, arriving at the triangle at ten.’

Ewe: serial verb constructions (cont.)

- core coordination under a clause node

  => [−MEP]

Ewe: serial verb constructions (cont.)

- core cosubordination under a core node

  => [+MEP]
Ewe: serial verb constructions (cont.)

- the two structures differ in that the one in Figure 8 requires directional particles in the cores
- evidence for the single clause node in Figures 8-9 comes from negation
  - the verbal projections cannot be negated independently of one another (cf. Bohnemeyer et al. 2007: 500-501)
- the placement of the PPs makes a nuclear juncture analysis of either construction look implausible
- by hypothesis, cosubordination is responsible for the structure in Figure 9 having the MEP

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Japanese: converb constructions

- -te converbs occur in nuclear, core, and clause junctures (Hasegawa 1996)
- core junctures with -te have the MEP
  - examples from Bohnemeyer et al. (in press)

(7.1) Onna no hito no osara vo teeburu ni tataki + tsuke te wat ta
female GEN person NOM dish ACC table LOC hit + attach CON
five-minute later LOC break PAST
'The woman broke the dish ("five minutes later [i.e., after smashing it]") by smashing it against the table'

(7.2) Onna no hito no hannao oo toshi te
female GEN person NOM hammer ACC drop CON
five minute later LOC dish ACC break PAST
'The woman broke the dish ("five minutes later [i.e., after dropping the hammer]") by dropping a hammer'

Japanese: converb constructions (cont.)

- in contrast, clause-level junctures with -te lack the MEP

(7.3) Sono onna no hito no tsui te
that female GEN person NOM Tokyo LOCNarrive CON
nakina jishin no oki ta
big earthquake NOM happen PAST
'A big earthquake happened five days after the woman arrived at Tokyo' (Sotaro Kita p.c.)

Japanese: converb constructions (cont.)

- clausal cosubordination
  - clausal junctures with -te must be cosubordinations

Japanese: converb constructions (cont.)

- core cosubordination ⇒ [+MEP]
  - the evidence against coordination comes again from modal operators

Figure 10. Clause cosubordination with the -te converb form

Figure 11. Core cosubordination with the -te converb form
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Summary and discussion

• simple cores are "macro-event phrases"
  – they appear to be universally associated with the macro-event property (MEP) – unlike verb phrases
• why should this be the case?
  – cores are the smallest unit that can be tested for the MEP
    • since they, but not their nuclei, license the kind of periphery that accommodates time-positional modifiers
  – cores are the smallest syntactic unit that can host a syntactically complete eventuality description
    • they are constituted by the expressions of predicates and their arguments
      – and therefore are sensitive to interface mapping properties in a way that VPs are not

Summary and discussion (cont.)

• complex cores and multi-core constructions generally lack the MEP
  – an intriguing exception across languages appear to be core cosubordinations
    • this construction may owe its special status vis-à-vis the MEP to cosubordinate cores sharing a periphery
      – this remains to be investigated
• a philosophical implication
  – mainstream Generative Grammar assumes
    • that the units of syntactic structure can and should be defined independently of the mapping properties
      – of the syntax-semantics interface
    – in contrast, RRG treats such properties as part of the definition of units of syntax such as the core

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References

http://www.acsu.buffalo.edu/~jb77/Eugene_paper_jb&al_draft_03.pdf
References (cont.)


