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On a much-debated Hungarian predicate^{*}

Verb or participle? Syntactic or lexical treatment?

Abstract

This paper deals with a very special Hungarian predicate type exhibiting a complexity of marked properties. After a summary and demonstration of the relevant features, I briefly outline the most important (and, often, radically different) types of analyses. Then I offer a detailed, comparative and critical discussion of four recent accounts, arguing for treating the predicate as a participle (rather than a finite verb form) and for handling its specific traits in the lexicon in the framework of Lexical-Functional Grammar.

Keywords: attributive participle, agreement, Hungarian, Lexical-Functional Grammar

1 Introduction

In this paper I discuss the Hungarian construction exemplified in (1).

- (1) *a Péter épít-ett-e ház*
 the Peter.NOM build-T-3(SG) house
 ‘the house built by Peter’

The constituent in bold premodifies the noun head. Its predicate has the following morphological composition: verb stem + a *-(V)(t)t* suffix + a special agreement morpheme *-a/-e*. I gloss the *-(V)(t)t* suffix as T, and I refer to this predicate type as TA. This construction has a number of rather marked properties, and it is for this reason that T has been analyzed in radically different ways in the literature: as a nominalizing suffix, as a participial suffix and also as a past tense marker. Likewise, the final suffix has been analyzed as a subject agreement marker and also as a definite object agreement marker.

^{*} I dedicate this paper to Béla Hollósy on his 65th birthday, who was the supervisor of my MA thesis on the English tense and aspectual system. I am extremely grateful to him for his guidance and support in general and for suggesting this research topic in particular. Later the research I had carried out on the English phenomena motivated and encouraged me to investigate Hungarian participial constructions, and – among other types (see Laczkó 1995, for instance) – I also dealt with TA participles, see Laczkó (2001). I am grateful to György Rákosi for very useful comments on a draft version of this paper, which helped me to improve some analytical and presentational aspects. All remaining errors are solely my responsibility.

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The structure of the paper is as follows. In section 2, I present the traits of the TA predicate. In section 3, I offer a brief overview of the most important types of analyses. In section 4, I compare four recent accounts in a detailed manner (Kenesei 1986, Laczkó 2001, Nádasdi 2006 and Márkus 2009). In section 5, I modify, correct and augment the analysis I propose in Laczkó (2001) in the framework of Lexical-Functional Grammar (LFG),¹ and I compare it with a recent analysis proposed by Márkus (2009). In section 6, I make some concluding remarks.

2 The traits of TA predicates

Márkus (2009) gives a very useful comprehensive summary of the most important aspects of TA predicates based on previous work by Kenesei (1986), Laczkó (2001) and Nádasdi (2006). Given that in the critical discussion of previous accounts I make several comments on her analysis, here I basically follow the logic of her summary, for the sake of easy comparison across various approaches. Occasionally, I supplement her points with some comments. The examples are mine.

2.1 The homophony of the T suffix

The T suffix is productively used as the past tense marker and as a participial derivational suffix. Compare the following examples.

(2) *Péter épít-ett-e a ház-at.*
 Peter.NOM build-PAST-3SG.DEF the house-ACC
 ‘Peter built the house.’

(3) *a Péter által épít-ett ház*
 the Peter by build-PART house
 ‘the house built by Peter’

In (2) the predicate is a finite verb with the past tense marker (T) and the regular agreement marker encoding a 3SG subject and a definite object. By contrast, in (3) the predicate is a participle derived absolutely productively by the participial suffix which I analyze as a passivizing morpheme in Laczkó (1995). Also compare (1), the construction we are interested in here and (3), an ordinary participial expression. In (3) the agent argument is expressed by an oblique phrase typical of passive constructions, and the participle carries no agreement features. As opposed to this, in (1) the agent is realized in nominative case (typical of the expression of subjects) and it has obligatory agreement marking. Thus, in theory, the construction types in (2) and (3) appear to motivate either the tense marker or the participial suffix treatment of T in (1).

¹ See, for instance, Bresnan (2001).

2.2 *The case of the subject argument*

It is a wide-spread generalization in the Hungarian mainstream Chomskyan generative literature that in this language it is the subject of a finite verb and the possessor within noun phrases that can bear nominative case. As (1) shows and as I mentioned in 2.1, in TA constructions the agent is in nominative case, which poses a rather serious (theory internal) problem for an approach advocating the participial analysis, see subsection 4(D).

2.3 *The status of the final morpheme*

The two current views of this morpheme are as follows: (i) it is the definite object marker (ii) it is a subject agreement marker. Márkus (2009) points out that (i) poses another problem for the participial approach, the relevant empirical generalization being that it is only finite verb forms that can be marked for the definiteness of their object. Compare again, in this respect, (1), (2) and (3).

2.4 *The speciality of subject agreement*

A finite verb form is consistently marked for person and number agreement with the subject, as the morphemes in bold in (4) and (5) show. By contrast, in the case of TA constructions agreement is only for person and not for number, as the invariant *-e* form and its gloss demonstrate in (6) and (7).²

(4) *A mérnök épít-ett-e a ház-at.*
 the engineer.NOM build-PAST-3SG.DEF the house-ACC
 ‘The engineer built the house.’

(5) *A mérnök-ök épít-ett-ék a ház-at.*
 the engineer-PL.NOM build-PAST-3PL.DEF the house-ACC
 ‘The engineers built the house.’

(6) *a mérnök épít-ett-e ház*
 the engineer.NOM build-T-3 house
 ‘the house built by the engineer’

(7) *a mérnök-ök épít-ett-e ház*
 the engineer-PL.NOM build-T-3 house
 ‘the house built by the engineers’

It is to be noted that this kind of deficient agreement pattern is typical of possessive constructions within noun phrases³ and it is one of the possibilities in the case of agreement marked infinitival constructions. For a discussion, see section 4.

² It is for this reason that in (1) I put SG in parentheses.

³ It is also noteworthy that there are analyses, in Bartos (2000), for instance, which hold that the final suffix on possessed nouns in the case of (third person) lexical NP possessors (whether singular or plural) only encodes the possessive relation and it does not carry any agreement features (not even for person).

- (17) *a ház-at épít-ő mérnök*
the house-ACC build-Ö engineer
'the engineer building the house'
- (18) *a mérnök által épít-ett ház*
the engineer by build-ETT house
'the house built by the engineer'
- (19) *a mérnök épít-ett-e ház*
the engineer.NOM build-T-3 house
lit.: 'the engineer-built house'
'the house built by the engineer'

In (16) and (17), the active participial constructions have overt objects, and their covert subjects are controlled by the subject of the matrix predicate and by the modified noun head, respectively. In (18) the *-(V)(t)t* participial construction is clearly passive: the agent is expressed by an oblique 'by-phrase', and the unexpressed theme must be taken to be the covert subject, again, controlled by the noun head. By contrast, in our TA participial construction in (19) the agent is the overt (nominative) subject and the covert object is controlled by the noun head. Thus, this property of TA participles is also marked in Hungarian.

2.8 A severe semantic constraint

As Márkus (2009) mentions, both Kenesei (1986) and Laczkó (2001) point out that in the productive use of TA constructions, the first argument of the predicate has to be an agent and the second has to be an affected argument. Consider Kenesei's example in (20), cited by Márkus (2009), and compare it with (19), for instance.

- (20) **a Mari tud-t-a vers*
the Mary.NOM know-T-3 poem
'the poem known by Mary'

3 An overview of major types of earlier analyses

In this section I briefly present the rather remarkable variety of approaches to TA constructions.⁸ This variation is due to two factors. On the one hand, the T suffix is (and used to be to an even greater extent) multifunctional: in addition to its productive participial and past tense marker roles (see section 2.1), it used to have a productive deverbal (event) nominalizing function. On the other hand, this construction manifests a strange mixture of properties typical of participial, verbal and nominal predicates.

(A) T is a deverbal nominalizer. This function also used to be productive. In present day Hungarian we only find a closed set of *-at/-et* deverbal nouns as mementos of this use, see (21).

⁸ This discussion is based on section 2 in Laczkó (2001). For further details, see that paper.

(21) a. <i>másol</i>	b. <i>másol-at</i>	c. <i>szeret</i>	d. <i>szeret-et</i>
copy	copy-AT	love	love-ET
‘copy [V]’	‘copy [N]’	‘love [V]’	‘love [N]’

Simonyi (1875) proposed an analysis along these deverbal nominalizer lines, see (22).

(22) <i>Isten</i>	ad-t-a	tehetség
God.NOM	give-T-POSS.3	talent
cca. ‘God’s gift talent’		

In addition to the origin of *-at/-et*, this account was partially justified by the fact that the construction followed (and it still follows, albeit rather archaically in part) the paradigm characteristic of possessive noun phrases when the nominative constituent is in the singular (but not in the plural). In this analysis the nominative constituent is taken to have the possessor grammatical function.

(B) The T suffix is the past tense marker, and the nominative constituent is its subject. Earlier on Zolnai (1893) had an account in this vein, and recently Nádasdi (2006) developed such an analysis. The strongly archaic forms in the plural paradigm (following the pattern of verbal conjugation for the definite object)⁹ lend considerable support to this approach.

(C) The T morpheme is a participial suffix. This is the view which most accounts subscribe to, although the details of the analyses vary considerably. These differences have to do with the status of the final (agreement) morpheme on the predicate and (partially consequently) the grammatical functional status of the nominative constituent.

(Ci) The suffix belongs to the (nominal) possessive paradigm (although it is attached to a participle), and the constituent in the nominative has the possessor grammatical function, see Simonyi (1907), A. Jászó (1991, 1992).

(Cii) The suffix is a (subject) agreement marker, and the nominative constituent has the subject grammatical function, see Károly (1957), Kenesei (1986), Laczkó (2001), and this paper.

(Ciii) The suffix is a (definite) object agreement marker, and the nominative constituent has the subject grammatical function, see Márkus (2009).¹⁰

As regards the history (and the mixed properties) of this construction, Károly (1957) makes the following claims. (i) Originally, it contained the deverbal T and the nominative constituent had the possessor function (see (Ci) above). At this stage, the deverbal T and the participial T were homophonous. (ii) Later they became distinct formally, and the T in this construction followed the participial pattern. The participle had its own morphological

⁹ For details, see Laczkó (2001).

¹⁰ As regards the grammatical functional status of the nominative constituent, Antal (1985) has a rather unique proposal. He suggests that the unexpressed argument is the subject of the participle, and the nominative constituent has an unmarked (‘by’-phrase-like) oblique function. In Laczkó (2001), I reject this idea by pointing out that although it would be an advantage that the generalization that the covert arguments of Hungarian participles can only be subjects could be maintained, the cost is way too high. On the one hand, this would be an extreme case of an unmarked oblique function. On the other hand, it would be surprisingly strange that an oblique argument showed subject-verb type agreement properties.

paradigm without the agreement marker. (iii) When, however, the agreement marker was present, it followed the paradigm of finite (past tense) verb forms, which is not surprising because the T suffix was also homophonous with the past tense marker. Compare Károly's (1957) examples (the crucial morphs are in bold).

- (23) a. *Isten* *ad-**t**-a* b. *Isten-től* *ad-**ott***
 God.NOM give-T-3 God-from give-T
 cca. 'God given' 'given by God'

I think that this account of the history of the TA construction is entirely plausible, and it offers a feasible explanation for the development of its mixed properties. The challenge for a synchronic approach is to capture the nature of this construction with all these marked characteristics. Obviously, the marked features call for a special treatment.

4 On four analyses

In this section, I give a brief critical overview of four relatively recent accounts, concentrating on their crucial aspects, in general, and on details which will be relevant to the development of my considerably modified analysis in section 5, in particular.

(A) Kenesei (1986) proposes an analysis in a Government and Binding (GB) framework. He assumes that T is a participial suffix and the final morpheme is a subject agreement marker, responsible for assigning Nominative case to the subject constituent. He points out that in present day Hungarian the productive use of this construction is subject to rather severe constraints: (i) the structure can and must contain two constituents, see section 2.6 above; (ii) the first constituent must be a lexical NP (that is, a third person singular or plural subject), see section 2.5; (iii) the second (covert) argument, controlled by the modified noun head, must be affected, see section 2.8. Although he observes these facts, he does not offer any formal analysis.

(B) In Laczkó (2001), I take the first steps towards developing a formal LFG analysis of TA constructions, relying heavily on Kenesei's (1986) empirical observations. The most important aspects of the analysis are as follows (Laczkó 2001: 754).¹¹

- (24) a. morphological change (1): $V_{tr} + [VPART(V)(t)t] \Rightarrow [VPART V_{tr} + (V)(t)t]$
 condition \rightarrow (OBJ): patient
 b. effect on the argument structure: $\langle \text{SUBJ, OBJ, (GF}_n) \rangle \Rightarrow \langle \text{SUBJ, OBJ, } \emptyset_n \rangle$
 c. additional effect on the lexical form: (OBJ) = 'PRO'
 d. effect on the stress pattern: [+AVOID_STRESS]
 e. further constraint \rightarrow use of adjuncts: \emptyset
 f. morphological change (2): $[VPART V_{tr} + (V)(t)t] + \text{Aff} \Rightarrow [[VPART V_{tr} + (V)(t)t] + \text{Aff}]$
 -Aff: $(\uparrow \text{SUBJNUM}) = \alpha$
 $(\uparrow \text{SUBJPERS}) = \beta$

¹¹ Note that the $(V)(t)t$ representation in (24a) encodes the T suffix, and it is a generalization over its allomorphs: there are one or two t consonants in a morph, and some morphs also contain a vowel (e, o, \ddot{o}); thus, in this representation V stands for an optional vowel. In actual fact, a more appropriate representation would be this: $-t/-(V)tt$, given that only tt can combine with a vowel.

Here two independent morphological processes are assumed: (24a) and (24f). (24a) is the morphological rule of T attachment. The suffix has to attach to a transitive verb, plus its OBJ has to have the patient semantic role (cf. the affectedness constraint). In section 5, I will show a formally more principled LFG way of representing the relevant information. (24b) captures the following fact. If the transitive verb has further arguments, they have to be optional (in LFG terms, they should be able to receive the zero grammatical function (\emptyset)), because they have no chance to occur in this strictly two-constituent construction. (24c) is an informal (and incomplete) way of encoding that the OBJ argument has to be a covert pronoun. I will use a more appropriate alternative in section 5. (24d) is deployed to guarantee that the only possible subject argument will (immediately) precede the predicate. The idea is based on Komlósy's (1985) notion of "stress-avoiding verbs" in Hungarian. Their special property is that in a neutral (i.e. non-focussed) sentence they obligatorily require one of their designated arguments to (immediately) precede them, they lose their word initial stress and the argument + verb combination constitutes one phonological word. In essence then, (24d) converts a non-stress-avoiding predicate into a stress-avoiding one. In section 5, I will point out that this solution is extremely marked: no other non-finite derivational suffix is capable of changing the \pm AVOID_STRESS status of the input predicate. However, this by itself would not rule out this treatment, given the multiply exceptional behaviour of this construction. The insurmountable problem is that it is also empirically false. In section 5, I will offer a more plausible alternative. (24e) is an informal way of excluding adjuncts from the construction. In section 5, I will present a formally more appropriate alternative. (24f) captures the attachment of the agreement suffix, whose role is to encode information about the subject's number and person. This encoding is correct, but it is incomplete for the productive use of TA constructions in present day Hungarian, because it is basically restricted to third person subjects, see section 2.5. This also has to be encoded, which I will do in section 5.

(C) Nádasi (2006), in his Minimalist Program (MP) framework, assumes that the TA construction is a finite sentence premodifying the noun head: T is the past tense marker (responsible for the nominative case of the subject), and the final suffix is the (definite) object agreement marker. As I mentioned in section 3, Zolnai (1893) has a similar finite sentence view, and Károly (1957) points out that the nominal and/or participial characteristics of the inflectional paradigm of TA predicates gradually became more and more verbal to such an extent that in the 18th and 19th centuries even truly (and unambiguously) verbal forms also appeared in this construction, see (25), one of Károly's (1957) examples cited by Laczkó (2001).

(25) *az említ-é-m kritika*
 the mention-A.PAST-1SG critique
 lit.: 'the I mentioned critique'
 'the critique mentioned by me'

The A.PAST abbreviation in (25) stands for a special, archaic past tense marker. Notice that this morpheme formally is entirely different from the standard T past tense marker (or participial suffix). This past tense marker is no longer in use in present day Hungarian, so formally the TA construction is strictly constrained to the (multifunctional) T morpheme.

There are rather serious problems with this T-as-past-tense-marker analysis. The most important ones are as follows.

(i) As Szepesy (1939) points out, the attributive (i.e. noun-premodifying) use of a finite clause is entirely alien to the nature of Hungarian and other Ugric languages.

(ii) Károly (1957) observes that, in addition to its anterior use, T can also be used productively to express simultaneity.¹² This is also pointed out by Márkus (2009). (26) is her example.

(26) *A szél lenget-t-e nád csodálatos látvány.*
 the wind.NOM sway-T-3 reed wonderful sight
 ‘The reed being swayed by the wind is a wonderful sight.’

She adds that if T really was a past tense marker in TA constructions, expressing anteriority then it would be inexplicable why a finite present tense verb form cannot be used in them to render simultaneity. Let me continue this argumentation here by elaborating further on this example. Notice that in (26) the simultaneous interpretation is not simply a possibility: it is the only reading available, and, as (26’) shows, a present tense verb form, which would naturally be compatible with a simultaneous interpretation, is strictly ruled out.

(26’) **A szél lenget-i nád csodálatos látvány.*
 the wind.NOM sway-PRES.3SG reed wonderful sight
 ‘The reed being swayed by the wind is a wonderful sight.’

Let me also add that if the construction really contained a past tense marked verb then its special agreement pattern could not be explained in a principled manner: even if the (third person) subject is plural, the final verbal suffix cannot express plurality (as opposed to the behaviour of real and normal finite past tense verbs), see section 2.4. As is well-known, this agreement pattern is typical of the possessive paradigm of noun phrases, and it is optionally available to agreement-marked infinitives, see (27) and (28).

(27) a. *a fiú-nak a rajz-a*
 the boy-DAT the drawing-POSS(.3)
 ‘the boy’s drawing’

b. *a fiú-k-nak a rajz-a / *rajz-uk*
 the boy-PL-DAT the drawing-POSS(.3) drawing-POSS.PL
 ‘the boys’ drawing’

(28) a. *a fiú-nak rajzol-ni-a*
 the boy-DAT draw-INF-3
 cca. ‘for the boy to draw’

¹² Obviously, the insurmountable problem here is that there is a contradiction between the regular use of the past tense marker (which is naturally compatible with anteriority) and the possible, systematic simultaneous interpretation of examples like (26).

- b. *a fiú-k-nak rajzol-ni-a* / *rajzol-ni-uk*
 the boy-PL-DAT draw-INF-3 draw-INF-3PL
 cca. ‘for the boys to draw’

Fundamentally, the *-a* morph in (27), that is, in possessive NPs, can be analyzed in two different ways. For instance, Bartos (2000) assumes that it only expresses the possessive relation and it does not encode agreement features at all. Obviously, the alternative is that this suffix also encodes the third person feature for the possessor. This is why in I put the third person value in parentheses (27). (28) is important for the following reason. As (28b) shows, here, too, there is another case of this special partial agreement pattern optionally. From our present perspective, the relevant generalization can be that in addition to the possessive paradigm within NPs, this marked agreement pattern is present in non-finite constructions as well (optionally in the case of infinitives, see (28b) and obligatorily in TA constructions, see (7)). The important point is that it is unquestionable that this special agreement type is present in possessive NP and non-finite verbal contexts; however, there is no independent evidence for it in the domain of finite verbal constructions.

(iii) I point out in Laczkó (2001), footnote 2, that certain additional agreement contrasts pose further problems for the finite verbal analysis. Compare my examples from that paper in (29) and (30).

- (29) *Magam készít-ett-em* / **készít-ett-e ez-t az asztal-t.*
 myself make-PAST-1SG / make-PAST-3SG this-ACC the table-ACC
 ‘I (myself) made this table.’

- (30) *Ez egy magam *készít-ett-em / készít-ett-e asztal.*
 this a myself make-PAST-1SG / make-PAST-3SG table
 ‘This is a table made by me/myself.’

In that paper I simply point out this contrast but I do not elaborate on it. The details are as follows. In (29) the reflexive pronoun is clearly used emphatically. This generalization is straightforwardly supported by the fact that we can insert the nominative version of the first person singular pronoun *én* ‘I’ in this sentence (and when the nominative pronoun is not present, as in (29), a “pro-dropped” pronoun is assumed). By contrast, in (30) *magam* ‘myself’ functions as the subject of the participle. It cannot be omitted, and it cannot be replaced by *én* ‘I’, and *én* ‘I’ cannot be inserted beside it. Notice the agreement difference between (29) and (30). In (29) the finite verb carries the regular 1SG agreement features, while in (30) the predicate follows the third person agreement pattern with the reflexive pronoun, which is typical of possessive and infinitival (non-finite) constructions.¹³ Thus, the problem for the past tense verbal approach to TA constructions is that it cannot give a principled explanation for this robust agreement difference if both (29) and (30) are assumed to contain a past tense verb.

Given that I consider these problems so serious that they entirely undermine the feasibility and tenability of the past tense marker approach, in this paper I do not discuss the details of Nádásdi’s (2006) account, no matter how consistent it is within its own system.

¹³ For further details, see section 2.5.

(D) Márkus (2009), in her MP framework, subscribes to the participial approach to TA constructions advocated by Kenesei (1986) and Laczkó (2001). The two crucial aspects of her analysis are as follows. (i) She assumes that these constructions are smaller projections than a finite clause: they are not TPs (Tense Phrases), instead, they are AspPs (Aspect Phrases). (ii) The final suffix is the (definite) object marker,¹⁴ and the covert object is a (potentially resumptive) personal pronoun. She claims that the postulation of a base-generated covert (resumptive) pronoun¹⁵ can be related to (i), the stipulated smaller size of the construction: the pronoun simply has no chance to move.

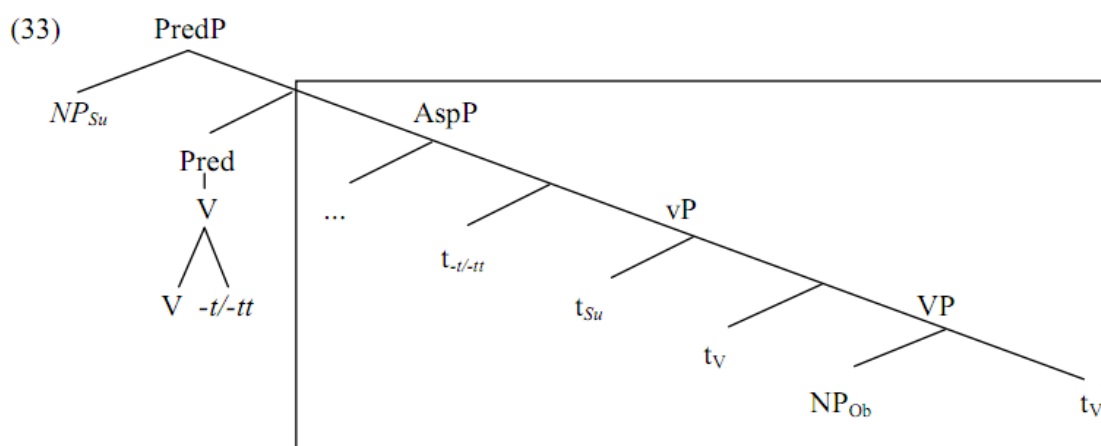
Márkus also admits that it is a further marked feature of this analysis that in Hungarian a covert pronoun is always singular, see (31), and even when the noun head is in the plural the covert pronoun in TA constructions cannot have overt expression, see (32).¹⁶

(31) *Lát-t-am* (*ő-t* / **ők-et*).
 see-PAST-1SG.DEF he-ACC they-ACC
 ‘I saw him/them.’

(32) *a* *János* *épít-ett-e* (**ők-et* / **az-ok-at*) *ház-ak*
 the John.NOM build-T-3 they-ACC that-PL-ACC house-PL
 ‘the houses built by John’

It is a further and theory-internally somewhat marked feature of her analysis that, because she assumes that the TA construction is not a TP, its subject cannot get Nominative case in the ordinary way (TP being the appropriate configuration for this in syntactic structure), and it can only receive an elsewhere (morphological) nominative case post-syntactically.

Márkus, following Bowers (2001), among others, also assumes a PredP responsible for converting the participle and its argument into a proposition (in the absence of TP). The structure she postulates is in (33).¹⁷



¹⁴ She agrees with Nádásdi (2006) on this point.

¹⁵ She herself points out that this is a rather marked solution for Hungarian.

¹⁶ These are Márkus' (2009) examples.

¹⁷ This is in (25) in her paper on page 41.

The portion of the structure within the rectangle does not (and must not) contain any overt element. The T suffix and the verb move to the head position of PredP (leaving their traces behind) and they morphologically combine there, the subject NP moves to the specifier position of PredP. The object NP obligatorily has to be a covert (resumptive) pronoun.

5 Developing a more detailed and more appropriate LFG account

In this section, first I revise my LFG analysis in Laczkó (2001) and develop a more tenable account by correcting, modifying and supplementing various aspects of it (5.1). Then I compare this analysis with Márkus' (2009) MP account (5.2) addressing the most crucial properties of the construction. I make some general remarks about the feasibility of a lexical vs. syntactic treatment of this rather marked construction in Hungarian in section 6.

5.1 A modified LFG analysis

In section 4 I presented the gist of my analysis of TA constructions in Laczkó (2001) and I also made some critical remarks on various aspects. For the sake of convenience, I repeat the summary in (24) as (34) below, and in (35)-(37)¹⁸ I show the most important details of my modified analysis. Then I comment on these details.

- (34) a. morphological change (1): $V_{tr} + [VPART(V)(t)t] \Rightarrow [VPART V_{tr} + (V)(t)t]$
 condition \rightarrow (OBJ): patient
- b. effect on the argument structure: $\langle SUBJ, OBJ, (GF_n) \rangle \Rightarrow \langle SUBJ, OBJ, \emptyset_n \rangle$
- c. additional effect on the lexical form: (OBJ) = 'PRO'
- d. effect on the stress pattern: [+AVOID_STRESS]
- e. further constraint \rightarrow use of adjuncts: \emptyset
- f. morphological change (2): $[VPART V_{tr} + (V)(t)t] + Aff \Rightarrow [[VPART V_{tr} + (V)(t)t] + Aff]$
 -Aff: $(\uparrow SUBJNUM) = \alpha$
 $(\uparrow SUBJPERS) = \beta$
- (35) a. morphological change: $V + [VPART_{attr} T_3] \Rightarrow [VPART_{attr} V + T_3]$
 $\langle x, y \rangle$
 agent/NF patient
- b. effect on the argument structure:
 $\langle (\uparrow SUBJ), (\uparrow OBJ), ((\uparrow GF_n)) \rangle \Rightarrow \langle (\uparrow SUBJ), (\uparrow OBJ), \emptyset_n \rangle$
- c. additional effects on the lexical form:
 $(\uparrow CHECK_PERS-AGR) = c +$
 $(\uparrow SUBJ CASE) = c NOM$

¹⁸ In (35) I present the details in such an arrangement that the two analyses can be easily compared. (36) represents the lexical forms of the two bound morphemes involved in TA constructions.

{ (↑ SUBJ PRED FN) ≈= PRO | (↑ SUBJ PRON-TYPE) =c REFL }
 (↑ OBJ PRED FN) = PRO
 (↑ OBJ PRON-TYPE) =c NULL
 ~(↑ ADJUNCT)

(36) a. T₃, VPART_{attr} < x , y >
 agent/NF patient
 { (↑ SUBJ PRED FN) ≈= PRO | (↑ SUBJ PRON-TYPE) =c REFL }
 (↑ SUBJ CASE) =c NOM
 (↑ OBJ PRED FN) = PRO
 (↑ OBJ PRON-TYPE) =c NULL
 ~(↑ ADJUNCT)
 (↑ CHECK_PERS-AGR) =c +

b. -a/-e, VPART_{attr}_SUFF (↑ SUBJ PERS) =c 3
 (↑ CHECK_PERS-AGR) = +

(37) a. *maga*₁, PRON (↑ PRED) = 'PRO'
 (↑ PRON-TYPE) = REFL
 { ~(SUBJ ↑) | ~(POSS ↑) }
 (↑ PERS)
 (↑ NUM)

b. *maga*₂, PRON (↑ PRED) = 'PRO'
 (↑ PRON-TYPE) = REFL
 { (SUBJ ↑) | (POSS ↑) }
 ~(TENSE ↑)
 (↑ PERS) = 3
 (↑σ PERS)
 (↑σ NUM)

Below I list my comments.

1. In Laczkó (2001) I presented an LFG-style analysis in a relatively loose, informal way. In addition, certain important (general and/or formal) details were not worked out at all. Moreover, there were some empirical problems as well. On these issues, see section 4.
2. In (34a) and (34f) two morphological processes are assumed in such a way that they are not intrinsically related to each other. Furthermore, (34f) is too general, given the limitations on TA constructions in present day Hungarian. The (overt) subject should be constrained by the agreement suffix to 3rd person (and its number can be either singular or plural).
3. For convenience' sake, in (35a) I use the T symbol for representing the participial suffix instead of the rather clumsy but morpho-phonologically more appropriate *(V)(t)t*.¹⁹
4. In (34a) the obligatory transitivity of the verb is indicated in the morphological rule itself (V_{tr}). Actually, this is not necessary in the LFG system if there is reference (within a constraining equation) to the OBJ grammatical function, see (36a) and (35c).

¹⁹ Although also see footnote 12.

5. As has been pointed out in section 2.1, T is multiply homophonous: in our present context at least three uses have to be distinguished: T₁ = past tense marker, T₂ = (ordinary) participial suffix, T₃ = the participial suffix in TA constructions. The main reason for the distinction between T₂ and T₃, the two participial uses, is that they follow partially different morpho-phonological patterns, and when this happens, T₃ follows T₁'s pattern, see (23), for instance. As a consequence, in a comprehensive analysis, this T₃ ~ T₁ correspondence has to be encoded.²⁰
6. The VPART_{attr} category in (35a) and (36a) stands for participles that function as heads of attributive modifiers of noun phrase heads. This labelling is in the spirit of the implementational framework of LFG called XLE (Xerox Linguistic Environment), see Butt et al. (1999).
7. In LFG terms, the “condition → (OBJ): patient” representation in (34a) is an absolutely informal way of encoding the constraint to the effect that the object argument of the T predicate has to be an affected one. Moreover, it is incomplete, because it is a concomitant condition that the subject has to be either an agent or a natural force (NF). In (35a) I formulate this dual condition more appropriately over the argument structure of the input verb in terms of discrete semantic role labels in the spirit of classical LFG.²¹
8. In point 2 above I called attention to the fact that the obligatory co-occurrence of T and the final agreement suffix is not at all appropriately captured in (34). In my new account I take care of this problem along the following lines. I capitalize on a very efficient device in XLE: the CHECK feature. Its essence is that two elements in a configuration can be annotationally marked in such a way that they mutually require each other's presence. The shared aspect in this case is a special person agreement requirement: CHECK_PERS-AGR. Both the T derivational suffix and the agreement suffix are marked for this feature (according to the notational convention, one of them, the agreement suffix, with an ordinary CHECK feature equation (=), see (36b), and the other, the participial suffix, with a constraining equation (=c), see (35c) and (36a), that is how and why they can and must co-occur (i.e. that is how they “find each other” in our implementational space). Once the presence of this agreement suffix is required and guaranteed, it can impose its highly specific requirement on the subject in the form of a constraining equation: the subject of the construction must be third person, see (36b).
9. The disjunction in (35c) and (36a) expresses (in the XLE formalism) the following limitations on the nature of the subject. (i) It must not be a pronoun: (↑SUBJ PRED FN) ~≠PRO (the first part of the disjunction).²² (ii) If it happens to be a pronoun, it must be of the reflexive type: (↑SUBJ PRON-TYPE)=c REFL (the second part of the disjunction).
10. In section 2.5 I pointed out that the reflexive pronoun follows a special agreement pattern (the same pattern) when it has the possessor grammatical function in noun phrases and when it is the subject in TA constructions. A possible way of treating this fact is to assume two distinct lexical forms for it: the regular reflexive pronominal use and this

²⁰ As has been noted in section 3, this T₃ ~ T₁ correspondence can be explained by the history of the TA construction. The T predicate in it was gradually felt to be more and more verbal in nature.

²¹ An alternative would be to use LFG's Lexical-Mapping Theory and to employ the intrinsic classification of arguments based on Dowty's (1991) Proto-Roles in the vein of Ackerman (1992) and Zaenen (1993).

²² In this notational system ~ expresses negation.

special use, see (37).²³ (37a) is the lexical form for the regular use of the reflexive pronoun.²⁴ In addition to the general facts, i.e. (a) it is an element having a pronominal meaning: (\uparrow PRED)=‘PRO’ and (b) it is of the reflexive type: (\uparrow PRON-TYPE)=REFL, it is also encoded, by dint of another disjunction, that it cannot have either the subject or the possessor function: $\{ \sim(\text{SUBJ}\uparrow) \mid \sim(\text{POSS}\uparrow) \}$.²⁵ The last two existential constraints express that the pronoun must carry person and number features. (37b) encodes the special use of the reflexive pronoun. Naturally, the first two equations are the same as those in (37a). The third equation is in complementary distribution with the corresponding equation in (37a). In this use, the reflexive pronoun must have either the subject or the possessor function: $\{ (\text{SUBJ}\uparrow) \mid (\text{POSS}\uparrow) \}$. In the fourth line it is encoded, by means of the $\sim(\text{TENSE}\uparrow)$ negative existential constraint, that in this use the reflexive pronoun cannot have the subject (or the possessor) function in a finite (i.e. tensed) clause. The last three lines in (37b) give a formal representation of the agreement properties of this use of the reflexive pronoun. Although it has the entire ordinary agreement paradigm, morphosyntactically all the paradigmatic forms require third person agreement with the T participle and the possessed noun, see (38).²⁶

<p>(38)a. <i>a maga-m tervez-t-e ház</i> the REFL-1SG design-T-3 house ‘the house designed by myself’</p> <table style="margin-left: 40px; border-collapse: collapse;"> <tr><td style="border-right: 1px solid black; padding-right: 10px;"><i>maga-m</i></td><td></td></tr> <tr><td style="border-right: 1px solid black; padding-right: 10px;">REFL-1SG</td><td></td></tr> <tr><td style="border-right: 1px solid black; padding-right: 10px;"><i>maga-d</i></td><td></td></tr> <tr><td style="border-right: 1px solid black; padding-right: 10px;">REFL-2SG</td><td></td></tr> <tr><td style="border-right: 1px solid black; padding-right: 10px;"><i>maga</i></td><td></td></tr> <tr><td style="border-right: 1px solid black; padding-right: 10px;">REFL.3SG</td><td><i>tervez-t-e</i></td></tr> <tr><td style="border-right: 1px solid black; padding-right: 10px;"><i>mag-unk</i></td><td>design-T-3</td></tr> <tr><td style="border-right: 1px solid black; padding-right: 10px;">REFL-1PL</td><td></td></tr> <tr><td style="border-right: 1px solid black; padding-right: 10px;"><i>maga-tok</i></td><td></td></tr> <tr><td style="border-right: 1px solid black; padding-right: 10px;">REFL-2PL</td><td></td></tr> <tr><td style="border-right: 1px solid black; padding-right: 10px;"><i>mag-uk</i></td><td></td></tr> <tr><td style="border-right: 1px solid black; padding-right: 10px;">REFL-3PL</td><td></td></tr> </table>	<i>maga-m</i>		REFL-1SG		<i>maga-d</i>		REFL-2SG		<i>maga</i>		REFL.3SG	<i>tervez-t-e</i>	<i>mag-unk</i>	design-T-3	REFL-1PL		<i>maga-tok</i>		REFL-2PL		<i>mag-uk</i>		REFL-3PL		<p>b. <i>a maga-m terv-e</i> the REFL-1SG design-POSS.3 lit.: ‘*myself’s design’</p> <table style="margin-left: 40px; border-collapse: collapse;"> <tr><td style="border-right: 1px solid black; padding-right: 10px;"><i>maga-m</i></td><td></td></tr> <tr><td style="border-right: 1px solid black; padding-right: 10px;">REFL-1SG</td><td></td></tr> <tr><td style="border-right: 1px solid black; padding-right: 10px;"><i>maga-d</i></td><td></td></tr> <tr><td style="border-right: 1px solid black; padding-right: 10px;">REFL-2SG</td><td></td></tr> <tr><td style="border-right: 1px solid black; padding-right: 10px;"><i>maga</i></td><td></td></tr> <tr><td style="border-right: 1px solid black; padding-right: 10px;">REFL.3SG</td><td><i>terv-e</i></td></tr> <tr><td style="border-right: 1px solid black; padding-right: 10px;"><i>mag-unk</i></td><td>design-POSS.3</td></tr> <tr><td style="border-right: 1px solid black; padding-right: 10px;">REFL-1PL</td><td></td></tr> <tr><td style="border-right: 1px solid black; padding-right: 10px;"><i>maga-tok</i></td><td></td></tr> <tr><td style="border-right: 1px solid black; padding-right: 10px;">REFL-2PL</td><td></td></tr> <tr><td style="border-right: 1px solid black; padding-right: 10px;"><i>mag-uk</i></td><td></td></tr> <tr><td style="border-right: 1px solid black; padding-right: 10px;">REFL-3PL</td><td></td></tr> </table>	<i>maga-m</i>		REFL-1SG		<i>maga-d</i>		REFL-2SG		<i>maga</i>		REFL.3SG	<i>terv-e</i>	<i>mag-unk</i>	design-POSS.3	REFL-1PL		<i>maga-tok</i>		REFL-2PL		<i>mag-uk</i>		REFL-3PL	
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²³ I hasten to add that this aspect of the analysis is rather preliminary. My main goal has been to show in very general terms that it is possible to capture the relevant facts formally in LFG. Naturally, a careful analysis should rely on general, fully-fledged LFG theories of agreement and binding in which these phenomena can be accommodated and captured in a principled manner. For instance, as György Rákosi pointed out (p.c., 2013.06.06.), a finer-grained syntactic analysis of agreement would be a viable alternative solution along the lines proposed by Wechsler & Hahm (to appear). They distinguish two major types of agreement. ‘Concord and Index agreement are both ‘syntactic agreement’, and Concord is the ‘more syntactic’ of the two, since Concord feature assignment is rooted in the formal properties of the noun, such as declension class, while Index feature assignment is rooted in meaning” (p. 62). I leave this issue to future research.

²⁴ In addition to its regular use, the reflexive pronoun can also be used emphatically, see (29). This use is irrelevant to our concerns in this paper.

²⁵ Note the following important representational convention in LFG. The position of the \uparrow metavariable is crucial. If – in an existential expression, for instance – it precedes a grammatical function then it encodes the constraint that the (predicative) element this expression is associated with has to have a subject: (\uparrow SUBJ). By contrast, if it follows a grammatical function then the constraint is that the element has to be the subject of another (predicative) element: (SUBJ \uparrow). In point 10 above we have examples of the latter.

²⁶ For an analysis of *maga* reflexives and a plausible explanation for their special agreement property, see Rákosi (2011).

In (37b) the $(\uparrow\text{PERS})=3$ equation encodes the general third person value of the reflexive pronoun in this use for (morpho)syntactic agreement to be represented and checked in LFG's functional structure (this is encoded by the \uparrow symbol). The person and number values contributed by the paradigm in (38) are relevant to interpretation; thus, they have to be projected to a different component of the grammar: semantic structure (this is encoded by the $\uparrow\sigma$ symbol). (37b) is a generalized lexical form of the reflexive pronoun, and the $(\uparrow\sigma\text{ PERS})$ and $(\uparrow\sigma\text{ NUM})$ expressions are existential constraints: they require that the pronoun must be marked (within its morphological paradigm) for semantic person and number. LFG subscribes to the Strong Lexicalist Hypothesis, which means that it assumes that all morphology (whether derivational or inflectional) is within the lexicon. Lexical redundancy rules create lexical forms for all derived and inflected words. For instance, in my analysis, the lexical form for *magam* 'myself' in (38a) is as follows.

(39) *magam*, PRON $(\uparrow\text{ PRED}) = \text{'PRO'}$
 $(\uparrow\text{ PRON-TYPE}) = \text{REFL}$
 $\{ (\text{SUBJ } \uparrow) \mid (\text{POSS } \uparrow) \}$
 $\sim(\text{TENSE } \uparrow)$
 $(\uparrow\text{ PERS}) = 3$
 $(\uparrow\sigma\text{ PERS}) = 1$
 $(\uparrow\sigma\text{ NUM}) = \text{SG}$

It is also noteworthy that the word *maga* is functionally ambiguous. On the one hand, it is used as the generalized lexical form for the reflexive pronoun as in (37). On the other hand, it also has a 3SG use. Thus, in addition to the lexical forms in (37) we also need those in (40).

(40)a. *maga₁*', PRON $(\uparrow\text{ PRED}) = \text{'PRO'}$
 $(\uparrow\text{ PRON-TYPE}) = \text{REFL}$
 $\{ \sim(\text{SUBJ } \uparrow) \mid \sim(\text{POSS } \uparrow) \}$
 $(\uparrow\text{ PERS}) = 3$
 $(\uparrow\text{ NUM}) = \text{SG}$

b. *maga₂*', PRON $(\uparrow\text{ PRED}) = \text{'PRO'}$
 $(\uparrow\text{ PRON-TYPE}) = \text{REFL}$
 $\{ (\text{SUBJ } \uparrow) \mid (\text{POSS } \uparrow) \}$
 $\sim(\text{TENSE } \uparrow)$
 $(\uparrow\text{ PERS}) = 3$
 $(\uparrow\sigma\text{ PERS}) = 3$
 $(\uparrow\sigma\text{ NUM}) = \text{SG}$

11. (34b) and (35b) are identical. This means that I accept this aspect of my earlier analysis. It captures the following fact. If the transitive verb has further arguments, they have to be optional (in LFG terms, they should be able to receive the zero grammatical function (\emptyset)), because they have no chance to occur in TA constructions, given that there is only one argument slot in them, reserved for the subject (the also obligatory object is always covert, see point 12 below).
12. The first line in (35c) requires the the subject's case should be nominative, the second and third lines express the requirement that the object has to be a covert (phonetically

null) pronoun in a much more appropriate way than the (incomplete and insufficient) informal representation in Laczkó (2001), see (34c).

13. The third line in (35c), $\sim(\uparrow\text{ADJUNCT})$, corresponds to (34e). It captures the generalization that the T predicate cannot have any adjunct modifiers. While (34e) is absolutely informal, this new expression (35c) is very simple and fully appropriate from a formalizational point of view as well. Notice that (35b) and (35c) jointly guarantee that no element other than the subject can occupy the only overt position available in this construction type.²⁷
14. (34d) has no counterpart in (35) at all. The reason for this is that (34d) captures an empirically false generalization, namely that TA participles become stress-avoiding predicates. The problem is that if a verbal predicate is stress-avoiding then in a neutral (non-focussed) clause it does not tolerate a preverb (immediately) preceding it. In the case of particle verb constructions (PVCs) in which the sole function of the preverb is to make the construction perfective,²⁸ this seems to hold inasmuch as normally the preverb does not appear in such TA constructions. However, as Márkus (2009) points out, if the preverb has a (further) semantic contribution, it can and must be present even when the PVC is in a TA construction, and this fact falsifies this aspect of my earlier analysis. Consider the following examples.²⁹

(41)a. *a János tervez-t-e ház*
 the John.NOM design-T-3 house
 ‘the house designed by John’

b. ??*a János meg-tervez-t-e ház*
 the John.NOM PERF-design-T-3 house
 ‘the house designed by John’

(42)a. *a János (??meg-)ír-t-a vers*
 the John.NOM PERF-write-T-3 poem
 ‘the poem written by John’

b. *a János újra-ír-t-a vers*
 the John.NOM again-write-T-3 poem
 ‘the poem rewritten by John’

In (41b) and (42a) *meg* is the par excellence perfectivizing preverb in Hungarian, while *újra* ‘again’ in (42b) changes the meaning of the verb considerably (‘write’ → ‘rewrite’).

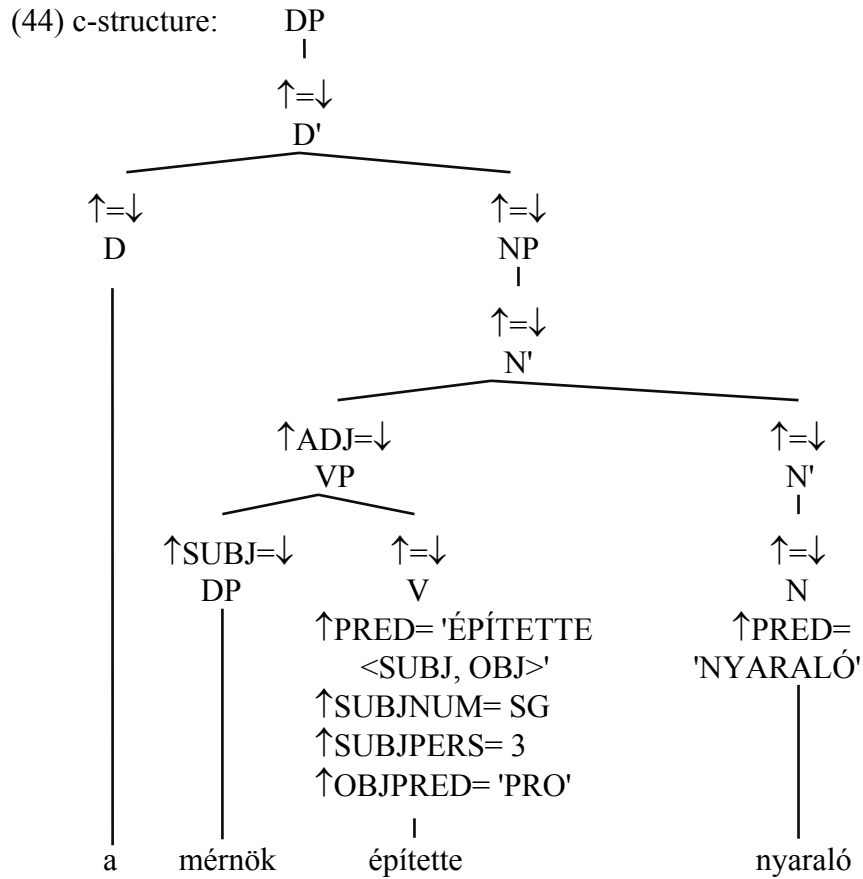
As regards the constituent structural (c-structural) and functional structural (f-structural) analysis of TA constructions, in Laczkó (2001: 750) I assign the following representations to the example in (43).

²⁷ For a slight modification of the two-overt-positions generalization, see point 14 below.

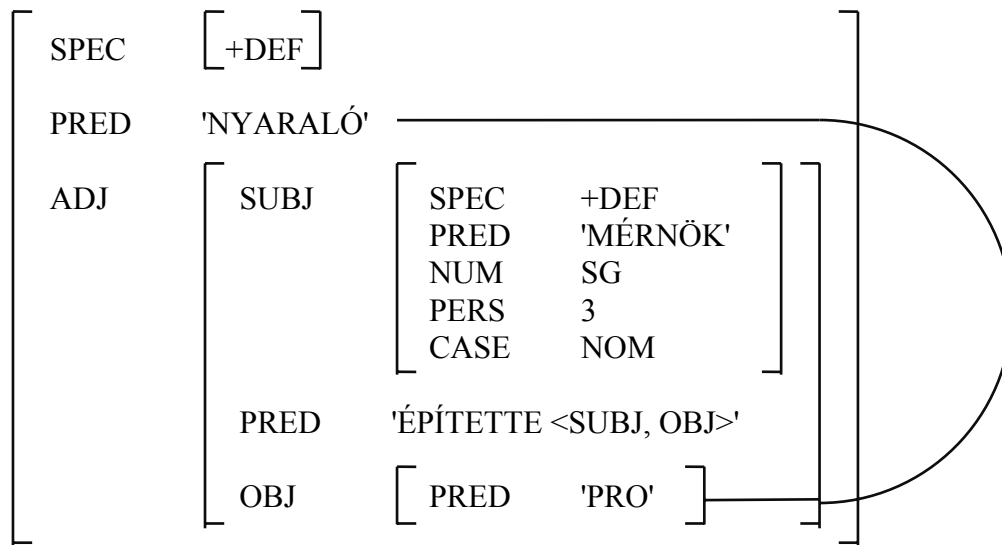
²⁸ I use the term perfectivization in a loose, everyday sense, which is suitable in the context of the present paper. The more appropriate term is telicization (changing the lexical aspect of the predicate, turning an activity verb into an accomplishment verb).

²⁹ (41) is from Márkus (2009: 43). Her other (and really crucial) pair of examples contains the input verbs *olvas* ‘read’ and *fel-olvas* = up-read ‘read out’. I use different examples in (42). The reason for this is that TA constructions are also constrained to contain a predicate with an affected object argument, see sections 2.8 and 5.2.8. In my idiolect, the object of either *olvas* ‘read’ or *fel-olvas* ‘read out’ is not affected enough for the TA construction to sound fully acceptable.

- (43) *a mérnök épít-ett-e nyaraló*
 the engineer.NOM build-T-3 summer_cottage
 'the summer cottage built by the engineer'



- (45) f-structure:



Below I make some comments on these representations.

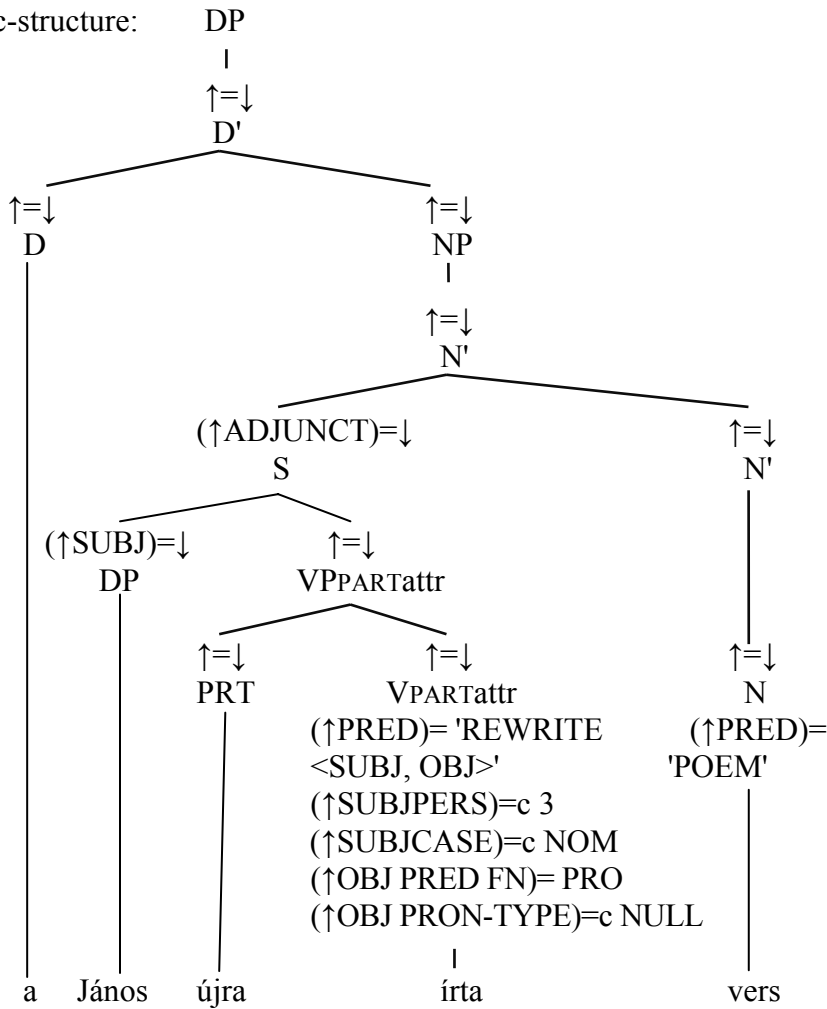
1. LFG is a representational (as opposed to derivational) model. It assigns its two syntactic structures to every sentence in a parallel, simultaneous fashion. The two representations are related by means of functional annotations associated with the nodes in c-structure. In other words: these annotations provide the mapping from c-structure to f-structure. C-structures capture language-specific properties (e.g. word order, phrase structure), while f-structures (attribute-value matrices) encode invariant grammatical relations across languages.
2. In (44), the \uparrow SUBJNUM= SG agreement annotation is not appropriate: in this paper it has been pointed out several times that the most plausible generalization is that TA predicates are only marked for third person subject agreement in present day Hungarian.
3. As the representations in (44) and (45) illustrate, in LFG's constituent structures there are no positions for empty categories like covert pronouns.³⁰ The covert object pronoun of the TA predicate, for instance, is encoded in the lexical form of the predicate, see the first two lines in (35c) and the relevant annotation above *építette* in (44). As a result of this encoding, the pronominal element is represented in f-structure, see (45). It may be instructive to compare Márkus' (2009) MP structure in (33), which does have a position for the covert object in its syntactic tree: NP_{Ob}, with (44) and (45).
4. As I discussed in point 14 above, in Laczkó (2001) I assume that the T suffix of TA constructions converts a verb into a stress-avoiding predicate requiring that (in neutral clauses) the position immediately preceding it should be filled by a designated argument. The c-structure in (44) has been designed to capture this aspect of the analysis. It is for this reason that I only use a simple VP constituent headed by the TA participle and accommodating one additional position for the subject. Obviously, this structure is suitable for (41a) and (42a); however, when a preverb (having a semantic contribution of its own in addition to perfectivization) also legitimately appears in the construction, as in (42b), then a serious problem arises: it is generally assumed across (generative) models (with irrelevant differences in details for our present purposes) that a preverb occupies the specifier position of the VP constituent.³¹ For a recent overview and an LFG analysis, see Laczkó & Rákosi (2011). The problem is that if the preverb occupies the [Spec,VP] position, the subject has no chance to appear within the VP. The solution is that we need a larger syntactic projection. In the spirit of Laczkó & Rákosi (2011), I propose the following analysis of (42b).³²

³⁰ Given that LFG is a non-transformational theory, it does not admit traces of moved elements as empty categories either.

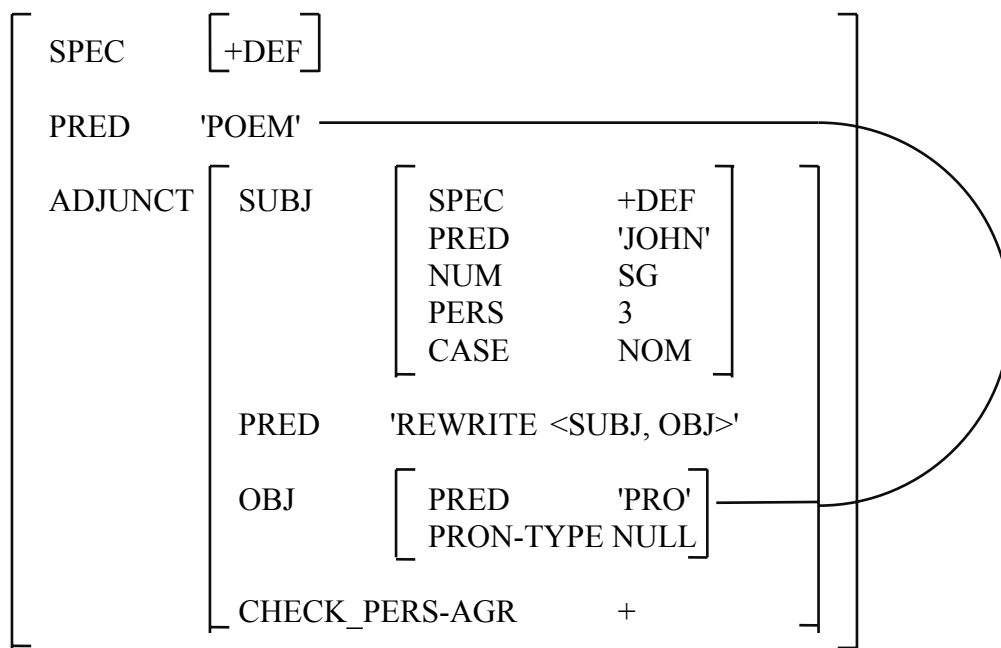
³¹ Despite the fact that the traditional Hungarian orthographical convention spells the two morphemes as one word.

³² In (46) and (47) I make the representations more appropriate according to the LFG formalism (as compared to (44) and (45)), and I also encode some crucial aspects of my new analysis presented in (35) and (36).

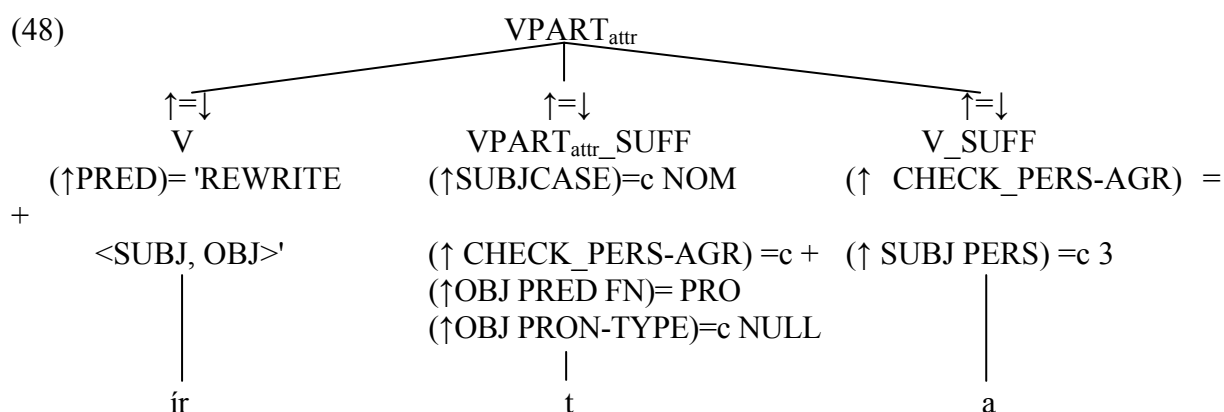
(46) c-structure:



(47) f-structure:



The preverb (bearing the syntactic category PRT, cf. particle) occupies the specifier position within the VP. The whole TA construction has the (sentential) S projection, and the subject of the construction is the sister of the VP. It is important to note that LFG employs both endocentric and exocentric phrasal representations in a principled manner, which is subject to parametric variation within and across languages. For the details of my view of the analysis of Hungarian particle verb constructions (which are not relevant to this paper), see Laczkó & Rákosi (2011). Given this example and these details of the analysis, the empirical generalization in section 2.6 has to be modified. Not all TA constructions can only contain two constituents: the participial head and the subject. The correct generalization is that the structure potentially has to accommodate three positions: subject, preverb, participle. It is another important aspect of my new approach that although a full sentential structure is available in TA constructions, the ingredients of the analysis in (35b) and (35c) ensure that only the subject argument of the participle can overtly appear in the construction. The preverb (when licensed by its meaning contribution) can also appear, but this can be taken to logically follow from the fact that it is part and parcel of the participial predicate.³³ Information about the source for the CHECK feature in (47) as well as about the contributions of the individual morphemes of the TA participle is given in the following LFG style sublexical structural representation.³⁴



All the three morphemes are functional heads ($\uparrow=\downarrow$), which means that they directly contribute information to the f-structure of the whole word. In addition, the T derivational suffix is also the categorial head of the word. The verb contributes the value of the PRED feature of the word: its meaning and argument structure. The T suffix constrains that the subject's has to be nominative, and the object of the overall predicate has to be a covert pronoun. Furthermore, it requires, by dint of the relevant pair of CHECK feature annotations, the presence of a special verbal suffix which prescribes that the person feature of the subject should be third, and which imposes no number specification on the subject.

³³ In LFG terms, they are functional co-heads of the construction (represented by the $\uparrow=\downarrow$ annotation associated with both of them). In more general terms, they together make up a complex predicate. For further details, see Laczkó & Rákosi (2011).

³⁴ Notice that in this analysis the preverb *újra* 'again' is not part of the morphologically complex participle, see (46). However, in the lexical representation of this use of the input verb, the meaning of the complex predicate is given, see (48). For the technical details of an LFG-XLE treatment of such particle verb constructions in Hungarian, which are not relevant to this paper, see Laczkó & Rákosi (2011).

5.2 A comparison of Márkus' (2009) analysis and my new account

In the discussion below, I follow the thematic order of the subsections in section 2.

5.2.1 The homophony of the T suffix

Both Márkus (2009) and I analyze the T morpheme in TA constructions as a participial suffix (agreeing with Kenesei (1986) and rejecting Nádasdi's (2006) past tense marker analysis). We set out to develop an analysis in our respective frameworks (MP and LFG).

5.2.2 The case of the subject argument

As is well-known, in the Chomskyan tradition (GB, MP) the notion of abstract Case has a distinguished role, fundamentally responsible for specifying syntactic positions in which (overt) noun phrases can occur. Thus, this theory of Case is one of the central organizing principles of admissible structural configurations. In Kenesei's (1986) GB framework the postulation of an agreement-marked participle (with the consequent functional projection) was sufficient for ensuring that the subject of the TA participle could get its abstract Nominative case. In Márkus' (2009) MP framework a TP (Tense Phrase) projection would be necessary for the same purpose, see section 4. However, on the basis of other independent (theory-internal) considerations, she assumes that TA constructions are smaller than TP projections; therefore, she is forced to have recourse to a kind of "hand-waving" elsewhere solution. Its essence is that if in a configuration (which is grammatical in the given language) a noun phrase cannot get a decent abstract Case then it can be saved by assuming that it receives an elsewhere morphological case "post-syntactically". Needless to say, this solution is rather marked in Márkus' (2009) system.

By contrast, the whole idea of abstract Case (in its aforementioned central structural organizing role) is absolutely alien to the architecture and basic assumptions of LFG. In this theory, one of the major principles of analysis and representation is "what you see is what you get". In this vein, there is nothing surprising about the fact that a particular predicate type imposes a particular case requirement on (one of) its arguments. Moreover, given the nature of TA constructions, it seems reasonable to assume that if an inflected predicate is capable of specifying the agreement properties of its subject argument (third person, in this particular case), it is also capable of specifying its subject's case feature, see the (\uparrow SUBJCASE)=c NOM constraining equation in (35c), (36) and (48).

5.2.3 The status of the final morpheme

As is discussed in section 4, the directly relevant aspects of the four salient previous analyses in this respect are as follows.

- (49) a. Kenesei (1986): T = participial suffix, A = subject agreement marker
 b. Laczkó (2001): T = participial suffix, A = subject agreement marker
 c. Nádasdi (2006): T = past tense marker, A = definite object agreement marker
 d. Márkus (2009): T = participial suffix, A = definite object agreement marker

Márkus' (2009) view can be taken to be a mixture of the Kenesei (1986) & Laczkó (2001) vs. Nádasi (2006) contrast in (49). Although she subscribes to the participial treatment of T, she assumes that A is a definite object agreement marker. The fact that in the paradigm of TA constructions we do find forms that are definitely identical to a PAST.3SG.DEF verb form, see the (23a) vs. (23b) contrast, for instance, lends partial support to the definite agreement marker analysis of A. However, there are several facts and considerations that support the subject agreement marker view. (i) It is unquestionable that TA constructions are of a nominal/participial origin and they acquired some verbal properties later, see Károly (1957) in section 3. It is not at all easy to ascertain whether some formal paradigmatic changes (partially triggered by the participial suffix ~ past tense marker homophony of the T suffix) have also led to a functional and/or categorial change in these constructions.³⁵ It is for this reason that additional factors need to be taken into consideration. (ii) Márkus (2009) herself admits that she has no (principled) explanation for why other participles in Hungarian never exhibit definite object agreement properties. She can only offer the following speculation. Within non-finite clauses (as opposed to finite clauses), definite object agreement is optional, and for economical reasons it is not expressed unless it is triggered, in our case, by the presence of an (always covert) resumptive pronoun. I find this assumption somewhat circular, to begin with, especially in the light of Márkus' own remark in which she points out that in Hungarian (the generally assumed) covert (object) pronouns strictly trigger singular agreement, and in TA constructions a plural version of the covert resumptive pronoun should also be assumed.³⁶ In addition, I think it is rather counter-intuitive that there is an obligatory subject argument in the construction and the predicate, according to Márkus, does not agree with it, or, as she puts it, "it has no morphological reflex" (Márkus 2009: 38, the translation is mine, TL). (iii) See the next subsection about subject/possessor-predicate agreement parallels across possessive noun phrases, TA and infinitival constructions.

5.2.4 The speciality of subject agreement

As we have seen, it is one of the most crucial aspects of Márkus' (2009) analysis that she assumes that TA constructions are not TPs, and from this it follows that there can be no subject-predicate agreement in them (I think it is partially for this reason that she takes the A suffix to be an object agreement marker). However, both on the basis of the nominal/participial origin of TA constructions and on the basis of striking parallel formal properties in possessive noun phrases, in TA constructions and (optionally) in infinitival constructions, the idea that we are dealing with the same manifestation of subject/possessor-predicate agreement naturally suggests itself, see the examples in (27) and (28) and the discussion in section 4. My account can capture these facts, while Márkus' (2009) analysis cannot.

³⁵ According to Nádasi (2006): YES, according to Márkus (2009): PARTIALLY, and according to Kenesei (1986) and Laczkó (2001): NO, see (49).

³⁶ Márkus tries to solve this problem by pointing out that in the case of some other Hungarian phenomena we also find a lack of (plural) agreement. Her example is from the agreement behaviour of certain overt (partially pronominal) preverbs and oblique arguments. I think this is a rather remote and vague analogy, given that in the case of TA constructions she is supposed to tackle the behaviour of a covert pronoun.

5.2.5 Third person lexical NPs and reflexive pronouns as subjects

As has been discussed in section 2.5 and fully exemplified in (38) in section 5.1, in addition to (either singular or plural) lexical noun phrases, the whole reflexive pronominal paradigm can also be used as the subject in TA construction, but all the forms invariantly and obligatorily trigger the third person agreement marker on the participle. In section 2.5 I also point out that lexical NPs and reflexive pronouns behave in the same manner as possessors in possessive noun phrases. It stands to reason that the most straightforward way of capturing this parallel is to assume that the agreement patterns are the same: subject-predicate in TA constructions and possessor-noun head in possessive noun phrases.³⁷ Needless to say, in Márkus' (2009) approach this parallel cannot be drawn, which by itself can be taken to be an important shortcoming.

5.2.6 The two-constituent constraint

In section 5.1, I slightly modify the two-constituent constraint generalization of section 2.6 and, in agreement with Márkus (2009), I point out that in addition to the obligatory (and obligatorily overt) subject, a preverb can also appear in TA constructions. In section 5.1, I show how I treat this property of these constructions in my new analysis. Márkus does not address this issue at all, and she leaves it to future research. As far as I can see, in her analysis, too, the preverb could be accommodated structurally within the AspP constituent.

5.2.7 Covert object control

As has been mentioned in section 2.7, TA constructions are also special inasmuch as it is their covert (= missing) object that is identified with the head of the noun phrase they premodify. This speciality is due to the fact that in all other Hungarian participial constructions (and also in infinitival constructions) it is the covert subject that is controlled in this way. In my LFG analysis this exceptional property can be easily encoded in the lexical form of the participle (see section 5.1). We have also seen that Márkus (2009) uses a special resumptive pronominal device. This solution, however, has some theory-internal problematic aspects, see subsection 5.2.3.

In this connection let me make a more general point. In either Márkus' analysis or mine, the postulation of the control of a pronoun is not of the ordinary, widely assumed kind. It is typically held that it is referential pronominal elements that are controlled (i.e. referentially bound) by fully referential noun phrases. In our current case, however, the covert pronominal element is controlled by the head of the noun phrase, see the f-structure representation in (47) in section 5.1. As such, the head cannot be taken to be a referential element. From this it follows that our classification of pronominal elements and their controllability has to be made

³⁷ Drawing this parallel is independently supported by the fact that possessors are quite widely analyzed as subjects of noun phrases.

finer-grained so that we can accommodate these instances of control as well. For a discussion and proposal, see Laczkó (2002).³⁸

5.2.8 *A severe semantic constraint*

Kenesei (1986) and Laczkó (2001) point out that in the productive use of TA constructions, the first argument of the predicate has to be an agent and the second has to be an affected argument. In Laczkó (2001), I include this in the analysis rather informally, and in my new account in section 5.1, I sketch a more appropriate formal LFG treatment (and I also mention a possible alternative). Márkus (2009) accepts the affectedness constraint generalization, but she does not even make an attempt at formalizing it in her analysis.

6 Concluding remarks

In this paper I have revisited Hungarian TA constructions. First, I gave a critical overview of some salient recent analyses (including my own account proposed in Laczkó (2001)) and then I developed a much more detailed, formally and empirically more appropriate and feasible LFG analysis (5.1), which I systematically compared with Márkus' (2009) MP analysis (5.2).

Below I make some general comments on these two approaches.

1. If the two analyses, as they now stand, are compared, it can be observed that mine is more comprehensive, more detailed and formally much more fully developed than Márkus' with respect to covering the eight major properties of TA constructions Márkus herself discusses, see sections 2.1-2.8 and 5.2.1-5.2.8.
2. Given the multiply exceptional and highly constrained behaviour of these constructions, it is inevitable that those aspects have to be captured in an appropriately and adequately special (or stipulative) way in any approach. At the same time, it seems to me that Márkus' account faces several theory internal challenges. On the one hand, she herself admits that some crucial aspects of her approach are rather marked given the general architecture and assumptions of her framework. On the other hand, I suspect that her formally handling those properties of TA constructions that she has not handled yet would add considerably to the theory internally marked character of her overall approach. For discussion and criticism, see sections 5.2.1-5.2.8.

³⁸ It is worth pointing out that the special control relation either Márkus or I (or any other approach) have to postulate may pose an additional challenge for Márkus' analysis, in which the covert resumptive pronoun triggers definite object agreement. On her account, the resumptive pronoun is taken to trigger the definite object agreement on the TA participle. The essence of the additional challenge is that, no matter what the details of the approach are, the pronoun to be controlled has to be definite (otherwise it could not trigger definite object agreement to begin with); however, the noun head by itself, or the interpretation of the entire NP can also be indefinite, see the following example.

(i) egy János tervez-t-e épület
a John.NOM design-T-3 building
'a building designed by John'

No matter what the relevant details of this aspect of Márkus' analysis can be, it is rather surprising that a definite resumptive pronoun is controlled by (the head of) an indefinite NP. I thank Péter Pelyvás (p.c. June 4, 2013) for this observation.

3. There is a significant architecture-specific difference between the two approaches: Márkus' MP analysis is syntactic in nature, while my LFG account is lexical. Márkus postulates a special attributive clausal projection (AspP) for the sake of handling this single, highly exceptional and constrained construction. This essentially syntactic account (also burdened with theory internally marked aspects) seems to me to be too powerful.³⁹ In addition, it is hard to see (and Márkus does not really elaborate on this) how she can ensure (encode) that, on the one hand, this special configuration should and must be available to TA constructions, and, on the other hand, it must not be available to any other attributive participial construction in Hungarian. By contrast, in my LFG analysis, syntactic structure is intact, and all the regular and exceptional properties of TA constructions are adequately and explicitly captured in a formally and technically satisfactory manner, see sections 5.2.1-5.2.8. Moreover, the lexical nature of the analysis has two interrelated advantages. On the one hand, the preferred locus of the treatment of a construction which is exceptional to this extent is the lexicon, and, on the other hand, it provides a straightforward tool for encoding that this construction is constrained to TA participles.

Finally, let me make two further general concluding remarks.

- The mixed and exceptional behaviour of TA participles nicely illustrates how powerfully analogy can work across various historically and/or formally (homophonously) related constructions.
- In Laczkó (2001: 753) I point out an additional property of TA constructions. It appears to be a fairly strong tendency that (other conditions being satisfied) those examples sound perfectly natural and fully acceptable which contain relatively short NPs with a preferably simple internal structure. The reason for this is that the past tense marker and the TA participial suffix are homophonous, TA constructions are relatively rare, and the longer and the more complex a TA subject is, the listener is more and more likely to interpret the T constituent as a past tense marked verb, rather than a TA participle (a garden-path effect). Thus, we can call this further, processing restriction a “no heavy NP subject” constraint.

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³⁹ For obvious reasons, this critical remark also holds for Nádasi's (2006) analysis.

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