Endpoint(s) in Hungarian denominal verb constructions*

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1. Introduction

- In recent cross-linguistic syntactic studies on argument structure, (transitive) denominal verbs have played an important role (mostly starting with Hale & Keyser 1993, 2002)
- The two central types often discussed are (transitive) locatum verbs (1) and (transitive) location verbs (2)
 - (1) Bill saddled the horse. (2) Bill boxed the books.
- These denominal verbs express complex events, events of change with an endpoint (the horse ends up with a saddle on, the books end up in boxes).
- The Hungarian equivalents would generally be particle-verbs:
 - (3) Bill fel-nyerg-el-t-e a lov-at.
 Bill up-saddle-VRB-PST-DEF3SG the horse-ACC
 'Bill saddled the horse.'
 - (4) Bill be-doboz-ol-t-a a könyv-ek-et.
 Bill into-box-VRB-PST-DEF3SG the book-PL-ACC
 'Bill boxed the books.'
- In Hungarian, telic change of state events generally include a verbal particle and/or a directional PP. Cross-linguistically typically telic verbs require a particle in Hungarian, e.g. achievement verbs.
 - (5) A váza el-tört. the vase away-broke 'The vase broke.'
- (6) A főszereplő meg-halt. the main.character PRT-died 'The main character died.'

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- This ongoing research is part of a 3-year project, whose main concern is to test the hypothesis that the result (including endpoint) part of complex events is always encoded by an adpositional element (particle or goal-denoting P) in Hungarian, rather than the verb itself, and to give a syntactic account. Some hypothesized places of variation are motion verbs, result/manner verbs and denominal verbs, where the goal/result is often in the verb cross-linguistically.
- A syntactic view of argument structure and morphology: Hale & Keyser's (1993, 2002) theory derives denominal verbs and their argument structure in syntactic terms (l-syntax) the restrictions on possible mechanisms are the same as any other parts of syntax.

• Aims of this talk:

- Give a syntactic account of the (a)telicity of denominal location and locatum verb constructions in Hungarian by considering their decomposed argument structure
- See whether the endpoint of an event is ever encoded in the verb, rather than on a separate lexical item, and if so, what are the conditions on it: Does P ever incorporate into V? (Put differently: can the verb lexicalize P+V? Ramchand 2008)
- N to P to V incorporation is also possible cross-linguistically (not necessarily via movement), e.g. Hale & Keyser (2002) analyze denominal verbs like saddle (the horse), box (the books) that way. Is that an option for Hungarian?

• Claims:

- Locatum and location verbs are syntactically different: Location verbs allow for N-to-P-to-V incorporation, encoding the endpoint in the verb. This is only possible in soem cases, with strict restriction on the type of locative relations.
- Locatum verbs on the other hand always need a particle for a telic interpretation, which structurally corresponds to the fact that there is not N-to-P-to-V incorporation and the (nominal) root is inserted into the structure under V. The same is true for location verbs when they do not fall under the first point.

2. The argument structure of complex events

2.1. Verb-framed and satellite-framed languages

- verb-framed and satellite-framed languages (e.g. Talmy 1991, 2000)
 - the distinction whether it is the verb that is responsible for telicity/result/endpoint or it is lexicalized by something else
 - e.g. Romance languages are verb-framed -no particles, verb can encode endpoint, e.g. entrar go in(to)'-, English is satellite-framed
 - it is sometimes taken to be a lexical or semantic distinction, others take it to be a structural property (e.g. Borer 2005, Ramchand 2008, the (neo-)constructionist approach, cf. Acedo-Matellán & Mateu 2014)

- (7) a. The bottle floated into the cave
 - b. La botella entrà a la cova flotant (Catalan)
- furthermore: weak s-framed vs. strong s-framed languages (Acedo-Matellán 2016)
 - English vs. Hungarian (also Finnish): difference in resultatives, where Hungarian (and Finnish, too) has a case-ending on resultative adjectives and not incorporated in the verb
- This general inability of V to express result/goal has been formulated by É. Kiss (2006) as a lexical/semantic property of Hungarian verbs, which are said to be inherently atelic and in need of another telicizer to express events that have an endpoint.
- the cross-linguistic variation in the encoding of result/goal in complex events in v-framed and s-framed languages is syntactic: a parametric variation in the lexicalization of P (Res/Path/p) in a decomposed argument structure (e.g. Hale & Keyser 1993, 2002; Borer 2005; Mateu 2012, Acedo-Matellán & Mateu 2014, Acedo-Matellán 2016)
- Note: Verbs of creation behave differently but there the indefinite object is the end result, the object is quantized (see Kardos 2016 for a semantic account).

2.2. Denominal verbs

• semantic classes of denominal verbs (McIntyre 2015):

- Location verbs:

bottle the wine, box the books — bort palack-oz, könyveket doboz-ol surface, peak — tető-z 'peak' (unaccusative) – HU: not very productive, mostly involves PP (felszín-re tör 'surface-onto break = surface')

Locatum verbs:

powder her face, crown people — arcot púder-ez, királyt koroná-z stamp / address a letter — levelet bélyeg-ez / cím-ez

- Privative location verbs:

mine the gold, shell the peas — aranyat bányá-sz, borsót hüvely-ez

- Privative locatum verbs:

dust shelves, stone fruit, weed garden — polcot por-ol, meggyet mag-oz, kertet gyom-lál

+ polcot por-talan-ít 'dust the shelf', kertet gyom-talan-ít

- Instrument verbs:

ship boxes to England, knife people — levelet postá-z, embert kés-el microwave food, sandpaper the floor — ebédet mikró-z, padlót smirgli-z + legó-z-ik, + hintá-z-ik, etc. – this seems like a 3rd type, very productive

- Incorporated N comes into existence:

orphan/outlaw someone —?

the clouds mushroomed —?

the animal foaled/calved — kölyk-ez-ik 'give birth - for animals', borj-az-ik 'calve' - not very productive

- Agent verbs:

pilot/guard the aircraft, mother children — ? star in films, model for H&M — modell-kedik – this does not seem productive¹

- The syntactic structure of transitive denominal constructions in English has been claimed to involve incorporation (conflation in the terminology of Hale & Keyser 2002) of a nominal complement head N (e.g. saddle_N, box_N) into a transitional predicative P head, and then into V, thereby deriving the lexicalization and complementation properties of these constructions.
- The internal structure of the VP has been proposed to conform to the general syntactic structure of unergative/transitive verbs.

 $(8) \qquad \qquad V \qquad \qquad V \qquad \qquad P \qquad \qquad P$

3. Hungarian denominal verbs involving location

3.1. Hungarian (transitive) location verbs

- location verbs the subject/object ends up or is in the location that is part of the verb
- (9) endpoint in the verb
 - a. (be-)dobozol 'box', (be-)üvegez 'bottle', (be-)palackoz 'bottle', be-börtönöz 'imprison', be-zsákol 'bag'
 - b. (?le-)jegel 'put on ice, also: put ice on'
 - c. be-zsebel 'gain' and not 'pocket' nowadays; (be-/el-)spájzol 'store (not only in pantry)'; (el-)raktároz 'store (anywhere, not necessarily warehouse)'
 - d. be-/el-földel 'cover with dirt (ground/earth (vill.))', be-fóliáz 'cover with film'
 - e. fel-nyársal 'skewer', fel-tekercsel 'spool', fel-csévéz 'spool'
 - f. ! fel-polcol 'elevate'
 - the most productive type seems to involve the particle be 'into', (9a)
 - some are with the particle fel 'up'

¹We do have $any\acute{a}skodik$ 'mother-adj-vrb = behave like someone's mother' which takes a locative complement, and might be of the relevant type. There is also $any\acute{a}z$ 'swear at someone by cursing their mother', or $szt\acute{a}r$ -ol 'star-vrb = treat as a star', but these area not the relevant kinds of agentive denominal verbs.

- the particle verb in (9f) is not the equivalent of the English denominal verb shelve, but a different construction
- (10) a. Mari be-dobozolta a szótárakat.

 Mari into-boxed the dictionary.pl.acc
 'Mary boxed the dictionaries.'
 - b. Mari be-palaczkozta a bort.
 Mari into-bottled the wine.acc
 'Mary bottled the wine.'
- (11) a. Mari fel-polcolta a szótárakat.

 Mari up-shelved the dictionary.pl.acc

 '*Mary shelved the dictionaries. / Mary elevated (propped up) the dictionaries.'
 - b. Mari fel-polcolta a lábát. Mari up-shelved the foot.poss3sg.acc 'Mary elevated her foot.'
 - c. Mari fel-tette a szótárakat a polc-ra. Mari up-put the dictionaries the shelf-sub 'Mary put the dictionaries on(to) the shelf.'
 - There are some verbs that are formally equivalents of English location verbs, but the nominal root is not the endpoint:
- (12) bankol 'be in contact with a bank' and not 'put in bank', házal go door to door' and not 'house'; vállal take on' and not shoulder' etc.
 - $\ddot{u}veg$ 'glass, bottle' + -z verbalizer = $\ddot{u}vegez$ 'glaze, bottle', where the latter meaning seems more restricted
- (13) a. A főbérlő be-üveg-ez-t-e a nappali ablakát. the landlord into-glass-vrb-pst-def.3sg the living.room window.poss.acc The landlord glazed the window of the living room.'
 - b. Anna be-üvegezte az eperlekvárt. Anna into-glass-vrb.pst-def3sg the strwberyy.jam 'Anna put the strawberry jam into jars.'
 - Telicity: the transitive verb in itself can be telic or atelic, but few of these verbs have a use without a particle, and all of them are from (9a).
 - The particle, when present, makes the construction telic.
- (14) a. Egy órán át / egy óra alatt dobozoltuk a könyveket. one hour.sup through / one hour under box.pst.1pl the book.pl.acc 'We boxed the books for an hour / in an hour.'
 - b. *Egy órán át be-dobozoltuk a könyveket.
 one hour.sup through box.pst.1pl the book.pl.acc
 Intended: 'We were boxing the books for an hour.'
 - c. Egy óra alatt be-dobozoltuk a könyveket. one hour under box.pst.1pl the book.pl.acc 'We boxed the books in an hour.'

- (15) a. Egy órán át / egy óra alatt palackoztuk a bort. one hour.sup through / one hour under bottle.pst.1pl the wine.acc 'We bottled the wine for an hour / in an hour.'
 - b. *Egy órán át be-palackoztuk a bort. one hour.sup through bottle.pst.1Pl the wine.acc Intended: 'We were bottling the wine for an hour.'
 - c. Egy óra alatt be-palackoztuk a bort. one hour under bottle.pst.def1pl the wine.acc 'We bottled the wine in an hour.'
 - Dobozol can also be used intransitively, but only without the particle.
- (16) a. Egész este dobozolnak. whole evening box-vrb-3pl 'They are boxing (things) all evening.'
 - b. ?(?)Gyorsan be-doboz-ol-ok. quickly into-box-vrb-1sg Intended: 'I'll quickly box things.'
 - Cognate/hyponymous objects:
- (17) a. #Mari (be-)dobozolta a könyveket a ládá-ba.

 Mari into-boxed.3sg the book.pl.acc the crate-ill

 Intended: 'Mary boxed the books into the crate.'
 - b. Mari egy óra alatt be-dobozolta a könyveket a papírdobozok-ba. Mari one hour under into-boxed.3sg the book.pl.acc the paper.box.pl-ill 'Mary boxed the books into the cardboard boxes.'
 - c. (?)Mari egy óra alatt dobozolta a könyveket a papírdobozok-ba. Mari one hour under boxed.3sg the book.pl.acc the paper.box.pl-ill 'Mary boxed the books into the cardboard boxes.'

3.2. Hungarian (transitive) locatum verbs

- transitive locatum verbs the noun (root) ends up in the location which is the accusative object in the structure
- quite productive; there seem to be at least two groups
- (18) "cover" meaning (not exhaustive)
 - a. (be-)vajaz 'butter', (be-)sóz 'salt', be-aranyoz 'gild', be-szappanoz 'soap', be-függönyöz 'curtain', (be-)tapétáz 'wallpaper', (be-)meszel 'whitewash', (be-)burkol 'cover', be-polcoz 'cover with shelves'
 - b. INTR: be-felhősödik 'get cloudy, cloud over'
 - c. (be-)vizez 'get sth wet' and not 'water sth', (be-)kameráz 'put under surveillance, equip with cameras'
 - d. (be-/ki-)szinez 'color'
- (19) "locate/put sth swh; supply with sth"

 (fel-)nyergel 'saddle', fel-lobogóz 'put flags on', fel-bélyegez 'put stamp on' [vs.

 meg-bélyegez 'stigmatize']

- with the few verbs like *nyergel*: if there in no particle, the object is licensed but the event is not telic
- (20) a. Peti egy órán át nyergelte a lovakat.

 Pete one hour through saddled the horse.pl.acc

 'Pete was saddling the horses for an hour.'
 - b. *Peti egy óra alatt nyergelte a lovakat.

 Pete one hour under saddled the horse.pl.acc
 Intended: 'Pete saddled the horses in an hour.'
 - c. Peti egy óra alatt fel-nyergelte a lovakat. Pete one hour under up-saddled the horse.pl.acc 'Pete saddled the horses in an hour.'
 - the verb can be used without an (overt) object, both with and without the particle, with the default object understood to be there
- (21) a. Peti minden nap órákon át nyergel. Pete every day our.pl.sup through saddle.3sg 'Pete saddles (horses) for hours every day.'
 - b. *Peti minden nap egy óra alatt nyergel.
 Peti every day one hour under saddle.3sg
 Intended: 'Pete saddles (horses) in an hour every day.'
 - c. *Peti minden nap órákon át fel-nyergel.

 Pete every day our.pl.sup through up-saddle.3sg
 Intended: 'Pete saddles up (horses) for hours every day.'
 - d. Peti minden nap egy óra alatt fel-nyergel. Pete every day one hour under up-saddle.3sg 'Pete saddles up in an hour every day.'
 - Cognate/hyponymous object:
- (22) Peti fel-nyergelte a lovat a barna nyereg-gel. Pete up-saddled the horse.pl.acc the brown saddle-ins 'Pete saddled the horse with the brown saddle.'

3.3. Privative locatum and location verbs

- Privative locatum verbs:
 - (le-)porol down-dust', (ki-)mag-oz 'seed', (ki-)gyom-lál 'weed'
 - These denominal verbs can only have a telic interpretation with a particle.
- (23) a. Peti egy óra alatt / *egy órán át le-por-ol-t-a a polcokat.

 Pete one hour under / one hour-sup through down-dusted the shelf.pl.acc

 'Pete dusted the shelves down in an hour /*for an hour.'
 - b. Peti *egy óra alatt / egy órán át porolta a polcokat.

 Pete one hour under / one hour-sup through dusted the shelves

 'Pete was dusting the shelves *in an hour / for an hour.'

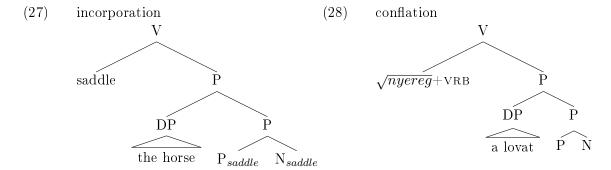
- Privative location verbs:
 - (ki-)bányász 'mine', (ki-)kukáz 'get out of the trash'
 - These verbs can only have a telic interpretation with a particle.
- (24) a. Peti egy óra alatt / *egy órán át ki-bányá-sz-t-a az
 Pete one hour under / one hour-sup through out-mine-vrb-pst-3sg the
 aranyat.
 gold.acc
 'Pete mined the gold out in an hour /*for an hour.'
 - b. Peti *egy óra alatt / egy órán át bányászta az aranyat. Pete one hour under / one hour-sup through mined the gold.acc 'Pete was mining the gold *in an hour / for an hour.'
 - There are other derived verbs with the same roots as privative locatum ones but with more complex morphology, including a caritive suffix (25) (cf. Szabolcsi 1983)
- (25) a. por-talan-ít dust-car-vrb dust (make dustless)'
 - b. gyom-talan-ít weed-car-vrb 'weed (make weedless)'
 - These verbs can both an atelic and a telic reading without a particle.
- (26) Peti egy óra alatt / egy órán át gyomtalanította a Pete one hour under / one hour-sup through weed-priv-vrb-pst-def3sg the kertet.

 garden.acc
 'Pete weeded the garden in an hour / for an hour.'

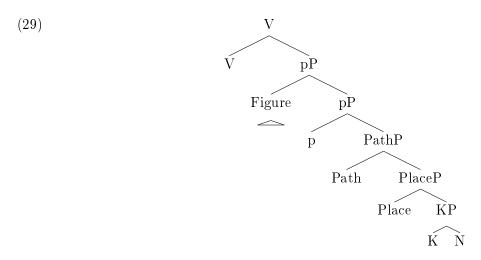
4. Analysis

4.1. Structural assumptions

- Conflation/incorporation/spanning spelling out the verbal part of the structure:
 - I will follow Haugen (2009) in calling the process of adjoining/inserting a root into a (functional) head conflation (contrary to e.g. Hale & Keyser 2002, who use it more generally).
 - Incorporation involves head movement, whereby a lower root and functional head as spelled out higher in the structure. In nanosytnactic terms, it would be spanning (e.g. Ramchand 2008 for the Initiator-V-Result structure), which would get rid of head movement but would have the same structural restrictions.



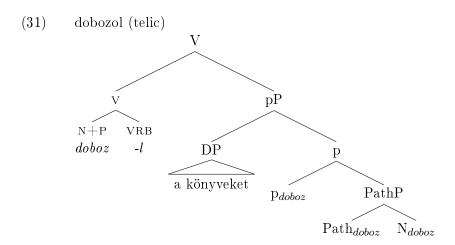
- As for the P (Hale& Keyser 2002) / ResP (Ramchand 2008, Mateu 2012) / PathP (Acedo-Matellán 2016) part of the structure:
 - I assume there is at least a Path projection in complex events. (Hungarian strongly supports a Path—directional, goal-denoting—instead of a simple Place interpretation of the P part in transitional predicates).
 - Particles are in p, projected on top of PathP, and generally lexicalized in complex events in Hungarian. So, maxiammly we have (29)
 - KP hosts cases such as instrumentalis, relevant for saddle-type verbs.

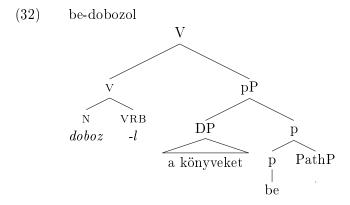


4.2. Location verbs

- (Transitive) location verbs can be derived in two ways:
 - When there is no particle, the root, e.g. doboz 'box' can incorporate into p/Path and V, allowing for a telic interpretation of (30a).
 - The root can also be inserted right under V (conflation), resulting in the atelic reading of (30a) when there is no telicizing p present and the telic (30b) when there is a particle in the structure.
- (30) a. (Egy órán át / egy óra alatt) dobozoltuk a könyveket. one hour.sup through / one hour under box.pst.1pl the book.pl.acc 'We boxed the books (for an hour / in an hour.'
 - b. (Egy óra alatt) be-dobozoltuk a könyveket. one hour under box.pst.1pl the book.pl.acc 'We boxed the books (in an hour).'

- While conflating the root with the verbalizer is a fully productive way of deriving denominal verbs, the option of incorporating the endpoint under V is very restricted:
 - few verbs have a telic use without a particle, and all of those have the particle be 'into' as an option to add
 - the other denominal locative verbs must either have a particle (be-börtönöz 'imprison') or they are atelic on their own (simple events)
- The restrictions have to do with the lexical content of Path and p in these structures:
 - the particle and the directional suffix (in Path) can refer to the same kind of path and endpoint, in this case, the particle does not always have to be lexicalized separately (or, alternatively, there is no p in the structure); the path has to be "simple"
 - when the particle is not the lexical 'equivalent' of the Path case/postposition,
 the p head has to be lexicalized separately;

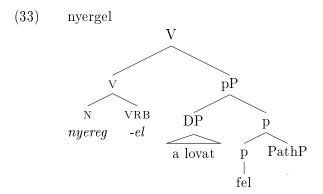




4.3. Locatum verbs

- (Transitive) locatum verbs can only be derived by conflating the root with the verbalizer (under V in the structrure)
- The reason for this is the different nature of the pP/Path/KP under V:

- Locatum verb constructions can often be paraphrased with instrumental complements, they do not involve the construction of a Path where the complement ends up at its endpoint.
- The particle used with the "cover with"-type of verbs (be-polcoz 'shelve = cover with shelves') is be 'into', the particle with the "supply with"-type verbs is fel 'up'.
- The nominal root in locatum verbs is inserted via conflation (e.g. Haugen 2009; Mateu 2012): the simple root is adjoined to the verbalizer



• Acedo-Matellán & Real-Puigdollers (2015) has also found a difference between the two verb types in Catalan, although there the difference is not in the presence of a particle but in the nature of the Path head.

4.4. Privative location and locatum verbs

- The simple denominal forms—both locative and locatum—behave systematically as expected. Since the path in privative forms is a source-related one, they need a particle to be telic and include a goal endpoint
- The forms with multiple derivations go through an adjectival stage, and this must interfere with their telicity. I have no derivation for them at this point.

4.5. Open question: intransitive use

- when there is no particle/Path present, the intransitive verb on its own is atelic, so the construction is a simple event with just an external argument present.
- the problemattice case is the one with fel-nyergel 'up-saddle', which is telic, there is a particle, but there is no theme present
- (34) a. Egész este dobozolnak. whole evening box-vrb-3pl 'They are boxing things all evening.'
 - b. ?(?)Gyorsan be-dobozolok. quickly into-box-vrb-1sg Intended: 'I'll quickly box things.'

- (35) a. Peti minden nap órákon át nyergel.

 Pete every day our.pl.sup through saddle.3sg

 'Pete saddles horses for hours every day.'
 - b. Peti minden nap egy óra alatt fel-nyergel. Pete every day one hour under up-saddle.3sg 'Pete saddles horses in an hour every day.'
 - More generally: capturing the telic use of particle-less verbs of creation/consumption might need a solution along different lines than the verb types presented here. (Particle-less motion verbs with directional complements can be analyzed along the lines presented here.)

5. Conclusions

- Transitive locatum and location verbs are syntactically different in that the latter but not the former allows for N-to-P-to-V incorporation to soem extent. It is very restricted, however, and in most cases the nominal root is inserted under V and the Path/p are lexicalized separately from the verb.
- Locatum verbs on the other hand always need a particle for a telic interpretation, which structurally corresponds to the fact that there is not N-to-P-to-V incorporation and the (nominal) root is inserted into the structure under V.
- This adds to the general tendency in Hungarian to lexicalize result/endpoint by a P element, adding only a few, systematic exceptions to the generalization.

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