

## Argument Structure: 2

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### *Lesson 2: The Analyzes of Some Frequent Argument Structures*

#### 1. Verbs with one argument

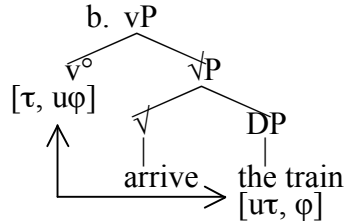
Three types of verbs will be analyzed: unaccusative verbs like *come* and *arrive*, passives of ordinary transitive verbs, and unergative verbs like *sing* and *run*.

#### Unaccusative verbs

An unaccusative verb is an intransitive verb taking a subject that does not actively initiate the action of the verb. Roughly, the subject of this type of verbs has properties shared with the direct object of a transitive verb. With respect to thematic role, the argument of these verbs is Patient or Theme. Verbs like *arrive*, *die* and *fall* are unaccusative verbs, while *sing* or *walk* are not. They are called unaccusative verbs because in a nominative–accusative language the only case which uniquely identifies a non-volitional role is the accusative case.

It follows from UTAH that a Theme/Patient argument constitutes the complement of the root; since this is the only argument, there cannot be any other DPs within vP, as illustrated for *arrive* in (20b). Note that there is one probe and one goal in (20b); when Agree has applied, both uninterpretable features are valued, and subsequently deleted.

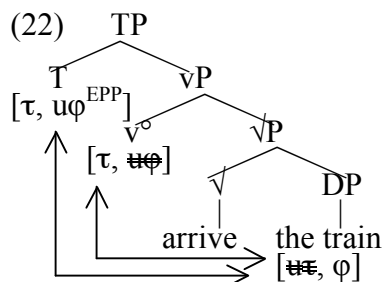
(20) a. *The train arrived at 6.*



An argument for (20b) is that unaccusative verbs cannot take cognate objects (21a), unlike the unergative verb *dance* in (21b). Since cognate objects are Themes, they must appear in the complement of the root, but that position is occupied by the unaccusative subject.

(21) a. \**The train arrived a late arrival.*  
 b. *They danced a complicated dance.*

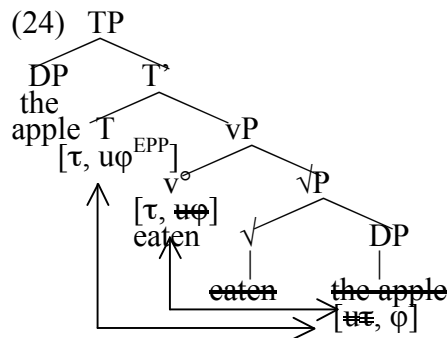
The analysis cannot stop with (20b), since the vP is not a full clausal structure. As we saw above, T is selecting vP, introducing a new probe with the features  $[\tau, u\phi^{EPP}]$ ; note that in a language like English with obligatory overt subjects, there is an EPP feature associated with  $u\phi$  in T. When T is merged to vP, the structure is the one given in (22).



In passive, the active subject is demoted and optionally represented by a PP. Thus, there is only one DP argument, corresponding to the direct object in the active clause.

(23) *The apple was eaten (by John).*

From the point of argument structure, we do not have to bother about the passive auxiliary *be*, since this verb is not associated with any thematic roles. The structure of (23) is identical to the one proposed for (20a), see (22) above and notice that the movement to subject position is not illustrated in (22)):



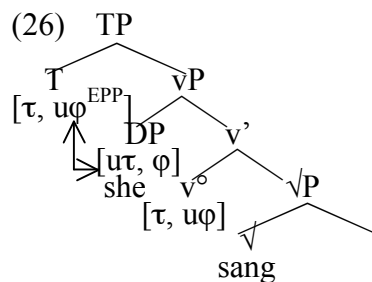
The demoted argument does not have to be in Spec-vP:

- (25) a. *Hundar skrämmer honom.*  
 dogs frighten him  
 b. *Han blir skrämmd av hundar.*  
 he is frightened by dogs

### Unergative verbs

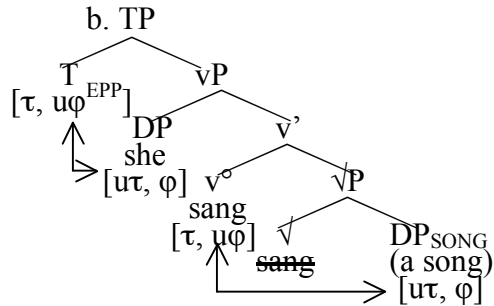
An unergative verb is an intransitive verb where the subject is actively initiating the action expressed by the verb, like English *run*, *sing*, and *dance*. Such verbs are called unergatives because in an ergative-absolutive language, the only case which uniquely identifies a volitional argument is the ergative case, which marks the Agent of a transitive verb.

Since the argument of an unergative verb is the initiator, UTAH determines that this argument must be merged in Spec-vP, giving us the structure in (26):



**Notice** that the structure in (26) is not well-formed, since  $v^\circ$  cannot get rid of its uninterpretable and unvalued  $\phi$ -feature. Hale & Keyser (2002:14) suggest that unergative verbs are “denominal” in a particular sense, meaning that (the root of) such verbs take a nominal complement that corresponds to a cognate object. Implementing this idea in our framework, we assume a DP in the complement of the root, carrying the features  $[u\tau, \phi]$  and thus providing a goal for  $v^\circ$  to probe. The structure of (27a) is given in (27b):

(27) a. *She sang (a song).*



(28) a.. *She ran a marathon yesterday.*  
 b. *She ran (the path) through the wood.*

Like transitive verbs, unergative ones may occur in the passive voice, as seen in (29):

(29) a. *The song was sung by Mary.*  
 b. *This year's New York Marathon was run by 30.000 men and women.*

In such cases the external DP-argument is lacking, occasionally expressed in a *by*-phrase. Since there is no DP in Spec-vP for T to probe, T has to go for the cognate object, already probed by  $v^\circ$ . Due to EPP on  $u\phi$  in T, this object must be phonologically expressed, otherwise EPP cannot be deleted. If the object is not phonologically expressed, languages with EPP on  $u\phi$  in T have to insert an expletive subject to provide a way for T to get rid of its EPP-feature.

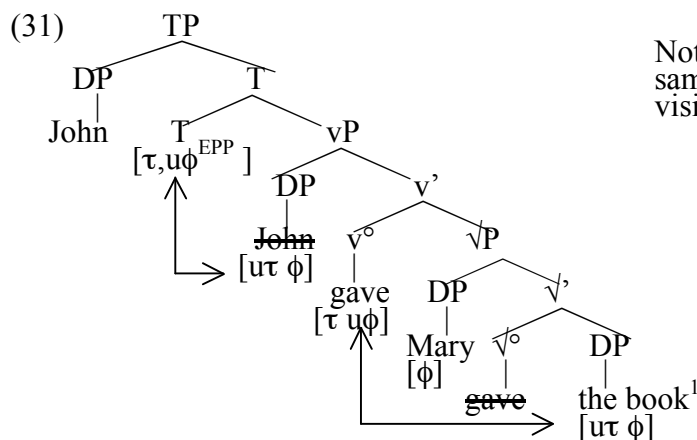
- (30) a. *Det dansades i flera timmar på skeppet.* (Swedish)  
 it was-danced for several hours at ship.the  
 b. *Es wurde bis spät in die Nacht getrunken.* (German)  
 it was till late in the night drunk  
 c. *\*There was danced on the ship for five hours.* (English)

We will not try to account for the fact that impersonal passives of this kind are possible in all the Germanic languages except English.

## 2. Verbs with three arguments

### Active ditransitives

Compared to ordinary transitive verbs, ditransitives have an extra argument within  $\sqrt{P}$ . Since the number of probes is constant (T and  $v$ ), the extra argument cannot have a full feature set up, or one uninterpretable feature will not be valued. In my description of the sentence *John gave Mary the book* in (31), I assume that the indirect object lacks a  $[u\tau]$  feature.



Note that the Agree relations would be the same also in the case Mary lacks any features visible to the probes T and  $v$ .

<sup>1</sup> It follows from Starke's Anti Identity principle (Starke 2001, 8) that  $\alpha\beta \dots \alpha \dots \alpha\beta$  is a legal environment for establishing a relation between the two instances of  $\alpha\beta$ . Hence the probe  $v^\circ$  will Agree with the direct object, bypassing the indirect one.

It should be obvious that if *Mary* had contained an uninterpretable  $\tau$ -feature in addition to its  $\phi$ -feature,  $v^\circ$  would have selected *Mary* as its goal; in that case, the uninterpretable  $\tau$ -feature in the direct object would not have been eliminated, and the derivation would have crashed.

### Passive ditransitives

Verbs taking two objects in the active form (ditransitive verbs) may theoretically promote any object to subject when appearing in the passive. As the examples in (32) show, however, this is not generally true. In standard American English, e.g., only the indirect object (the goal argument) may be promoted, as shown by the difference between (32b) and (32c).

- (32) a. *John gave Mary a red bike yesterday.*  
 b. *Mary was given a red bike yesterday.*  
 c. \**The red bike was given Mary yesterday.*

German, on the other hand, only allows the direct object to be promoted:

- (33) a. *Eine größere Wohnung wurde ihm versprochen.*  
 a larger flat was him promised  
 He was promised a larger flat.  
 b. \**Er wurde eine grössere Wohnung versprochen.*

In the terminology of Baker (1988, 180-186), the patterns in (32) and (33) are typical for partial or asymmetric double object languages. Swedish differs from both German and standard American English in being a true or symmetric double object language (Baker 1988, 174-180): as shown in (34a,b), either the goal argument (the indirect object) or the theme argument (the direct object) may be promoted to subject in passive.<sup>2</sup> Danish and Norwegian are like Swedish,<sup>3</sup> see the Norwegian examples in (34c,d).

- (34) a. *Han erbjöds ett nytt jobb.* (Swedish; Falk 1990, ex. (4:3))<sup>4</sup>  
 he offered.PASS a new job  
 He was offered a new job.  
 b. *Ett nytt jobb erbjöds honom.*  
 a new job offered.PASS him  
 c. *Pokalen vart överrekt vinnaren.* (Norwegian; Faarlund et al. 1997, 842f.)  
 cup.DEF was presented winner.DEF  
 The cup was presented to the winner.  
 d. *Vinneren vart overrekt ein pokal.*  
 winner.DEF was presented a cup  
 The winner was presented a cup.

<sup>2</sup> Statistically, there is a clear 80-20 preference for promoting the indirect object in written Swedish, as Lundquist (2004) has shown. The only verbs preferring direct object promotion are *tillägna* 'dedicate' and *tillskriva* 'ascribe, attribute'. Note that *tillägna* accepts both the order indirect-direct object and direct-indirect object in the active voice, as shown in (i):

- (i) a. *Tyson tillägnade matchen honom.* b. *Tyson tillägnade honom matchen.*  
 Tyson dedicated match.DEF him Tyson dedicated him match.DEF

<sup>3</sup> Falk (1990) claims that Danish patterns with Am. English. However, according to Lars Heltoft (p.c., author of the forthcoming Danish Reference Grammar), cases like (i) and (ii) are grammatical, showing that Danish is a symmetric language.

- (i) a. *Præmien blev frataget ham igen.* (ii) a. *Prisen blev tildelt Ghita Nørby.*  
 prize.DEF was deprived him again prize.DEF was allotted Ghita Nørby  
 b. *Han blev frataget præmien.* b. *Ghita Nørby blev tildelt prisen.*  
 he was deprived prize.DEF Ghita Nørby was allotted prize.DEF

<sup>4</sup> Swedish may also form the passive with the help of an auxiliary and a past participle. With respect to the choice of subject, both passives are alike:

- (i) a. *Hän blev erbjuden ett nytt jobb.* b. *Ett nytt jobb blev erbjudet honom*  
 he was offered a new job a new job was offered him

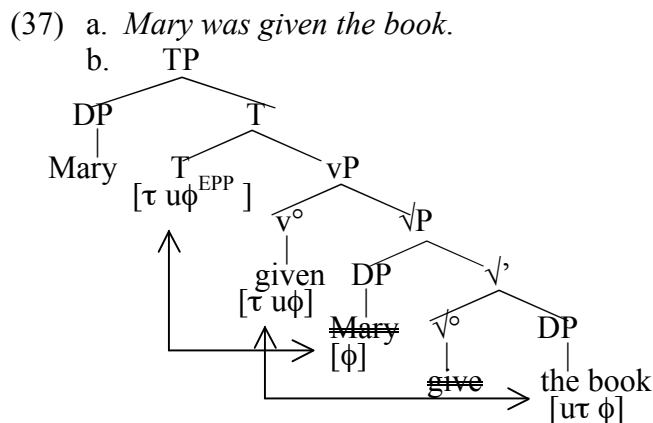
Also Icelandic allows promotion of both the goal argument and the theme argument, although the goal argument is realized as an oblique subject:

- (35) a. *Var Jóni gefin bókin?* (Icelandic; Barðdal 1999, ex. (20))  
 was Jón-DAT given book.DEF.NOM  
 b. *Var bókin gefin Jóni?*  
 was book.DEF.NOM given Jón-DAT

There are also British English dialects that are symmetric double object languages. Consider (36), taken from Bissell (2004, 95):

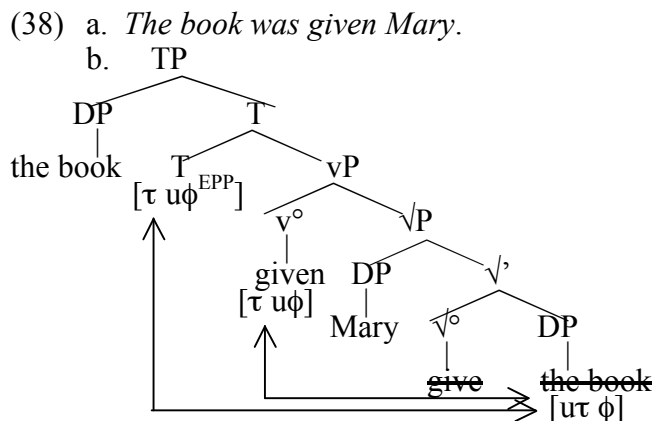
- (36) *A medal was given the professor that I told you about last week.*

Taking the passive morpheme to demote the external argument to PP status (see above), we derive the structure in (37b) for the sentence (37a), *Mary was given the book.*



Consider next the British English and modern Mainland Scandinavian option to promote the direct object, producing sentences like *The book was given Mary*. To force the direct object to be promoted, *Mary* must lack features. We take this to be a relict with respect to features, assuming that morphological dative makes the feature of DP invisible for the probes *v* and *T*.

The derivation of the passive (38a) with promoted direct object is given in (38b).



As shown by (37) and (38), the feature value of the indirect object determines which argument will be promoted to subject in a passive double object construction: when the indirect object only has an interpretable  $\phi$ -feature, the indirect object will be promoted, as in (37), whereas when the indirect object has no features at all, the direct object will be promoted, as in (38).

## References

- Anagnostopoulou, Elena (2002), *The Syntax of Ditransitives. Evidence from Clitics*. Berlin, New York: Mouton de Gruyter.  
 Arad, Maya (1996), A minimalist view of the syntax-lexical semantics interface. *UCL Working Papers in Linguistics* 8, 215-242.

- Baker, Mark (1988), *Incorporation: a Theory of Grammatical Function Changing*. Chicago, IL: The University of Chicago Press.
- Baker, Mark (1997), Thematic roles and syntactic structure. In *Elements of grammar, Handbook in generative syntax*, ed. by L. Haegeman, 73-137. Dordrecht: Kluwer.
- Barðdal, Jóhanna (1999), The Dual Nature of Icelandic Psych-Verbs. *Working Papers in Scandinavian Syntax* 64, 79-101.
- Bissell, Teal (2004), *All Things Being Unequal: Locality in Movement*. PhD thesis. Department of Linguistics, MIT.
- Bobaljik, Jonathan (2002), Realizing Germanic Inflection. Why Morphology Does Not Drive Syntax. *Journal of Comparative Germanic Linguistics* 6: 129-167.
- Broekhuis, Hans (2000), Against Feature Strength: The Case of Scandinavian Object Shift. *Natural Language and Linguistic Theory* 18, 673-721.
- Chomsky, Noam (1982), *Some Concepts and Consequences of the Theory of Government and Binding*. Cambridge, MA and London, England: The MIT Press.
- Chomsky, Noam (1995), *The Minimalist Program*. Cambridge, London: The MIT Press.
- Chomsky, Noam (2001), Derivation by phase. In *Ken Hale. A Life in Language*, ed by Michail Kenstowicz, 1-52. Cambridge, MA and London, Engl.: The MIT Press.
- Chomsky, Noam (2005), On Phases. Unpublished ms., MIT.
- Faarlund, Jan Terje, Svein Lie & Kjell Ivar Vannebo (1997), *Norsk referansegrammatik*. Oslo: Univeritetsforlaget.
- Falk, Cecilia (1990), On Double Object Constructions. *Working Papers in Scandinavian Syntax* 46, 53-100.
- Givón, Talmy (2001), *Syntax. Volume I*. Amsterdam/Philadelphia: John Benjamins.
- Grimshaw, Joan (1990), *Argument structure*. Cambridge, MA: The MIT Press.
- Hale, Ken & Samuel Jay Keyser (2002), *Prolegomenon to a Theory of Argument Structure*. Cambridge, MA, London, England: The MIT Press.
- Heinat, Fredrik (2006a), *Probes, pronouns, and binding in the Minimalist Program*. Doctoral dissertation, Lund University.
- Heinat, Fredrik (2006b), Probing Phrases, Pronouns and Binding. *Glow Newsletter* 56.
- Hellan, Lars (1990), The phrasal nature of double object clusters. In *Issues in Germanic syntax*, ed. by Werner Abraham, Wim Kosmeijer and Eric Reuland, 67-92. Berlin, New York: Mouton de Gruyter.
- Holmberg, Anders & Christer Platzack (1995), *The Role of Inflection in Scandinavian Syntax*. Oxford, New York: Oxford University Press.
- Holmberg, Anders (2002), Expletives and Agreement in Scandinavian Passives. *Journal of Comparative Germanic Linguistics* 4, 85-128.
- Jackendoff, R. (1972), *Semantic Interpretation in Generative Grammar*. Cambridge, Mass. and London, England: The MIT Press.
- Larson, Richard (1988), On the Double Object Construction. *Linguistic Inquiry* 19, 335-392.
- Legate, Julie Anne (2003), Some Interface Properties of the Phase. *Linguistic Inquiry* 34: 506-516.
- Lundquist, Björn (2004), Subjektival vid passivering av bitransitiva verb. Unpublished Masters Thesis, Lund University.
- Maling, J. (2001), Dative: The heterogeneity of the mapping among morphological case, grammatical functions, and thematic roles. *Lingua* 111, 419-464.
- Maranz, Alec (1997), No Escape from Syntax. Don't Try Morphological Analysis in the Privacy of Your Own Lexicon. In *Proceedings of the 21<sup>st</sup> Penn Linguistics Colloquium*, 201-225. UPenn Working Papers in Linguistics, University of Pennsylvania, Philadelphia.
- McGinnis, Martha (1998), Locality in A-movement. Ph.D. diss., Cambridge MA: Department of Linguistics and Philosophy, MIT.
- Nordström, Jackie (2006), Selection through Uninterpretable Features. Evidence from Insular Scandinavian. *Working Papers in Scandinavian Syntax* 77: 129-149.
- Pesetsky, David (1995), *Zero Syntax*. Cambridge, MA: The MIT Press.
- Pesetsky, David & Esther Torrego (2001), Tense-to-C Movement. Causes and Consequences. In *Ken Hale. A Life in Linguistics*, ed. by Michael Kenstowicz, 355-426. Cambridge, The MIT Press.
- Pesetsky, David & Esther Torrego (2004), Tense, Case, and the Nature of Syntactic Categories. In *The Syntax of Time*, ed. by Jacqueline Guéron and Jacqueline Lecarme, 495-537. Cambridge, MA: The MIT Press.
- Platzack, Christer (1999), The Subject of Icelandic Psych-Verbs: a Minimalist Account. *Working Papers in Scandinavian Syntax* 64, 103-115.
- Platzack, Christer (2006), Case as Agree Marker. *Working Papers in Scandinavian Syntax* 77: 71-99.
- Ramchand, Gillian (2006), *Verb Meaning and the Lexicon*. Unpublished ms., CASTLE, University of Tromsø.
- Starke, Michal (2001), *Move Dissolves into Merge: a Theory of Locality*. PhD Diss, available at LingBuzz 000002.
- Ura, Hiroyuki (1996), Multiple Feature-Checking: A Theory of Grammatical Function Splitting. Ph.D. diss., Cambridge, MA: Department of Linguistics and Philosophy, MIT.