The Birth of an Epistemic Indefinite: vaegy in Transylvanian Hungarian*

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1. INTRODUCTION

- The focus of our talk is the indefinite *vaegy* (also spelled *vajegy*, pronounced either as [VDεjj] or [VD[εjj]):
 - (1) Ha létezik vaegy update le fogod tudni tölteni.³
 if exist:3SG some.or.other update down will:2SG be.able.to:INF load:INF
 'If some update or other is available, you will be able to download it.'
- *Vaegy* 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, it has until now escaped the attention of formal linguists.
- Our claims are as follows:
 - *vaegy* has three related but distinct usages: *vaegy* as indefinite determiner ('some'), *vaegy* as epistemic indefinite⁴ ('some or other', some_{sG}) and *vaegy* as approximator ('approximately' or 'approximately one')
 - *vaegy* has diachronically developed from the reinterpretation of a *vagy egy* (lit. 'or one') compound
 - the Romanian epistemic indefinite *vreun* (Farkas 2002b, Fălăuş 2014 a.o.) played a role in aiding this reinterpretation through analogy (Transylvanian Hungarian has been in strong contact with Romanian for several centuries)

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4 Epistemic indefinites are also known as referentially vague items or antispecific indefinites (cf. Section 3.1).

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³ All examples, unless otherwise noted, are drawn from our database compiled from electronic and printed sources, comprising altogether 267 examples. Sources for the historical data include the Hungarian Historical Corpus and various digitized print works accessible in repositories such as the Hungarian Electronic Library (the oldest attestation is from 1860). Data reflecting current usage were collected from the Hungarian National Corpus and also from newspapers, blogs and discussion forums. Since *vaegy* is mainly used in colloquial registers; ethnographic interviews, private correspondence, diaries, blogs and discussion forums were prominent sources. As far as current usage is concerned, grammaticality judgements were elicited from native speakers.

- *vaegy* as an epistemic indefinite characterized by antispecificity and weak existential commitment (similary to *vreun*)
- unlike French *quelque*, Spanish *cualquiera* or Dutch *wie dan ook* and Standard Hungarian *valami*; *vaegy* has not evolved from a free relative structure (i.e., its epistemic meaning component did not originate from the free choice meaning component typical to free relatives)
- our findings add to our cross-linguistic understanding of the emergence and evolution of (epistemic) indefinites (cf. Haspelmath 1997, Jäger 2010, Aguilar-Guevara et al 2010, Jayez and Tovena 2011, Gianollo 2018)

2. DATA

- Hungarian belongs to the Ugric branch of the Uralic language family: altogether ~13 million native speakers, ~1.5 million native speakers in Transylvania (Romania)
- As has been noted already by Kriza (1863a) and Czuczor and Fogarasi (1874), *vaegy* can be used interchangeably with *néhány* 'some' in Transylvanian dialects (specifically, in the Szekler dialect and the closely related Csango dialect):
 - (2) Tehetünk bele vaegy szem kását is.
 put:POT:1PL into some grain:CL porridge:ACC too
 We may add some grains of porridge to it.'
- In addition to this, however, *vaegy* is also used as an epistemic indefinite or referentially vague item ('some or other'):
 - (3) Ha létezik vaegy update le fogod tudni tölteni. if exist:38G some.or.other update down will:28G be.able.to:INF load:INF

'If some update or other is available, you will be able to download it.'

- *Vaegy* can also be used as an approximator modifying a numeral ('approximately n pieces of something'):
 - (4) A tenyeremen van vaegy öt vérhólyag.
 the palm.of.hand:MY:ON be:3SG approximately five blood.blister
 'There are about five blood blisters on the palm of my hand.'
- *Vaegy* can also be used as an approximator modifying a measure expression ('approximately n units of x'). Interestingly, however, in case n=1, the numeral is obligatorily suppressed:
 - (5) Még fennebb sétáltunk vaegy fél kilométernyit a Borzia mentén yet higher.up walk-PAST-1PL approximately half km-worth the Borzia along 'Higher up, we walked approximately half kilometres along the Borzia stream.'

(6)	Hoztunk	ehejt	vajegy	zsák	pityókát	magának.⁵
	bring-PAST-1PL	here	approximately	sack	potato:ACC	you:DAT

⁵ The continuation of the text makes it clear that there is a single sack of potatoes (so the reading 'some sacks of potatoes' is not available.)

'Here, we brought about one sack of potatoes for you.'

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

(7) a.	*körülbelül	zsák(nyi)	krumpli	b.	körülbelül	egy	zsák(nyi)	krumpli
	approximately	sack(worth)	potato		approximately	one	sack(worth)	potato
(8) a.	vaegy	zsák.(nyi)	krumpli	b.	*vaegy	egy	zsák(nyi)	krumpli
	approximately	sack(worth)	potato		approximately	one	sack(worth)	potato

- *Vaegy* 'some' and *vaegy* 'approximately' do not impose semantic restrictions on the environments where they can appear.
- *Vaegy* 'some or other' is subject to semantic restrictions and is only found in the following environments: in epistemic modals (9), the protasis of conditionals (10), imperatives (11), adversatives (12), desideratives (13), purposives (14), questions (15) and habituals (16):

(9) A vaktyúk es találhat vajegy gyöngyszemet.
the blind.hen too find:POSS:3SG some.or.other pearl:ACC
'Even a blind hen may find some pearl or other.'

- (10) Ha létezik vaegy update le fogod tudni tölteni.
 if exist:3SG some.or.other update down will:2SG be.able.to:INF load:INF
 'If some update or other is available, you will be able to download it.'
- (11) [az örökségemet] adják vaegy esztelneki rászorulónak
 my inheritance give:IMP:3PL some.or.other Esztelnek:from person.in.need:DAT
 'My inheritance should be given to some person in need from Esztelnek.'
- nehogy (12)Ehelyt þonk.hálót a verem, here spider.web:ACC hit:1SG lest the lovak.ot. mérges ponk. megmássza vajegy a mount:SUBJ:3SG the some.or.other toxic spider horse:PL:ACC 'Here, I smash the spiderweb lest some venomous spider or other bite the horses.'
- (13) Bár vajegyet nyikkantott volna.
 if.only some.or.other:ACC squeak:PAST:3SG be:PAST:COND
 'If only he had made some squeaky little noise.'
- (14) Nem tudok falura menni, hogy
 not can:1SG village.onto go:INF that
 vajegy jó kövér bornyút hozzak.
 some.or.other good fat calf:ACC bring:SUBJ:1SG
 'I am unable to go to the countryside in order to get some nice fat calf or other.'

- (15) Van pasid, vagy tetcik vajegy fiu?
 be:38G boyfriend:28G or please:38G some.or.other boy
 'Do you have a boyfriend, or is there some guy or other that you are interested in?'
- (16) Vajegy virágcserépbe, ócskább csuporba, fazékba tettük.⁶
 some.or.other flowerpot:into used mug:into pot:into put:PAST:1PL
 We used to put it into some flowerpot, used mug or pot.'

3. ANALYSIS – SYNCHRONIC

- 3.1. THE LANDSCAPE FIRST LOOK
 - vaegy as indefinite determiner 'some': the standard Barwise and Cooper (1981) treatment:
 - (17) $[[vaegy_{some}]] = \lambda f. \lambda g. \{x: f(x) = 1\} \cap \{x: g(x) = 1\} \neq \emptyset$
 - (18) Férfiak nemigen vótak velünk, vajegy legény ütötte bé magát. men not.really be:PAST:3PL with.us some youth hit:PAST:3SG in self:ACC We did not really have any grown men with us, some youths did show up.' $\{x: youth(x) = 1\} \cap \{x: showed-up(x) = 1\} \neq \emptyset$
 - *vaegy* as epistemic (antispecific, quodlibetic etc.) indefinite determiner (Haspelmath 1997, Farkas 2002ab, Jayez and Tovena 2006, Aloni and Port 2010, Alonso-Ovalle and Menéndez-Benito 2010, Giannakidou and Quer 2013, Kamp and Bende-Farkas 2019 a.o.)
 - since Farkas (2002ab), indefinite DPs have been characterized in terms of the constraints on value assignment that they impose on the variables they introduce
 - scopal specificity: whether the assignment function depends on another operator in the environment: dependent indefinites (e.g. *câte un/o* 'one each' in Romanian, *egy-egy* 'one each' in Hungarian, cf. Farkas (1997); FCIs crosslinguistically, cf. Giannakidou (2001)) vs. nondependent indefinites
 - quodlibetic specificity: whether, according to the speaker's beliefs, there is a particular individual which is the value of the variable in question (particular indefinites: *egy bizonyos diák* 'a certain student') or not (quodlibetic or antispecific indefinites: *valami diák* 'some student or other', *bármelyik diák* 'any student')
 - in case of quodlibetic specificity: whether there is a requirement that the whole value domain be considered (exhaustive variation: free choice items: *bármelyik diák* 'any student', cf. Giannakidou (2001), Kratzer and Shimoyama (2002) a.o.⁷) or not (non-exhaustive variation: *valami diák* 'some student or another', cf. Giannakidou and Quer 2013, Farkas and Brasoveanu 2013 a.o.)
 - existential commitment: to what degree the speaker is committed to the existence of an entity denoted by the indefinite DP (more precisely, the existence of a verifying value within the context for the variable introduced by the indefinite DP, cf. Farkas 2002ab)

⁶ This example is drawn from a text which describes the habits and practices of traditional village life.

⁷ On free-choice items in Hungarian, cf. Hunyadi (1991, 2002), Abrusán (2007), Bende-Farkas (2014, 2015), Halm (2016ab)

- we claim that phrases with *vaegy* 'some or other' are to be analyzed as indefinites (19a) that are quodlibetic (or, using slightly different terminology, antispecific) in terms of specificity (19b) and have a weak existential commitment (19c):
- (19) a. λfλg. | {h(f)} ∩ {x: g(x) = 1} |=1 where h is a choice function which receives existential closure at the appropriate level⁸
 - Avaktyúktalálhatvajegygyöngyszemet.theblind.henfind:POSS:3SGsome.or.otherpearl:ACC'Ablind hen may find some pearl or other.'GEN(x) $\Diamond \exists$ CF(h) . blind-hen(x) \land find(x,h(pearl))
 - b. the use of *vaegy* 'some or other' is only licensed if there is no particular individual which the speaker believes to be the value of the variable introduced by *vaegy* (antispecifity) (for a DRT-based formalization of this constraint, see Jayez and Tovena 2006), rather, in the various possible worlds epistemically accessible to the speaker, different individuals are denoted by the variable introduced by *vaegy*
 - c. the speaker is only weakly committed to the existence of any entity denoted by the *vaegy*-phrase (weak existential commitment)
 - (19bc) explain while *vaegy* 'some.or.other' is only available in such environments that are modal⁹ and compatible with a weak existential commitment: in epistemic modals, the protasis of conditionals, imperatives, adversatives, desideratives, purposives, questions and habituals
- *vaegy* as approximator modifying a numeral (approximately n pieces of x):
 - (20) $[[vaegy_{approximately}]] = \lambda n.\lambda f.\lambda g. | \{x: f(x) = 1\} \cap \{x: g(x) = 1\} | \approx n$

(21)	Ma elmentek		innen	a	barakungból			
	today leave:PA	AST:3PI	from.here	the	barracks.our.from			
	vaegy	tízen	bányamunká	íra	alsórákosiak.			
	approximately	v ten	mine.work.	onto	Alsórákos:native:PL			
	Today, about 10 people originally from Alsórákos set out from our barracks to go and							
	work in the mines.'							
	$ \{x: from-Alsórákos(x) = 1\} \cap \{x: set-out-etc.(x) = 1\} \approx 10$							

⁸ For ease of exposition, we choose the choice-functional analysis of indefinites over the more traditional generalized quantifier analysis ([[vaegy_{some.or.other}]] = $\lambda f \lambda g. f(x) \wedge g(x)$), but nothing hinges on this choice. On the cross-linguistic debate on whether all or some kinds of indefinites should receive a choice function interpretation, see Reinhart (1995, 1997), Winter (1997), Kratzer (1998) and Matthewson (1999) a.o.).

⁹ On the modality of habituals, cf. Boneh and Doron (2010).

- *vaegy* as approximator modifying a measure expression (approximately n units of x) (cf. Rothstein 2016, Schvarcz 2017):
 - (22) $[[vaegy_{approximately.measure}]] = \lambda n.\lambda u.\lambda f.\lambda g.MEAS_{type(u)}(\{x: f(x) = 1\} \cap \{x: g(x) = 1\}) \approx < n, u > u.\lambda f.\lambda g.MEAS_{type(u)}(\{x: f(x) = 1\} \cap \{x: g(x) = 1\}) \approx < n, u > u.\lambda f.\lambda g.MEAS_{type(u)}(\{x: f(x) = 1\} \cap \{x: g(x) = 1\}) \approx < n, u > u.\lambda f.\lambda g.MEAS_{type(u)}(\{x: f(x) = 1\} \cap \{x: g(x) = 1\}) \approx < n, u > u.\lambda f.\lambda g.MEAS_{type(u)}(\{x: f(x) = 1\} \cap \{x: g(x) = 1\}) \approx < n, u > u.\lambda f.\lambda g.MEAS_{type(u)}(\{x: f(x) = 1\} \cap \{x: g(x) = 1\}) \approx < n, u > u.\lambda f.\lambda g.MEAS_{type(u)}(\{x: f(x) = 1\} \cap \{x: g(x) = 1\}) \approx < n, u > u.\lambda f.\lambda g.MEAS_{type(u)}(\{x: f(x) = 1\} \cap \{x: g(x) = 1\}) \approx < n, u > u.\lambda f.\lambda g.MEAS_{type(u)}(\{x: f(x) = 1\} \cap \{x: g(x) = 1\}) \approx < n, u > u.\lambda f.\lambda g.MEAS_{type(u)}(\{x: f(x) = 1\} \cap \{x: g(x) = 1\}) \approx < n, u > u.\lambda f.\lambda g.MEAS_{type(u)}(\{x: f(x) = 1\} \cap \{x: g(x) = 1\}) \approx < n, u > u.\lambda f.\lambda g.MEAS_{type(u)}(\{x: f(x) = 1\} \cap \{x: g(x) = 1\}) \approx < n, u > u.\lambda f.\lambda g.MEAS_{type(u)}(\{x: f(x) = 1\} \cap \{x: g(x) = 1\}) \approx < n, u > u.\lambda f.\lambda g.MEAS_{type(u)}(\{x: f(x) = 1\} \cap \{x: g(x) = 1\}) \approx < n, u > u.\lambda f.\lambda g.MEAS_{type(u)}(\{x: f(x) = 1\} \cap \{x: g(x) = 1\}) \approx < n, u > u.\lambda f.\lambda g.MEAS_{type(u)}(\{x: f(x) = 1\}) \approx < n, u > u.\lambda f.\lambda g.MEAS_{type(u)}(\{x: f(x) = 1\}) \approx < n, u > u.\lambda f.\lambda g.MEAS_{type(u)}(\{x: f(x) = 1\}) \approx < n, u > u.\lambda f.\lambda g.MEAS_{type(u)}(\{x: f(x) = 1\}) \approx < n, u > u.\lambda f.\lambda g.MEAS_{type(u)}(\{x: f(x) = 1\}) \approx < n, u > u.\lambda f.\lambda g.MEAS_{type(u)}(\{x: f(x) = 1\}) \approx < n, u > u.\lambda f.\lambda g.MEAS_{type(u)}(\{x: f(x) = 1\}) \approx < n, u > u.\lambda f.\lambda g.MEAS_{type(u)}(\{x: f(x) = 1\}) \approx < n, u > u.\lambda f.\lambda g.MEAS_{type(u)}(\{x: f(x) = 1\}) \approx < n, u > u.\lambda f.\lambda g.MEAS_{type(u)}(\{x: f(x) = 1\}) \approx < n, u > u.\lambda f.\lambda g.MEAS_{type(u)}(\{x: f(x) = 1\}) \approx < n, u > u.\lambda f.\lambda g.MEAS_{type(u)}(\{x: f(x) = 1\}) \approx < n, u > u.\lambda f.\lambda g.MEAS_{type(u)}(\{x: f(x) = 1\}) \approx < n, u > u.\lambda f.\lambda g.MEAS_{type(u)}(\{x: f(x) = 1\}) \approx < n, u > u.\lambda f.\lambda g.MEAS_{type(u)}(\{x: f(x) = 1\}) \approx < n, u > u.\lambda f.\lambda g.MEAS_{type(u)}(\{x: f(x) = 1\}) \approx < n, u > u.\lambda f.\lambda g.MEAS_{type(u)}(\{x: f(x) = 1\}) \approx < n, u > u.\lambda f.\lambda g.MEAS_{type(u)}(\{x: f(x) = 1\}) \approx < n, u > u.\lambda f.\lambda g.MEAS_{type(u)}(\{x: f(x) = 1\}) \approx < n, u > u.\lambda f.\lambda g.MEAS_{type(u)$

kaptunk vajegy fél deci gabonapálinkát hozomra

get:PAST:3PL approximately half decilitre grain:brandy:ACC on.tick

- a kántortanító bögrecsárdájában
- the choirmaster.and.teacher pub:his:in

We got about half a decilitre of brandy on tick in the choirmaster-cum-teacher's pub.'

 $MEAS_{volume}({x: brandy(x) = 1} \cap {x: we-received(x) = 1}) \approx <0.5, decilitre>$

3.2 THE LANDSCAPE – SECOND LOOK

(23)

- The two approximator uses discussed above can easily be given a unified treatment. Intuitively, in both cases, we have approximation of a quantity: a countable quantity ('approximately n pieces of something') or a measure quantity ('approximately n units'). There are technically two ways to achieve this.
- One can assume that *vaegy* 'approximately' displays a principled type ambiguity (Partee and Rooth 1983, Hendriks 1987, Li and Rothstein 2012):

(24)
$$[[vaegy_{approximately}]] = \lambda n.\lambda f.\lambda g. | \{x: f(x) = 1\} \cap \{x: g(x) = 1\} | \approx n \text{ or}$$
$$\lambda n.\lambda u.\lambda f.\lambda g. \text{MEAS}_{type(u)}(\{x: f(x) = 1\} \cap \{x: g(x) = 1\}) \approx < n, u > u = 1\}$$

• Alternatively, one can assume that in countable cases, in cases where there is no explicit unit of measurement such as 'dozen', there is an implicit measure unit 'count' (#) (which indeed does surface in certain uses such as *two counts of burglary* meaning 'two burglaries'), cf. Krifka (1989).¹⁰ This enables us to give the unified formulation:

(25)
$$[[vaegy_{approximately}]] = \lambda n.\lambda u.\lambda f.\lambda g.MEAS_{type(u)}(\{x: f(x) = 1\} \cap \{x: g(x) = 1\}) \approx \langle n, u \rangle$$

where $u \in \{\#, \text{ decilitre, kilometre, } ...\}$

- Note that the type of measurement is a function of the type of unit: type(litre)=volume, type(kilometer)=length, type(count)=cardinality, type(dozen)=cardinality.¹¹
- Interestingly, *vaegy* 'some' can be given a similar formulation. Note that two sets are disjoint if and only if the cardinality of their intersection is zero. This means that (26) is logically equivalent to (17):

(26)
$$[[vaegy_{some}]] = \lambda f.\lambda g.MEAS_{cardinality}(\{x: f(x) = 1\} \cap \{x: g(x) = 1\}) > <0, \#>$$

11 This analysis can be extended to the cases where vaegy stands for 'approximately one', such as in (6):

(i) $[[vaegy_{approximately.one}]] = \lambda u.\lambda f.\lambda g.MEAS_{type(u)}(\{x: f(x) = 1\} \cap \{x: g(x) = 1\}) \approx <1, u > 1$

where $u \in \{\#, \text{ decilitre, kilometre, } ...\}$

¹⁰ Such null classifiers have been proposed by various authors (Sharvy (1978), Muromatsu (2001), Kobuchi-Philip (2006); Cinque (2006a), Gebhardt (2009), Piriyawiboon (2010), Zhang (2011), among others, and the idea has been adopted for Hungarian in particular in Csirmaz and Dékány (2010), Dékány and Csirmaz (2010) and Dékány and Csirmaz (2014))

4. ANALYSIS - DIACHRONIC

4.1 THE STARTING POINT

- Traditional grammars and dictionaries simply assume (without discussing any supporting evidence) that *vaegy* is historically derived from *vagy egy* ('or one'). In fact, there is considerable circumstantial evidence for a *vagyegy* > *vajegy* > *vaegy* chain. While in the electronic sources of today, the *vaegy* forms predominate, earlier literary and folkloristic texts typically have *vajegy*, and in the earliest sources (1863)¹², *vagyegy* can also be attested. In phonological terms, the weakening of an intervocalic palatal affricate [jj] into a palatal glide [j], followed by further weaking to zero, is a typical lenition pathway (Szigetvári 2008).¹³ (Note also that *vagy* 'or' itself is often pronounced as *vaj* in certain varieties of Transylvanian Hungarian.)
- However, the crucial piece of the puzzle is still missing: what was the locus of and motivation for this reinterpretation, since it is not immediately clear why and under what circumstances 'or one' can be reinterpreted as 'some' or 'some or other' or 'approximately'.
- It is also unclear whether these new meanings are separate developments, or somehow connected to each other. (E.g., in English, the connection between *some* and *some or other* is unmistakable, and *some* can also be used as an approximator: *some twenty years ago* 'approximately twenty years ago').
- We will claim that the starting point of the reinterpretation was the approximative use of of *vagy* 'or' which is widely attested in all variants of Hungarian:

(27)	Vasárnap	óta	aludt	am	vagy	öt	órát.			
	Sunday	since	e sleep	PAST:1SG	or	five	hour:ACC			
	'Since Sunday, I have had about five hours of sleep.'									
(28)	Most ismét	vagy	öt	könyvet	olvaso	k	egyszerre.			
	now again	ı or	five	book:ACC	read:	1sg	at.once			

'Once again, I am reading approximately five books simultaneuosly.'

- While it is beyond our scope to look into the origins of this 'approximative or'¹⁴, it is plausible to assume that it derives from a deletion of the first disjunct of a bona fide disjunction with an approximative flavour:
- (29) a. Vasárnap óta aludtam négy vagy öt órát.
 Sunday since sleep:PAST:1SG four or five hour:ACC
 'Since Sunday, I have had four or five hours of sleep.'

^{12 (}i) *s jót nevetnek rajta – főkint, ha vagyegy ügyetlent tettek föl.* and good:ACC laugh:3PL him.on especially if some.or.other clumsy:ACC put:PAST.3PL up 'and they have a good laugh at his expense, especially if it is some clumsy guy that they have put on stage' (source: Kriza 1863)

¹³ It is well-known that in numerous languages, indefinites are made up of a wh-word and some reflex of 'or', e.g. Japanese *dare-ka* (lit. 'who-or', meaning 'someone') (Haspelmath 1997: 164-169). Note that *vaegy* 'some or other' differs from these as here, 'or' combines with the numeral 'one' (and not with a wh-word). Also, while *vaegy* is historically derived from *vagy* ('or') plus *egy* 'one', this has become fossilized by now and *vaegy* is to be treated as single lexical item.

¹⁴ This approximative use of *vagy* 'or' has been attested as early as 1508 (cf. Klemm 1926).

b. Vasárnap óta aludtam négy vagy öt órát.
 Sunday since sleep:PAST:1SG four or five hour:ACC
 'Since Sunday, I have had about five hours of sleep.'

4.2 APPROXIMATIVE VAEGY

- In Hungarian, numeral+unit expressions can be ambiguous between two readings, e.g. *fél kiló* 'half kilo' can mean 'half of the unit kilo' or 'one unit of half kilo'. Cf., where (b) and (c) have a roughly similar meaning but a different structure:
- (30) a. Vettem egy^{15} kiló kenyeret.

buy:PAST:1SG one kilo bread:ACC

'I brought one kilo of bread.'

 $MEAS_{mass}({x: bread}(x) = 1) \cap {x: buy(speaker)(x) = 1}) = <1;kilo>$

b. Vettem fél kiló kenyeret.

buy:PAST:1SG half kilo bread:ACC

'I brought half a kilo of bread.'

 $MEAS_{mass}({x: bread}(x) = 1) \cap {x: buy(speaker)(x) = 1}) = \langle 0.5; kilo \rangle$

c. Vettem egy fél kiló kenyeret

buy:PAST:1SG one half kilo bread:ACC

'I brought half a kilo of bread.' (lit.: 'I bought one half-kilo unit of bread.')

 $MEAS_{mass}({x: bread}(x) = 1) \cap {x: buy(speaker)}(x) = 1)) = <1; half-kilo>$

• Deploying approximative 'or':

(31) a. Vettem kiló kenyeret. vagy egy buy:PAST:1SG or one kilo bread:ACC 'I brought approx. one kilo of bread.' $MEAS_{mass}({x: bread}(x) = 1) \cap {x: buy(speaker)(x) = 1}) \approx <1;kilo>$ b. Vettem kiló kenyeret. vagy fél buy:PAST:1SG or half kilo bread:ACC 'I brought approx. half a kilo of bread.' $MEAS_{mass}({x: bread}(x) = 1) \cap {x: buy(speaker)(x) = 1}) \approx <0.5;kilo>$ c. Vettem vagy fél kiló kenveret egy buy:PAST:1SG or one half kilo bread:ACC

¹⁵ In Hungarian, *egy* is in fact ambiguous between *egy* 'one' (the numeral) and *egy* 'a' (the indefinite article). In neutral readings of (30a) (i.e., where the amount is not contrastively highlighted), *egy* carries no stress, which indicates that it is *egy* 'a'. Nevertheless, the meaning is still 'an amount of bread measuring 1 kilo' and not 'one of the several contextually available one-kilo portions of bread, chosen by a choice function', i.e., the formulation of (30a) is accurate. Exactly pinpointing how *egy* 'a' is being reinterpreted as *egy* 'one' is beyond our scope here, but note that this is a cross-linguistically attested phenomenon: *a pound of gold* vs. *one pound of gold*.

'I brought approx. half a kilo of bread.' (lit.: 'I brought approx. one half-kilo unit of bread.')

 $MEAS_{mass}({x: bread}(x) = 1) \cap {x: buy(speaker)(x) = 1}) \approx <1; half-kilo>$

- It is easy to see how (31c) served as the locus of reinterpreting *vagy egy* (approximative or + one) into *vagyegy* (approximator modifying numerals):
- (32) a. Vettem vagy egy fél kiló kenyeret
 buy:PAST:1SG or one half kilo bread:ACC
 'I brought approx. half a kilo of bread.' (lit.: 'I brought approx. one half-kilo unit of bread.') MEAS_{mass}({x: bread(x) = 1} ∩ {x: buy(speaker)(x) = 1}) ≈ <1;half-kilo>
 b. Vettem vagyegy fél kiló kenyeret

buy:PAST:1SG approximately half kilo bread:ACC

'I brought approximately half a kilo of bread.'

 $MEAS_{mass}({x: bread}(x) = 1) \cap {x: buy(speaker)(x) = 1}) \approx <0.5; kilo>$

- As we have noted above (6), *vaegy* can be used as an amalgamated version of an approximator and the numeral one. This stems from the reinterpretation of *vagy egy* (approximative or + one) into *vagyegy* (approximately one):
- (33) a. Vettem vagy egy kiló kenyeret

buy:PAST:1SG or one kilo bread:ACC

'I brought approximately a kilo of bread.'

b. Vettem vagyegy kiló kenyeret
buy:PAST:1SG approximately.one kilo bread:ACC
'I brought approximately a kilo of bread.'

4.3 VAEGY AS INDEFINITE DETERMINER ('SOME')

• As we have discussed above (27), *vagy n* in standard Hungarian means 'approximately n'. Focusing on cardinals, the meaning of *vagy egy* 'approximately one' is:

(34) $[[vagy egy]] = \lambda f.\lambda g.MEAS_{cardinality}(\{x: f(x) = 1\} \cap \{x: g(x) = 1\}) \approx \langle 1, \# \rangle$

• Note that this is very similar to *vaegy* 'some' (cf. (20) above, reproduced here as (29)):

(35) $[[vaegy_{some}]] = \lambda f.\lambda g.MEAS_{cardinality}(\{x: f(x) = 1\} \cap \{x: g(x) = 1\}) > <0, \#>$

- 'Approximately one' in fact means a positive cardinality close to one (note that 'John slept approximately one hour.' entails that 'John slept.', so the interval denoted by 'approximately one' cannot include zero), in other words, a small positive cardinality.
- While 'some' technically refers to a non-zero cardinality (35), it is well-known that in most situations, there is an inference that this cardinality is small.
- This means that *vagy egy* 'approximately one, a few' was easy to reinterpet as *vaegy* 'some', especially once the relationship to the original construction was masked due to phonological lenition (*vagy egy > vagyegy > vaegy*).

4.4 VAEGY AS EPISTEMIC INDEFINITE ('SOME OR OTHER')

- In many languages, epistemic indefinites such as *some* in English (36) can be used as approximators (37):
- (36) *Some famous scientist once said that everything is relative.*
- (37) I slept some five hours.
- The situation is similar in Hungarian:
- (38) Valami híres tudós azt mondta, hogy minden relatív.
 EI¹⁶ famous scientist it:ACC say:PAST:3SG that everything relative
 'Some famous scientist said that everything is relative.'

(39) Aludtam valami öt órát.
slept-PAST-1SG EI five hour:ACC¹⁷
'I slept some five hours.'

- While the full discussion of this cross-linguistic pattern is beyond our scope, it is easy to point out why epistemic indefinites may function as approximators. Note that epistemic indefinites (or referentially vague items) are taken to be anti-specific: in the epistemically accessible possible worlds, different elements of the set 'famous scientist' satisfy the predicate in (38):
 - in w₁, Galileo said that everything is relative,
 - in w₂, Albert Einstein said that everything is relative,
 - ...
 - in w_n, Stephen Hawking said that everything is relative
- While *five hours* may denote an exactly five-hour-long time span in certain contexts, in everyday usage, it often denotes the set of time spans which are approximately equal¹⁸ to five hours. In this sense, *five hours* can be taken to denote a set, similarly to *famous scientist*:
- (40) [[famous scientist]] = {Galileo, Kepler, Albert Einstein ... Stephen Hawking}
- (41) [[five hours]] = $\{4h45m, 4h46m \dots 5h14m, 5h15m\}$
- This means that in the epistemically accessible possible worlds, different members of the set 'five hours' satisfy the predicate in (33)
 - in w₁, I slept 4 hours 45 minutes,
 - in w₂, I slept 4 hours 46 minutes,
 - ...
 - in w_n, I slept 5 hours 15 minutes.¹⁹

¹⁶ EI = epistemic indefinite.

¹⁷ Numerically premodified nouns are always in the singular in Hungarian.

¹⁸ What counts as approximately equal depends on the contextually given degree of accuracy required.

¹⁹ Cf. Farkas and Brasoveanu's (2013, 23) observation regarding *some* 'some or other' in English (dubbed some_{sc} by F&B) and *vreun* 'some or other' in Romanian: "The fact that when some_{sc} is used with a numeral, an approximately interpretation is required follows under the assumption that such DPs refer to quantities. An exact quantity has a single verifying value; approximate quantities have non-singleton verifying values."

- Since, as we have seen above, epistemic indefinites can systematically be used as approximators, it is relatively easy for a language learner to overgeneralize in the other direction, and to start using an approximator as an epistemic indefinite:
- (42) a. Aludtam körülbelül öt órát. slept-PAST-1SG approximately five hour:ACC 'I slept approximately five hours.' b. Aludtam valami öt órát. slept-PAST-1SG ΕI five hour:ACC 'I slept some five hours.' c. Aludtam vaegy öt órát. slept-PAST-1SG approximately->EI five hour:ACC

'I slept some five hours.'

- In other words, being exposed to sentences such as (33c), a language learner might infer that *vaegy* is an epistemic indefinite. This reinterpretation is made easier by the fact that *vaegy* contains *egy* 'one', which is homophonous with *egy* 'a', the indefinite determiner.
- Analogy from Romanian, a language with which Transylvanian Hungarian has been in close contact for centuries, most probably played a role. The epistemic indefinite *vreun* (composed of *vrea* 'want' + *un* 'one') has a partially similar morphological makeup, and *vaegy* and *vreun*, in addition to being anti-specific, also share the characteristic of weak existential commitment (Farkas 2002ab, 2006; Săvescu-Ciucivara 2007; Fălăuş 2009, 2014, 2015). To our knowledge, the only difference between the distribution of *vaegy* and *vreun* is that unlike *vreun*, *vaegy* appears to be a positive polarity item in that it is unavailable in the scope of negative expressions:
- (44) a. *fără vreun dubiu* without some.or.other doubt 'without any doubt'
- (45) a. *vaegy kétely nélkül some.or.other doubt without
 b. bármilyen kétely nélkül
 - free.choice.item doubt without
 - c. minden kétely nélkül
 - every doubt without
 - 'without any doubt'
- *Vaegy* 'some or other' is only attested in Transylvanian Hungarian (this is another argument in favour of language contact with Romanian having played a role). Its closest cousin in standard Hungarian is *valami* 'some or other'. Crucially, however, *valami* does not exhibit weak existential commitment, and therefore is freely available in episodic contexts:

- (46) a. A kormány hozott valami új rendeletet.
 the government bring:PAST:3SG some.or.other new decree:ACC
 'The government passed some new decree or other.'
 - b. **A* kormány hozott vaegy új rendeletet. the government bring:PAST:3SG some.or.other new decree:ACC intended: 'The government passed some new decree or other.'²⁰

5. CONCLUSION

- We have shown that *vaegy* in Transylvanian Hungarian has three uses:
 - indefinite determiner ('some')
 - approximator ('approximately' or 'approximately one')
 - ° epistemic (antispecific) indefinite with weak existential commitment ('some or other')
- All these uses are diachronically derived from approximative vagy ('or') plus egy 'one':

vaegy 'some'

vagy egy ('or one' = 'approximately one')

vaegy 'approximately' *→ vaegy* 'some or other'

• Romanian *vreun* 'some or other' played a role in this reinterpretation process (analogy)

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²⁰ Naturally, this sentence is grammatical if *vaegy* is interpreted as the indefinite determiner 'some': 'The government has passed some new decrees.'

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