Definiteness in Hungarian: Semantic at the leaves, syntactic through the branches

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Abstract

A long-standing problem in Hungarian linguistics is how to account for the distribution of the subjective and objective conjugations. Their use correlates with whether or not the object is definite, but the definiteness of the object is not a completely reliable indicator of which conjugation will appear. The current state of the art is an analysis due originally to Bartos (2001), according to which the syntactic status of the object is the determining factor: If it is a DP or larger phrase, then the objective conjugation is used; otherwise the subjective conjugation is used. This purely syntactic analysis is problematic for several reasons pointed out by Coppock and Wechsler (to appear). This paper presents a partly semantic and partly syntactic solution that overcomes these difficulties: If the referential argument of a phrase is *lexically specified* as D-linked, then the phrase bears the feature [+DEF], and in this case it triggers the objective conjugation. It can happen that a phrase as a whole is D-linked but is not lexically specified as such, and in this case it does not trigger the objective conjugation (e.g. *minden* 'every' phrases; oblique partitives). The DEF feature is thus semantic at the lexical level, but otherwise syntactic.

1 Introduction

The use of the subjective and objective conjugations in Hungarian correlates well but imperfectly with the definiteness of the object. Generally speaking, the objective conjugation is used in the presence of a definite object, as in (1), and the subjective conjugation is used in the presence of an indefinite object, as in (2), and in the absence of an object, as in (3).

(1) Lát-om a madar-at
see-1.SG.DEF the bird-ACC
'I see the bird'

(2) Lát-ok egy madar-at
see-1.SG.INDEF a bird-ACC
'I see a bird'

(3) Vár-ok
wait-1SG.INDEF
'I'm waiting'

Other arguably definite noun phrases that trigger the objective conjugation include proper names, nominals headed by the determiners *a/az* 'the', *ez* 'this', *az* 'that', *melyik* 'which', *bármelyik,* 'whichever', *hányadik* 'which number', and *valamennyi* 'each', third person [-wh] personal pronouns (both overt and null), and reflexive and reciprocal pronouns. Noun phrases such as those headed by indefinite determiners like *néhany* 'some' and *sok* 'many', numerals, and the indefinite article *egy* 'a', generally trigger the objective conjugation. But there are exceptions in both directions.

Definite noun phrases that do not trigger the objective conjugation include 1st and 2nd person non-reflexive pronouns:

(4) Lát-nak engem/téged/minket/...
see-3PL.INDEF me/you/us/...
'They see me/you/us/...'

Noun phrases with the determiner *minden* 'every' generally do not trigger the objective conjugation:

(5) Eltitkol-ok minden találkozás-t
keep.secret-1SG.INDEF every meeting-ACC
'I keep every meeting secret.'

Minden could be classified as definite on the grounds that it is incompatible with the existential construction:

(6) *Van minden könyv.
is every book
'There is every book.'

If we take this as a diagnostic of definiteness, then *minden* is an example of a definite determiner that does not trigger the objective conjugation. Alternatively, we could view the existential contruction as a diagnostic of some property other than definiteness (such as specificity; Szabolcsi 1994) and maintain that *minden* is for example specific, but indefinite. In that case it seems that we would need to cope with the existence of *indefinite* noun phrases that *do* trigger the objective conjugation, because with a possessed noun, *minden* does trigger the objective conjugation:

(7) Ismer-em minden titk-od-at.
know-1SG.DEF every secret-2SG.POSS-ACC
'I know your every secret.'

Alternatively, we must find a notion of definiteness that draws the line between (5) and (7). According to Bartos (2001: 314), "there is absolutely no definiteness or specificity difference" between the two examples in (8) (Bartos 2001: ex. (6)).

(8) a. Eléget-em a től-ed kapott minden level-et.
burn-1SG.DEF the from-2SG.POSS received every letter-ACC
'I burn every letter received from you.'

b. Eléget-ek minden től-ed kapott level-et.
burn-1SG.INDEF every from-2SG.POSS received letter-ACC
'I burn every letter received from you.'

Regarding these examples, Szabolcsi (1994: 210) writes, “whereas the presence of the article is required in one of the examples and prohibited in the other, this makes no difference for interpretation”. If Bartos and Szabolcsi are right, then either both examples in (8) are definite (in which case we have a definite noun phrase failing to trigger the objective conjugation), or both examples are indefinite (in which case we have an indefinite noun phrase triggering the objective conjugation).

We certainly must accept the existence of indefinite noun phrases that trigger the objective conjugation. Possessed noun phrases with the determiner *néhány* ‘some’ can be used with the objective conjugation. The subjective conjugation is reported to be an option here as well, as we might expect.

(9) Ismer-em/Ismer-ek néhány titk-od-at.
know-1SG.DEF/know-1SG.INDEF some secret-2SG-ACC
‘I know some secrets of yours’

(10) Lát-om/Lát-ok valaki-d-et.
see-1SG.DEF/see-1SG.INDEF someone-2SG-ACC
‘I see someone of yours’

Néhány phrases are clearly indefinite; for example, they can be used in existential constructions:

(11) Van néhány könyv-em itt Pest-en.
is some book-POSS.1SG here Pest-in
‘There are some of my books here in Pest.’

The addition of an overt possessor makes these indefinite noun phrases obligatorily definite even for speakers who allow the indefinite conjugation in examples like (9) and (10):

(12) Ismer-em/*Ismer-ek neked néhány titk-od-at.
know-1SG.DEF/know-1SG.INDEF your some secret-2SG-ACC
‘I know some secrets of yours’

Even with the indefinite article *egy*, we can have the objective conjugation when the object is possessed (Gerland and Ortmann 2009):

(13) János egy könyv-é-t olvas-om
John a book-his-ACC read-1SG.DEF
‘I’m reading a book of John’s.’

(14) Egy könyv-em-et /-ünk-et olvas-om.
a book-POSS.1SG-ACC -POSS.1PL-ACC read-1SG.DEF
‘I’m reading a book of mine/ours.’

The object triggers the objective conjugation even when the possessor and the possessum are both indefinite, as illustrated by the following example (Kiss 2002: 173, ex. (50)):

(15) Csak egy diák-nak két dolgozat-á-t talál-t-a
only one student-DAT two paper-3SG.POSS-ACC find-PAST-3SG.DEF

jutalom-ra méltón-ak a zsűri.
prize-to worthy.PL the juri.NOM

‘The jury found only one student’s two papers worthy of a prize.’

So it is not exactly definiteness that governs the distribution of the objective conjugation.

Nor is it specificity. There are specific indefinites that do not trigger the objective conjugation. These include scopally specific indefinites, as in (16) (Coppock and Wechsler to appear, ex. (52)).

(16) Minden nap egy görög énekes-t hallgatt-ak/*-ák.
every day a Greek singer-ACC listened-3PL.INDEF/-3PL.DEF

Máriá-nak hív-ják.
Maria-DAT call-3PL.DEF

'Every day, they listened to a Greek singer. Her name is Maria.'

The indefinite object *egy görög énekest* 'a Greek singer' must be specific, because the subsequent discourse identifies the singer by name. Some partitives, which are specific in Enç's (1991) sense, also trigger the subjective conjugation (Chisarik 2002: 100, exx. (15), (16)):

(17) A regény-ek közül Péter el-olvas-ott négy-et.
the novel-PL from-among Peter PERF-read-3SG.PAST.INDEF four-ACC
'Of the novels, Peter read four.'

(18) A cukor-ból Anna tett a kávé-já-ba valamennyi-t
the sugar-ELAT Anna put.3SG.PAST.INDEF the coffee-POSS.3SG-into some-ACC
'Of the sugar, Anna put some in her coffee.'

Coppock and Wechsler (to appear) investigate a range of other semantic factors, including descriptive content, topicality, and anaphoricity, and conclude that none of them draws the line in the right place.

The predominant view on what conditions the use of the objective conjugation is what Coppock and Wechsler (to appear) refer to as the *DP-hood hypothesis* (Bartos 2001, building on Szabolcsi 1994, adopted in É. Kiss 2000 and É. Kiss 2002: 49,151–157):

(19) **DP-hood hypothesis**
The objective conjugation is used if and only if the object is a DP (or larger).

Coppock and Wechsler (to appear) point out several empirical challenges for this view, which are summarized in §2: (i) Some personal pronouns (which one would otherwise assume are DPs) trigger the subjective conjugation (§2.1); (ii) Nominals of the same syntactic category differ in whether the noun phrase they head triggers the objective conjugation (§2.2); (iii) Indefinite nominals with non-extracted dative possessors are compatible with the subjective conjugation for some speakers (§2.3); (iv) CPs can trigger the objective conjugation, and CPs are not DPs (§2.4).

Coppock and Wechsler (to appear) argue, in the context of a larger argument that the objective conjugation suffixes are agreement markers rather than pronouns, that Hungarian makes use of a purely formal feature [+DEF]. Lexical items can be specified as [+DEF] or [−DEF], or be unspecified for definiteness, and the DEF feature is passed up from the head daughter to its mother if the head daughter is specified for DEF; otherwise the DEF feature is passed up from the complement daughter, within an extended projection. The objective conjugation is historically associated with topicality, hence definiteness, but synchronically [+DEF] has no semantic content according to this view.

Here I propose that the [+DEF] feature does have semantic content synchronically. So it is not a complete accident, even synchronically, that *a madarat* 'the bird' triggers the objective conjugation and *egy madarat* 'a bird' does not. Regarding the person effect, whereby 1st and 2nd person non-reflexive pronouns do not trigger the objective conjugation, I follow Coppock and Wechsler (to appear) and Coppock and Wechsler (2010) in assuming that this is a historical relic of the fact that only third person pronouns were incorporated at an earlier stage of Hungarian, and the objective conjugation derives from those third person pronouns. The reflexive and reciprocal pronouns are morphologically third person, even though they are not actually third person, so I will assume that being morphologically third person is a precondition for triggering the objective conjugation.

Within the class of morphologically third person elements, however, I believe that the use of the objective conjugation can be grounded semantically, although I will advocate a somewhat moderate position. I will retain the view that the DEF feature is part of the lexical specification of a word or morpheme (such as the possessive morpheme) and passed up in the manner described above, but I claim in addition that whether or not this lexical specification is present can be predicted based on semantics. In particular:

(20) **Lexical D-linking hypothesis**
If the referential argument of a phrase is *lexically specified* as D-linked, then the phrase triggers the objective conjugation.

Possessive morphemes and the Poss head hosting the PossP projection in which dative possessors sit require that the referential argument (the possessee) is D-linked and therefore contribute a [+DEF] feature. When a possessive phrase is combined with an indefinite determiner, the phrase receives [-DEF] from the determiner, and lexical feature specifications clash. In these cases Hungarian speakers seem to lose their intuitions, and this is precisely what we would expect from an account based on lexical feature specifications rather than one based on the semantics of the noun phrase as a whole. Partitives and *minden* 'every' phrases are also D-linked, but not lexically specified as such. They do not trigger the objective conjugation because there is no lexical host for the DEF feature. So the [+DEF] feature is grounded in D-linking, but some things are D-linked yet not [+DEF]. Seen from this perspective, object agreement in Hungarian is quite similar to accusative-marking in Turkish: Both are sensitive to D-linking, but in Hungarian this D-linking must come from the lexical items.

2 Problems for the DP-hood hypothesis

Again, the predominant view on the issue concerning us is the DP-hood hypothesis: the objective conjugation is used when the syntactic category of the object is DP (or larger); the subjective conjugation is used elsewhere. There are several problems for this view: (i) there are pronouns (DPs) that trigger the subjective conjugation; (ii) there is at least one pair of determiners of the same syntactic category such that one triggers the objective conjugation and the other does not; (iii) there are phrases with dative possessors (DPs) with which some speakers allow the subjective conjugation; (iv) CPs count as definite, and CPs are not DPs.

2.1 Pronouns that behave as indefinites

As mentioned earlier, first and second person non-reflexive pronouns trigger the subjective conjugation, as É. Kiss (2005: p. 110) points out: "[Bartos's theory of V-object agreement] cannot explain why an object represented by a 1st or 2nd person pronoun triggers no agreement."

(21) Lát-nak engem/téged/minket/...
see-3PL.INDEF me/you/us/...
'They see me/you/us/...'

Something more must be said in order to explain this. This person restriction seems to be morphosyntactic in nature rather than semantic, because 1st/2nd person *reflexive* pronouns trigger objective conjugation:

(22) (Én) szeret-em magam-at.
I love-3SG.DEF myself-ACC
'I love myself.'

These pronouns have the morphological structure of 3rd person forms, even though for the purposes of agreement they are genuinely 1st or 2nd person. The synchronic generalization seems to be that a form must be morphologically 3rd person in order to trigger the objective conjugation.[1] This is a stipulation that I will adopt in the present analysis, so in fact, example (21) does not argue against the DP-hood hypothesis any more than it argues against the present proposal.

However, there are other pronouns that trigger the subjective conjugation, such as [+wh] pronouns like *kit* 'who-ACC', for which no stipulation is required on the present proposal:

(23) Ki-t lát-sz?
who-ACC see-2SG.INDEF
'Who do you see?'

(24) Mi-t akar-sz?
what-ACC want-2SG.INDEF
'What do you want?'

Under the DP-hood hypothesis, we must analyze such pronouns as smaller than DP, and this idea is otherwise completely unmotivated. On the present hypothesis, it follows from the fact that *kit* 'who' and *mit* 'what' are not D-linked items.

2.2 Same category, different definiteness

A second problem with the DP-hood hypothesis is that there is at least one pair of determiners such that one (*valamennyi* 'each') triggers the objective conjugation and the other (*minden* 'every') does not:

(25) Eltitkol-om valamennyi találkozás-t
keep.secret-1SG.DEF each meeting-ACC
'I keep each meeting secret.'

[1] See Coppock and Wechsler (2010) for a historical explanation for this person restriction based on comparison with other Uralic languages.

(26) Eltitkol-ok minden találkozás-t
keep.secret-1SG.INDEF every meeting-ACC
'I keep every meeting secret.'

According to the DP-hood hypothesis, *valamennyi találkozást* 'each meeting' must be analyzed as a DP (or larger), and *minden találkozást* 'every meeting' must be analyzed as smaller than a DP. But Coppock and Wechsler (to appear) show that *minden* and *valamennyi* have the same syntactic category, and I will summarize those arguments here.

Like other determiners belonging to the category 'Det' according to Szabolcsi (1994), both *minden* 'every' and *valamennyi* can co-occur with *az*, as long as there is an intervening element such as a possessor:[2]

(27) a Mari valamennyi/minden kalap-ja
the Marie each/every hat-3SG.POSS
'each/every one of Marie's hats'

(28) a neked kiosztott valamennyi/minden feladat
the you-DAT assigned each/every task
'each/every task assigned to you'

Assuming that *az* 'the' is of category D, as Szabolcsi (1994) argues, this shows that both *valamennyi* and *minden* are of a syntactic category that is instantiated below D.

Could *minden* 'every' have a syntactic category that is instantiated lower than than of *valamennyi* 'each'? É. Kiss's (2000) suggests the following structure for the DP (borrowing some from Bartos (1999)):

(29) TopP? < DP < DetP < (AgrP) < NumP < (PossP) < NP

The idea that there is a structural difference between the two determiners in question could be saved if *minden* 'every' could be shown to be a Num, while *valamennyi* 'each' is a Det. But at least two pieces of evidence show that *minden* is not a Num. (i) *Minden* can precede numerals (É. Kiss 2000, ex. 26):

(30) Minden tíz falu épit-sen egy templomot!
every ten village build-IMP.3SG a church
'Every [set of] ten villages should build a church.'

(ii) Nums can be adjacent to *az*:

(31) Mi a különbség a két könyv között?
what the difference the two book between
'What is the difference between the two books?'

but *minden* cannot be immediately preceded by *a(z)*:

[2]Other determiners that can co-occur with *az* 'the' include *e, eme, ezen* 'this', *ama, azon* 'that', *melyik* 'which', *kevés* 'few', *sok* 'many', *egy* 'one'.

(32) (*a) { valamennyi, minden } kalap-ja
the each every hat-3SG.POSS
'each/every one of her/his hats'

In general, when there is no intervening element, *az* 'the' cannot co-occur with *minden* or *valamennyi*:

(33) (*a) valamennyi/minden feladat
the each/every task
'each/every task'

Two kinds of explanation for the contrast between (28) and (33) have been given. Regardless of which one we incorporate into our theory, the DP-hood hypothesis ends up making false predictions. According to Szabolcsi (1994), the contrast is due to a constraint against contiguous strings of type 'D Det' or 'D D', which can be eliminated through a haplology rule that deletes *az* 'the' at PF. Through haplology, *valamennyi feladat* 'each task' is generated with the following structure, a DP with *a(z)* deleted:

(34) $[_{DP}\ [_{D}\ \sout{\text{a}}\ ]\ [_{Det}$ valamennyi] feladat]
the each task

Thus, this phrase is really a DP, despite containing only a Det-level determiner overtly. Bartos (2001: 317) captalizes upon this idea to support the DP-hood hypothesis, positing that a DP is not projected unless *a(z)* is there at least silently. This yields a structural difference between definites and indefinites. So, on Bartos's version of the DP-hood hypothesis, nominals like *valamennyi feladat* 'each task' are DPs headed by a silent *a(z)* 'the', deleted by a haplology rule; nominals headed by other Dets such as *néhány* 'some' have no silent *a(z)*.

The problem is that by this logic, we should also be able to generate DPs with silent *az* in a parallel manner:

(35) $[_{DP}\ [_{D}\ \sout{\text{a}}\ ]\ [_{NP}\ [_{Det}$ minden] feladat]]
the each task

Because *minden* can co-occur with *az*, this structure should be generated by the grammar. Furthermore, Szabolcsi's (1994) theory states that a D is projected in the presence of a [+specific] Det, and *minden* is a [+specific] Det, as shown by the ungrammaticality of (6) (*Van minden könyv* 'there is every book'). So *minden* should trigger insertion of *a(z)* in D, and then phrases like *minden kalap* should trigger the objective conjugation, if the DP-hood hypothesis is right.

É. Kiss (2000), another proponent of the DP-hood hypothesis, suggests an alternative explanation for the contrast between (28) and (33):

> We can derive [the fact that *a(z)* does not show up when the noun phrase has a Det determiner, unless something intervenes] by projecting a DP above DetP, and deleting D when it is immediately followed by Det (as in Szabolcsi 1992). Or else we can assume determiner movement from Spec,DetP to Spec,DP..., which is blocked by an intervening projection. If movement from Spec,DetP to Spec,DP is blocked, then the head of D must be spelled out as a definite. That is, either the specifier or the head of DP is filled, but not both – in observance of the principle 'Economize functional heads'." (p. 131).

Note that this is similar in spirit to many analyses of double definiteness in Scandinavian.

(36) a. (*det) hus-et (Swedish)
the house-DEF

b. det stor-a hus-et
the big-DEF house-DEF

Many accounts say that (36a) involves movement of the noun (or small projection containing it) to the D-zone (spec or head), which is blocked by the adjective in (36b) (see Delsing 1993, Julien 2005, references cited therein).

Under this movement-based view, there are two possibilities: (i) *Minden* does not move to D-zone (even though it is a [+specific] Det; some revision to the rules would have to be made here). Then it should be found adjacent to *az* 'the', contrary to fact. (ii) *Minden* moves to D-zone. Then it should trigger the objective conjugation, if DP-hood is responsible for triggering the objective conjugation.

Of the available explanations for (27) vs. (32), the movement-based approach seems most promising, and under that assumption it seems most likely that *minden* moves to the D-zone. But then we must give up the DP-hood hypothesis. In fact, in either case, we are forced to give up the DP-hood hypothesis, because under both explanations for (27) vs. (32), *minden* is incorrectly predicted to trigger the objective conjugation.

2.3 Non-extracted dative possessors

Another problem with the DP-hood hypothesis is that for some speakers, there are noun phrases with dative possessors that are compatible with the subjective conjugation (Bartos 1997):

(37) %Olvas-t-unk Péter-nek (öt) vers-é-t
read-PAST-1PL.INDEF Peter-DAT five poem-POSS-ACC
'We read five poems by Peter'

Regardless of whether the dative possessor is analyzed as adjoined to DP in Spec,DP or in the specifier of a higher projection, the presence of the dative possessor renders the object a DP (or larger). So (37) should be impossible according to the DP-hood hypothesis.

2.4 CP objects

Finally, complement clauses of bridge verbs (those which allow extraction) trigger the objective conjugation:

(38) János mond-t-a [hogy holnap érkez-ik]
John.NOM say-PAST-3SG.DEF that tomorrow arrive-3SG.INDEF
'John said that he is arriving tomorrow.'

These are *prima facie* counterexamples to the claim that all and only DPs are [DEF], since CPs are not DPs (nor are they on an extended projection containing a DP).

Kenesei (1994) argues that (38) underlyingly contains an expletive pronoun *azt*, as in (39):

(39) János mond-t-a az-t [hogy holnap érkez-ik]
John.NOM say-PAST-3SG.DEF it-ACC that tomorrow arrive-3SG.INDEF
'John said it that he is arriving tomorrow.'

The expletive pronoun and the complement clause together form a DP chain, according to Kenesei. On this analysis, the verbs are agreeing with an expletive pronoun, a DP, rather than a CP in sentences like (38).

The problem with this analysis is that correlative object pronouns create islands:

(40) *János holnap mond-t-a az-t [hogy érkez-ik]
John.NOM tomorrow say-PAST-3SG.DEF it-ACC that arrive-3SG.INDEF
'It is tomorrow that John said (it) that he is arriving.'

To account for this, Kenesei argues that focus-raised elements "are raised into the position of the expletive in the focus slot of the matrix clause" (p. 315). Support for this comes from the fact that focus-raised subjects acquire accusative case in the matrix clause:

(41) Péter-t mond-t-a [hogy jön]
Péter-ACC say-PAST-3SG.DEF COMP come.3SG.INDEF
'It is Peter who he/she said is coming.'

But unfortunately Kenesei's analysis forces us to accept that adverbs and obliques are also accusative-marked in the matrix clause:

(42) János holnap mond-t-a [hogy érkez-ik]
John.NOM tomorrow say-PAST-3SG.DEF that arrive-3SG.INDEF
'It is tomorrow that John said that he is arriving.'

(43) Két ember-rel szeret-né-m [hogy Péter találkoz-z-on]
two men-INST like-would-1SG.DEF that Peter meet-SBJ-3SG.INDEF
'I want Peter to meet with *two men*.'

If these phrases are somehow accusative-marked, then the verb should be in the subjective conjugation, reflecting the indefiniteness of the raised item; instead it appears in the objective.

A further problem for this analysis is that the putative 'expletive' is optional. True expletives such as the expletive subjects of raising verbs serve to satisfy a surface requirement such as the EPP. This all leads to the conclusion that complement clauses are CPs, and there are CPs that trigger the objective conjugation. Thus DP-hood is not a necessary condition for triggering the objective conjugation.

3 Proposal

According to Coppock and Wechsler (to appear), the phrasal category of the nominal does not determine the verb conjugation. Rather, the definiteness of a nominal or complement clause for the purposes of the objective conjugation is determined primarily by lexical feature specifications contributed by morphemes such as definite determiners, third person pronouns, reflexive and reciprocal pronouns of all person values, proper names, finite complementizers, and possessive suffixes.

A silent Poss head hosting dative possessors is also [+DEF]. The DEF feature is passed up the tree from heads to their phrasal projections, and from complements to their extended projections, with heads taking precedence over complements whenever the feature values would otherwise clash.

Here, I propose to augment this view by grounding the feature specifications in semantics. The definiteness of individual lexical items does not need to be stipulated on an item-by-item basis. Yet it is not the semantics of the nominal as a whole that determines whether or not it triggers the objective conjugation; it is still a matter of features being introduced at the lexical level, and being passed up. (One minor detail on which I differ here from Coppock and Wechsler is that I do not assume that heads take precedence over complements whenever the feature values would otherwise clash. I assume that a phrase can simultaneously bear [+DEF] and [-DEF]. It doesn't make Hungarians happy, but it does occur.)

The semantic framework that I will use is λ-DRT, augmented with a mechanism for stating presuppositional constraints (Kohlhase et al. 1996; Blackburn and Bos 2006). This is a way of combining Discourse Representation Theory (DRT) with Montague Semantics like Compositional DRT (Muskens 1996). The use of λ-DRT makes it possible to give substance to the notion of D-linking within a compositional framework in which the individual contributions of lexical items can be clearly identified. With such tools, it is possible to substantiate the principles of definiteness and indefiniteness guiding the distribution of the subjective and objective conjugations.

3.1 Principles

The principles guiding the distribution of the subjective and objective conjugations, I propose, are as follows. The distribution of [+DEF] on lexical items corresponds directly to a semantic property, namely D-linking of the referential argument:

(44) **Principle of lexical definiteness**
A lexical item is [+DEF] if (it is morphologically third person and) it specifies that its referential argument is D-linked.

The notions of D-linking and referential argumentood are understood as follows.

(45) **D-linking**
A discourse referent is D-linked if it is anaphoric (i.e., if it is a discourse referent for which an antecedent needs to be provided), or specified as a mereological part of a discourse referent that is anaphoric.

Thus D-linking is understood here as a disjunction of anaphoricity and partitive specificity (cf. Farkas 2002). 'Anaphoricity' is meant in a broad sense: Anaphors do not necessarily require a linguistic antecedent, so long as the discourse referent can be found in the associated context.

(46) **Referential argument**
The referential argument of a word or phrase is the discourse referent that acts as the bearer of the predication expressed by the head of its extended projection.

For DPs, for example, the head of the extended projection is the head noun, and the head noun introduces the referential argument. A determiner along the same extended projection will have the

same referential argument. I use 'extended projection' in Grimshaw's (1991) sense (cf. the notion of 'functional domain' in LFG; Bresnan 2001).

The distribution of [-DEF] is governed by a separate principle:

(47) **Principle of lexical indefiniteness**
A lexical item is [-DEF] if it introduces its referential argument in the universe of a DRS within its ordinary at-issue content.

Because the distribution of [+DEF] and [-DEF] are governed by two independent principles, it can happen that a phrase has both or neither. I suggest that both types of examples are attested.

These lexically specified features are passed up the parse tree along an extended projection.

(48) **Agreement feature inheritance principle**
If α is any phrase and β is its head daughter, or (ii) α is a functional category (e.g. DP) and β is its complement daughter, then all of β's agreement features are agreement features of α.

Because it is syntax that regulates the distribution of [+DEF] above the word level, it can happen that the semantic properties of the phrase as a whole do not match the semantics of the [+DEF] feature.

3.2 Lexical entries

Common nouns. Again, in order to talk about D-linking in a compositional way, I propose to use a variant of λ-DRT (Blackburn and Bos 2006) with a van der Sandtian treatment of presuppositions (van der Sandt 1992). I assume that lexical items are translated into λ-DRT terms. For example, a noun like *secret* will be translated as a function from discourse referents u to DRSs containing the condition that u is a secret.

(49) titok/secret$_{\langle et \rangle} \rightsquigarrow \lambda u.[: \textsc{secret}(u)]$

Some notational points: (i) A colon (:) separates the universe of the DRS from the list of its conditions; in this case there is nothing in the universe. (ii) The subscript $\langle e, t \rangle$ indicates the expression's type; t is the type of DRS boxes and e is the type of discourse referents; (iii) In general, all discourse referents in lexical entries are to be seen as variables over discourse referents (so u could be instantiated as any particular discourse referent, e.g. u_1).

Pronouns. I further assume that the terms into which words and phrases are translated may be associated with a presupposed DRS (which may consist of a series of DRSs linked together with the sequencing operator). In Blackburn and Bos's (2006) system, these DRSs are prefixed to the ordinary content via an operator α. The $\gg$-operator that I use here is basically the same except that I list the ordinary content first, and the presupposed content second. The '$\alpha \gg \beta$' symbol can be read, "α, presupposing β". For clarity, I will write the presupposed content on a second line. A less superficial difference between the system I am imagining here and previous ones is that the ordinary content is not always a DRS; it can be a function from discourse referents to DRSs or, even more dramatically, the ordinary content can be a lone discourse referent. Pronouns exemplify the dramatic case.

(50) $\text{he}_e \rightsquigarrow u \gg [u : \textsc{male}(u), |u| = 1]$

(51) $\text{ő}_e \rightsquigarrow u \gg [u : |u| = 1]$

(52) $\text{téged/you}_e \rightsquigarrow u \gg [u : \textsc{ad}(u), |u| = 1]$

A pronoun like *he* comes with an existence presupposition along with gender and number constraints: the discourse referent to which *he* corresponds must be established as a male individual consisting of a single atom. The Hungarian pronoun *ő* carries no gender information but still requires existence and singularity. In (52), *you* is translated as a discourse referent given by the context satisfying two conditions: being an addressee (AD) and consisting of a single atom. (This is just toy semantics for the second person feature of course; a serious analysis of indexicality would take us too far afield here.) The 'referential argument' in these cases is u, and its existence is presupposed; hence these pronouns are predicted to bear [+DEF]. [+DEF] does not go on *téged* 'you', however, because it is not morphologically third person.

It is beyond the scope of this paper to give a semantics for *wh-* pronouns like *who* and *what* within λ-DRT, but suffice it to say that they display many properties similar to indefinites in many languages, and it is the very contrast between *which* and *what* that brought the term 'D-linking' into the linguistics vocabulary (Pesetsky 1987).

Definites. Under the present proposal, not all functions denoted by lexical items have semantic types that end in t; the output of a function can be a discourse referent instead. This makes it possible to state a lexical entry for *the* that is type $\langle et, e\rangle$, rather than $\langle et, \langle et, t\rangle\rangle$, which is welcome for reasons that Heim and Kratzer (1998) and Löbner (2011) have explained. That lexical entry is as follows:

(53) $\text{az/the}_{\langle et,e\rangle} \rightsquigarrow \lambda p \,.\, u \gg [u : u = \Sigma_{u'}([u' :] \otimes p(u'))]$

This will require an antecedent DRS in which u is defined and equal to the merelogical sum of all entities that satisfy the predicate p (Kamp and Reyle 1993; Kamp et al. 2011; Yee 2011).

The $\otimes$-symbol represents a merge operator (cf. Blackburn and Bos 2006). Thus $[u' :] \otimes p(u')$ is the DRS (qua Context Change Potential) that results from first introducing u' into the discourse and then updating with the DRS $p(u')$. For *the*, updating with $p(u')$ will amount to ascribing the property denoted by the modified noun to u. The resulting DRS is the argument of the sum-operator Σ, which produces the sum of all individuals with property p. The referential argument of the definite description is presupposed to be equal to that sum.

Definites are anaphoric, in the sense that they presuppose the discourse referent corresponding to the referential argument (u). The definite article is therefore [+DEF], and this feature is passed up, so that definite descriptions like *a titkot* 'the secret-ACC' are [+DEF].

Possessives. I assume that possessives, like definites, have a type that ends in e. The lexical entry for the possessive morpheme combines first with a possessor, and then with a common noun (which I am representing here as 'sortal', as Löbner (2011) would call it, rather than relational; nothing crucial hinges on this as far as I can see):

(54) $\text{POSS}_{\langle e,\langle et,e\rangle\rangle} \rightsquigarrow \lambda u\,.\,\lambda p\,.\,v \gg [v : v = \Sigma_z([z : \text{HAVE}(u,z)] \otimes p(z))]$

The meanings of phrases are put together using functional application, and the presuppositional DRSs are collected together in a list, with those of the argument pushed in front of those of the functor, so that they will be processed first. Putting POSS together with *you* to make *your* or *-ed* 'your', we have:

(55) $\text{your/-ed}_{\langle et,et\rangle} \rightsquigarrow \lambda p\,.\,v \gg [u : \text{AD}(u), |u| = 1] \otimes [v|v = \Sigma_z([z : \text{HAVE}(u,z)] \otimes p(z))]$

Then *titkod* or *your secret* will then be type e (like definite descriptions and pronouns):

(56) $\text{titkod}_e \rightsquigarrow v \gg [u : \text{AD}(u), |u| = 1] \otimes [v|v = \Sigma_z[z : \text{HAVE}(u,z), \text{SECRET}(z)]]$

The process of function application must ensure that these presuppositional DRSs end up inside the intermediate (not-fully-resolved) DRS that is contructed for the enclosing sentence. Following van der Sandt (1992), I assume that the material must be bound or accommodated in order to derive a fully resolved DRS for the sentence.

Given the principle of lexical definiteness and the agreement feature inheritance principle, we have an account for why *titkodat* 'your secret' is definite. The word *titkodat* is the syntactic head of the nominal, and it requires D-linking of its referential argument. The discourse is required to provide an antecedent for this secret, so it is anaphoric, hence D-linked.

Quantifiers. For the quantifiers *minden* 'every' and *néhány* 'some', we can assume the following lexical entries, following Muskens (1996):

(57) $\text{minden/every}_{\langle et,\langle et,t\rangle\rangle} \rightsquigarrow \lambda p\,.\,\lambda q\,.\,[: ([u :] \otimes p(u)) \Rightarrow q(u)]$

(58) $\text{néhány/some}_{\langle et,\langle et,t\rangle\rangle} \rightsquigarrow \lambda p\,.\,\lambda q\,.\,([u :] \otimes p(u) \otimes q(u))$

In contrast, *each* is presuppositional:

(59) $\text{valamennyi/each}_{\langle et,\langle et,t\rangle\rangle} \rightsquigarrow \lambda p\,.\,\lambda q\,.\,[: [u : u \in y] \Rightarrow q(u)] \gg [y : y = \Sigma_{y'}([y' :] \otimes p(y'))]$

The presuppositional part requires that there is an entity y which is the sum of all entities with property p. It is the individual members of y over which *valamennyi* 'each' quantifies, as encoded by the condition $u \in y$ in the restrictor DRS.

It is crucial for our account that *valamennyi* 'each' is lexically presuppositional while *minden* 'every' is not. The referential argument of *valamennyi* 'each' is u, which is specified as D-linked, because the existence of y is presupposed, and u is always a part of y. Hence *each* is lexically [+DEF]. *Minden* 'every' has no presuppositions, so it is not [+DEF].

It must be acknowledged that *every* has been argued to be presuppositional, on the grounds that it gives rise to so-called 'empty domain effects' whereby *every*-sentences are judged odd when the domain is empty. But I agree with Lappin and Reinhart (1988) and Geurts (2007), i.a., that empty domains are compatible with the lexically specified meaning and presuppositional requirements of *every*, and that empty domain effects arise essentially through Gricean reasoning. Thus, while *every* phrases are typically used when speakers presuppose a non-empty domain, this presupposition is not part of the lexical meaning of *every*, so *minden* 'every' does not bear the [+DEF] feature.

In a similar way, epistemically specific indefinites with for example *egy* 'a' are used when the speaker has in mind a particular individual, and expects the hearer to recognize this; in this sense, they are presuppositional. But this presupposition arises in context, and not as a result of the lexical specification for the determiner. I assume that a determiner like *egy* 'a' has a lexical entry very much like that given from *néhány* 'some' given above, crucially in that it does not presuppose existence for the referential argument.

Oblique partitives and numerals. A numeral like *négy* 'four' is indefinite, introducing a discourse referent for its referential argument:

(60) $\text{four}_{\langle et,\langle et,t\rangle\rangle} \rightsquigarrow \lambda p\,.\,\lambda q\,.\,[u : |u| = 4] \otimes p(u) \otimes q(u)$

Recall example (17), repeated here:

(61) A regény-ek közül Péter elolvas-ott négy-et
the novel-PL from_among Peter read-3SG.PAST.INDEF four-ACC
'Among the novels, Peter read four.'

We can account for the possibility of the subjective conjugation here under the assumption that the head of the phrase is either the numeral *négy* 'four' or a silent noun, rather than *a regények*. In fact, although such an analysis has been advocated for partitives, i Girbau (2010) has recently argued against it. Yet i Girbau still considers it to be right for the *among* construction as in *two among the novels*. What we have in (17) looks very much like the *among* construction. There are both possessive and oblique partitives in Hungarian, and (17) is an example of the latter type. Oblique partitives are different from possessive partitives in a number of respects; they use a lexical postposition with a meaning similar to *among* and they tolerate splitting between the PP and the numeral, as exemplified in (17) (Chisarik 2002). This suggests that the head of the phrase in (17) is the numeral, as i Girbau (2010) argues for the *among* construction. If so, then the head of such partitives is lexically indefinite, and the noun phrase as a whole is indefinite, even though the denotation of the partitive noun phrase as a whole is part of something whose existence is presupposed and is in this sense D-linked.

The partitive type-shift. Next we would like to give an analysis of quantified possessives, like *minden titkodat* 'every secret of yours' and *néhány titkodat* 'some secret of yours'. At this point, *every* is not compatible with the interpretation of *your secret* that we have given. *Every* requires its first argument to be of type $\langle e, t\rangle$, but *your secret* is type e. We must type-shift *your secret* in order to make it compatible with *every*. There are two possible type-shifts we could imagine:

(62) **Adapatation of Partee's (1986) LIFT**
$x \gg K_1, ..., K_n \;\mapsto\; \lambda y\,.\,y = x \gg K_1, ..., K_n$

Applied to *titkod* ‘your secret’, LIFT gives:

(63) $\text{titkod}_{\langle e,t\rangle} \rightsquigarrow \lambda y.y = v \gg [u : \text{AD}(u), |u| = 1] \oplus [v : v = \Sigma_z([z : \text{HAVE}(u, z)] \otimes p(z))]$

This does not work because *every* quantifies over individual secrets, not a defective singular domain consisting of the sum of all secrets.

I propose instead to use the a partitive type-shifting operation that works as follows:

(64) **Partitive type shift**
$X \gg K_1, ..., K_n \mapsto \lambda x \,.\, x \in X \gg K_1, ..., K_n$

Applied to *titkod* ‘your secret’, the partitive type shift gives:

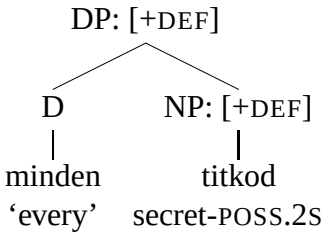
(65) $\text{titkod}_{\langle e,t\rangle} \rightsquigarrow \lambda y.y \in v \gg [u : \text{AD}(u), |u| = 1] \otimes [v : v = \Sigma_z([z : \text{HAVE}(u, z)] \otimes p(z))]$

The partitive type-shifted version of *titkod* ‘your secret’ in (65) is the type of meaning that can be combined with *minden* ‘every’.

(66) $[\text{minden titkod}]_{\langle et,t\rangle}$
$\rightsquigarrow \lambda q \,.\, [: [v : v \in y] \Rightarrow q(v)] \gg [u : \text{AD}(u), |u| = 1] \oplus [y : y = \Sigma_z[z : \text{HAVE}(u, z), \text{SECRET}(z)]]$

This phrase is predicted to be definite, because the head *titkod* is [+DEF], and this feature percolates up the tree.

(67)



The partitive type-shifted *titkod* ‘your secret’ can also be combined with *valamennyi*. In this case, the possessor and the determiner contribute essentially the same presupposition.

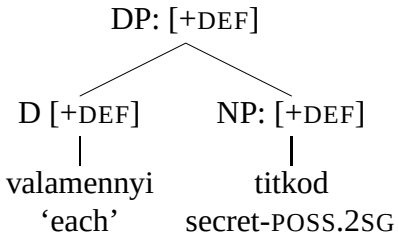
(68) $[\text{valamennyi titkod}]_{\langle et,t\rangle}$
$\rightsquigarrow \lambda q[: [v : v \in y] \Rightarrow [: q(v)]] \gg [y : y = \Sigma_x[x : x \in y']] \oplus [u : \text{AD}(u), |u| = 1] \oplus [y' : y' = \Sigma_z[z : \text{HAVE}(u, z), \text{SECRET}(z)]]$

This can be simplified as:

(69) $[\text{valamennyi titkod}]_{\langle et,t\rangle}$
$\rightsquigarrow \lambda q[: [v : v \in y] \Rightarrow [: q(v)]] \gg [u : \text{AD}(u), |u| = 1] \oplus [y : y = \Sigma_z[z : \text{HAVE}(u, z), \text{SECRET}(z)]]$

So both *valamennyi* ‘each’ and *titkod* ‘your secret’ contribute a [+DEF] feature in this case:

(70)

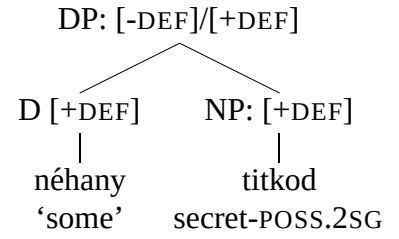


A phrase like *néhány titkod* ends up as follows:

(71) [néhány titkod]$_{\langle et,t\rangle}$
$\rightsquigarrow$ $\lambda q\,.\,[v : v \in y] \otimes q(v)$
$\gg [u : \text{AD}(u), |u| = 1] \oplus [y : y = \Sigma_z[v' : \text{HAVE}(u, z), \text{SECRET}(z)]]$

This phrase is both definite and indefinite. The determiner *néhány* is [-DEF] according to the principle of lexical indefiniteness (47), because the referential argument is introduced as a new discourse referent. But the possessive makes it definite.

(72)



Speakers tend to be quite hesitant in making judgments regarding the definiteness of examples like this, and there is a fair amount of variation among Hungarian speakers when it comes to such examples. This can easily be explained under the assumption that the phrase is both definite and indefinite.

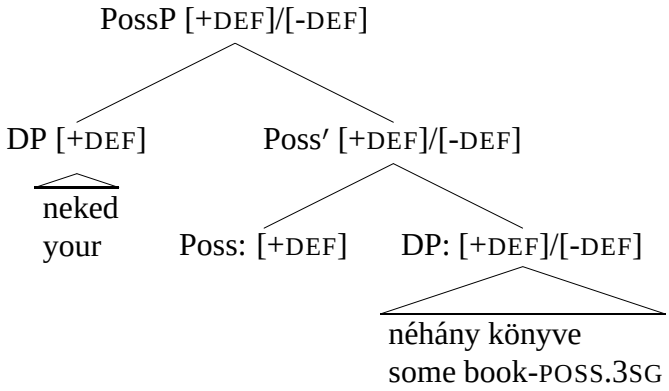
The Poss head. The partly-syntactic approach we have pursued here helps us to explain why the addition of an overt possessor makes a phrase more definite. Recall the contrast between (9) and (12), repeated here:

(73) Ismer-em/Ismer-ek néhány titk-od-at.
know-1SG.DEF/know-1SG.INDEF some secret-2SG-ACC
‘I know some secrets of yours’

(74) Ismer-em/*Ismer-ek neked néhány titk-od-at.
know-1SG.DEF/know-1SG.INDEF your some secret-2SG-ACC
‘I know some secrets of yours’

If we assume, following Coppock and Wechsler, that there is a Poss head that licenses the dative possessor and introduces the possessive semantics for the dative, then we predict that this head is [+DEF]. Examples like (73) and (74) still have both [+DEF] and [-DEF], but there are two sources for [-DEF] in this case, and that could explain the contrast in acceptability, if we assume that the number of times a given feature is syntactically introduced affects the strength of the requirement.

(75)



The assumption that the Poss head bears the [+DEF] feature also allows us to explain the fact that some speakers allow the subjective conjugation with nominals that have a dative possessor, as shown in (37)., repeated here:

(76) %Olvas-t-unk Péter-nek (öt) vers-é-t
read-PAST-1PL.INDEF Peter-DAT five poem-POSS-ACC
'We read five poems by Peter'

The presence of the Poss projection does not negate the presence of the [-DEF] feature arising from the indefinite determiner. Therefore, unlike the DP-hood hypothesis, the present proposal is compatible with examples like (76).

4 An unsolved problem

There are also examples in which the addition of an overt possessor makes the object *less* definite:

(77) *(Janos-nak) olvas-ott könyv-e
John-DAT read-3SG.INDEF book-POSS.3SG
'He read books of John's.'

In this case, at least, the subjective conjugation patterns with the existential construction:

(78) *(Janos-nak) van könyv-e
John-DAT is book-POSS.3SG
'There are books of John's'

It seeems that when the possessor is extracted, an indefinite null determiner may appear in the possessed nominal. When there is no overt extracted possessor, the possessor must be reconstructed as a covert pronominal in the possessed noun, and this is for some reason incompatible with the indefinite null determiner. Why this would be so is unclear to me, though.

5 Conclusion

The semantic property that the Hungarian objective conjugation is sensitive to is the same as the one that accusative-marking in Turkish is sensitive to: D-linking (Enç 1991; Özge 2012). The difference

between Hungarian and Turkish is that in Hungarian, the process is mediated by a syntactic feature whose only source is lexical. *Every*-phrases, oblique partitive phrases and specific indefinites are linked to a familiar discourse referent in required fashion, but this is not specified in any lexical entry. Hence, they are accusative-marked in Turkish, but do not trigger the objective conjugation in Hungarian.

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