

The Discourse-Semantic Background of the Freedom of Hungarian Word Order

I argue that in a representational dynamic discourse-semantic framework (Alberti 2011), an operator zone belonging to a verb or other head can be captured, as a first step, by a chain of generalized conditionals with the first focus as the last element (if $K > 0$):

(1) The general scheme of the operator zone $[O^* \wedge F_1 \wedge O^* \dots \wedge F_K \wedge O^* \wedge X]$ of a head X :

$[\dots [O_1 \rightarrow_{\omega_1} (O_2 \rightarrow_{\omega_2} (\dots (O_{J-1} \rightarrow_{\omega_{J-1}} (O_J \rightarrow_{\omega_J} (X \rightarrow_{\forall} F_K))) \dots))] \rightarrow_{\forall} F_{K-1} \dots] \rightarrow F_1$

$X = V, A, Adv, Inf, N$; $J = 0, 1, 2, \dots$; $K = 0, 1, 2, \dots$;

F: focus; O: other operators (diff. sorts of topics, quantifiers and adjuncts)

Specifications of ' \rightarrow_{ω} ': \rightarrow_{\exists} , $\rightarrow_{A \text{ FEW}}$, $\rightarrow_{\pi\%}$, $\rightarrow_{\text{MOST}}$, $\rightarrow_{\text{default}}$, \rightarrow_{\forall} , $\rightarrow_{\text{EXACTLY } n}$, ...

What comes *indirectly* from applying scheme (1) to a sentence like (2) is (2a): a *generic/habitual* reading, whose meaning is expressed by the simplified formula in (2b). Its interpretation requires considering eventualities (EVE) in which somebody proves to be a Czech man and then their (more-step) extension to complex EVEs with a Czech man (r1), his girl-friend (r2), an Easter (r3) and his favorite pub (r5); and the given reading is to be evaluated as true if in (almost?) each relevant extension of such complex EVEs, *r1 takes r2 to r5 at r3* – provided that there is no explicit information to the contrary. This additional clause is intended to capture the *default* character of the conditionals (' $\rightarrow_{\text{default}}$ '). The existential alternative (' \rightarrow_{\exists} ') is interpreted so that, relative to the premise EVE, a single extension is required to be true (called the *weak reading* by Dekker (1996: 4.2), often illustrated by (2c)).

(2) Generic–habitual and actual readings

A cseh férfi a barátnőjét húsvétkor elviszi a kedvenc sörözőjébe.

the Czech man the girl-friend-poss3Sg-acc Easter-at away-take-3Sg the favorite pub-poss3Sg-into

e1[r1] e2[r2,r1] e3[r3] e4[r1,r2,r3,r5] e5[r5,r1]

'At Easter the Czech man takes his girl-friend to his favorite pub.'

a. $e1 \rightarrow_{\omega_1} (e2 \rightarrow_{\omega_2} (e3 \rightarrow_{\omega_3} (e5 \rightarrow_{\omega_5} e4)))$

b. *generic-habitual*: $e1 \rightarrow_{\text{default}/\exists} (e2 \rightarrow_{\text{default}} (e3 \rightarrow_{\text{default}} (e5 \rightarrow_{\text{default}/\exists} e4)))$

c. If a man has a dime in his pocket, he throws it in the parking meter.

d. *actual* (eventualities e1, e2, e3, e5 have been anchored): $e4^*$: $p_{\text{take}}(r_{2011}, r_{\text{Bohumil}}, r_{\text{Eliška}}, r_{\text{U Flekú}})$

Nevertheless, sentences to be interpreted as generic are rare, due to the principle of Maximize Discourse Coherence (Asher–Lascarides 2003). It is typical that *in the relevant context* the eventuality expressed by the premise of a conditional should be matched to a single situation, *anchoring* certain referent to given entities. Hence, (2) may mean that *my friend Bohumil takes Eliška to U Flekú in 2011* (2d). Anchoring results in the disintegration of certain parts of the initial conditional scheme in (1).

Explicit quantifiers like *every*, *most*, *exactly five*, *at least six* block this disintegration of conditional relations. They set a certain variant of generalized conditional. Conditional ' $\rightarrow_{\text{MOST}}$ ', for instance, means that the premise eventuality can be extended to the conclusion eventuality *in most relevant cases*; and conditional ' \rightarrow_{\forall} ' is a stronger version of the default condition as it permits no exception from the extendibility of the input eventuality:

(3) Non-disintegrating conditionals

A cseh férfi a barátnőjét minden húsvétkor elviszi a kedvenc sörözői többségébe.

the Czech man the girl-friend-poss3Sg-acc every Easter-at away-take-3Sg the favorite pub-poss3Sg majority-poss3Sg-into

e1[r1] e2[r2,r1] e3[r3] e4[r1,r2,r3,r4] e5[r4,r1]

'At every Easter the Czech man takes his girl-friend to most of his favorite pubs.'

a. $e1 \rightarrow (e2 \rightarrow (e3 \rightarrow (e5 \rightarrow e4)))$

b. *ev's* e1 and e2 anchored; $e3 \rightarrow_{\forall} (e5 \rightarrow_{\text{MOST}} e4^*)$ where $e4^*$: $p_{\text{take}}(r_3, r_{\text{Bohumil}}, r_{\text{Eliška}}, r_4)$

Examples in (4a-b) below illustrate the application of the general scheme in (1) to a sentence containing a focus, and then another one with a multiple focus construction. The presupposition

belonging to the focus in (4a) is disintegrated into an EVE expressing that *r1 demonstrated Joe to Mary*, and the conditional \rightarrow_{\forall} required by focus expresses that in every relevant extension, *r1* should be identical (**id**) with a definite person called Peter. In (4b) the presupposition itself ($[e3 \rightarrow_{\text{EXACTLY } 5} (e2 \rightarrow_{\forall} e4)]$) is a focus construction expressing that *it is only to Mary that r1 demonstrated exactly five guests*; and the ultimate assertion, again, requires *r1* to be identical with Peter.

(4) Single and multiple focus

- a. Csak Péter mutatta be Jóskát Marinak.

only Peter show-past-3Sg in Joe-acc Mary-dat

$e1[r1] \quad e2[r1,r3,r4] \quad e3[r3] \quad e4[r4] \quad [e3 \rightarrow (e4 \rightarrow e2)] \rightarrow_{\forall} e1$

‘It is only Peter that demonstrated Joe to Mary.’

after anchoring $e3, e4$: $e2^*$: $p_{\text{dem}'}(r1, r_{\text{Joe}}, r_{\text{Mary}}) \rightarrow_{\forall} e1$: **id**($r1, r_{\text{Peter}}$)

- b. Csak Péter mutatott be pontosan öt vendéget csak Marinak.

only Peter show-past-3Sg in exactly five guest-acc only Mary-dat

$e1[r1] \quad e2[r1,r3,r4] \quad e3[r3] \quad e4[r4]$

‘It is only Peter that demonstrated exactly five guests only to Mary.’

$[e3 \rightarrow_{\text{EXACTLY } 5} (e2 \rightarrow_{\forall} e4)] \rightarrow_{\forall} e1$: **id**($r1, r_{\text{Peter}}$)

A crucial property of our approach is that on the basis of the scheme in (1) all word order variants expressing the operator hierarchy in the given scopal order can be calculated – without any recourse to operator heads and +/- interpretable features (e.g. É.Kiss 2001, Szabolcsi 1997), or Raising, Scrambling and A-reconstruction (Surányi 2010). We claim, thus, that this semantics-based solution practically makes the majority of the minimalist machinery unnecessary, providing an “even more minimalist” solution to word-order problems. (5) below shows what is relevant now: there are five semantic relations which are *potentially* expressed by *adjacency in word order* in every language. Language-specific differences lie in this “potentially”: a predicator, for instance (5a), should be indirectly followed by an argument, but this demand has a language-specific *rank*. A demand of rank α can be satisfied either *directly* due to the adjacency required, or *indirectly*, by satisfying a competing demand of a rank at least as high as α . (5-7) show the source of the extremely flexible Hungarian word order (which, however, is rigid in the preverbal zone): four types of semantic relations (5a-d) come with the *same ranks* in this language, so the corresponding demands can be satisfied +/- directly. The arrow types show the reader in (6-7) which demands are satisfied directly in producing which word order variant.

(5) Five demands concerning adjacency in word order, out of which the ranks of four coincide

- predicator \leftrightarrow argument (rank 7)
- host \leftarrow adjunct (rank 7)
- predicator \curvearrowright “stolen complement” (rank 7)
- [operator > scope] (rank 7)
- F1 \Rightarrow verb stem (rank 3)

(6) Some word order variants of a Hungarian sentence

- $^?[Nem > sikerült] \leftarrow$ sajnos \leftarrow tegnap \leftrightarrow megszereztem \leftarrow újra \leftrightarrow a tájékoztatóját \leftrightarrow a dékániának \leftrightarrow a nyitva tartásról.
- [Sajnos > tegnap > nem > sikerült] \leftrightarrow [újra > megszereztem] \leftrightarrow [a dékániának > a tájékoztatóját] \leftrightarrow a nyitva tartásról.
- $^?[Sajnos > nem > sikerült] \curvearrowright$ a dékániának \curvearrowright újra \leftarrow tegnap \leftrightarrow [megszereztem \curvearrowright a nyitva tartásról] \leftrightarrow a tájékoztatóját.
- $^?[A dékániának_{\text{T}} > tegnap > nem > sikerült] \leftarrow$ sajnos \leftrightarrow [a nyitvatartásról_{\text{T}} > újra > megszereztem] \leftrightarrow a tájékoztatóját.
the dean's office-poss yesterday not succeed unfortunately the open hours-about again obtain-inf-1Sg the brochure-poss3Sg-acc
‘Unfortunately yesterday I could not obtain again the brochure of the dean’s office about open hours.’

(7) Some word order variants of sentence (5) containing multiple focus

- [Csak Péter \Rightarrow mutatott] \leftrightarrow be \leftrightarrow pontosan öt vendéget \leftrightarrow csak Marinak.
- [Csak Péter \Rightarrow mutatott] > pontosan öt vendéget > csak Marinak > be