

The Syntax of Event Structure

Lecture 2: Why Events?

1. Variable Behavior Verbs

1.1. The Paradigm

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|------------------------------------------------------------------------------|----------------------------------------------------------------------|--------------------------------------------------------------------|
| 1. <i>Transitive:</i>
[_{VP} External [_V V Internal] | <i>Unaccusative:</i>
[_{VP} ∅ [_V V Internal] | <i>Unergative:</i>
[_{VP} External [_V V ∅] |
|------------------------------------------------------------------------------|----------------------------------------------------------------------|--------------------------------------------------------------------|
2. a. *Jan heeft gesprongen* (Dutch)
Jan has jumped
b. *Jan is in de sloot gesprongen*
Jan is in the ditch jumped
 3. a. *Gianni ha corso* (Italian)
Gianni has run
b. *Gianni e corso a casa*
Gianni is run to home
 4. a. **Ne hanno corso/i due*
of-them have run two
b. *Ne sono corsi due a casa*
of-them are run.agr two to home (Hoekstra and Mulder, 1990).
 5. a. *ha.xadašot hericu 'et dan le.misrado* (Hebrew)
the.news made.run OM Dan to.office.his
'The news made Dan run to his office'
b. *#ha.xadašot hericu 'et dan be.misrado*
the.news made.run OM Dan in.office-his
'The news made Dan run in his office'
c. *ha.boss heric 'et dan be.misrado/l.-misrado*
the.boss made-run OM Dan in.office-his/to.office his
'The boss made Dan run in his office/to his office'
 6. *In het tweede bedrijf werd er door de nieuwe acteur op het juiste ogenblik gevallen*
In the second act was there by the new actor on cue fallen
(Dutch, Perlmutter, 1978)
 7. a. *ha.praxim naḅlu le-rani/li*
the.flowers wilted to Rani
'Rani's/my flowers wilted'
b. *ha.praxim₁ naḅlu lahem₁*
the.flowers wilted to.them
'The flowers were wilting (implies self-directed motion)'
 8. a. *ha.qir hitporer le-rina/la*
the.wall crumbled to.Rina
'Rina's/her wall crumbled'
b. *ha.kir₁ hitporer lo₁ (le-'ito)*
the.wall crumbled to.it (slowly)
'The wall was crumbling slowly'
(Hebrew)
 9. a. *??ha.praxim naḅlu le-rani me-axat 'ad šaloš ve-'az yarad gešem ve-hem*

hit'ošešu
 the.flowers wilted to.Rani from 1pm to 3pm and then it rained and-they recovered

- b. *ha.praxim₂ naḅlu lahem₂ me-axat 'ad šaloš ve-'az yarad gešem ve-hem*
hit'ošešu
 the.flowers wilted to.them from 1pm to 3pm and then it rained and-they recovered

10. Dowty's Correlations:

Agentive, Atelic: definitely unergative
 Non-Agentive, Telic: definitely unaccusative

11. [_S Kim ... [_{VP} arrived/laughed]]

1.2. Evidence for Syntactic Representation for Variable Behavior Verbs

12. a. *ne arrivanno [molti ne]*
of-them arrive many
b. **[molti ne] ne arrivanno*
13. **ne telephonano [molti ne]*
of-them telephone many
14. a. *Kim ne ha spinti [molti ne] (per molte ore)*
Kim *ne* has pushed many (for many hours)
b. *Kim ne ha guidate [molte ne] (per molte ore)*
Kim *ne* has driven many (for many hours)
15. a. *Het vliegtuig is geland*
the plane is landed
b. *De voorstelling is aangevangen*
the performance is begun
16. a. *Het vliegtuig heeft een landing gemaakt*
the plane has a landing made
b. *De voorstelling heeft een aanvang genomen*
the performance has a beginning taken. (Everaert, 1992)
17. a. *ha₁.yeladim xatku le-rani_{*1,2} 'et ha₂.gader?*
the.boys cut to-Rani acc the.fence
'*Rani's boys (=Rani's sons) cut the fence'
'the boys cut Rani's fence'
b. *ha.yalda₁ nigna le-rani_{*1,2} ba-psanter₂*
the.girl played to-Rani in-the.piano
'*Rani's girl(=Rani's daughter) played the piano'
'The girl played Rani's piano'
18. a. *ha₁.yeladim zarku le-rina_{*1,2,3,4} 'et ha₂.kadur le-tox ha₃.gina 'al-yad*
ha₄.mitbax
the.boys threw to-Rina acc the.ball into the.garden next-to
the.kitchen
'*Rina's sons threw the ball into the garden (while) next to the kitchen'
'the boys threw Rina's ball into the garden, (while) next to the kitchen'
'the boys threw the ball into Rina's garden, (while) next to the kitchen'

'the boys threw the ball into the garden, (while) next to Rina's kitchen'

- b. *ha₁.xatulim yilelu le-Rina_{*1,2,3} mi-taxat la₃-xalon bi-zman ha₂.šena*
 the.cats whined to-Rina under to.the.window during the.nap
 '*Rina's cats whined under the window during naptime '
 'the cats whined under the window during Rina's nap'
 'the cats whined under Rina's window during naptime '

19. a. *ha₂.mitriya napla le-Rani_{2}*
 the.umbrella fell to-Rani
 'Rani's umbrella fell'

- b. *napla le-Rani_{2} ha₂.mitriya*
 fell to-Rani the.umbrella
 'Rani's umbrella fell'

- c. *ha₂.mitriya napla le-Rani_{2,3,4} al ha₃.šbil le-yad ha₄.mitbax*
 the.umbrella fell to-Rani on the path next-to the.kitchen
 'Rani's umbrella fell on the path, next to the kitchen'
 'the umbrella fell on Rani's path, next to the kitchen?'
 'the umbrella fell on the path, next to Rani's kitchen'

"Verbs that show variable behavior of this kind are always associated with more than one meaning; each meaning turns out to be correlated with the predicted syntactic properties, including membership in the unaccusative or unergative class. The question, however, is whether the change in meaning displayed by a particular variable behavior verb is to be attributed to its appearance in a particular construction, as the constructional approach would claim, or to the existence of some lexical rule which gives rise to multiple semantic classifications of verbs, which then license the appearance of these verbs in more than one construction, as the lexical approach would have to claim... The constructional approach predicts that ... verbs are free to appear in a range of constructions (and hence meanings) constrained only by the compatibility of the "core" meaning of the verb with the semantics of the construction... The lexical approach, in contrast, does not make this prediction... [in turn there is a] need for lexical rules which specify multiple class membership. In addition, the multiple classification of verbs is manifested in a variety of constructions, suggesting that verbs are classified once and for all for class membership."

(Levin and Rappaport Hovav 1992b, pp. 12,13).

20. a. I sprayed the wall with the paint (in two hours)
 b. I sprayed the paint on the wall (in two hours)
21. a. I ate the cake (in ten minutes)
 b. I ate at the cake (*in ten minutes)
22. a. Kim built the houses (in three months)
 b. Kim built houses(*in three months)

"Hypothesizing that a large semantically coherent group of verbs have duplicate categorization in unaccusative and unergative syntactic classes (and with corresponding different semantics in the two frames) would be missing the point, I argue....I would argue that the correct analysis is...semantic...

instead of or in addition to the syntactic type."

(Dowty, 1991, p. 608).

23. A. If argument structure projects from the lexicon, the distinct syntax of unaccusatives and unergatives means that there are two entries for variable behavior verbs, together with lexical mapping rules which modify argument structure configurations
 B. If we wish to reject the systematic existence of two distinct entries for variable behavior verbs, then it follows that at least the syntax of variable behavior verbs, and by extension, the syntax of argument structure, cannot project from the lexicon.

2. But why Aktionsart?

2.1. Arguments for the syntactic representation of *aktionsart* (from Rosen, 1999)

24. A. Addition of direct object gives rise to telicity:
 a. Bill ran for 5 minutes/*in five minutes
 b. Bill ran the mile *for five minutes/in five minutes¹
 cf. Verkuyl, 1972 and subsequent work, Dowty, 1979, 1991, Tenny, 1987, 1994, and Krifka, 1992, 1998, among many others
 B. Cognate Objects give rise to telicity:
 a. Terry sang for an hour/*in an hour
 b. Terry sang a ballad ?for an hour/in an hour
 C. X's way Constructions give rise to telicity:
 a. Marcia sang for an hour/*in an hour
 b. Marcia sang her way to the Met in 10 years/*for ten years
 D. Fake Reflexives give rise to telicity:
 a. Terry swam for an hour/*in an hour
 b. Terry swam herself to sleep in an hour/*for an hour
 E. The Conative Alternation (cf. (21)) gives rise to atelicity:
 a. I ate the cake for ten minutes/in ten minutes)
 b. I ate at the cake for ten minutes/*in ten minutes
 F. Antipassive gives rise to atelicity:
 a. *Junna-p Anna kunip-p-a-a*
 Junna.erg₂ Anna.abs₁ kiss.ind.(trans).3sg₂/3sg₁
 'Junna kissed Anna'
 b. *Junna (Anna-mik) kunis-si-vu-q*
 Junna.abs₂(Anna.intrans) kiss.APASS.(intrans).3sgA₂
 'Junna kisses/is kissing Anna' (Inuit, from Bittner and Hale, 1996)
 G. The addition of an (ECM) Object, in resultative constructions, triggers telicity:
 a. Terry ran for an hour/*in an hour
 b. Terry ran us ragged in an hour/*for an hour
 H. Verb Particles with 'objects' trigger telicity:
 a. Terry thought for an hour/*in an hour
 b. Terry thought an answer up in an hour/*for an hour

¹ Judgments from Rosen, (1999). Native speakers report that (24b) is possible with an atelic construal in certain contexts, e.g., if 'the mile' is understood as a particular stretch, rather than defining the length of the running.

25. a. *Anne rakensi taloa*
 Anne built house-PRT
 'Anne was building a/the house'
 b. *Anne rakensi talon*
 Anne built house-ACC
 'Anne built a/the house'

2.2. Reinhart's (1996) Arguments against the Syntax of *aktionsart*

26. a. The vase broke and fell
 b. The vase fell and broke
27. a. The apple dropped and reddened
 b. The apple reddened and dropped
28. a. Kim ran and sang
 b. Kim sang and ran
29. a. The yarn twisted and spanned
 b. The yarn spanned and twisted (Reinhart, 1996)
30. a. The apple yellowed and reddened
 b. The apple reddened and yellowed
31. a. The guest understood the solution and left
 b. The guest left and understood the solution
32. a. We watched [the asteroid drop/fall (through the atmosphere) and burn/break apart for several minutes]
 b. We watched [the asteroid burn/break apart and drop/fall (through the atmosphere) for several minutes]
 (cf. *We watched [the guest understand the problem and leave (*for several minutes)]* vs. *we watched [the guest leave and understand the problem (*for several minutes)]* with a sequential interpretation only)
33. *ha.mete'or nisrap ve-napal /napal ve-nisrap* (ambiguous)
 the.meteor burned and fell /fell and burned
 'the meteor burned and fell/fell and burned'
34. a. *ha.mete'or napal le-ran ve-nisrap*
 the.meteor fell to-Ran and-burned
 b. *ha.mete'or napal ve-nisrap le-ran*
 the.meteor fell and-burned to-Ran
 'Ran's meteor fell and (then) burned'
 (e.g., in a physics class, with students writing programs simulating meteoric trajectories)
35. a. *ha.mete'or_i nisrap ve-napal lo_i*
 the meteor burned and-fell to.it
 b. *ha.mete'or_i napal lo_i ve-nisrap*
 the meteor burned to.it and-fell
 'The fell and burned' (simultaneity is possible but not forced)

3. UTAH?

36. *drop.trans*; *drop.unacc*; *drop.unerg*; [_Adropped]; [_Adroppable]; [_N drop]

Within UTAH, *drop* must be associated with the same thematic and syntactic configuration in all these instantiations.

37. a. [_{FP1} [SUBJ-OF-CHANGE] <e>_{F1} [_{VP} [_v drop]]]
 b. [_{FP2} [SUBJ-OF-PROCESS] <e>_{F2} [_{VP} [_v drop]]]
 c. [_{FP2} [SUBJ-OF-PROCESS] <e>_{F2} [_{FP1} [SUBJ-OF-CHANGE] <e>_{F1} [_{VP} [_v drop]]]]
 d. [_{DP} <e>_d [_{NP} [_N drop]]]]
38. [_{FP3} [SUBJ-OF-STATE] <e>_{F3} [_{AP} [_A drop(-aff)]]]

4. Severing the *Internal* Argument from its Verb (cf. Kratzer (1994, 1996))

39. Jane fed the dog
40. a. (*feed* (theme) (e))
 b. ∃e [Agent (*Jane*, e) & (*feed* (the dog) (e))]
41. ∃e [*quantity*(e) & *originator*(*Jane*, e) & *subject-of-quantity*(*the dog*, e) & *feed* (e)]
42. External arguments disappear (e.g. in adjectival passives), but not 'internal' arguments – a problem for UTAH, but not for severing the external argument from the verb poses precisely the same problems as it does for full lexical projection accounts.
43. Location of assignment -
 a. Variable behavior verbs
 b. Adjectival passives have external, rather than internal arguments.
44. a. *takie studenty nikogda ne prinjaty v universitet (verbal passive)*
 such students never NEG accepted in university
 (M.NOM.pl) (pl)
 'Such students are never accepted in the university' (*verbal passive*)
 b. *takix studentov nikogda ne prinjato v universitet*
 (M.GEN.pl) (neut.sg)
45. a. *takie manery nikogda ne prinjaty v xorosix klubax (adj. passive)'*
 such manners never NEG acceptable in good clubs
 (F.NOM.pl) (pl)
 b. **takix maner nikogda ne prinjato v xorosix klubax (adj. passive)'*
 (F.GEN.pl) (neut sg)
 (Russian, Pesetsky, 1982)
46. a. *ha. xuga hunxa li xal šulxan (v-passive, poss. dat)*
 the.cake placed(V.Pass) to.me on table
 'My cake was placed on a table'
 b. *ha.xeder qušat li be-praxim (v-passive, poss. dat)*
 the.room `decorated(V.Pass) to.me with-flowers
 'My room was decorated with flowers'
47. a. **ha. xuga₂ hunxa la₂ xal šulxan (v-passive, reflx. dat)*
 the.cake placed(V.Pass) to.it on table
 b. **ha.xeder₂ qušat lo₂ be.praxim (v-passive, reflx. dat)*
 the.room decorated(V.Pass) to.it with.flowers
48. a. **ha. xuga hayta munaxat li xal šulxan (a-passive, poss. dat)*
 the.cake was placed.A to.me on table

- b. **ha.xeder haya mequšat li be-praxim (a-passive, poss. dat)*
 the.room was decorated.A to.me with-flowers
49. a. *ha. xuga₂ hayta munaxat la₂ xal šulxan (a-passive, refl. dat)*
 The.cake was placed-A to.it on table
 'The cake was lying on the table'
- b. *ha.xeder₂ haya mequšat lo₂ be-praxim (a-passive, refl. dat)*
 the.room was decorated.A to.it in-flowers
 'The room was decorated with flowers'
50. a. $\exists e$ [*quantity (e) & subject-of-quantity (the flower, e) & wilt (e)*]
 b. $\exists e$ [*activity (e) & originator (the flower, e) & wilt (e)*]

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