Measure Constructions in Hungarian and the Semantics of the *–nyi* Suffix

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This paper examines the distribution and meaning of the *–nyi* suffix. *-nyi* naturally attaches to container classifiers and induces a measure interpretation of the container noun. I show that *-nyi* is not restricted to the dimension of volume but applies generally to count nouns. *-nyi* combines with N to create a measure head, analogous to expressions such as *kilo*. I maintain that being a measure head, *N-nyi* combines with a numeral to form a complex phrasal modifier. I then examine the semantics of *-nyi* itself. I show that it has two interpretations: it induces a measure reading of the N *pohár* in *két pohár-nyi bor*, and it forces an approximative interpretation when suffixed to an explicit measure expression as in *kiló-nyi.*

Keywords: classifier constructions, measuring, word formation

1. Introduction

This paper explores the semantics of the *-nyi* suffix in Hungarian. *-nyi* is a suffix which attaches to container classifiers, such as *pohár* (‘glass’) in (1a), to other count nouns, such as *könyv* (‘book’) in (1b), and to lexical measures such as *kiló* (‘kilo’) in (1c). [1]

(1) a. két pohár-nyi bor
two glass-NYI[2] wine
‘two glassfuls of wine’

b. három könyv-*(nyi) cikk
three book-NYI article
‘three book(ful)s of articles’

[1] The following abbreviations are used in the paper: ABL = ablative, ACC = accusative, ALL = allative, ATTR = attributive, COND = conditional, DAT = dartive, DELAT = delative, DIM = diminutive, ELAT=elative, ILL = illative, IMP = imperative, INE = inessive, INSTR = instrumental, POSS = possessive, SUBL = sublative, SUPERESS = superessive, TERM = terminative, VM = verbal modifiers. Following Dékány (2011), I have not marked bare nouns as singular.

[2] I have glossed *-nyi* as NYI because at this stage I do not want to specify its semantic content. I will discuss its semantic interpretation in Section 5.

c. két kiló-nyi liszt
two kilo-NYI flour
'approximately two kilos of flour'

The *-nyi* suffix naturally attaches to container nouns where it forces a measure interpretation. I shall show that container classifier phrases, such as *két pohár bor* ('two glasses of wine') are ambiguous between two count interpretations – two actual glasses filled with wine or two portions of wine – and a measuring interpretation – a quantity of wine equal to two glassfuls; while *két pohár-nyi bor* ('two glass-NYI wine') has only a measure reading, as we will see below. When *-nyi* attaches to a noun it creates a measure expression, thus *három könyv-*(nyi) cikk* ('three book-NYI articles') refers to a quantity of articles measured in terms of book-units. As we will see, attaching *-nyi* to lexical measures results in an approximate reading.

My data show that *-nyi* phrases can be used as measures in different ways, and function as predicates in a wide range of expressions including container, value, temporal and adjectival measures. There is considerable variation among the judgments of speakers with respect to the applicability of *–nyi* in certain dimensions, as well as to the obligatoriness and optionality of *-nyi* in certain constructions. However, my data reflect the judgments of a solid body of informants of various ages and from different regions. All grammaticality judgments reflect the intuitions of at least six Hungarian native speakers and sometimes as many as ten (ranging between the ages of 19-62). Unless otherwise noted, the judgments of all my informants were essentially the same.

Given the range of constructions and dimensions in which *-nyi* can appear for many speakers, and the fact that for some speakers *-nyi* can be used in highly creative ways, I shall propose a minimal semantic analysis for *-nyi*. I treat *-nyi* as a general operator that converts a noun into a measure head which can express measurement in a number of different domains. I shall suggest that reference to any particular dimension of measurement is not incorporated into the semantic meaning of *-nyi*. Instead, restriction to a specific dimension is determined pragmatically. For some speakers, available dimensions of measurement are highly conventionalized, and for these speakers some of the examples cited will seem infelicitous.

For other speakers, choice of dimension of measurement is much freer, and determined by the specific local context.[3]

The structure of this paper is as follows. In the remainder of this section I will discuss the measure-inducing function of *-nyi,* in particular I will focus on the ambiguity of container classifiers, and show *-nyi*'s contribution upon attaching to non-container nouns. In Section 2, I will discuss whether *-nyi* is obligatory for creating a measure reading. In Section 3, I will explore what part of speech *-nyi* phrases are, and propose that *-nyi* creates a measure head. In Section 4, I will examine conditions for its occurrence: when it is impossible, when speakers prefer using it, and when it is obligatory. In Section 5, I will present a range of constructions which can be *-nyi* suffixed, and discuss the possible meanings of *-nyi,* and propose a general semantic analysis for *-nyi.* In Section 6, I discuss its approximative use. In Section 7, I draw some conclusions.

I begin with some general background on the ambiguity of container classifiers. Rothstein (2009) draws a distinction between counting and measuring uses of nouns in 'Numeral+Classifier+Noun' constructions. She argues that phrases such as *two glasses of wine* are semantically ambiguous and have two possible interpretations. On an individuating reading, the phrase refers to individual glasses and allows them to be counted. On a measure reading, the phrase denotes a quantity of wine, and says of it that the quantity equals two glasses. The phrase is ambiguous because the classifier *glasses* is ambiguous between an individuating reading – denoting two actual objects – and a measure reading – denoting a unit of measure. When we use *glass* as an ordinary count noun we intend it to mean a container for liquids. When we use *glass* as a measure unit, we intend it to mean a unit of measure indicating a quantity which is equal to the quantity which would fill the glass.

Recent work has pointed out that the interpretation of classifier phrases is not restricted to a two-way ambiguity. Partee and Borschev (2012) argue that an object vs. measure ambiguity is not fine-grained enough. While there is one individuating reading, their analysis allows for

[3] The most serious disagreement is over examples (6)-(7), (12)-(14), (17), and (28), in particular the conventionality of using the nominal in question to denote a unit of measurement on a particular dimension. The degree of constraints may be dialectal or may even be personalized. There seems to be dialectal variation on how the choice of dimension is constrained: for some speakers the constraint is merely contextual plausibility, and these speakers can use *nyi*-phrases in highly creative ways, for others, the dimension must be a conventional one, such as volume, weight, time, financial value etc.

three measure-type readings resulting from three different meaning shifts of the classifier noun. These are the concrete portion reading, the *ad hoc* measure reading and the standard measure reading. In concrete portion readings the measurement depends on particular concrete tangible containers. *Ad hoc* measures occur when a non-specific container is involved in the measurement, while standard measures involve a container of a conventional size. However, while Partee and Borschev treat concrete portions as a kind of measure, there is evidence that these are in fact count readings. Schvarcz (2014) points out that in Hungarian these cannot occur with *-nyi* (see examples (3a), (3b) and (16) below).

Khrizman, Landman, Lima, Rothstein and Schvarcz (2015) argue explicitly that concrete portion readings are count readings, and give a semantic analysis. They show that *three glasses of wine* is in fact four-ways ambiguous: there are three count readings and a measure reading. On one count reading the N denotes three glasses containing wine. The second count reading is a contents-classifier reading, equivalent more or less to Partee and Borschev's concrete portion reading, on which *three glasses of wine* denotes three wine-portions contained in three wine-glasses. The free portion interpretation involves three wine-portions that each measure one glassful. The measure reading denotes a (single) quantity of wine which measures three glassfuls. Khrizman *et al*. show that this distinction holds cross-linguistically. For the purpose of this paper, I will not distinguish between the contents-classifier reading and the free portion reading, and will treat container classifier expressions as three-way ambiguous between the two count readings, denoting glasses filled with wine and portions of wine, and one measure reading. I now turn to Hungarian and examine the patterns of ambiguity in container classifiers.

Container classifiers in Hungarian, such as *három üveg bor* ('three bottles of wine') exhibit a three-way ambiguity. They can refer to the actual objects filled with wine which are being counted (2a); or to countable portions of wine (2b); or to a quantity of wine which measures three bottlefuls (2c):

(2) a. Három üveg bor-t bontottunk fel.
three bottle wine-ACC open.PAST.1PL VM
'We opened three bottles of wine.'

b. Három üveg bor-t adtam a puncs-hoz.
three bottle wine-ACC add.PAST.1SG the punch-ALL
Az üveg-ek-et a borállvány-ról egyenként
the bottle-PL-ACC the wine.stand-DELAT one.by.one
vettem le és bontottam fel, majd
take.PAST.1SG VM and open.PAST.1SG VM then
beleöntöttem őket a puncs-ba.
VM.pour.PAST.1SG them the punch-ILL
'I added three bottlefuls of wine to the punch. I took the bottles one by one from the wine stand, opened them, then I poured them into the punch.'

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c. A pincészet-ünk-ben az érlelési idő alatt minden hat
the winery-POSS.1PL-INESS the aging period during every six
hónap-ban teszteljük a bor-t. Minden alkalom-mal,
month-INESS test.PRES.1PL the wine-ACC each occasion-INSTR
amikor megnyitjuk a hordó-t, egy kicsi
when open.PRES.1PL the barrel-ACC a little
elszivárog. Összességében mintegy két üveg bor
seep.PRES.3SG all.in.all some two bottle wine
vész el.
get.lost.PRES.3SG VM
'In our winery, throughout the aging period, we test the wine every six months. Every time we open the barrel a little bit evaporates. Overall, about two bottles of wine are lost.'

Examples (2a) and (2b) are individuating readings in which objects and portions are being counted, while example (2c) is a measure reading in which a quantity is being measured. The verb *felbont* ('to open') in (2a), requires actual bottle objects to be involved. The scenario in (2b) accentuates three wine portions, each of which measures one bottleful. Each portion is individuated by a "taking the bottle from the wine stand" event. (2c) must be a measure reading, since in this situation, evaporating wine cannot be apportioned in terms of bottles, therefore the phrase *két üveg bor* ('two bottles of wine') can only refer to an overall quantity

of of wine. Suffixing *-nyi* to the classifier is infelicitous with predicates and expressions that only allow an individuating interpretation, while it is possible in a measure context.

(3) a. # Három üveg-nyi bor-t bontottunk fel.
three bottle-NYI wine-ACC open.PAST.1PL VM
'We opened three bottlefuls of wine.'

b. ? Három üveg-nyi bor-t adtam a puncs-hoz.
three bottle-NYI wine-ACC add.PAST.1SG the punch-ALL
Az üvegek-et a borállvány-ról egyenként
the bottle-ACC the wine.stand-DELAT one.by.one
vettem le és bontottam fel, majd
take.PAST.1SG VM and open.PAST.1SG VM then
beleöntöttem őket a puncs-ba.[4]
VM.pour.PAST.1SG them the punch-ILL
'I added three bottlefuls of wine to the punch. I took the bottles one by one from the wine stand, opened them, then I poured them into the punch.'

c. A pincészet-ünk-ben az érlelési idő alatt, minden hat
the winery-POSS.1PL-INESS the aging period during every six
hónap-ban teszteljük a bor-t. Minden alkalom-mal,
month-INESS test.PRES.1PL the wine-ACC each occasion-INSTR
amikor megnyitjuk a hordó-t, egy kicsi
when open.PRES.1PL the barrel-ACC a little
elszivárog. Összességében mintegy két üveg-nyi bor
seep.PRES.3SG all.in.all some two bottle-NYI wine
vész el.
get.lost.PRES.3SG VM
'In our winery, throughout the aging period, we test the wine every six

[4] In portion readings we do not expect *-nyi* to attach to the classifier, and indeed many speakers find (3b) questionable. Note that the example may also be interpreted as a measure of an overall quantity, and thus some speakers may find this sentence felicitous, but the context and the plural pronoun *őket* ('them') indicates that we are talking about a plurality of portions, and thus the *-nyi* construction is blocked.

months. Every time we open the barrel a little bit evaporates. Overall, about two bottles of wine are lost.'

When *-nyi* attaches to a container classifier, the whole nominal phrase can only have a measure interpretation. When *-nyi* attaches to a non-container nominal, *N-nyi* never refers to N, but indicates a unit of measure. This is illustrated in examples below: we cannot refer to actual books with *könyv-nyi* ('book-NYI') (4), but only to a measure (5).

(4) Context: *Pointing to two books*
Az két könyv-nyi cikk.
that two book-NYI article
Intended meaning: 'That are two books with articles.'

(5) Tönkrement a számítógép-em, minden munká-m
broke.PAST.3SG the computer-POSS.1SG all work-POSS.1SG
elveszett Legalább két könyv-*(nyi) cikk veszett
lost.PAST.3SG at.least two book-NYI article get.lost.PAST.3SG
oda.
VM
'My computer broke, all my work was lost. At least two bookfuls of articles are gone.'

In recent studies, the *-nyi* suffix has been treated as a particle which creates adjectives out of nouns; the resulting expression, *N-nyi*, has an estimate interpretation. Kenesei, Vago and Fenyvesi (1998) propose that *-nyi* "forms adjectives of measure out of any noun that can be understood as a unit of measure, whether permanent or occasional" (p. 365). They predict that the resulting construction can be used predicatively as well as attributively. Kiefer and Ladányi (2000) point out that *–nyi* attaches to concrete nouns or measures forming adjectives and it is used to name estimate measures.

In this paper, I argue that *N-nyi* is not used as an adjective. *-nyi* rather forms measure heads out of nouns (expressions such as *kilo*) which then combine with a numeral to form a complex predicate, *NUM+N-nyi*. We see that it is the whole predicate phrase *NUM+N-nyi*

which has adjectival properties, and not *N-nyi* alone. I shall show that contra to Kenesei, Vago and Fenyvesi (1998) and to Kiefer and Ladányi (2000) there are many differences between *N-nyi* and typical adjectives, in particular the fact that *N-nyi* can only occur after a numeral. While estimation is a part of the meaning associated with *-nyi* phrases, I shall show that *–nyi* has different semantic interpretations upon attaching to nouns and to lexical measures, and the approximative meaning has a different source in each case. In the case of containers and of sortal nouns, *-nyi* converts a N into an expression denoting an imprecise measure unit, while in the case of lexical measures, *-nyi* turns a measure operator which maps a quantity onto a precise value into an operator yielding an imprecise value, as argued by Khrizman and Rothstein (2015) for approximative constructions in Russian. Before discussing this, I discuss the distribution of *-nyi*, concerning its obligatoriness in the contexts that allow for it.

2. Measures with and without *-nyi*

First, I examine if *-nyi* is obligatory in creating measures. Here, I will differentiate between its uses with container classifiers and with general count nouns: while containers can have a measure interpretation without using *-nyi*, count nouns cannot.

To achieve a measure interpretation, container classifiers need not be *nyi*-marked, as has already been shown in (2c). While to some speakers it seems that the measure reading is highly preferable with *-nyi*, this is not always the case. Examples (6) and (7) below are clear measure contexts in which the classifier need not be *-nyi* suffixed.[5]

(6)	Addig	forraljuk	a	leves-t,	amíg	két	csészé-(nyi)	folyadék
	that.till	boil.PRES.1PL	the	soup-ACC	when	two	cup-NYI	liquid
	el	nem	párolog.					

[5] Judgments on the optionality of *-nyi* in these examples vary. With nouns that conventionally shift into the measure interpretation, for example container nouns such as *csésze* ('cup'), *evőkanál* ('spoon'), csomag ('pack'), *-nyi* for many speakers seems to be optional. A solid body of informants found these examples felicitous without the application of *–nyi*.

VM not evaporate.PRES.3SG

'We boil the soup till two cups of liquid evaporate.'

(7) A recept szerint a tortá-hoz két csomag liszt kell. Hat felbontott
the recipe according.to the cake-ALL two pack flour needed six opened
csomag liszt-em volt otthon, mindegyik-ben különböző
pack flour-POSS.1SG be.PAST.3SG home each-INESS different
mennyiség. Felhasználtam mind-et. Összességében ez két csomag-(nyi)
quantity use.PAST.1SG all-ACC all.in.all this two pack-NYI
liszt-nek felelt meg.
flour-DAT equal.PAST.3SG VM

'The recipe called for two packs of flour. I had 6 packs with different amounts in them. I put them all in. This altogether equaled two packs of flour.'

On the other hand, in order for other non-container count nouns to have a measure interpretation, they must occur with *-nyi*. In the examples below, the context indicates a clear measure, and the use of *-nyi* is obligatory. In (8) there are no actual books involved, since the articles were published in various journals; while in (9) the context stresses that we are not counting bus stops, as there does not exist an actual bus line, but we are referring to a measure of distance.

(8) Három könyv-*(nyi) cikk-et írtam az év folyamán.
three book-NYI article-ACC write.PAST.1SG the year during
Öt különböző folyóirat-ban publikálták őket.
five different journal-INESS publish. PAST.3PL them

'I wrote three bookfuls of articles throughout the summer. They were published in five different journals.'

(9) János-tól mindig sétálok egészen hazá-ig. Nagy kár
John-ABL always walk.PRES.1SG totally home-TERM big shame
hogy nincs busz. Ha lenne, akkor az legalább
that be.not.PRES.3SG bus if be.COND.3SG then that at.least

öt buszmegálló-*(nyi) utazás lenne.
five bus.stop-NYI ride be.COND.3SG
'I always walk home from John's. It is a real shame that there is no bus. If there were, it would be at least a five bus-stop ride.'

These examples show that *-nyi* is not obligatory with measure readings of container nouns but it is obligatory with measure readings of other nouns. In this respect, *-nyi* is like the English *-ful*, which is sometimes obligatory and sometimes optional. In the case of English, the suffix is optional with standard containers, such as *cup,* but obligatory with ad-hoc containers, such as *hat,* as shown in Rothstein (2009). While containers such as *cup* can have a measure reading, *hat,* being a non-standard container, must make use of the *-ful* suffix to indicate that the noun is used as a measure. Thus, there is a contrast between the English *cup of water* vs. *hat*(ful) of mushrooms.* We will return to this issue in more detail in Section 4.

3. *N-nyi* is a measure head

I have shown that *-nyi*, when attaching to nouns, creates an expression denoting a measure unit. In this section, I will examine what part of speech the resulting expression is, and argue that *N-nyi* is a measure head. While Kenesei, Vago and Fenyvesi (1998) and Kiefer and Ladányi (2000) suggest that *N-nyi* is an adjective, this does not explain the fact that unlike other adjectives, *N-nyi* must be preceded by a numeral:[6]

(10) a.*(három) könyv-*(nyi) cikk
three book-NYI article
'three bookfuls of articles'

b. *(egy) buszmegálló-*(nyi) séta
a bus.stop- NYI walk
'a bus stop-length of walk'

[6] An anonymous reviewer disagreed with my claims on this condition, and points out that in his/her dialect the examples in (10) are felicitous without an overt numeral, although they must be understood as if having the structure with a covert numeral *egy* ('one'). All my informants, however, made contrary judgments, namely that they cannot leave out the numeral under any circumstances. I have not yet been able to determine what degree of dialectal variation there is for this issue.

As *-nyi* attaches to container classifiers, another possibility would be to treat *N-nyi* as a classifier. However, *N-nyi* does not behave like a classifier. For example, elliptical classifiers in demonstrative constructions get plural marking, but elliptical *N-nyi* expression do not. Dékány (2011) treats constructions such as (11a) as cases of Spurious NP Ellipsis (SNPE), in which the classifier occurs in the N position and is pluralized like the N. If *N-nyi* were also a classifier we would expect it to function the same way, but this is not the case, as shown in (11b).

(11) Context: *Checking the expiry date of the milk in the supermarket, A says to B*

a. Ezeket a karton-ok-at ne vedd meg,
these the carton-PL-ACC not buy.IMP.2SG VM
holnapután lejárnak.
the.day.after.tomorrow expire.PRES.3PL
'Do not buy these cartons, they are off the day after tomorrow.'

b. # Ezeket a karton-nyi-ak-at ne vedd meg,
these the carton-NYI-PL-ACC not buy.IMP.2SG VM
holnapután lejárnak.
the.day.after.tomorrow expire. PRES.3PL
'# Do not buy these cartonfuls, they are off the day after tomorrow.'

Rather than being either an adjective or a classifier, *N-nyi* looks like a measure head, analogous to expressions such as *kilo* or *liter*, as argued for English *N-ful* expressions in Rothstein (2009). Krifka (1989) and Landman (2004) treat lexical measure heads such as *kilo* or *liter* as expressions which apply to a number *n* to form a measure predicate such as *two kilos, three litres*, which then denotes the property an entity has on a scale if it measures two kilos or three litres. Rothstein (2009, in press) introduces the idea of shifting nouns into measure heads in measure contexts. She argues that both in English and in Modern Hebrew measure phrases, the numeral combines with the classifier to create a measure head. She treats containers like 'glass' analogously to *litre*: 'glass' is a unit of measure, while 'two glasses' denotes the property of quantities which measure two-glassfuls.

I propose that *-nyi* induces this shifting operation. When *-nyi* attaches to nouns which can be naturally converted into containers, it shifts the N into a measure head analogous to *kilo*, and derives a measure expression relating to volume. When *-nyi* attaches to general count nouns it creates measure units in terms of N on some other dimensional scale, as discussed in Rothstein (in press). *N-nyi* functions as a measure head which then combines with a numeral to form complex measure predicates, which are adjective-like phrases. According to my account, it is not *N-nyi* which is the adjective, as suggested in previous accounts, but *NUM+N-nyi*. In *két pohárnyi bor* ('two glass-NYI wine'), *-nyi* shifts the nominal *pohár* ('glass') into a measure head, which then combines with the numeral *két* ('two'), as shown in Figure 1 below. *Két pohárnyi* ('two glass-NYI') then denotes the property *bor* ('glass') has on the scale of volume if it measures two glassfuls. A formal account will follow in Section 5.

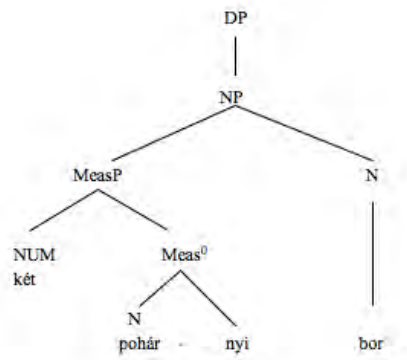

Figure 1.

Treating *NUM+N-nyi* phrases as measure predicates predicts that these expressions should not be restricted to classifier positions. This prediction is borne out by the data: *-nyi* phrases can function as attributive measures as well as adverbials. Schwarzschild (2006) discusses the contrast between pseudopartitive measure phrases such as *two litres of wine* (where the measure word is a classifier and the numeral looks like a determiner), and attributive measures such as *a two-litre barrel of wine* (where the whole measure phrase *two-litre* is in adjectival position under the scope of the determiner *a*). Semantically, *two litre* looks like an adjective modifying the noun, describing a property of N.

NUM+N-nyi can be used attributively. In examples (12)-(13) below, *NUM+N-nyi* scopes under a numeral and another adjective, while *-nyi* replaces the adjectival marker *-s*.[7] The meaning contributed by *-nyi* in such cases will be discussed in detail in Section 5.

(12) Három két órá-*(nyi) ülés-t hallgattam végig
three two hour-NYI session-ACC listen.PAST.1SG VM
a konferenciá-n.
the conference-SUPERESS
'I listened to three two-hour sessions at the conference.'

(13) Egy kínos húsz perc-*(nyi) feleltetés-sel
an uneasy twenty minute-NYI oral.in-class.presentation-INSTR
kezdődik mindegyik angol óra, legalább hárman
start.PRES.3SG each English class at.least three
sorra kerül-nek.
row-SUBL get.PRES.3PL
'Each English class starts with an uneasy twenty minutes of oral in-class presentation, at least three students will get a turn.'

NUM+N-nyi can also be used as an adverbial phrase expressing distance or duration. In this use *NUM+N-nyi* modifies the VP. In (14) the *-nyi* phrase gives a property of the duration of the event of the stay in Bordeaux, while in (15) it takes a state and gives it a value in terms of distance.

[7] For these examples the parallel construction with the adjectival marker *-s* is also available. While some of my informants found the *-s*-structure more natural, they also accepted the example modified by *-nyi*. A reviewer found *-nyi* infelicitous if the *-s* construction was also available, but none of my informants shared this judgment.

(14) Két francia kurzus-*(nyi)-t éltem Bordeaux-ban. [8]
two French course-NYI-ACC live.PAST.1SG Bordeaux-INE
'I lived in Bordeaux for the time equal to two French courses.'

(15) János három buszmegálló-nyi-ra lakik Mari-tól.
John three bus.stop-NYI-SUBL live.PRES.3SG Mary-ABL
'John lives three bus stops away from Mary.'

Altogether, the data in (10)-(15) show that *N–nyi* cannot be treated as a classifier nor as an adjective, but as a measure head. The *-nyi* suffix contributes to a measure expression converting a noun to a measure head, which then combines with a numerical to form a complex measure expression, *NUM+N-nyi*. Being measure predicates, *NUM+N-nyi* phrases can occur in a wider range of positions than adjectives and classifiers can. I now return to the question we discussed in Section 2 and examine the conditions under which *-nyi* is impossible to use, and where it must be used and can be used.

4. Conditions for the occurrence and non-occurrence of *-nyi*

Suffixing *-nyi* is impossible in individuating contexts. In Section 1, I have shown that container classifiers in Hungarian are ambiguous between two count readings and a measure reading, while the application of *-nyi* disambiguates the readings in favor of a measure interpretation. If *-nyi* induces a measure head, the two count readings are predicted to be infelicitous with *-nyi*. This is indeed what we find, as shown in examples (3a) and (3b) above. Examples (16a) and (16b) further illustrate the incompatibility of *-nyi* with count

[8] This is one of the examples where one of the reviewers noted that reference to a particular dimension may not be sufficiently conventionalized. As already noted, not all speakers are equally flexible in interpreting *N-nyi* structures. For those whose dialect is like the reviewer's this sentence is infelicitous, but can be made felicitous by adding the noun *idő* ('time'), as shown in (i) below. This preference does not affect the major argument of this paper which is that *-nyi* is necessary to turn the N into a measure head.

(i) Két francia kurzus-*(nyi) idő-t éltem Bordeaux-ban.
two French course-NYI time-ACC live.PAST.1SG Bordeaux-INE
'I lived in Bordeaux for the time equal to two French courses.'

interpretations of container classifiers. (16a) is a container reading: the verb *tesz* (‘to place’) indicates the use of the physical container in the action. (16b) is a concrete portion reading: portions of champagne, each of which measures one glassful, are individuated by the events of removing glasses full of champagne form the tray. *-nyi* is incompatible with both these readings.

(16) a. # Három pohár-nyi pezsgő-t tettem a tálcá-ra.
three glass-NYI champagne-ACC place.PAST.1SG the tray-SUBL
‘I placed three glassfuls of champagne on the tray.

b. # Három pohár-nyi pezsgő-t ittam a
three glass-NYI champagne-ACC drink.PAST.1SG the
parti-n, a tálcá-ról vettem el őket. [9]
party-SUPERESS the tray-DEL take.PAST.1SG VM them
‘I drank three glassfuls of champagne at the party, I took them from the tray.’

If *N-nyi* is a measure head, we expect *-nyi* to be obligatory with nouns which are not born as measures. With container classifiers the use of *-nyi* is not necessary to obtain a measure interpretation, as shown in Section 2 above, while its use is obligatory with non-container nouns and with nouns which are non-conventionally used as measure units.

However, even within container nouns there is variation. First, non-standard containers, such as *kötény* (‘apron’), in (17) below, must make use of *-nyi* to indicate a measure.[10]

[9] One of the reviewers disagreed with my opinion regarding this example, and points out that the unacceptability of the sentence is due to the pronoun *őket* (‘them’) which can only refer to pluralities. In the reviewers dialect, if the pronoun is dropped or replaced by the singular *azt* (‘the-ACC’) the sentence becomes felicitous. In the context of this sentence, reference is made to a plurality of portions of champagne (which were taken individually from the tray) and not to a single quantity of champagne, which is why the use of the pronoun *őket* is justified. All of my informants find this example infelicituous with a droppred pronoun as well as with the singular *azt*.

[10] There might be dialectal and individual preferences as to how conventional it is to use a noun as a container. All my informants agree that the application of *-nyi* is obligatory with nouns which are used as containers in an *ad hoc* manner. For them nouns such as *kötény* (‘apron’), *kapucni* (‘hood’) or *sapka* (‘cap’) all take *-nyi* in the

(17) A két kötény-ké-*(nyi) gombát, amit az erdőben
the two apron-DIM-NYI mushroom-ACC that the forest-INESS
szedtünk, mind belefőztem a paprikás-ba.
pick.PAST.1PL all VM.cook.PAST.1SG the paprikás-ILL
'All of the two apronfuls of mushroom that we picked in the forest, I cooked in the paprikás.'

Second, with respect to standard containers, there are speaker-personal preferences as to whether container classifiers need to be *-nyi* marked for a measure interpretation; for example, in expressions such as *két üveg bor* ('two bottles of wine') or *két pohár bor* ('two glasses of wine'). In general, speakers prefer suffixing *-nyi* to the container when the indicated container does not take part in the measurement. In (18) and (19), the context indicates a measure, yet no actual glasses or spoons are involved, as the substance is poured straight from a larger container. In both cases *NUM+N–nyi* indicates an estimated measure of a quantity: a quantity of water equal to four glassfuls, and a quantity of soysauce equal to three spoonfuls.

(18) Töltsd meg ez-t a kancsó-t a csap-nál
fill.IMP.2SG VM this-ACC the jug-ACC the tap-ADESS
és adj négy pohár-nyi vizet a leves-hez.
and add.IMP.2SG four glass-NYI water-ACC the soup-ALL
'Fill this jug from under the tap and add four glassfuls of water to the soup.'

context of example (17). A reviewer points out, however, that with the noun *kalap* ('hat') the use of *-nyi* is not obligatory in his/her dialect, and draws attention to the well-known colloquial expression *egy kalap szar* ('a hatful of shit'). This appears to be a lexicalized expression referring to something worthless, and not actually referring to a measure of excrement in terms of hat units.

(19) Három kanál-nyi szójaszósz-t adtam a főzelék-hez,
thee spoon-NYI soy.sauce-ACC add.PAST.1SG the vegetable.dish-ALL
egyenesen az üvegből öntöttem bele.
straight the bottle-ELAT pour.PAST.1SG VM
'I added three spoonfuls of soy sauce to the vegetable dish, I poured it in straight from the bottle.'

Nonetheless, for many speakers, in adjectival constructions, applying *-nyi* to the container is obligatory. In (20) below, *három* ('three') and the classifier *üvegnyi* ('bottle-NYI') form a single measure predicate, which functions as a modifier just as another adjective, *drága* ('expensive') would do, giving a property to the N *bor* ('wine'), and would come under the scope of a quantifier *mintegy* ('some').

(20) Mintegy három üveg*(-nyi) drága bor ömlött ki
some three bottle-NYI expensive wine spill.PAST.3SG VM
abból a kancsó-ból.
that.ELAT the jug-ELAT
Intended meaning: 'An expensive three bottlefuls of wine was spilled from that jug.'

In order to indicating a measure, non-container count nouns must always be marked with *-nyi*. Example (21) indicates a measure of an amount of money, in terms of buns. Alternatively, *három zsemlényi apró* ('three bun-NYI coins') can be interpreted as an amount of coins whose volume equals to that of three buns. Example (22) is a measure of distance in terms of continents. Example (23) is a measure of people in terms of inhabitants of a village. In all of these cases the use of *–nyi* is obligatory.

(21) Három zsemlé-*(nyi) apró-m maradt.
three bun-NYI change-POSS.1SG remain.PAST.1SG
Intended meaning: 'The amount of money I have left is enough to buy three buns.' OR 'The volume of money I have left equals the size of three

buns.'

(22) Egy kontinens-*(nyi)-t repültem, hogy láthassalak
a continent-NYI-ACC fly.PAST.1SG that see.POT.SUBJ.1SG
és te nem is értékelted.
and you not even appreciate.PAST.2SG
'I flew (the distance of) a continent to see you, and you didn't even appreciate it.'

(23) Csak most jöttem rá, hogy egy falu-*(nyi) ember
only now realize.PAST.1SG VM that a village-NYI people
vesz körül és támogat.
surround.PRES.3SG VM and support.PRES.3SG
'I have just realized that there is a village(ful) of people who surround and support me.'

The contrast between cases when *-nyi* is obligatory or preferred shows that *-nyi* is not obligatory to create a measure structure in the case of container classifiers, but in many dialects it is obligatory to turn non-container nouns into measures.

5. What is *-nyi* and what do *-nyi* phrases indicate?

On its use with container classifiers, it seems that *-nyi* is equivalent to the English *-ful*, as in 'two cupfuls of water', which derives measure expressions relating to volume. *-ful* turns the container, *cup*, into a unit of measure for water. Similarly, in 'a handful of berries', *-ful* turns *'hand'* into a unit of measure for berries. Krifka (1989) and Landman (2004) treat measure heads as operators of type <n< e,t>>. Rothstein (2009) argues that sortal nouns can be used in the same way. She treats containers like 'cup' analogously to *litre*: 'cup' in (24c) is a unit of measure, while 'two glasses' in (24d) denotes the property of quantities which measure two-glassfuls.

(24) a. [[litre]] $\lambda n \lambda x.MEAS_{VOL}(x) = \langle n, LITRE \rangle$

b. [[two litres]] $\lambda x.MEAS_{VOL}(x) = \langle 2, LITRE \rangle$

c. [[cup]] $\lambda n \lambda x.\ MEAS(x) = \langle n, CUP \rangle$

d. [[two cups]] $\lambda x.\ MEAS(x) = \langle 2, CUP \rangle$

Measure uses of *cup/cupful* are derived by shifting the sortal predicate *cup:* $\lambda x.CUP(x)$ shifts to a measure head interpretation where it denotes units of volume at type $\langle n, \langle e,t \rangle \rangle$. It combines with a numerical at type n, and gives a predicate denoting the property of having a volume of n cupfuls, i.e. $\lambda x.\ MEAS(x) = \langle n, CUP \rangle$. In (25) *–nyi* has the same function:

(25) a. két pohár-nyi víz
two cup-NYI water
'two cupfuls of water'

b. egy marok-nyi bogyó
one hand-NYI berry
'a handful of berries'

However, as we have seen above, unlike *-ful,* the Hungarian *-nyi* has a much wider usage and is not restricted to the dimension of volume: it can attach to a wide variety of non-container nouns and converts them into measure heads which then can be used to measure a variety of dimensions. In addition, *-nyi* can have numerous effects on the meaning of nouns it attaches to.

First, *-nyi* can combine with a currency and indicate financial worth. *Ezer forint-nyi* ('one thousand forint-NYI') in (26) gives the worth of the candy, while *hat euró-nyi* ('six euro-NYI') in (27) gives the worth of the clothes in financial terms.[11]

(26) Ezer forint-*(nyi) cukorka van ebben a tál-ban.
1000 forint-NYI sweets be.PRES.3SG this.INESS the bowl-INESS
'There are one thousand forints-worth sweets in this bowl.'

[11] In examples (26)-(27) *-nyi* functions like the English *-worth,* However, we cannot equate *-nyi* to *-worth,* since *-nyi* has a much wider usage than a value measure operator, appearing in container, temporal and adjectival measure phrases.

(27) Hat euró-*(nyi) ruhá-t vettem a turkáló-ban.
six euro-NYI clothing-ACC buy.PAST.1SG the second.hand.shop-INESS
'I bought six euros-worth of clothing in the second hand shop.'

Second, *-nyi* can indicate distance: in (28) *két domb-nyi* ('two hill-NYI') indicates distance in terms of contextually relevant generic hills. Note that here, the application of *-nyi* is not obligatory. The structure without the *-nyi* presupposes the existence of actual hills between the two places. With *-nyi* this is not necessarily the case, we can indicate distance without actual hills existing.[12] In addition, the way the measurement is carried out is not indicated: whether we ought to measure circuit, aerial- or road distance between the hills. Analogously, in (29) no actual bus stops have to exist, *-nyi* indicates that there could only be a footpath whose length is equal to that of between two bus stops. Moreover, whether reference is made to inner- or intercity busses heavily relies on the context.

(28) A szőlőskert-ünk két domb-nyi-ra van
the vineyard-POSS.1PL two hill-NYI-SUBL be.PRES.3SG
a ház-unk-tól.
the house-POSS.3SG-ABL
'Our vineyard is two hills away from our house.'

(29) Mindig két buszmegálló-nyi-ra laktam az egyetem-től.
always two bus.stop-NYI-SUBL live.PAST.1SG the university-ABL
'I have always lived two bus stops away from the university.'

Third, the expressions in (30) and (31) measure a time period. For example, in (30) *N-nyi* measures time spent in Bordeaux in terms of French courses, and in (31) it measures fallback in terms of generations. The explicit duration of the event of living in Bordeaux is vague and is contextually dependent. The temporal unit of 'generation' is imprecise, *két generációnyi* ('two generation-NYI') gives a time measure of fallback, of roughly 50 years.

[12] This presupposition appears to be subject to speaker preference. One of reviewers points out that in his/her dialect one cannot utter *két dombnyi* ('two hills-NYI') if there are no hills present. Uttering (28) in this scenario was possible for my informants, however.

(30) Két francia kurzus-*(nyi)-t éltem Bordeaux-ban.
two French course-NYI-ACC live.PAST.1SG Bordeaux-INESS
'I lived in Bordeaux for the time equal to two French courses.'

(31) Két generáció-*(nyi) lemaradás-ban vagyunk.
two generation-NYI fallback-INESS be.PRES.1PL
'We are in a fallback of two generations.'

Fourth, in constructions such as (32) and (33) the meaning of *-nyi* is two-fold: it can either indicate an approximate duration or it can subdivide an event into several shorter events, i.e. 'lecture' into several lectures following each other, the length of which adds up to the time indicated by *NUM+N-nyi*. On its second use, it also indicates a time measure.

(32) két órá-nyi előadás
two hour-NYI lecture
'a lecture which lasts approximately two hours' OR
'a two hour lecture stretch comprised of several shorter lectures'

(33) húsz perc-nyi feleltetés
twenty minute-NYI oral.in-class.presentation
'an oral in-class presentation which lasts approximately twenty minutes' OR
'twenty minutes of an oral in-class presentation stretch comprised of several shorter presentations'

In addition, *-nyi* attaches to lexical measures, such as *kilo* and *litre*, deriving approximate values: in (34) we give the approximate quantity of soup in litres. As we will see in Section 6, this involves a different interpretation of *-nyi*.

(34) Három liter-nyi leves van a fazék-ban.
three litre-NYI soup be.PRES.3SG the pot-INESS

'There are approximately three litres of soup in the pot.'

Temporarily ignoring (34), the examples in (26)–(33) suggest that *-nyi* allows us to treat nouns which are not born as units to be used as units of measure of a contextually relevant size. *-nyi* attaches to N to give a measure head, while the resulting expression *N-nyi* can have a variety of meanings. These examples further indicate that the process of turning a noun into a measure head is not restricted to container classifiers nor to the domain of volume.

If *N-nyi* is a general measure phrase it appears to be restricted to certain kinds of measure parameters, such as the dimension of measure it operates on. Arguably, for some speakers there is a presupposed choice from a range of conventional dimensions, such as volume, weight, distance, time or financial value, therefore restricting the choice of noun *-nyi* can combine with. This would explain that in some dialects, examples such as (6)-(7), (12)-(14) and (17) are questionable or seem to be infelicitous. However, for some other however, this presupposition is absent, allowing for the use of *–nyi* phrases in highly creative ways. The degree of conventionality is a matter which varies from speaker to speaker. The variety of judgments received for the examples in this paper reflects the controversiality of this issue. The majority of the authors' informants accept the wide variations in the use *-nyi* phrases; for another group of informants *–nyi* expressions are more limited, implying a contextually determined dimension; while at least for one reviewer of this paper, when using *-nyi* there is a conventionally explicit restriction for reference to a particular dimension.

Because of the diverse usage of *–nyi* in Hungarian dialects, I maintain that reference to any particular dimension of measurement is a matter of pragmatics and not of semantics. The spectrum of both dialects and personal judgments suggests that reference to a conventionalized dimension is an issue of pragmatic preference. All speakers who contributed to this survey agree that *-nyi* creates measure constructions, and thus *N-nyi* is used as a measure head. My data show that *N-nyi* are predicate phrases which appear in a wide range of constructions and varying dimensions. This strongly supports the hypothesis that the semantic function of this operator, *-nyi*, is to generally create a measure phrase. I assume that the conventionalized nature of reference to an explicit dimension should not be incorporated in the semantics. I, therefore, continue to treat *–nyi* as a general measure operator and propose a minimal semantic analysis.

We can now discuss the semantic content of *–nyi*, which I glossed as NYI. I consider that *-nyi* denotes an operator, which I call **NYI**, which can be defined in terms of its function. I propose that **NYI** is an operator applying to nouns generally and yielding a measure head, without making reference to any specific dimension.

I assume a theory of scales following Rothstein (2012, in press), who claims that measuring is assigning a quantity value on a scale. A scale is a triple <Dim, UNIT, n>, where Dim is a dimension, UNIT is a unit of measurement, and n is a set of numbers. Measure heads specify a dimension, Dim, and a unit, UNIT, and denote functions from *n* to quantities measuring *n* units on the dimension Dim. For example, Rothstein 2012 defines *litre* as presented in (35a), a function from *n* into quantities. It combines with a number at type *n,* and returns a set of quantities measuring *n* units on the dimension of volume. Following Rothstein (2012), I assume that numbers can denote entities of type *n*, the type of numbers, which are distinct from their predicate-type denotations of numbers. (For a semantics of number showing that numerals have a denotation at the predicate type and at the argument type, see Rothstein 2012). Thus, *two litres* in (35b) denotes the set of quantities which have value two on the scale calibrated in liter units.

(35) *two litre*

a. [[litre]] $\lambda n \lambda x.\text{MEAS}_{\text{VOLUME}}(x) = \langle n, \text{LITRE} \rangle$

b. [[two litres]] $\lambda x.\text{MEAS}_{\text{VOLUME}}(x) = \langle 2, \text{LITRE} \rangle$

I propose that the measure interpretation of *N-nyi* is analogous to that of lexical measures, such as *litre*. *-nyi* is of type <<e,t>, <n<e,t>>: it applies to a nominal predicate at type <e,t> and turns it into a measure head at type <n<e,t>>. Thus, **NYI** is a function which maps predicates onto measure heads. Its formal analysis is given in (36a). The denotation of *-nyi* applies to the denotation of the N and produces a measure head, as shown in (36b). (based on Schvarcz (2014), for a different version see Rothstein (in press)).

(36) a. [[-nyi]] **NYI** = $\lambda P \lambda n \lambda y.\text{MEAS}(y) = \langle n, P \rangle$

b. [[N-nyi]] **NYI(**$\lambda x.N(x)$) = $\lambda n \lambda y.\text{MEAS}(y) = \langle n, \lambda x.N(x) \rangle$

Now I extend the interpretation of *two litres* to *NUM+N-nyi* phrases. **NYI** has a crucial measuring function: it applies to a noun and allows it to denote a unit of measurement. It applies to a noun N, and results in an expression *N-nyi* which has the same type as lexical measure phrases have. The stages of this operation are presented in (37). I assume that the nominal *pohár* ('glass') is of type <e,t> (37a). *pohárnyi* ('glass-NYI') denotes a function from numbers into a measure head of type <n,<e,t>> (37b). *pohárnyi* ('glass-NYI') applies to a number *két* (37c). *két pohárnyi* ('two glass-NYI') in (37d) then denotes the property quantity y has if there is some contextually relevant glass which supplies the measure unit $\text{UNIT}_{\text{GLASS}}$, and y measures 2 of those glass-units in volume.

(37) *két pohárnyi*

a. [[pohár]] = λx.GLASS (x)

b. [[pohárnyi]] = **NYI**(λx.GLASS(x)) =
= λnλy.MEAS(y) = <n, λx.GLASS(x)>

c. [[két]] = 2

d. [[két pohárnyi]] = λy.MEAS(y) = <2, λx.GLASS(x)>

While there are conventional dimensions of measures, such as volume, weight, distance, time, etc. it is also possible to have *ad hoc* units of measures which is indicated by the lexical content of NPs, as Partee and Borschev (2012) show. *-nyi* takes nouns generally and allows them to function as measure units which presuppose a dimension of measurement. Formally, (38) is derived analogously to (37) from the denotation of 'bus stop'. *három buszmegállónyi* ('two bus stop-NYI') denotes the property quantity y has if there is some contextually salient bus stop which supplies the measure unit $\text{UNIT}_{\text{BUS STOP}}$, and y is 3 of those bus stop-units in distance. However, the dimension of measurement, distance, is implied by the NP and restrained by context.

(38) *három buszmegállónyi*

a. [[buszmegálló]] = λx.BUSSTOP (x)

b. [[buszmegállónyi]] = **NYI**(λx.BUSSTOP(x)) =
= λnλy.MEAS(y) = <n, λx.BUSSTOP(x)>

c. [[három]] = 3

d. [[három buszmegállónyi]] =

= λy. MEAS(y) = <3, λx.BUSSTOP(x)>

Given the range of nouns *–nyi* applies to, we can generalize that **NYI** is a function which maps a predicate into an ad hoc unit of measure. The rule I put forward expresses the formal compositional properties of **NYI** and of N-**NYI**. I assume that the measure property denoted by N-**NYI** gives a value on a scale relative to a specific dimension. However, the choice of dimension is the result of the interaction between N and the object modified, and is pragmatically determined by context. Furthermore, the conventionalized nature of reference to a particular dimension is subject to dialectal preferences. Thus, restrictions on the choice of dimension should not be part of the semantic meaning of **NYI**. I, therefore, propose a general interpretive principle for N-**NYI** as in (39):

(39) λnλyMEAS(y) = <n, λx.N(x)> → ∃x ∈ N: x supplies the unit for measuring y

I leave the interpretation vague assuming that the lexical content of the NP, context and dimension constrain how the unit is supplied. What counts as a bus stop is a given, while how a unit of length is determined by *bus stop* is highly context dependent. That is to say, in *három buszmegállónyi* ('three bus stop-NYI') the context supplies how to carry out the measurement, i.e. whether we are measuring length between inner-city bus stops or inter-city bus stops.

This mechanism for interpreting measure classifiers is a partial generalization of Rothstein's (2009) analysis of container classifiers.[13] As in Rothstein's analysis, the measure head *N-nyi* combines with a numeral to give a measure predicate of the form λx.MEAS(x) = <n, UNIT> which, like other adjectival modifiers, modifies the N. The *-nyi* suffix contributes to a complex predicate and its semantic function is to convert a noun to a measure head and facilitate a measure interpretation, rather than creating an adjective. I now turn to the second use of *-nyi*, approximation.

[13] I proposed this principle in Schvarcz (2014). For an in-depth account of how nouns can be used as measure heads, see Rothstein (in press, chapter 9).

6. *–nyi* as an approximative operator

Although a unified account for the uses of *-nyi* would be preferable, we cannot treat the uses of *-nyi* with nouns and with lexical measures in a single analysis. First, *-nyi* cannot turn expressions like *kilo* or *metre* into a measure head, when they are already inherently measure heads. If *-nyi* applies to N at type <e,t> to yield a measure head at type <n, <e,t>>, we predict that it ought not to apply to lexical measures, like *kilo*, which are born at type <n,<e,t>>. Second, the application of *-nyi* is obligatory upon turning nouns into measure expressions, whereas with lexical measures it is not, as shown in (40) below. Third, while *metre* has a precise value, the length between bus stops is inexact. *Metre*-units have a fixed value, in contrast, a bus stop-unit is determined in a contextually relevant way. The approximation in (40a) and (40b) is different: (40a) is inherently approximate, since what counts as the length between bus stops is not fixed; (40b) is only approximate if we assume that the number has an approximate numerical value.[14] For these three reasons, I maintain treating *-nyi* upon attaching to lexical measures as a separate operator.

(40) a. két buszmegálló-*(nyi) séta
two bus.stop-NYI walk
'two bus stop-length of walk'

b. kétszáz méter-nyi séta
two hundred metre-NYI walk
'approximately two hundreds metres of walk'

It appears that *NUM+N-nyi* phrases are naturally approximate, as the unit of measure is pragmatically determined by context, while *-nyi* seems to be adding explicit approximation upon attaching to lexical measures. This explains an interesting contrast in (41). For the majority of speakers, lexical measure words suffixed with *–nyi* are incompatible with

[14] For a detailed account on the analysis of approximate numerical values see Rothstein (in press, chapter 9).

‘*exactly’* (41a), unlike -*nyi*-suffixed container classifiers (41b).[15] Speakers’ judgments vary on the compatibility of *exatly* and inherently approximate units of measure, such as *domb-nyi* (‘hill-NYI’) in (41c). It appears that the more inherently approximative the unit of measure, the less acceptable *exactly* is.

(41) a. # Pontosan két liter- nyi viz-et ittam ma.
exactly two liter-NYI water-ACC drink.PAST.1SG today
Ezt a két liter-es üveget ürítettem ki.
this the two litre-ATTR bottle-ACC empty.PAST.1SG VM
‘I drank exactly about two litres of water today. I emptied this two-litre bottle.’

---

[15] An anonymous reviewer pointed out that there do seem to be examples in the Hungarian National Corpus, such as (i) and (ii) below. With high round numbers it seems to be the case that speakers find the combination of –*nyi*-suffixed lexical measure words compatible with *exactly*. It is unclear at this stage whether the possibility of such expressions has to do with dialectal variation or whether round numbers behave differently with *exactly*.

(i) A Ski amadé terület-én a sípályá-k 78%-a
the ski resort area-SUPERESS the ski.slope-PL 78%-POSS.3SG
(ez pontosan 670 kilométer-nyi sípálya) hóágyúz-ható.
this exactly 670 kilometre--NYI ski slope snow.cannon-able
‘78% of the area of the ski resort, which is exactly 670 kilometres of ski slope, can be snow cannoned.’

(ii) Egész-en pontosan 1550 liter-nyi poggyász fér el az első ülés-ek
whole-SUPERESS exactly 1550 litre-NYI luggage fit.PRES.3SG VM the front seat-PL
mögött.
behind
‘Exactly 1550 litres of luggage fits behind the front seats.’

b. Pontosan két üveg- nyi viz-et ittam ma.
exactly two bottle-NYI water-ACC drink. PAST.3SG today
'I drank exactly two bottlefuls of water today.'

c. ? Pontosan két domb-nyi-ra található a szőlőskert.
exactly two hill-NYI-SUBL findable the vineyard
'The vineyard can be found exactly two hills away from here.'

Consequently, *-nyi*, must have a different semantic function upon attaching to lexical measures. As an approximative operator, *-nyi* modifies a measure, and is of type <<n<e,t>>, <n <e,t>>; it maps an inherent measure head onto an approximative measure head. I assume that *-nyi* on this reading has the same interpretation as the approximate operator analysed in Khrizman and Rothstein (2015). They argue that approximate measurement involves mapping a quantity x on to an interval on a scale, rather than onto a point on a scale. Thus, 'approximately n units' maps x onto an extended interval on the scale surrounding the point indicated by n. We adopt their analysis for the Hungarian *-nyi* attaching to lexical measures.

The interpretation of *liter* is given in (42a). *Liter* is an exact measure function which maps quantities onto a value n on the scale of volume calibrated in litre units. *Két liter* in (42b) denotes a set of quantities whose volume is equal to 2 litres. *-nyi* induces a shift from an exact measure function in (42a) to an approximate measure function in (43a). *Liter-nyi* in (43a) is then an approximative measure function: instead of mapping quantities onto a precise value n, it maps them onto a range of values associated with n, i.e. an interval focused on n. *két liternyi* in (43b) denotes a set of quantities whose measure value is in the range focused on 2, i.e. a measure of approximately two litres.

(42) a. [[liter]] $\lambda n \lambda x.MEAS_{VOL}(x) = <n, LITRE>$
b. [[két liter]] $\lambda x.MEAS_{VOL}(x) = <2, LITRE>$

(43) a. [[liternyi]] $\lambda n \lambda x.\ MEAS_{VOL\text{-}APPROX}(x) = < I n, LITRE>$[16]
b. [[két liternyi]] $\lambda n \lambda x.\ MEAS_{VOL\text{-}APPROX}(x) = < I_2, LITRE>$

[16] *In* is a set of intervals focused on n if all intervals in *I* include the number *n*. For a detailed analysis, see Khrizman and Rothstein 2015.

7. Conclusions

This paper examined the distribution and meaning of the *-nyi* suffix. I proposed to treat *N-nyi* as a measure head which combines with a number to form complex measure predicates. Previously, *N-nyi* had been treated as an adjective which expressed estimate measures. In contrast, my account proposes to treat *NUM+N-nyi* as measure predicate. I have shown that besides a measure function, *NUM+N-nyi* phrases can also be used attributively, and I emphasized the obligatory role of the numeral in the phrase. It is the whole predicate phrase *NUM+N-nyi* which has adjectival properties and not *N-nyi* alone. I analyzed the conditions for *-nyi's* occurrence and reached the following generalizations: while *-nyi* is not obligatory to create a measure structure in container classifier phrases, its application is obligatory upon turning non-container nouns into measures, and in attributive measure constructions. Being a measure suffix, it is incompatible with individuating contexts, i.e. it cannot be suffixed to the container classifier under count readings. I pointed out that the application of *-nyi* is subject to dialectal preferences. However, given the range of constructions it can appear in, as well as the spectrum of felicity judgments, I suggested treating *-nyi* as a general measure operator. I argued that this suffix has two different uses and semantic functions. On one use, it applies to nouns and shifts them into measure heads which combine with numericals to form measure predicates; on the second use, with lexical measure heads it is an approximator.

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