From pronoun to clausal correlate: The versatility of the Hungarian demonstrative

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Abstract

This paper offers a comprehensive LFG-account of three Hungarian constructions that can host what at first seem to be instances of the selfsame demonstrative pronoun: adnominal demonstratives, demonstrative correlates of finite *that*-clauses, and demonstrative correlates of noun phrases in topic left dislocation. We treat synchronic variation in this domain as a result of different historical paths of grammaticalization, and provide an outlook on the pertinent diachrony.

1 Introduction: Aims and claims†

The Hungarian demonstrative pronoun has a versatile character. Besides functioning as a par excellence pronominal demonstrative, it also features in a special adnominal demonstrative construction, where it co-occurs with the definite article. Furthermore, what looks like the selfsame demonstrative element also functions as the correlate of finite *that*-clauses and of noun phrases in topic left dislocation. In this paper, we aim to capture this variation in the synchronic system by developing an LFG-based account that recognizes the ties between the apparently different functions of the demonstrative element.

Our fundamental claim is that the demonstrative elements in these constructions are grammaticalized variants of the basic demonstrative pronoun. Where relevant, we briefly discuss the diachrony of these constructions to be able to have a better grasp on the synchronic data. In our analysis of the pertinent historical changes, we follow existing LFG research treating grammaticalization as a complex, possibly non-unidirectional historical change (see, especially, Vincent 2001, Börjars & Vincent 2017, Booth & Butt 2023, and Lowe 2015).

The structure of this paper is as follows. Section 2 is a succinct overview of the descriptive background. The adnominal construction, the finite *that*-clause construction, and the topic left dislocation construction are discussed in Sections 3, 4 and 5, respectively. Section 6 concludes the paper.

2 Descriptive background

Hungarian has a two-way demonstrative system with the distal form az 'that' and the proximal form ez 'this' (henceforth: az_1 and ez_1). Unlike personal pronouns, demonstratives inflect for number and case in a transparent manner, in analogy with lexical noun phrases. Consider (1) and (2) for illustration:¹

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¹ We use the following abbreviations in the glosses:

^{1,2,3:} first, second and third person, ACC: accusative case, AUX: auxiliary, COMP: complementizer, COND: conditional, DAT: dative case, DEF: definite conjugation, IMP: imperative, INDEF: indefinite conjugation, INE: inessive case, INF: infinitive, NOM: nominative case, PL: plural, POSS: possessive marking on the possessum, PRT: verbal particle, SG: singular.

The f-structure on the right spells out the feature content of the plural demonstrative. In particular, we assume in this paper that the deictic force of the demonstrative pronoun is decomposed into a DEICTIC feature proper, representing the core attention-directing function of demonstratives; and a PROXIMAL feature, which captures the referential distance effects. We also assume that this demonstrative is a D, and it projects a DP in all of its uses (see Dékány 2021: 102 for pertinent discussion).

In the adnominal demonstrative construction, the demonstrative (identical to the pronoun in form) co-occurs with the definite article, which, like in many other languages, is a historical derivative of the demonstrative pronoun itself (see Diessel 1999 for an overview, and Egedi 2014 on the diachrony of the Hungarian definite article). The adnominal demonstrative, which we refer to as az_2 , shows NUMBER and CASE agreement with the noun head.

(3) János látta az2-ok-at a film-ek-et.

John saw.DEF.3SG that-PL-ACC the film-PL-ACC

'John saw those films.'

The distal demonstrative form also functions as an associate of finite *that*-clauses (az_3 , see example 4), or of a noun phrase in left dislocation (az_4 , see example 5).

- (4) János az₃-t mondta, hogy a film érdekes.

 John that-ACC said.DEF.3SG COMP the film interesting 'John said that the film is interesting.'
- (5) A film-et, az₄-t János is látta. the film-ACC that-ACC János too saw.DEF.3SG 'Those films, John saw them, too.'

What the demonstrative constructions in (3), (4) and (5) share, we argue, is that some version of the demonstrative pronoun stands in juxtaposition with another constituent. We discuss these three constructions in the next three sections respectively, and spell out our LFG analysis for each.

3 Adnominal demonstratives

3.1 On the diachrony of adnominal demonstratives

The agreeing adnominal demonstrative construction spread in the Middle Hungarian period (16th-18th centuries), gradually replacing the non-agreeing construction that dominated Old Hungarian. Example (6) is a 17th century example of the old, non-agreeing demonstrative, which shows no number or case concord with the noun head. Example (7) is its Modern Hungarian equivalent featuring the agreeing demonstrative.²

² Example (6) is from the Corpus of Middle Hungarian Memoires and Dramas (Gugán et al. 2023).

- (6) **non-agreeing adnominal construction** *ez eddig irt hadakozás-ok-ban*this so.far written fighting-PL-INE
 'in these fightings written (about) so far'
- (7) **agreeing adnominal construction** (Modern Hung.) ez-ek-ben az eddig irt hadakozás-ok-ban this-PL-INE the so.far written fighting-PL-INE 'in these fightings written (about) so far'

The birth of the agreeing adnominal construction was concomitant with the rise of the definite article (which itself is an Old Hungarian derivative of the distal demonstrative): native speakers of the age juxtaposed, it seems, the definite article, which had just gained general currency, and the demonstrative within the confines of a single nominal construction.

Egedi (2025) provides a comprehensive discussion of the historical changes that led to the contemporary system, arguing that the initial stage involved a truly appositive construction. Two kinds of arguments support this view. First, in Middle Hungarian, discourse particles and lexical possessors could intervene between the demonstrative and the noun phrase, unlike in Modern Hungarian. Note the position of the possessor in our examples in (8) and (9): while it must precede the demonstrative in Modern Hungarian (8), we see a demonstrative > dative possessor > possessum linear order in (9).³

- (8) *a természet-nek ez-t az adó-já-t* (Modern Hung.) the nature-DAT this-ACC the tax-POSS.3SG-ACC 'this tax of nature'
- (9) ez-t a természet-nek adó-já-t (1710) this-ACC the nature-DAT tax-POSS.3SG-ACC 'this tax of nature'

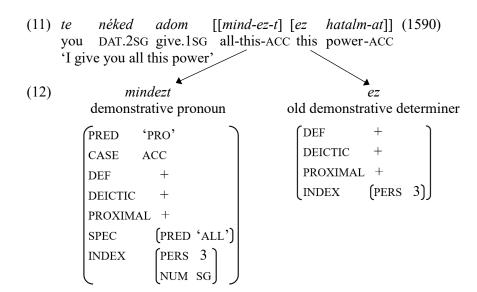
Second, the proximal demonstrative pronoun could co-occur with the proximal adnominal demonstrative in some Middle Hungarian texts (11), unlike in contemporary Hungarian, where this is not an option (10).⁴ It is reasonable to assume that, as in (11), the pronominal demonstrative could form an appositive construction with a noun phrase containing the old non-agreeing demonstrative determiner.

(10) neked adom mind-ez-t a hatalm-at (Modern Hung.)
DAT.2SG give.1SG all-this-ACC the power-ACC
'I give you all this power'

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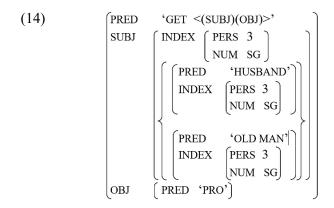
³ Interestingly, the intervening material typically seems to have broad scope over the whole construction in Middle Hungarian examples, as far as it can be judged from the textual contexts. Examples (8) and (9) thus apparently have the same semantics. Example (9) is from the Corpus of Middle Hungarian Memoires and Dramas (Gugán et al. 2023).

⁴ (11) is an example from a 1590 translation of the Bible (source: Old Hungarian Corpus, Simon et al. 2014). Egedi (2025) notes that this construction mostly appears in Middle Hungarian religious texts.

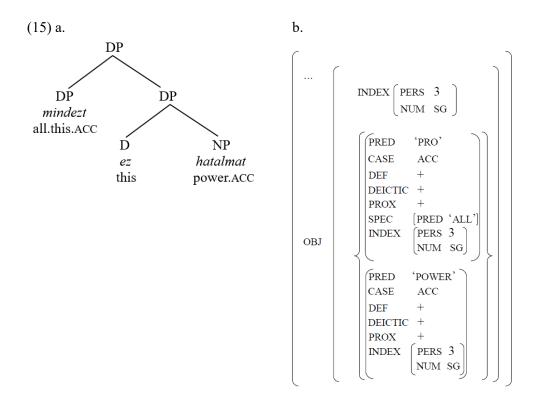


We therefore argue that the demonstrative construction in (11), representing the initial stage of the development of the current agreeing adnominal construction, *is* a true appositive structure. The analysis that we propose in (15) below is inspired by Sadler and Nordlinger's (2009) treatment of nominal apposition and juxtaposition constructions in Australian languages. In their account, several NPs can co-specify a given grammatical function, even in a discontinuous manner. The semantic relation between the NPs can vary widely from generic–specific or part–whole relations to inclusory constructions. For illustration, see the example in (13) and the corresponding f-structure in (14).

(13) Garidini bungmanyini gin.amany yanybi. (Wambaya) husband.ERG old.man. ERG AUX.3SG get '(Her) old man husband came and got (her).' (Sadler & Nordlinger 2009: 433)



The Middle Hungarian demonstrative construction in (11) is a more canonical appositive structure in the sense that it includes two constituents with identical syntactic function and reference. Our analysis is in (15).

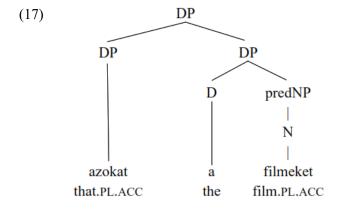


As we argue here, understanding this initial diachronic stage provides us with a vantage point for the study of the synchronic adnominal demonstrative construction, which we turn to in the next subsection.

3.2 Adnominal demonstrative in the synchronic system

Consider the following sentence, our key datapoint in this section (ex. 3 repeated).

We are aware of only one (rather undeveloped) proposal in the generative literature that employs an appositional configuration even in Modern Hungarian: É. Kiss (1998: 81-82). Her analysis of the relevant construction in (16) would be as follows (17).



She assumes, agreeing with all other accounts, that the demonstrative element is a DP (because it can occur on its own as a referential pronoun). Then she points out that agreement between the demonstrative and the noun head is unattested elsewhere in Hungarian DPs; therefore, the construction can only be taken to be appositional, given that it is only the two elements in an appositional structure that exhibit this agreement behavior. É. Kiss does not address any potential problems for this approach.

By contrast, all the other generative (GB and MP) analyses we are aware of reject the appositional treatment of the present day Hungarian construction, and they postulate a matrix DP whose specifier position is occupied by the demonstrative element, see, for instance, Kenesei (1994: 294-296), Bartos (2000: 704-708), Dékány 2021: 100-113) and Egedi (2025: 14-17). The two most often used arguments against the appositional approach are the following. (i) The demonstrative and the definite article must be strictly adjacent. (ii) There can be no prosodic boundary between the demonstrative and "the rest of the configuration". We can add that notional agreement between the two parts is no longer available. That is, while (18a), a true appositive construction is grammatical, and (18b), which contains the adnominal demonstrative, is not.⁵

```
(18) a. ez-ek,
                     (vagyis) az
                                     új
                                           csapat
        this-PL.NOM that.is
                                    new team.SG.NOM
         'these, that is, the new team = these people, i.e. the new team'
     b. *ez-ek
                        az
                              új
                                    csapat
         this-PL.NOM
                        the
                              new team.SG.NOM
```

It is a major challenge for the Spec, DP approach that modifiers and determiners do not agree for case, person, and number with their noun heads elsewhere in Hungarian.⁶ The generative approaches mentioned above use different formal devices to capture this agreement behaviour. For example, Kenesei (1994) simply assumes Spec-head agreement, while Bartos (2000) introduces a special case-percolation operation: the case of the matrix DP percolates down onto the demonstrative pronominal DP (needing case) in Spec, DP.⁷

It appears to be a shared shortcoming of the generative analyses cited here that they do not address the status of the demonstrative element in Spec, DP. Either explicitly or implicitly they assume that it is the same demonstrative pronoun as is used on its own. However, if it is an ordinary referential pronoun (our az₁ 'that₁') then its automatic coreferentiality with a D' constituent within the matrix DP cannot be feasibly captured.8

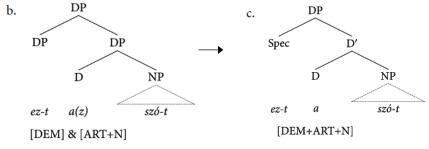
Egedi (2025) proposes that a truly appositional construction in Middle Hungarian underwent reanalysis yielding the Modern Hungarian constituent. Consider her structural generalization in (19) (2025: 16).

⁵ Some speakers may find (18a) somewhat marked because here the demonstrative is associated with +HUMAN entities (contrary to its typical use). This is, however, orthogonal to our point, see Farkas & Alberti (2018: 21-24) for notes on this issue. For further arguments against the appositional treatment, see Bartos (2000).

⁶ Recall that this is É. Kiss' (1998) major argument for her appositional approach.

⁷ For further details, see the works mentioned above.

⁸ Note that É. Kiss' (1998) appositional treatment can naturally handle this, but it has serious shortcomings in several other respects that render it untenable, see above.

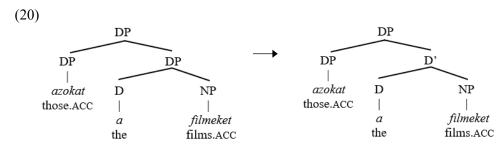


Middle Hungarian

Modern Hungarian

In our LFG analysis to be developed here, we assume that the Modern Hungarian adnominal demonstrative construction is the result of a grammaticalization process with the following main ingredients.

We subscribe to Egedi's (2025) approach, see our reanalysis treatment of the key example from (16) in (20), and compare (19b,c) with (20).



We assume that the agreement for case and number between the demonstrative and the noun head has simply been retained in the process of grammaticalization. In the Middle Hungarian appositional configuration two DPs were in an agreement relationship, while in the Modern Hungarian counterpart the demonstrative DP in Spec,DP agrees with the noun head of the matrix DP. This is a simple and natural explanation for the exceptional agreement facts in present day Hungarian, as opposed to É. Kiss' (1998) highly problematic claim that even the Modern Hungarian version is an appositional structure.

Importantly, we also assume that in the grammaticalization process the demonstrative DP lost its PRED feature,⁹ i.e. it is no longer a referential pronoun, see the two respective lexical forms for the ordinary demonstrative pronoun $(az_1 \text{ 'that}_1')$ and for the adnominal use of the demonstrative element (az_2) .¹⁰

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⁹ This aspect of our grammaticalization analysis is comparable to the widely attested phenomenon of SUBJ and OBJ pro-drop. A SUBJ or OBJ marker suffixed to a verb stem originally functioned as an incorporated pronoun, and at a later stage it optionally dropped its PRED feature, and in the absence of the PRED feature only the agreement features remained, see Toivonen (2023), for instance.

¹⁰ Note that a PRED-less demonstrative is also posited for the determiner use of *this/that* in Dalrymple et al. (2019: 86-87).

```
(21) a.
            az_1, D
                                                                 b. az_2,
                                                                              D
                 (\uparrow PRED) = 'PRO'
                                                                         (\uparrow DEF) = +
                                                                         (\uparrow DEICTIC) = +
                 (\uparrow DEF) = +
                                                                         (\uparrow PROXIMAL) = -
                 (\uparrow DEICTIC) = +
                                                                         (\uparrow PERS) = 3
                 (\uparrow PROXIMAL) = -
                                                                         (\uparrow NUM) = SG
                 (\uparrow PERS) = 3
                                                                         (\uparrow CHECK ART) =_c +
                 (\uparrow NUM) = SG
```

In our analysis, az_2 is no longer a referential pronoun: it has become a PRED-less demonstrative element. This makes it possible for us to assume that in the process of reanalysis an important functional annotational change has also taken place: az_1 'that₁', a referential pronoun with a PRED feature, requires a GF annotation, while the PRED-less az_2 is naturally associated with the functional head annotation, which makes it a functional co-head in this configuration. This change enables us to avoid, in a principled manner, the (co-)referentiality problem with the demonstrative element in analyses that assume that it is an ordinary referential pronoun in its adnominal use as well, see the foregoing discussion. We analyze our key example in (16) as shown in (22) and (23).

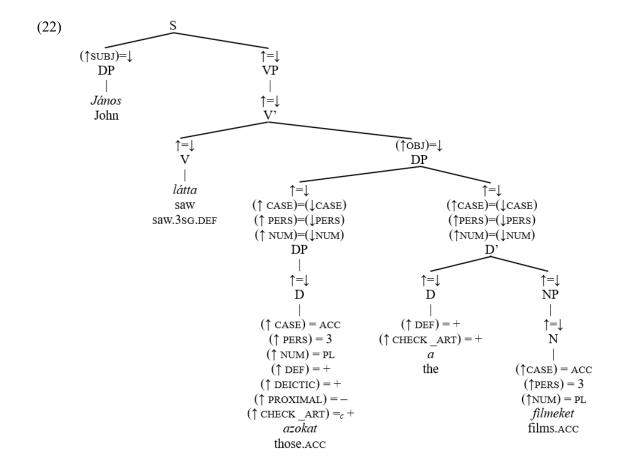
Our focus here is the representation of the object DP in (22). The demonstrative DP in Spec,DP and D' (ultimately headed by N) are functional co-heads, which is legitimate as the former has no PRED feature. The three annotations below the respective functional head annotations encode the agreement facts inherited from the appositional construction serving as input to reanalysis. The definite article and the noun head bring their usual annotations from their lexical forms. The lexical form of the demonstrative head we assume is given in (21b). The functional annotations in (22) yield the f-structure in (23).

Furthermore, it is a special property of this adnominal demonstrative construction that it must contain the definite article sitting in the D head position. We capture this fact by introducing a specific CHECK feature to encode the obligatory presence of the definite article in the construction. Hence, we insert the following constraining equation in the lexical form of az_2 'that₂' in (21b): (↑ CHECK _ART) = $_c$ +. This requires the presence, in the relevant configuration, of an element associated with the defining member of this CHECK feature pair. We insert this equation in the lexical form of the definite article as an optional annotation: ((↑ CHECK _ART) = +). Thus, this optional annotation will only be activated in the presence of az_2 in a DP. 12

¹¹ CHECK features come in pairs: there is a constraining equation, and it has a defining equation counterpart. These CHECK feature pairs can ensure that two elements will occur together in a

counterpart. These CHECK feature pairs can ensure that two elements will occur together in a particular configuration. For an example of this, see Laczkó & Rákosi's (2011) treatment of Hungarian particle verb constructions, in which the simplex verb and the particle are marked by corresponding CHECK features in their respective lexical forms.

¹² As we subscribe to Laczkó (2021) in terms of the general LFG-approach to Hungarian sentence-structure, (22) is headed by the exocentric S node.



Finally, we note that in the majority of analyses az_2 'that₂' and the dative-marked possessor DP are assumed to be in complementary distribution in Spec,DP. It is a well-known fact that dative possessors can be extracted from the matrix possessive DP, see (22). By contrast, the extraction of az_2 from the very same position is not allowed (23).

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¹³ In our LFG context, *extraction* is just a descriptive term. The theory's formal treatment is functional uncertainty and not movement.

- (22) Láttam [Jánosnak a filmjét]. → Jánosnak láttam [a filmjét]. saw.DEF.1SG John.DAT the film.his.ACC 'I saw John's film.'
- (23) Láttam [azt a filmet]. \rightarrow *Azt láttam [a filmet]. saw. DEF.1SG that.ACC the film.ACC 'I saw that film.'

Our explanation for this contrast is that the possessor has a GF (POSS), while the demonstrative, being a functional co-head, has no GF, and the necessary (but not sufficient) condition on extraction is that the element involved should have a GF.

4 Clausal correlate demonstrative

 Az_1 'that₁' can be used to refer to clausal or propositional entities within standard discourse deixis, appearing both cataphorically (24a) and anaphorically (24b). In such cases, the demonstrative is co-referential with an independent clause.

- (24) a. János az₁-t mondta: "A film érdekes". John that-ACC said.DEF.3SG the film interesting 'John said: the film is interesting.'
 - b. "A film érdekes." János mindig az₁-t mondja. the film interesting John always that-ACC says.DEF.3SG 'The film is interesting. John always says that.'

Moreover, Hungarian features a distinctive construction involving the nominal demonstrative, which functions as a proleptic correlate pronoun linked to a subordinate clause. Apart from answering a question like *What did John say?*, (25) can be used out of the blue, or as a broad-focus response to a question like *What happened?*.¹⁴

(25) János az₃-t mondta, hogy a film érdekes.

John that-ACC said.DEF.3SG COMP the film interesting 'John said that the film was interesting.'

Here we propose that (25) involves a distinct variant of az – here labeled as az_3 and referred to as a "clausal correlate". Our analysis is in line with Szűcs (2022), wherby this demonstrative is analyzed in LFG following the GF-unification-based approach of Berman et al. (1998). This analysis is outlined in Section 4.2, following a short diachronic overview of the development of this element.

4.1 On the diachrony of clausal correlates

According to É. Kiss (2023), finite subordination began to emerge in Old Hungarian around the 12th century. Prior to that, subordination was either nonfinite or achieved through parataxis, typically in the form of direct quotation using an independent clause. Such quoted material was often introduced by an anticipatory demonstrative pronoun in the main clause. While É. Kiss's study focuses on the adverbial demonstrative $\dot{u}gy$ 'so.DIST' in this role, the same holds true for az 'that', which appeared somewhat later (the adverbial may already be found in the 14th century, while the nominal becomes

¹⁴ We restrict our discussion and analysis here to sentences with assertive/non-factive main verbs. Verbs of other semantic types show a different behavior. However, going into such details would take us far afield. See Szűcs (2022: 355-356) for discussion and references.

common in the 15th century). Note also the contrast in definiteness agreement on the verbs in (26) and (27). In the former sentence, *mond* 'say' is intransitive, while in (27), the demonstrative serves as its object. The historical examples in this section are from the Old Hungarian corpus of Simon et al. (2014).¹⁵

- (26) Úgy mond Szent Gergely doktor: az igazaknak so.DIST says.INDEF saint Gregory doctor the thruthful.DAT erőssége a testnek győzése. strength.POSS.3SG the body.DAT defeat.POSS.3SG 'So says Saint Gregory: it is the strength of the truthful to defeat the body.'
- (27) Az-t mondják vala: ó én édes Istenem volnának mégis that-ACC say.DEF.3PL been oh my sweet god be.COND.3PL still több tagjaink, hogy teérted adhatnók.
 more limbs.POSS.1PL COMP for.you give.COND.1PL

 'They said (that): O my dear God, if only we had more limbs to give to you.'

By the 15th-16th centuries, the earlier paratactic construction grammaticalized into genuine subordination (illustrated in 25), involving both the adverbial and the nominal demonstrative pronouns. Both are parts of the grammatical system of contemporary Hungarian, and their distribution is governed by a range of lesser studied linguistic factors.¹⁶

4.2 Clausal correlate in the synchronic system

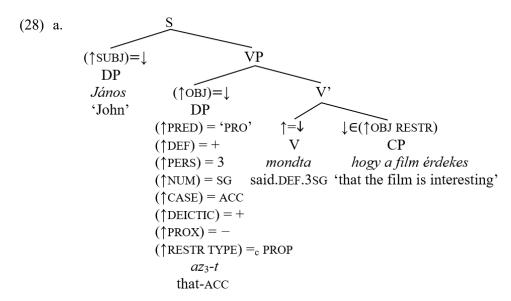
Agreeing with Szűcs's (2022) treatment, we adopt the "unification"-style analysis based on Berman et al. (1998). In particular, we propose that az_3 'that₃', as a demonstrative, and the subordinate clause jointly constitute the OBJ of the main predicate. In this approach, the pronoun contributes an instantiated semantic variable, which is crucially distinct from specifying/restricting the content of such a variable. The restriction is done by the clause, in a sub-f-structure. Ultimately, the contributions of both the pronoun and the clause are unified within the OBJ function of the main predicate.¹⁷ Consequently, for (25), we propose the c-structure and f-structure representations in (28), with the lexical entry for az_3 shown separately in (29).

the relativizer was reanalyzed as a complementizer.

¹⁶ For instance, with some verbs (e.g. *tud* 'know'), using *úgy* 'so.DIST' vs. *az* 'that' is associated with the non-factive vs. factive interpretation of the CP. These issues are beyond the scope of our paper.

¹⁵ The diachronic primacy of the adverbial demonstrative is supported by its role in the historical development of the Hungarian complementizer *hogy*. Originally, *úgy* 'so' and *(a)hogy* 'how' formed a correlative pair, analogous to other demonstrative-relativizer pairs in the paradigm (such as Hungarian equivalents of *that...who*, *then...when*, or *there...where*). According to É. Kiss (2023), this correlative structure was repurposed for finite subordination. In this process,

¹⁷ In the words of Berman et al. (1998), it is possible to "make a distinction between (i) the introduction of an instantiated symbol (i.e. a variable or a discourse referent): [PRED '...']; and (ii) the specification of a semantic relation restricting such a variable (the separation of the latter is technically achieved by introducing the semantic relation embedded under a set-feature RESTR resembling the adjunct feature; this makes the outer f-structure compatible with an ordinary PRED value from elsewhere: [RESTR {[PRED '...']}]".



```
(29) az_3, D

(\uparrow PRED) = 'PRO'

(\uparrow DEF) = +

(\uparrow DEICTIC) = +

(\uparrow PROXIMAL) = -

(\uparrow PERS) = 3

(\uparrow NUM) = SG

(\uparrow RESTR TYPE) =_c PROP
```

As we consider the pronoun az_3 'that₃' to be a demonstrative pronoun – specifically, a grammaticalized version of az_1 – we argue that it is endowed with the [DEICTIC +] and [PROXIMAL –] features. Accordingly, we maintain that, despite the less common and marked status of proximals, such forms are nonetheless compatible with the construction.

Support for this view can be drawn from both diachronic and synchronic data. Notably, the dominance of distal over proximal forms appears to be independent of the language's historical developmental stage. Rather, it seems that discourse-related deixis in Hungarian systematically favors distal forms, even when clearly contentful instances of az_1 'that' are involved, as illustrated in examples (26) and (27) above. Nevertheless, relevant occurrences of proximal forms can be found in both historical (29) and contemporary (30) authentic sources.

- (30) a. $hi\dot{u}$ dicsőség ez_1 -t mondja: mutassad ki a jót vain glory this-ACC says show.IMP.2SG out the good 'vain glory says this: show the good'
 - b. *ki ez*₃-*t hirdeted*, *hogy nem kell orozni*, *orozást* who this-ACC proclaim.2SG COMP not need rob.INF robbery.ACC *tész* do.2SG
 - 'whoever proclaims (this) that robbery is not needed, you do robbery'
- (31) a. Aztán ez₁-t mondja: Hát akkor legyen. then this-ACC says so then be.IMP.3SG 'Then he says this: so then let it be.' (Hungarian National Corpus, Oravecz et al. 2014)
 - b. *Tehát ez*₃-*t* látjuk, hogy nem hasznosul ez a rengeteg so this-ACC see.1PL COMP not gets.utilized this the plenty *pénz*.

'So what we see is that this huge amount of money is not put to good use.' (online, https://youtu.be/VKB8Ydff9zI?si=lm6Cit-dk9y1cPSn, 1:54)

The specific contextual conditions that license the use of proximal forms remain largely unexplored. Their distribution is likely influenced by factors such as the cognitive prominence of the proposition, and the speaker's stance towards it. While these factors merit further investigation, for the purposes of the present analysis, we believe that it is justified to assume that deixis forms part of the lexical specification of az_3 'that₃'.

As for NUMBER, az_3 'that₃' does not seem to occur in the plural. That is, sentences such as (32) are unattested in both diachronic and synchronic data.

(32) *János az₃-ok-at mondta, hogy ... és hogy ... John that-PL-ACC said.2SG.DEF COMP and COMP Intended: 'John said (those) that and that ...'

This restriction cannot be attributed to an incompatibility between the relevant verbs and plural pronominal objects. The historical corpus (Simon et al. 2014) does contain examples of such verb-object combinations. However, in those cases, the plural pronouns either introduce relative clauses or serve as anaphoric references to preceding sentences (that is, not instances of az_3).

(33) te pedig az₁-ok-at mondjad, melyek illenek az igaz you and that-PL-ACC say.2SG.IMP which.PL suit.3PL the true tudományhoz science.to

'And you should say those (things), which suit the true science.'

(34) és mikor ez₁-ek-et mondotta volna... and when this-PL-ACC said.2SG COND 'And when he was to say these (things)...' (reference to earlier statements)

As for the general issue with plural forms in sentences like (32), the problem probably stems from the difficulty of associating plurality with clausal or propositional entities. This may be because CPs may not have a number feature, so only the default singular pronoun can refer to them. This can also be seen in English: while for the purposes of agreement, coordinated CPs might, under certain circumstances, trigger plural concord (for details see McCloskey 1991), pronominal reference is strongly preferred as singular. In other words, clauses are generally associated with a singular number feature.

- (35) That he'll resign and that he'll stay in office seem at this point equally possible. (McCloskey 1991: 564)
- (36) Kate is the smartest student, but John is intelligent too. Everyone believes {this/?these}.

This explains why the relative clause in (33), in which the demonstrative is a nominal head, and the clause is possibly only an adjunct, can occur with the plural form *azokat* 'those.ACC'. Nevertheless, (34) still features a plural demonstrative but it is important to note, that such constructions are relatively rare in historical corpora, with singular forms being the far more common choice. Also, the sentences with the plural (33 and 34 alike) sound distinctly marked in contemporary Hungarian. This pattern suggests that alongside the issue of whether a category bears a number feature, there is a more general difficulty in associating propositional content with plurality. This interpretation aligns with broader tendencies in grammaticalization, where reduced variability in feature expression is a common outcome (Diessel 1999: 118). For us this means that the lack of plural occurrences like (31) may be explained not directly by the lack of NUM in *az*₃, but by general principles.

The restriction (\uparrow RESTR TYPE) =_c PROP is necessary for az_3 'that₃', to prevent it from being associated with arbitrary objects in its restriction. The restricting element must be a propositional CP as in (25), but not a simple entity as in (37). Importantly, *vicc* 'joke' would be legitimate object on its own. However, in (37), rather than specifying/restricting content of the demonstrative, its presence just results in incoherence by doubling the OBJ function.¹⁸

(37) *János az₁-t mondta a vicc-et.

John that-ACC said.2SG the joke-ACC
Intended, approx.: '*John said/told it the joke.'

In English (as in many other languages), there is no direct equivalent for az_3 'that₃' and even the standard demonstratives (*this* and *that*) are somewhat marked in discourse-related deixis – note that the translation of (34) is dispreferred. This is in line with the general stance of discourse-related deixis itself being a grammaticalization of the core exophoric function of demonstratives, as argued by Diessel (1999: 109-113). However, languages will differ with respect to particular consequences of grammaticalization: they could be a development of new instance of a demonstrative (az_3) or just usage restrictions (*?he said these*).

¹⁸ Constraining the restriction to be a CP might also be an option, although the optionality of the complementizer (Kenesei 1994: 333-339) complicates the issue.

We conclude this section with a brief critical overview of the alternative accounts proposed in the previous literature. The traditional account of the clausal correlate construction – originating with Kenesei (1994) and followed by many subsequent studies – maintains that the demonstrative functions as a semantically empty formative, i.e., an expletive. However, as opposed to expletives, the demonstrative in question: i) can assume various non-subject grammatical functions; ii) can bear discourse functions and be stressed accordingly; iii) occurs in a *pro*-drop language, and such languages are typologically not expected to host expletive elements; iv) can participate in a number of syntactic constructions which are normally unavailable for expletives (e.g. coordination, nominalization). For a more comprehensive discussion, the reader is referred to Laczkó (2022) and Szűcs (2022).

Because of such considerations, some later analyses (e.g. Szűcs 2015), interpret the demonstrative as an instance of az_1 'that₁', with the clause serving as an adjunct. Nevertheless, the clause does not seem to be one: i) conceptually, the CP contains the proposition associated with the main verb; b) the main verb imposes selectional restrictions on the subordinate clause; c) the subordinate clause is not set apart from the main clause by an intonational boundary, as would be expected in appositive clauses.¹⁹

Laczkó (2022) is another LFG-based account. Laczkó argues that az_3 is a personal pronoun (so no deictic meaning is involved) and it alone functions as a fully-fledged argument of the main predicate, with the subordinate clause serving as an argument of the pronoun, bearing a COMP function. This shares an important insight with our analysis: in some sense, clausal correlate az 'that' is "incomplete" without the accompanying clause. However, a key aspect of divergence lies in how this incompleteness is interpreted. Laczkó (2022) argues that the demonstrative is "incomplete" insofar as it is an argument-taking predicate. By contrast, the unification-analysis advocated here proposes that az_3 'that₃' is a demonstrative, and with the subordinate clause it jointly constitute the OBJ of the main predicate. We believe that this latter approach better captures both the diachronically and synchronically detectable deictic aspect of az_3 'that₃' and it also expresses the link between the CP and the main verbal predicate in a more direct fashion.²⁰

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¹⁹ Butt (2014: 163) opts for such an adjunction-based analysis of Urdu scope-marking constructions. Thus, according to her, *kya* below is a thematic pronoun. For the reasons outlined above, we do not adopt this kind of analysis, but we acknowledge her calling our attention to this analysis at the LFG2025 conference in person. (For simplicity, the morphosyntactic details have been removed from the original example.)

⁽i) ravi kya janta he [ke sita kısko pasand karti he]? Ravi what know be COMP Sita who liking do be

^{&#}x27;Who does Ravi know Sita likes?' lit.: 'What does Ravi know, who does Sita like?'

 $^{^{20}}$ A reviewer asks whether an apposition-like analysis would be appropriate for clausal correlation. While we do subscribe such a treatment for the topic left dislocation construction to be detailed in section 5, we do not find it appealing for sentences like (25). In left dislocation, the pronoun is plausibly an independent referring expession in the (referential) topic field of the sentence, we take az_3 to be deficient in the sense described above (occurring in the specifier of VP). The apposition analysis is also motivated by case-sharing in left dislocation, which is not applicable to the constellation of az_3 and the associated CP.

It may also be noted that Laczkó (2022) and our current analysis are both similar in spirit to Szűcs's (2024) Minimalist-style approach (where the demonstrative, originating in Spec-CP, is a secondary predicate for the clause).

5 Topic left dislocation correlate

5.1 Descriptive overview

Left dislocation (LD) is a term commonly used to describe constructions in which a left-peripheral, topic-like host element is (usually) co-indexed with a subsequent pronominal element. It is widely accepted generalization that at least two types of LD should be distinguished (see, for example, Shaer 2009). The type found in languages such as English is often referred to as non-integrated or n-type left dislocation:

(38) *John*_i, *I really like him*_i.

In (38), *John* functions as a hanging topic, an element loosely connected to the sentence. This lack of syntactic integration is evidenced by the possibility of case mismatches (e.g.: *me, I like beer*) or by constructions where actually no sentence-internal pronoun is present, and the connection between the peripheral element and the clause is only pragmatic (e.g.: *Barcelona, the architecture is amazing*).

While certain Hungarian constructions may be analyzed as instances of non-integrated (n-type) left dislocation, the demonstrative *az* ('that') participates in the other subtype, the integrated (i-type) left dislocation. This is characterized by a closer, syntactic association of the topical element with the sentence. Szűcs (2019) offers a detailed account of the two LD types in Hungarian; see also Lipták (2011) for a Minimalist perspective. Here, we summarize the most relevant empirical facts.

In Hungarian (i-type) LD, an element in the topic-field of the Hungarian sentence is followed by a co-referent demonstrative pronoun. Adjacency between the two is not required, as illustrated in (39).²¹

(39) A film-ek-et_i, szerintem az-ok-at_i János is látta. the film-PL-ACC in.my.opinion that-PL-ACC John also saw.DEF.3SG 'The films, I think John also saw them.'

However, since this is an i-type LD, case-mismatch is not permitted: if the peripheral element in (39) were *film-ek* 'film-PL.NOM' or the demonstrative were *az-ok* 'that-PL.NOM' (resulting in a mismatch), the sentence would be ungrammatical.²²

While the demonstrative pronoun in (39) can be seen as an instance of az_1 , there is a remarkable variation that manifests the focus of our analysis: it is possible for the *singular* form of az 'that' to appear in (40), even though such usage is unexpected under

²¹ As regards topic-orientedness, note that *valaki* 'somebody' can only be a host element if it is interpreted contrastively, in relation to some previously established set, otherwise it would violate the pragmatic identifiability condition on topics. So there is no non-contrastive interpretation for (ia) below, and a newly introduced topic in a presentational sentence is infelicitous with the LD-demonstrative. See Szűcs (2019: 300-301) for more on this issue.

⁽i) a. Valaki az eljött. b. #Valaki az van odakint. somebody that.ACC came.3SG somebody that is outside 'Somebody (as opposed to others) came. 'There is somebody outside.'

²² Other contrasts between the two types of LD include the form of the pronoun (it can be a personal pronoun in the i-type), the phonology of the two (n-type LDs are set apart from the host sentence by a sizable intonational break) and positional restrictions. N-type LDs, strongly prefer sentence-initial positions, e.g. they are degraded if subordinated), while i-type LDs are more freely distributed. Note that English "topicalization" behaves more like an i-type structure in this regard: *They think that John, I really like (??him)*.

standard assumptions of co-reference. We argue that (40) features another grammaticalized version of az, which we label as az_4 and we describe it as "topic left dislocation correlate demonstrative pronoun".

(40) A film-ek-et_i, szerintem az₄-t_i János is látta. the film-PL-ACC in.my.opinion that-ACC John also saw.3SG.DEF 'The films, I think John also saw them (it).'

Apart from NUMBER, the PERSON feature may also exhibit mismatch with the host.

```
(41) Minket, az<sub>4</sub>-t János is látott. us that-ACC John too saw.3SG.INDEF 'Us, John saw (it), too.'
```

Finally, the formally distal az_4 'that' can be associated with a proximal element.

```
(42) [Ez_2-t a k\"{o}nyv-et]_i, [az_4-t]_1 szeretem. this-ACC the book-ACC that-ACC like.1SG.DEF 'This book, I like (it).'
```

At present, relatively little is known about the historical development of left dislocation. One of the primary challenges is that this construction is most characteristic of informal, spoken language, whereas historical corpora typically consist of official documents, literary texts, Bible translations, and other formal registers – sources that are not well suited to capturing colloquial phenomena.²³

There has been some research on the historical development of left dislocation in English, e.g. Tizón-Couto (2015). On the basis of these findings, it is a plausible scenario that n-type left dislocations emerge first and are later reanalyzed into more syntactically integrated structures. The initial appearance of n-type LDs may be motivated by general communicative or processing principles – such as the separation of introducing a discourse referent (the topic) from making an assertion about it (Lambrecht 1994: 185). The integration results in topicalization in English (see footnote 20) or an i-type dislocation in Hungarian (and other languages which have it, e.g. German, see example in (48) in the next section).

According to Tizón-Couto (2015), the driving force behind this development may be speakers' tendency to avoid syntactically non-integrated elements within the clause. Such a diachronic trajectory would, in essence, parallel the development of the adnominal demonstrative and finite subordination from clausal juxtaposition towards functional unification. At this point, however, this remains a conjecture about Hungarian, requiring further investigation.

5.2 Topic left dislocation correlate in the synchronic system

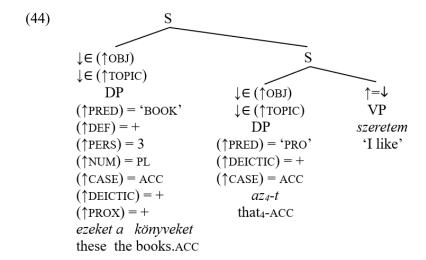
Szűcs (2019) analyzes the demonstrative pronoun in Hungarian i-type left dislocation as an adjunct to the host element. While this is technically a workable solution, we find it lacking in conceptual plausibility. Adjuncts typically contribute additional information about the element with which they are associated, but it is not clear what it would mean for a demonstrative pronoun – whose semantic function is to refer to another element – to serve as an adjunct. Hence, the lack of similar solutions in the LFG-literature is unsurprising, which motivates exploring alternatives. In this spirit, here we propose an approach designed to supersede the analysis presented in Szűcs (2019).

²³ We stress that in spite of the scarcity of historical data, there is no doubt about the existence of LD in contemporary Hungarian.

Invoking the approach to apposition by Sadler & Nordlinger (2009) (described in section 3.1), we propose that in Hungarian topic left dislocaction, the host element and the demonstrative pronoun co-specify the given grammatical function, as can be seen in (43)-(45) below. We assume that the case-matching requirement arises as a natural consequence of the host element and the demonstrative pronoun sharing the same grammatical function.²⁴ The proposed lexical entry for az_4 is also shown separately in $(46)^{25}$

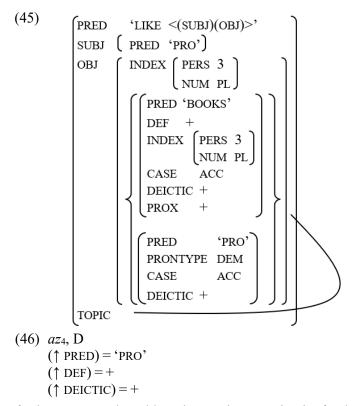
As shown in (43)–(46), the grammaticalization of az_4 'that₄' appears to involve the loss of several grammatical features. Specifically, az4 lacks person and number specifications, which allows it to co-occur with hosts bearing a variety of feature values – singular or plural number, and first, second, or third person – as seen in (40) and (41). This flexibility enables the host element to determine the agreement features of the complex grammatical function.

(43) *[Ez-ek-et* könyv-ek-et]i $[az_4-t]_i$ szeretem. this-PL-ACC the book-PL-ACC that₄-ACC like.1sG 'These books, I like (them).'



²⁴ The apposition analysis of Hungarian topic left dislocation is also in line with Lipták (2011: 179), according to whom the pronoun is "generated as an appositive modifier to the leftdislocated item".

²⁵ A reviewer asks why not simply put the topicalized constituent in a TOPIC feature and then coindex that with the OBJ. The reason is that such a treatment would erroneously suggest that at least one of the two elements is an extrasentential entity (a hanging topic), while there are ample reasons to believe that both are integrated in the core clause structure - they do not have to be sentence-initial, they can intermingle with other topics, they can be in a subordinate clause, see Szűcs (2019) for details.



We further propose that although az_4 'that₄' retains its fundamental deictic character (specifically in its attention-directing function, which probably underlies its topic-oriented behavior), it no longer encodes a specific distance value. In other words, az_4 functions as a distance-neutral demonstrative pronoun (Diessel 1999: 2), which allows it to co-occur with host elements that may bear an overtly contrasting deictic specification (see 42). In such cases, the surface distal form of the left dislocation correlate demonstrative reflects grammaticalization into a default, unmarked setting, rather than signaling true deixis.

It is worth noting that the involvement of such a demonstrative in left dislocation is not unique to Hungarian; the German counterpart similarly employs a distance-neutral demonstrative element, *den* in (47):²⁶

```
(47) Den Hans, den mag jeder. (German) the ACC Hans DEM. ACC likes everyone 'Hans, everyone likes him.' (Shaer 2009: 369)
```

Additionally, it needs be noted that in Hungarian left dislocation, proximal forms are only permitted when the host element already carries a corresponding proximal specification:

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²⁶ On the distance-neutral nature of the German demonstrative in question, see Buchholz & von Heusinger (2024: 2).

```
(48) a. A filmet, {az-t / #ezt} szeretem.
the film-ACC that-ACC this-ACC like.1SG
'The film, I like (it).
b. Ez-t a filmet, {az-t / ez-t} szeretem.
this-ACC the film-ACC that-ACC this-ACC like.1SG
```

'This film, I like (it).'

The deictic mismatch in (49b) clearly indicates that the demonstrative az used there is an instance of az_4 'that₄'. In contrast, the az in (49a) could be interpreted as either az_1 or az_4 . The proximal form ez_1 'this₁' is not licensed in (49a) due to the general dispreference for proximal forms in discourse-related deixis, as noted earlier in Section 4.2.

Compared to clausal association, left dislocation appears to exhibit an even stronger preference for distal forms. While, under our account, general cognitive prominence can license ez_3 as a clausal correlate, as illustrated in (30b) and (31b), ez_1 'this₁' is only acceptable in (48) when proximity is explicitly encoded in the grammatical environment.

6 Conclusions

In this paper we developed an LFG analysis of three Hungarian constructions containing a demonstrative element that appears to be the same as the canonical demonstrative pronoun. Our key assumption is that the demonstrative elements in these constructions are special, grammaticalized versions of the canonical pronoun with partially different feature sets. We claim that this variation in the synchronic system is a result of different historical paths of grammaticalization, possibly not only involving feature loss or feature change but also the emergence of a new feature. Below in (49) we repeat the lexical forms of the ordinary pronoun and the three grammaticalized variants.

```
a. ordinary demonstrative pronoun
                                                      b. adnominal demonstrative
                                                         az_2, D
   az_1, D
    (\uparrow PRED) = 'PRO'
                                                          (\uparrow PRED) = 'PRO'
    (\uparrow DEF) = +
                                                          (\uparrow DEF) = +
    (\uparrow DEICTIC) = +
                                                          (\uparrow DEICTIC) = +
    (\uparrow PROXIMAL) = -
                                                          (\uparrow PROXIMAL) = -
    (\uparrow PERS) = 3
                                                          (\uparrow PERS) = 3
    (\uparrow NUM) = SG
                                                          (\uparrow NUM) = SG
                                                          (\uparrow CHECK ART) =_c +
c. clausal correlate
                                                      d. topic LD correlate
   az_3, D
                                                         az_4, D
                                                          (↑ PRED) = 'PRO'
    (\uparrow PRED) = 'PRO'
    (\uparrow DEF) = +
                                                          (\uparrow DEF) = +
    (\uparrow DEICTIC) = +
                                                          (\uparrow DEICTIC) = +
    (\uparrow PROXIMAL) = -
                                                          ( PROXIMAL) =
    (\uparrow PERS) = 3
                                                          (\uparrow PERS) = 3
    (\uparrow NUM) = SG
                                                          (\uparrow NUM) = SG
    (\uparrow RESTR TYPE) =_c PROP
```

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