

AICED 21 Bucharest
7. June 2019

AN EPISTEMIC DETERMINER IN HUNGARIAN: ITS CONSTRUALS AND ITS EVOLUTION

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1 Introducing *va-j-egy* and its construals

Va-j-egy (*vagy + egy* lit. ‘or one’) is an approximator and an epistemic determiner found with Hungarian speakers in Romania (Transylvania and the so-called csángó or ceangău region).

- (1) Ha létezik **vaegy** update le fogod tudni tölteni
If exists V1 update down FUT-2SG can-INF fill-INF
‘If there is some update or other you’ll be able to donwload it’

Va-j-egy is freely used in colloquial Transylvanian Hungarian, however, it is unattested in other variants of Hungarian. While certain functions of *vaegy* have already been described by traditional grammarians in the second half of the 19th century (Czuczor and Fogarasi (1874), Kriza (1926)), it has until now escaped the attention of theoretical (generative, ...) linguists.

Observations, Claims:

- *Va-j-egy* has several related but distinct construals. It can be
 - a ‘plain’ indefinite determiner (‘some’), or
 - an epistemic indefinite determiner (‘some or other’), or
 - an approximator (‘approximately’, ‘some’).
- *Va-j-egy* has diachronically developed from the reinterpretation of a *vagy egy* (lit. ‘or one) compound.
- The Romanian epistemic indefinite *vreun* (Farkas (2002a), Farkas (2002b), Fălăuş (2014), among many others) played a role in aiding this reinterpretation through analogy.

1.1 Main data

As has been noted already in Kriza (1926) and Czuczor and Fogarasi (1874), *va-j-egy* can be used interchangeably with *néhány* ‘some, ‘a few’ in Transylvanian (and specifically, in Szekler) dialects:¹

¹Data: collected by H.T. from the Internet, in addition to the data from the 19th century dictionaries.

- (2) Tehetünk bele **vaegy** szem kását is.
 Put-POSS.1PL into-3SG some grain:CL porridge-ACC too.
 ‘We may also add some grains of porridge (kasha) to it’

The above-mentioned authors note only this construal of *va-j-egy*. In addition to the ‘some’, ‘a few’ construal, however, *va-j-egy* is also used as an epistemic indefinite determiner:

- (3) Ha létezik **vaegy** update le fogod tudni tölteni
 If exists V1 update down FUT-2SG can-INF fill-INF
 ‘If there is some update or other you’ll be able to download it’

Va-j-egy can also be used as an approximator modifying a numeral (approximately *n* pieces of something), similarly to Romanian *vreun/vreo*:

- (4) A tenyeremen van **vaegy** öt vérhólyag
 The palm-POSS.1SG-ON is V1 five blood.blister
 ‘There are about five blood blisters on the palm of my hand’
 Romanian: ‘Am **vreo** cinci bășici cu sânge pe palmă’

Va-j-egy can also be used as an approximator modifying a measure expression (approximately *n* units of *x*). Interestingly, however, in the case *n*=1, the numeral is obligatorily suppressed, cf. (6).

- (5) Még fennebb sétáltunk **vaegy fél** kilométernyit a
 Yet higher.up walk-sc past.1pl V1 half kilometre-WORTH-ACC the
 Borzia mentén
 Borzia along
 ‘Higher up, we walked for about half a kilometre along the Borzia creek’.
- (6) Hoztunk ehejt **vajegy** zsák pityókat magának.
 Bring-PAST-1PL here V1 sack potatoes-ACC you(HON)-DAT
 ‘Here, we’ve brought you a sack or two of potatoes’ (Clear from context: =1 sack.)

(Aside: HT: *vaegy* zsák: approximately one sack(ful). ÁBF: *vaegy* zsák: A sack or two. ($n \geq 1$, and the difference between *n* and 1 is not large, it can be said to be minimal.)

- (7) Van **vaegy** gyufád?
 Is V1 match-POSS.2SG
 ‘Do you have a match?’
 Rom.: ‘Ai vreun chibrit?’)

This sets *vaegy* apart from other approximators, where a numeral is obligatory in front of the measure expression:

- (8) a. ***körülbelül** zsák(nyi) krumpli
 about sack(ful) potato
 ‘about one sack(ful) of potatoes’

- b. **körülbelül egy** zsák(nyi) krumpli
 about one sack(ful) potato
 — same —
- (9) a. **vaegy** zsák(nyi) krumpli
 V1 sack(ful) potato
 ‘about one sack(ful) of potatoes’
- b. ***vaegy egy** zsák(nyi) krumpli
 V1 one sack(ful) potato
 — same —

Va-j-egy some and *va-j-egy* approximately do not impose semantic restrictions on the environments where they can appear.

Va-j-egy ‘some.or.other on the other hand is subject to semantic restrictions and is only found in the following environments: In epistemic modals (10), the protasis of conditionals (11), imperatives (12), adversatives (13), desideratives (14), purposives (15), questions (16) and habituals (17).

- (10) A vaktyúk es találhat **vajegy** gyöngyszemet
 The blind.hen too find-POSS.3SG V1 pearl-ACC
 ‘Even a blind hen may find some pearl or other’ (Proverb)
- (11) Ha létezik **vaegy** update le fogod tudni tölteni
 If exists V1 update down FUT-2SG can-INF fill-INF
 ‘If there is some update or other you’ll be able to donwload it’
- (12) [az örökségemet] adják **vaegy** esztelneki
 [the inheritance-POSS.1SG-ACC] give-IMP.3PL V1 Esztelnek-from
 rászorulóknak
 person.in.need-DAT
 ‘My inheritance should be given to some person (or other) in need from Esztelnek’
- (13) Ehelyt a ponkhálót verem, nehogy **vajegy** mérges ponk
 Here the spider.web-ACC hit-1SG, lest V1 poisonous spider
 megmássza a lovakot
 climb.up.on the horse-PL-ACC
 ‘Here I smash the spider’s web lest some poisonous spider or other get on the horses’
- (14) Bár **vajegy**et nyikkantott volna
 If.only V1-ACC squeak-PAST-3SG be-PAST-COND
 ‘If only he had whimpered but once’
- (15) Nem tudok falura menni, hogy **vajegy** jó kövér bornyút
 Not can-1SG village-onto go, so.that V1 good fat calf-ACC
 hozzak.
 bring-SUBJ-1SG
 ‘I cannot travel to the country, to bring some nice fattened calf’
- (16) Van pasid, vagy tetcik **vajegy** fiu?
 Is boyfriend-POSS.2SG, or please-3SG V1 boy?
 ‘Do you have a boyfriend, or do you fancy some boy or other?’

- (17) **Vajegy** virágcserepbe, ócskább csuporba, fazékba tettük.
 V1 flowerpot-into, older jar-into, pot-into put-PAST-1PL
 ‘We would put it into some flowerpot or other, into an older jar or pot’

2 *Va-j-egy* as an approximator

Point of departure: *vaj-e-gy* as a generalised quantifier. Conservative, and provides a unitary ‘platform’ for all readings of *va-j-egy*.

$$(18) \quad \llbracket \text{vajegy}_{\text{some}} \rrbracket = \lambda f. \lambda g. [\{x|f(x) = 1\} \cap \{x|g(x) = 1\} \neq \emptyset]$$

That is, *va-j-egy* as a plain indefinite determiner is an existential quantifier.

Va-j-egy As an approximator, first version (Rothstein (2016), Schvarcz (2017)):

$$(19) \quad \llbracket \text{vajegy}_{\text{apprx-ly}} \rrbracket = \lambda n. \lambda f. \lambda g. [|\{x|f(x) = 1\} \cap \{x|g(x) = 1\}| \approx n]$$

$$(20) \quad \text{vajegy öt vérhólyag (‘some five blisters’):}$$

$$\lambda g. [|\{x|blister(x) = 1\} \cap \{x|g(x) = 1\}| \approx 5]$$

Va-j-egy with measure phrases:

$$(21) \quad \llbracket \text{vajegy}_{\text{apprx.meas}} \rrbracket = \lambda n. \lambda u. \lambda f. \lambda g. [\text{MEAS}(\{x|f(x) = 1\} \cap \{x|g(x) = 1\}) \approx \langle n, u \rangle]$$

$$(22) \quad \text{vajegy fél deci szilvapálinka ‘about 0,05 l of slivowitz’:}$$

$$\lambda g. [\text{MEAS}(\{x|sl(x)\} \cap \{x|g(x) = 1\}) \approx \langle 0,05, \text{litre} \rangle]$$

Second version: why not unify entries for approximating *va-j-egy*, regardless of what they approximate.

Simplistic attempt: declare approximating *va-j-egy* to be ambiguous, and that is that.

Not so simplistic attempt: for the ‘count’ case assume a covert classifier $\#$, meaning (approximately) ‘piece’, ‘head’, ...

$$(23) \quad \llbracket \text{vajegy}_{\text{apprx}} \rrbracket = \lambda n. \lambda u. \lambda f. \lambda g. [\text{MEAS}(\{x|f(x) = 1\} \cap \{x|g(x) = 1\}) = \langle n, u \rangle],$$

where

$$u \in \{\#, \text{litre, kilometre, bunch, sack(ful), \dots}\}.$$

Reducing existential-quantifier-*va-j-egy* to an approximator:

$$(24) \quad \llbracket \text{vajegy}_{\text{some}} \rrbracket = \lambda f. \lambda g. [\text{MEAS}_{\text{card}}(\{x|f(x) = 1\} \cap \{x|g(x) = 1\}) > \langle 0, \# \rangle]$$

3 The evolution of *va-j-egy*

The origins of *va-j-egy*: from *vagy* ‘or’ + *egy* ‘one’.

$$(25) \quad \text{vagy egy} \rightarrow \text{vajegy} \rightarrow \text{vaegy}$$

NB, the conjunction *vagy* ‘or’ on its own is (to this day) pronounced as **vaj** in Transylvania. (See also Szigetvári (2008).)

Questions:

1. How did ‘or one’ come to mean ‘a few’?
2. How did ‘or one’ come to mean ‘approximately’?
3. How did ‘or one’ become an epistemic determiner?

Where it all started (according to us):

Vagy ‘or’ on its own is also used as an approximator (in the entire Hungarian speech community):

- (26) Aludtam **vagy öt** órát
Sleep-PAST-1SG some five hour-ACC
‘I slept for some five hours’

Buying ONE half:

- (27) a. Vettem egy kiló kenyeret
Buy-PAST-1SG one kilo bread-ACC
‘I bought one/a kilo of bread’
b. Vettem fél kiló kenyeret
Buy-PAST-1SG half kilo bread-ACC
‘I bought half a kilo of bread’
Rom.: ‘Am luat jumătate de kilogram de pâine’
c. Vettem **egy** fél kiló kenyeret
Buy-PAST-1SG one half kilo bread-ACC
‘I bought one half kilo of bread’
Rom.: ‘Am luat **un** jumătate de kilogram de pâine’
- (28) (Approximating *vagy*) + *egy* (numeral)
→ *vagyegy* (approximator)

Approximating *vagyegy/vajegy*: a small number, larger than 0 → use extension from quantities to countables, a.k.a. to individuals. (This is our hypothesis concerning the emergence to the construal ‘a few’.)

The emergence of the epistemic, anti-specific construal?

Observation: epistemic determiners can be used as approximators:

- (29) a. **Some** famous scientist had claimed that ...
b. Last night I slept **some** five hours.

Anti-specific *va-j-egy* may have emerged from perceived reversibility (a fallacy????): If anti-specific determiners can be used as approximators, then approximators can also be used as anti-specific determiners.

In addition, the trajectory of *vajegy* parallels the much earlier ‘evolution’ of the numeral *egy* into the indefinite *article*.

- (30) a. *egy* (‘one’, ‘a’): quantity → conveying existence, introducing a discourse referent;

- b. *vajegy* uncertainty concerning a quantity → uncertainty concerning the existence of a witness, uncertainty concerning the identifiability of a witness.

4 *Va-j-egy* as an epistemic determiner

4.1 Background: epistemic/modal indefinites

‘Epistemic’ determiners: interpretation depends on hearer’s cognitive state. Non-specific epistemic determiners (usu. called ‘epistemic’ tout court): ignorance and indifference. In addition: existence of witness inferred.

‘Modal’ indefinites: sensitivity to modal contexts.

4.2 Comparing Romanian *vreun* and Hungarian *va-j-egy*

Scenario: visitor to the big city has lost his way. He phones his host.

- (31) a. H: Hol vagy? ‘Where are you?’
 b. G: **Valami**/#**Vaegy** szobornál. ‘At some statue or other’

Same in Romanian:

- (32) a. H: Unde ești? ‘Where are you?’
 b. G: La **ceva**/#**vreo** statuie. ‘At some statue or other’

NB, *valami* is originally a full DP meaning ‘something’. As a determiner it is an epistemic determiner comparable to French *quelque*. Same for Romanian *ceva*.

A bit from Aloni & Port’s checklist:

The hide-and-seek scenario (children are hiding in a house)— UNLIKE *vreun* (Fălăuş (2015)) :

- (33) a. Peti **#valami/valamilyik** emeleti szobában lehet
 Petey something/some-which storey-ADJ.SFX room-INE be-POSS-3SG
 ‘Petey may be in one of the rooms upstairs, doesn’t matter where’
 b. Peti **????vaegy** emeleti szobában lehet
 Petey V1 storey-ADJ.SFX room-INE be-POSS-3SG
 ‘Petey may be in some upstairs room or other’

BUT-BUT-BUT:

- (34) Peti **vajegy** eldugott sarokban lehet
 Petey V1 hidden corner-INE be-POSS-3SG
 ‘Petey may be in some hidden corner or other’

The ‘namely’-continuation:

- (35) a. Péter találkozhatott **valami** hírességgel, mégpedig
 Peter meet-POSS-PAST-3SG some(-thing) celebrity-INSTR, namely
 Jolina Angel-lel.
 Jolina Angel-INSTR

‘Peter may have met some celebrity, namely, Jolina Angel’
 B???Péter találkozhatott **vajegy** hírességgel, mégpedig Jolina
 Peter meet-POSS-PAST-3SG V1 celebrity-INSTR, namely Jolina
 Angel-lel.
 Angel-INSTR
 ‘Peter may have met some celebrity or other, namely, Jolina Angel’

Negation, MON ↓ contexts: *va-j-egy* and *vreun* behave differently:

- (36) a. fără **vreun** dubiu
 without VR1 doubt
 Rom.: ‘without any/the smallest doubt’
 B???**vajegy** kétség nélkül
 V1 doubt without
 H: ‘without any doubt’; OK with one FC item or with *minden* ‘every’
- (37) a. Puțini studenți s-au înscris la **vreun** curs
 Few students SE-PERF-3PL enrol-PARTCPL at VR1 course
 avansat
 advanced
 Rom.: ‘Few students signed up for any advanced courses’
 B???Kevés diák vett fel **vajegy** haladó kurzust
 Little student took up V1 advanced course-ACC
 H: intended meaning the same as in Romanian
- (38) Niciodată n-am ținut **vreun** talk la București
 Never not-PF.AUX-1SG held VR1 talk at Bucharest
 ‘I’ve never given a single talk in Bucharest’ (Edward Göbbel, yesterday)

⇒ *Vreun*-DPs are NPIs (Fălăuș).

Hungarian *vaegy*-DPs are NOT NPIs. Strangely enough, they may even be called PPIs.

The Epistemic Constraint (originally about *vreun*, accepting it to hold for *va-j-egy* as well).

- (39) THE EPISTEMIC CONSTRAINT 1 (Fălăuș (2010))
 Context of occurrence: Op[...vreun...]
Op p entails that the speakers epistemic alternatives include *non p*-worlds
- (40) THE EPISTEMIC CONSTRAINT 2 (Fălăuș (2014)) The determiner **vreun** is licensed by obligatorily non-factive epistemic operators.

Our rendering of anti-specific, epistemic *vaegy*: A modalized (modally Skolemized) choice function.

Aside: Why λ-s? Why choice functions?

- Uniform analysis for all three construals.
- Halm: ‘weak existential commitment’. Choice functions do convey ‘existential commitment’. Making them modally dependent weakens this commitment.

$$(41) \quad \text{vae}gy_{epst} = \lambda P.\lambda Q.\lambda w.[Q(h(w)(P))]$$

The Epistemic Constraint and (41):

If the function h is composed with the functions denoted by P, Q , the characteristic set of such a function must be a proper subset of the set W of alternatives. ('Alternatives': Worlds accessible to the epistemic agent.)

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