

ON THE NATURE OF DATIVE IN HUNGARIAN

Dieter Wunderlich

Heinrich Heine University Düsseldorf

1. Introduction

Considering the recent literature on case it seems still to be an open question of whether dative is a structural or a semantic case.¹ Generative linguists often assume the possibility of alternation to be the defining criterion for structural case. Accusative is regarded as structural because it alternates with nominative in the passive, while dative is regarded as non-structural because it mostly does not alternate with nominative or accusative. Therefore, dative is claimed to be a semantic case. However, dative marks a variety of semantic roles such as recipient, beneficiary, experiencer, and possessor, while the semantic range of undoubtedly semantic cases such as instrumental or ablative is much narrower. The fact that dative is less involved in alternations than accusative could be explained by the fact that it is more marked than accusative. In order to decide on the question one has to consider other diagnostics for structural case, and one has to provide a theory that gives a principled account for the occurrence of dative in either structural or semantic terms. In this paper I will pursue the idea that dative is a structural case, with emphasis on Hungarian. More precisely, I will argue that all instances of the Hungarian dative are structural, even if they are assigned lexically.²

Morphologically, the Hungarian dative is more similar to semantic cases than to accusative. The dative suffix /nEk/ has a CVC structure and cannot be attached to a pronoun: (1b), corresponding to (1a), is ungrammatical; the correct form for the dative-inflected pronoun is (1c), with the possessor affix attached to the case root, corresponding to a semantic case such as the instrumental in (1d).

- (1) The formation of case-inflected pronouns
- | | | | |
|-------------------|--------------------|-------------------|-------------------|
| a. <i>mink-et</i> | b. * <i>mi-nek</i> | c. <i>nek-ünk</i> | d. <i>vel-ünk</i> |
| we-ACC | we-DAT | DAT-1plP | INSTR-1plP |
| 'us' | 'to us' | 'to us' | 'with us' |

¹ Among others, Marantz (1984), Fanselow (2000), and Woolford (2001) claim that at least some instances of dative are structural, while Haider (1985, 2001), and Vogel & Steinbach (1998) argue for dative as a semantic case, which is also the position of standard case theory (Chomsky 1981).

² In principle, dative can be structural in some instances, and semantic (or oblique) in others, similarly to the accusative, which, e.g., is semantic in temporal adjuncts of German such as *den ganzen Tag* 'for the whole day'. In Basque, there are clear criteria to distinguish between structural and oblique dative: most instances of dative can be clefted and correlate with agreement, while some instances which are lexically triggered do not (Joppen & Wunderlich 1995: 129). I have found no clear examples of semantic dative in Hungarian.

Since there is no indication from the morphology that dative patterns with accusative, what, then, are possible diagnostics for structural case that can be applied to Hungarian? I assume the following criteria to be relevant.

- (2) Universal diagnostics for structural dative
- A. Dative marks the medial argument of a basic ditransitive verb.
 - B. Dative appears on the causee of causativized transitive verbs.
 - C. A dative argument can alternate with nominative.
 - D. A dative argument can be coindexed with an agreement morpheme.
 - E. A dative argument can be suppressed in certain constructions, even if dative is assigned lexically.

In the whole tradition of grammar a criterion such as (A) has always been in the center of the definition of ‘dative’, alongside with the grammatical role of indirect object. In (B), this criterion is applied to morphologically derived causatives, in which causees are always second-to-highest; dative causees with causativized transitive verbs are found in many languages, such as Turkish, Japanese, and Basque. (3) is an example from Turkish, showing that even double-dative is possible, where the first occurrence of dative relates to the causee.

- (3) Biz-e mektub-u Hasan-a göster-t-ti-ler.
 we-DAT letter-ACC Hasan-DAT show-CAUS-PAST-PL
 ‘They let us show the letter to Hasan.’
 * ‘They let Hasan show the letter to us.’ (Zimmer 1976: 411)

(C) adopts the above-mentioned criterion of generative grammarians. Dative-nominative alternation is less often found than accusative-nominative alternation; Japanese is one of the languages that allows it in the passive, as shown in (4).³

³ In the literature on German it is debated whether the dative-nominative alternation in the *kriegen*-passive, illustrated in (iii), is a structurally determined alternation. Some authors (e.g., Haider 2001) assume that *kriegen* has become a light verb that inherits its thematic potential so that it selects a Recipient for subject, while other authors assume that *kriegen* has become a true passive auxiliary. The medial dative argument can always be used with *kriegen* (*Er kriegte ein Buch geschenkt*, lit. ‘He got a book presented’), whereas (iii) with a lexically marked dative is not accepted by all speakers, but those who do so seem to use *kriegen* as an auxiliary.

- (i) Ich half ihm.
I helped he.DAT
- (ii) Ihm wurde geholfen. (passive)
he.DAT was helped
- (iii) Er kriegte geholfen. (*kriegen*-passive)
he.NOM got helped

- (4) a. Hanako=ga akanboo=o watasi=ni takusi-ta
 H.=NOM baby=ACC I=DAT entrust-PAST
 ‘Hanako entrusted the baby to me.’
 b. watasi=ga Hanako kara akanboo=o takus-are-ta
 I=NOM H. ABL baby=ACC entrust-PASS-PAST
 ‘I got entrusted the baby by Hanako.’ (Gamerschlag 1996:21)

Another structural aspect is assumed in criterion (D): only arguments that are not hidden by an oblique marker (or another semantic predicate) can be coindexed with an agreement morpheme. Dative agreement on verbs is again not very often found; one example is Basque, illustrated in (5).

- (5) Zuek lagun-ei opari polit-ak ema-ten dizkiezue/*dituzue.
 you.pl.ERG friend-pl.DAT present nice-pl.NOM give-IMPF
 AUX.3plN.3plD.2plE/ AUX.3plN.2plE
 ‘You all always give nice presents to your friends.’
 (Joppen & Wunderlich 1995:129)

Finally, criterion (E) presumes that structural arguments can be reconstructed more easily than semantic ones, a condition which is at variant with (C). (E) is illustrated by the following example from Icelandic, where a dative subject of the dependent verb can be controlled by a non-dative subject.

- (6) Ég vonast til að –_{DAT} líka þessi bók.
 I hope for to –_{DAT} like this book.NOM
 ‘I hope to like this book.’ (Wunderlich 2000b)

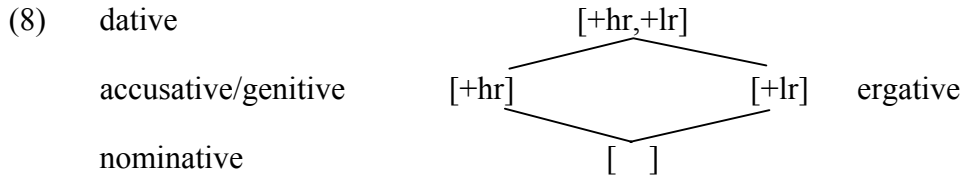
In the following, I will show that Hungarian meets all of the above criteria, except (B): the medial argument of basic ditransitive verbs is dative-marked (but not the causee of transitive verbs); dative possessors alternate with nominative possessors, and they agree with the possessor affix on the head noun; dative subjects alternative with nominative subjects in the presence of inflected infinitives; finally, there is a construction of Hungarian in which dative arguments, even if they are lexically marked, can be suppressed.

The theoretical background of my investigation is given by Lexical Decomposition Grammar (LDG; Wunderlich 1997, 2000a). In this theory, lexical representations are decomposed so that a unique ordering of argument variables results. The λ -abstractors of argument variables constitute the theta-roles, which are associated with features regulating their mapping into morphology and syntax. In the default case, the ordering of the theta-roles reflects the hierarchy of arguments, with the lowest argument to the left and the highest one to the right. Abstract case is then simply encoded by means of two relational features: [+hr] ‘there is a higher role’, and [+lr] ‘there is a lower role’. This is

illustrated in (7) for intransitive, transitive and ditransitive verbs (such as *dance*, *fall*; *hit*, *like*; *give*, *show*), together with their canonical mappings onto an accusative-dative or an ergative-dative pattern.

(7)	<table style="border-collapse: collapse; width: 100%;"> <tr> <td style="text-align: left; padding-right: 20px;">intransitive</td> <td style="text-align: left;">transitive</td> </tr> <tr> <td>λx DANCE(x)</td> <td>$\lambda y \quad \lambda x$ HIT(x,y)</td> </tr> <tr> <td>λx FALL(x)</td> <td>$\lambda y \quad \lambda x$ LIKE(x,y)</td> </tr> <tr> <td>-hr</td> <td>+hr -hr</td> </tr> <tr> <td>-lr</td> <td>-lr +lr</td> </tr> <tr> <td>NOM</td> <td>ACC NOM</td> </tr> <tr> <td>NOM</td> <td>NOM ERG</td> </tr> </table>	intransitive	transitive	λx DANCE(x)	$\lambda y \quad \lambda x$ HIT(x,y)	λx FALL(x)	$\lambda y \quad \lambda x$ LIKE(x,y)	-hr	+hr -hr	-lr	-lr +lr	NOM	ACC NOM	NOM	NOM ERG							
intransitive	transitive																					
λx DANCE(x)	$\lambda y \quad \lambda x$ HIT(x,y)																					
λx FALL(x)	$\lambda y \quad \lambda x$ LIKE(x,y)																					
-hr	+hr -hr																					
-lr	-lr +lr																					
NOM	ACC NOM																					
NOM	NOM ERG																					
	<table style="border-collapse: collapse; width: 100%;"> <tr> <td colspan="3" style="text-align: left; padding-left: 20px;">ditransitive</td> </tr> <tr> <td>λz</td> <td>λy</td> <td>λx {ACT(x) & BEC POSS(y,z)}</td> </tr> <tr> <td>λz</td> <td>λy</td> <td>λx {ACT(x) & SEE(y,z)}</td> </tr> <tr> <td>+hr</td> <td>+hr</td> <td>-hr</td> </tr> <tr> <td>-lr</td> <td>+lr</td> <td>+lr</td> </tr> <tr> <td>NOM</td> <td>DAT</td> <td>ERG</td> </tr> <tr> <td>ACC</td> <td>DAT</td> <td>NOM</td> </tr> </table>	ditransitive			λz	λy	λx {ACT(x) & BEC POSS(y,z)}	λz	λy	λx {ACT(x) & SEE(y,z)}	+hr	+hr	-hr	-lr	+lr	+lr	NOM	DAT	ERG	ACC	DAT	NOM
ditransitive																						
λz	λy	λx {ACT(x) & BEC POSS(y,z)}																				
λz	λy	λx {ACT(x) & SEE(y,z)}																				
+hr	+hr	-hr																				
-lr	+lr	+lr																				
NOM	DAT	ERG																				
ACC	DAT	NOM																				

The annotated mappings are possible because the case morphemes are specified in terms of the same features:



Note that the presence of features such as [+hr] and [+lr] suggests that these features can be combined, thus the possibility of a structural dative is predicted. Furthermore, the lattice shown in (8) is complete, which predicts that no further structural cases are possible. In fact, genitive can be considered to be at variance with accusative in the domain of nouns, while other cases with structural aspects (such as the partitive) add certain semantic information to a structural accusative. One should also have in mind that the actual distribution of morphological cases forming a case pattern such as <NOM,DAT,ACC> is regulated by general constraints and thus subject to optimality-theoretic considerations (Stiebels 2000, Wunderlich 2001b). In this paper, however, I will not go any further into the details of LDG.

2. *Datives on medial arguments*

Hungarian has quite a number of lexical ditransitives with dative for the medial argument, among them transaction verbs as in (9a) and speech verbs as in (9b).

- (9) a. Anna Péter-nek adott egy könyv-et
 Anna Peter-DAT gave a book-ACC
 ‘Anna gave a book to Peter’
 b. Anna Péter-nek el-mesélt egy történet-et
 Anna Peter-DAT PV-recounted a story-ACC
 ‘Anna told a story to Peter’

Here, the argument marked by dative is a recipient, i.e., someone who comes in the possession of either a physical or an information object. Semantically, the recipient *y*, who stands in the relation $POSS(y,z)$ to some object *z*, ranks above *z*. The alternative representation $[[poss(z)](y)]$ clearly shows that *y* c-commands *z*. It has been proposed in the literature that such a hierarchy of arguments can be identified by a number of tests, including anaphoric binding, bound pronouns, weak crossover, and multiple questions (see Barss & Lasnik 1986), though, some of these tests may not be conclusive for the individual language in question.

One of the predictions is that the dative argument can be the antecedent for a reflexive in an accusative complement, which in fact turns out to be the case in Hungarian.

- (10) Mutat-t-am a lány-nak egy fénykép-et mag-á-ról.
 show-past-1sg the girl-DAT a photo-ACC REFL-3sgP-DEL
 ‘I showed the girl a photo of herself.’

However, if the two objects are semantically more or less symmetric, as in ‘introduce’ (if one introduces *y* to *z* in a standard face-to-face situation, than *z* is also introduced to *y*), accusative is preferred for the antecedent in the reciprocal construction. According to Kenesei, Vago & Fenyvesi (1998) (henceforth KVF), the predicted construction in (11b) is grammatical only when the reciprocal is focused.

- (11) a. Be-mutattam egymás-nak a fiúk-at.
 PV-introduced.DEF.1sg each.other-DAT the boys-ACC (KVF 146:421a)
 b. A fiúk-nak egymás-t mutattam be.
 the boys-DAT each.other-ACC introduced.DEF.1sg PV (see KVF 147:426b)
 ‘I introduced the boys to each other.’

In the parallel construction of German only accusative is allowed for the antecedent NP, perhaps because *einander* ‘each other’ is unmarked for case, and non-lexical dative only appears in the context of an accusative.

- (12) Ich stellte die Jungen /*den Jungen einander vor.
 I introduced the.ACC boys /*the.DAT boys each.other PRT
 ‘I introduced the boys to each other.’

Such an argument is not possible for Hungarian (11a), where the reciprocal is marked by dative. There might be other reasons why the antecedent is preferred in the less marked case if the situation is symmetric.

Recipients/Beneficiaries can be added to transitive verbs productively, given that they are semantically adequate;⁴ these entities generally constitute medial arguments (Wunderlich 2000a).

- (13) a. Fel-olvas-t-am a lány-nak Péter könyv-é-t.
 PV-read-PAST-1sg the girl-DAT Peter book-3sgP-ACC
 ‘I read Peter’s book to the girl.’
 b. Meg-javít-otta nek-em a feleség-em szemüveg-é-t.
 PV-repair-PAST.3sg DAT-1sgP the wife-1sgP glass(es)-3sgP-ACC
 ‘He repaired my wife’s glasses for me.’
 c. Meg-talál-t-am nek-i a helyesírási hibá-k-at.
 PV-find-PAST-1SG DAT-3sgP the orthographic mistake-PL-ACC.
 ‘I found out the spelling errors for her.’

In some instances, benefactive extension cannot be distinguished from possessor raising. As the examples in (14) illustrate, datives in the verbal domain (outside of a DP) have more readings than datives in the nominal domain (inside a DP). This suggests that the dative in the verbal domain is base-generated, rather than originating from movement (see section 4 below).

- (14) a. Péter Anná-nak tartja a lámpa-já-t.
 Peter Anna-DAT hold.DEF.3sg the lamp-3sgP-ACC
 i. ‘Peter holds his/her lamp for Anna.’
 ii. ‘Peter holds Anna’s lamp.’
 b. Péter fel-olvas-t-a a lány-nak a könyv-é-t.
 Peter PV-read-PAST-3sg the girl-DAT the book-3sgP-ACC
 i. ‘Peter read his/her book to the girl.’
 ii. ‘Peter read the girl’s book (to someone).’

⁴ Some verbs resist the benefactive extension even if no semantic reason is recognizable. I owe the following example to one of the reviewers.

(i) *János meg-ért-et-te Mari-nak a feladat-ot.
 Janos PV-understand-CAUS-PAST Mary-DAT the task
 ‘Janos made Mary the task intelligible.’

- c. Péter el-mesél-te a lány-nak a történet-é-t.
Peter PV-tell-PAST.3sg the girl-DAT the story-3sgP-ACC
i. 'Peter told his/her story to the girl.'
ii. 'Peter told the girl's story.'

Surprisingly, the causee of transitive and ditransitive verbs is marked by instrumental rather than by dative, as shown by the examples in (15).

- (15) a. Anna könyv-et olvas-tat Péter-rel.
Anna book-ACC read-CAUS Peter-INSTR
'Anna has Peter read a book.' (KVF 360:877d)
b. Márton küldet-ett Nórá-val egy csekk-et Évá-nak.
Martin send.CAUS-PAST.3sg Nora-INSTR a check-ACC Eve-DAT
'Martin made Nora send a check to Eve.' (KVF 288:582)

The instrumental is clearly a semantic case which contributes its own semantic relation. Cross-linguistically, causees often appear in the instrumental if a dative is not available and double-accusative is avoided for the sake of unequivocality, as in Urdu or Quechua (Wunderlich & Lakämper 2001). The fact that Hungarian blocks dative for causees might be due to a special property of the causative morpheme. Causativization mainly occurs with agentive verbs, and the causee is optional with transitive and ditransitive verbs. This suggests that the causee is existentially bound by the causative morpheme, and can only be expressed by an adjunct. The instrumental is appropriate for expressing an animate being in the agentive role, and as such may have been grammaticalized.

3. Lexically marked datives

The LDG framework does not exclude that dative is marked on arguments others than the medial one. Lexically marked datives are still considered to be structural, i.e. characterized by the feature combination [+hr,+lr]. The decomposition of dative into two feature values allows us to characterize exceptional dative by a single feature which marks either the lowest or the highest argument, in addition to the feature that is given by default. The lexical feature is [+lr] if the lowest argument ([+hr] by default) is marked for dative, but it is [+hr] if the highest argument ([+lr] by default) is marked for dative.

The lowest argument is exceptionally marked for dative in a couple of Hungarian verbs, such as *telefonál* 'call up', similarly to German *helfen* 'help', *folgen* 'follow', Icelandic *hjelpa* 'help', and Basque *jarraiki* 'follow' (Wunderlich 1997, 2001b; Joppen & Wunderlich 1995). These verbs might be called 'agentive object verbs' because the lexical feature [+lr] suggests that the lowest argument (the object) has some control of

the event by itself. The example in (16a) can be captured by the theta structure given in (16b).

- (16) a. Telefonál-t-ál János-nak?
 telephone-PAST-INDEF.2sg John-DAT
 ‘Have you called John?’ (KVF 199:34)
- b. $\lambda y \lambda x \text{ CALL.UP}(x,y)$
 lexical: +lr
 default: +hr
 DAT

Hungarian also allows the highest argument to be marked for dative, as in *tetszik* ‘like’, similarly to German *gefallen* ‘like’, Icelandic *líkar* ‘like’, and Basque *gustatu* ‘like’. These verbs might be called ‘experiencer verbs’ because the lexical feature [+hr] suggests that the highest argument is affected. (17a) illustrates this class of verbs, while (17b) represents the relevant theta structure.

- (17) a. A gyerek-nek tetszett a labda.
 the child-DAT liked the ball
 ‘The child liked the ball.’
- b. $\lambda y \lambda x \text{ LIKE}(x,y)$
 lexical: +hr
 default: +lr
 DAT

Differing from German, Hungarian adjectives in secondary predicative function are case-marked. Depictive predicates are generally marked by dative, while resultative predicates are marked by sublative or translative (expressing directional information). Dative marks here the relation between the secondary predicate and its licensing argument. (18) and (19) show the raising variants of verbs where the secondary predicate is lexically marked. Although the predicative argument occupies the lowest position in theta structure (Wunderlich 2000a:254), it is marked as if the argument it selects were in lower position, which in fact is true of the semantic representation, given in (18b) and (19b).

- (18) a. A katoná-t mindenki halott-nak hi-tt-e.
 the soldier-ACC everyone dead-DAT believe-PAST-DEF.3sg
 ‘Everyone believed the soldier to be dead’ (KVF 203:70)
- b. $\lambda P \lambda y \lambda x \text{ BELIEVE}(x,P(y))$
 +lr

- (19) a. A diák-ok elégedett-nek tu3n-nek.
 the student-pl satisfied-DAT appear-INDEF.3pl
 ‘The students appear satisfied’ (KVF 202:61)
- b. $\lambda P \lambda x$ APPEAR(P(x))
 +lr

Thus, the dative appearing with secondary predicates does not indicate a specific semantic relation; on the contrary, it indicates a structural relation between the predicate and its argument.

4. *Dative possessors*

The possessed noun in Hungarian allows two possessor positions in the DP: an NP-internal position in which the possessor is unmarked (nominative), and an NP-external position in which it is marked by dative; the latter position can be identified with SpecDP, a possible escape position, according to Szabolcsi (1994). In each case the possessor must be cross-referenced with a possessor affix on the noun.

- (20) a. a fiú piros kalap-ja
 the boy.NOM red hat-3sgP
- b. a fiú-nak a piros kalap-ja
 the boy-DAT the red hat-3sgP
 ‘the boy’s red hat’

Relational nouns already have an internal argument (to be realized by a possessor), while non-relational nouns can undergo possessor extension in order to become relational. The default feature for the possessor argument is [+hr], while the optional but marked position SpecDP correlates with the additional feature [+lr].⁵

- (21) *kalap*: $\lambda y \lambda x$ {HAT(x) & POSS(y,x)}
 default: +hr
 (SpecDP: +lr)

Possessor affixes are specified as [+hr] and thus are compatible with either [+hr] or [+hr,+lr]. Under the assumption that accusative is blocked in the NP, nominative fits best for NP-internal possessors, while dative is the best choice in the SpecDP option.

The same alternation between nominative and dative is found in nominalizations, where the event argument corresponds to the possessum and all the arguments of the

⁵ Cross-linguistically, possessors are often realized by dative, which is motivated by the fact that the possessor (‘y’) is not only lower but also higher to the possessum (‘x’) in a representation such as (21).

verb correspond to potential possessors. However, the lowest argument gets preference in being realized by a possessor linker, as it is attested cross-linguistically (Koptjevskaja-Tamm 1993, Ehrich & Rapp 2000, Stiebels 2001). The example given in (22) with an underlying transitive verb, therefore, gets the interpretation that *a vadász* ‘the hunter’ is patient rather than agent.

- (22) a. a ló fut-ás-a
the horse.NOM run-NOML-3sgP
‘the running of the horse’
b. a vadász le-löv-és-e
the hunter.NOM PV-shoot-NOML-3sgP
‘the shooting of the hunter’
*‘the shooting by the hunter’

Since only one argument can be cross-referenced with the possessor affix, it is generally not possible to realize two structural arguments within the DP. Additional (oblique) arguments have to be expressed by one of the adjectivizing constructions, shown in (23), except when a goal or location argument is expressed; in such a case there is an alternative to the adjectival construction, shown in (24).

- (23) a. a város-nak [az ellenség által-i] el-pusztít-ás-a
the city-DAT [the enemy by-ADJ] PV-destroy-NOML-3sgP
‘the city’s destruction by the enemy’
b. Edit-nek [az irodá-ban való] levizsgáztat-ás-a
Edith-DAT [the office-INE being] examine-NOML-3sgP
‘the examination of Edith in the office’ (Laczkó 1995: 103)
- (24) az elnök-nek az urná-hoz járul-ás-a
the president-DAT the ballot_box-ALL proceed-NOML-3sgP
‘the president’s going to the ballot box’ (Laczkó 1995: 128)

We can describe these facts by the following generalizations: (i) A structural (internal, i.e. [+hr]) argument of the noun must be realized by a possessor affix. (ii) If this argument is realized syntactically, it must agree with the possessor affix.

Hence, dative is a structural argument in the DP for three reasons: it is fixed to the SpecDP position, it alternates with a nominative possessor, and it agrees with the head noun. Arguments marked by a semantic (oblique) case usually do not agree with the licensing head.⁶

⁶ There are some exceptions. As discussed in Wunderlich & Lakämper (2001), some dialects of Quechua, which lacks a dative, under certain circumstances allow agreement with either benefactive

For the dative complement of a nominalized ditransitive verb only two options are conceivable; both are violating certain constraints. Either the dative patterns together with semantic cases in that it occurs in an adjectival phrase, as in (25a), or one of the internal arguments is accepted without being cross-referenced by the possessive affix, as in (25b). However, the latter option is judged ungrammatical by most speakers. However, such a construction is attested with a secondary predicate being dative, as in (25c).

- (25) a. a könyv [Anna-nak való] fel-olvas-ás-a
the book [Anna-DAT being] PV-read-NOML-3sgP
‘the reading of the book to Anna’
b. *Anna-nak a könyv fel-olvas-ás-a
Anna-DAT the book PV-read-NOML-3sgP
c. Péter gazember-nek nevez-és-e
Peter bastard-DAT call-NOML-3sgP
‘calling Peter a bastard’

As has been illustrated in (14) above, possessor extraction competes with dative which is base-generated in the VP. If the definite article is absent in the possessive construction, an NP-internal nominative possessor leads to another reading than an NP-external dative possessor, as shown in (26). With the dative possessor, as in (26b), the sentence yields an unspecific reading.⁷

- (26) a. Nem ismert-em [Mari nőver-é- t]
not knew-1sg [Mari.NOM sister-3sgP-ACC]
‘I did not know Mari’s sister.’
b. Mari-nak nem ismert-em [nőver-é- t]
Mari-DAT not knew-1sg [sister-3sgP-ACC]
‘I never knew any sister of Mari.’ (Szabolcsi 1994: 181-182)

Such a semantic shift is problematic for a movement analysis, claiming that the possessor is extracted from the NP. What is specific or unspecific is not the possessor but the

or instrumental case marked on a medial argument. One could argue that in the respective dialects, these cases are in the process of developing into a structural dative.

⁷ A similar distribution can be observed in Bulgarian. NP-internally, the dative possessor clitic requires a preceding definite affix, while the possessor of an unspecific NP must be NP-external, i.e., part of the verbal domain (Schürcks & Wunderlich 2001).

- (i) Pročetox statija-ta=i. (ii) *Pročetox statija=i.
read.1sg article-DEF=3fsg read.1sg article=3fsg
‘I read her article.’ ‘I read one of her articles.’
(iii) Pročetox=i statija.
read.1sg=3fsg article
‘I read one of her articles.’

possessum, which remains in its syntactic position. The movement analysis can be justified only under the assumption that the triggering feature is either focus or topic, and that the specificity shift is nothing but a side-effect of syntactic position. Alternatively, one could consider the dative possessor to be base-generated in the VP. Given the observation made in (14) that a dative NP can have multiple readings in the VP, it is questionable whether these sentences have two different derivations (with the dative NP either base-generated or extracted). Note that a possessor-affixed noun is grammatical without having a syntactic possessor. Assuming base-generation, the possessor reading of a sentence such as (26b) obtains because it is the only way to integrate the dative NP; the unspecific reading of (26b) then results because the possessed NP lacks any further determination.

Szabolcsi (1994: 182) argues that the assumption that the existential reading obtains when the possessor leaves a NP lacking the definite article leads to a simple account of Hungarian *have*-sentences. Consider the example in (27a), which Szabolcsi analyses as in (27b).

- (27) a. A *fiú-nak* van piros kalap-ja.
 the boy-DAT be red hat-3sgP.NOM
 ‘The boy has a red hat.’
 b. a *fiú-nak* van [*t* piros kalap-ja].
 ‘There exists a red hat that is possessed by the boy.’

The existential reading of a *have*-sentence is necessary, but its subject does not need to have a specific discourse feature such as topic or focus. Thus, the movement analysis is even more questionable than in (26b), discussed above. Pursuing the base-generating alternative, one has to assume a lexical variant of the copula which selects a relational (i.e., possessed) noun, with the possessum existentially bound. This variant of the copula would have to mark the lower argument of the noun with dative, as shown in (28a). If the possessed noun *kalap-ja* is represented as in (28b), with ϕ being the information of the possessor affix (3sg in this case), functional application then yields the representation for the copula VP, given in (28c). (I leave out any indication of the temporal stage argument of the copula because it is irrelevant here.)

- (28) a. *van* : $\lambda R \quad \lambda y \quad \exists x R(y)(x)$
 +lr
 b. *kalap-ja* $\lambda v^\phi \lambda u \{ \text{HAT}(u) \ \& \ \text{POSS}(v,u) \}$
 c. *van kalap-ja*: $\lambda y^\phi \quad \exists x \{ \text{HAT}(x) \ \& \ \text{POSS}(y,x) \}$
 +hr

If one applies this to a *fiú-nak*, one gets the desired reading of (27). Such a lexical analysis avoids any movement.

5. Agreement with infinitives

A further variant of the dative-possessor construction is shown with infinitives selected as the complement of adjectives (such as *fontos* ‘important’, *könnyű* ‘easy’) or modals (*kell* ‘need, ought to’, *szabad* ‘permitted’). The examples in (29a) illustrate that these lexical items trigger dative for the highest argument of the dependent verb, so that the dative NP agrees with the possessor affix realized on the dependent infinitive.

- (29) a. Péter-nek fontos magyar-ul beszél-ni-e.
 Peter-DAT important Hungarian-ESS speak-INF-3sgP
 ‘For Peter it is important to speak Hungarian.’
 b. Dorottya-nak sok-at kellene olvas-ni-a.
 Dorothy-DAT much-ACC ought.to read-INF-3sgP
 ‘Dorothy ought to read a lot.’ (KVF 314:691)

A closer look at this construction, investigated by Tóth (2000), reveals that two different sources of dative are involved. Besides the infinitive complement (30a), most of the adjectives allow also a sentential complement (30b), but still with a dative NP in the matrix clause. In such a case, the dative must be selected by the (dyadic) matrix predicate.

- (30) a. Kellemetlen János-nak az igazság-ot bevalla-ni-(a).
 unpleasant John.DAT the truth-ACC admit-INF-3sgP
 ‘It is unpleasant for John to admit the truth.’ (Tóth 11:2a)
 b. János-nak kellemetlen volt, hogy Kati bevallotta az igazság-ot.
 John.DAT unpleasant was that Kate admitted-3sg the truth-ACC
 ‘It is unpleasant for John that Kate admitted the truth.’ (Tóth 14:10a)

However, the modals, at least when they have epistemic reading, are monadic predicates, and the dative originates from the inflected infinitive.

- (31) a. Ilyen hidegben a tónak már be kell fagy-ni-a.
 such cold-INESS the lake-DAT already PV must freeze-INF-3sg
 ‘In such a cold weather the lake must already freeze.’ (Tóth 18: 20a)
 a. Nem kell a torták.nak délre kész len-ni-ük.
 not must the cakes-DAT by.noon ready be-INF-3plP
 ‘The cakes do not have to be ready by noon.’ (Tóth 34: 48c)

There are also nominal predicates that alternate between ablative and dative complements, as shown in (32a). However, if the infinitive clause is left-dislocated, only dative is possible, shown in (32b). Thus, the dative belongs to the inflected infinitive clause.

- (32) a. Illetlenség volt Pál-tól/Pál-nak ilyen későn érkez-ni-e.
 impoliteness was Paul-ABL/Paul-DAT so late arrive-INF-3sgP
 ‘It was impolite of/for Paul to arrive so late.’ (Tóth 44: 64a, 65)
- b. *Pál-tól/Pál-nak ilyen későn érkez-ni-e, az illetlenség volt.
 Paul-ABL/Paul-DAT so late arrive-INF-3sgP that impoliteness was
 ‘For Paul to arrive so late, that was impolite.’ (Tóth 45: 67a,b)

Further evidence for the assumption that the dative belongs to the inflected infinitive comes from the following examples observed by Tóth. (33a) illustrates that a predicative adjective exhibits case concord with its subject. However, if the matrix predicate selects ablative, as in (33b), the embedded adjective still bears dative case. Tóth concludes that the ablative argument controls the dative subject within the inflected infinitive clause.

- (33) a. Butaság volt Kati-nak ilyen türelmetlen-nek len-ni-e.
 silliness was Kate-DAT so impatient-DAT be-INF-3sgP
 ‘It was silly for Kate to be so impatient.’ (Tóth 49: 77b)
- b. Illetlenség volt Mari-tól ilyen türelmetlen-nek len-ni-e.
 impoliteness was Mary-ABL so impatient-DAT be-INF-3sgP
 ‘It was impolite of Mary to be so impatient.’ (Tóth 49: 78a)

Let us assume that the infinitive is a nominalized verb, and therefore can undergo the same option as nouns: it can be inflected for possessor agreement, and then marks the possessor (which is the subject of the verb) by dative. For independent reasons, nominative subjects have to raise or to be controlled from outside, and therefore cannot be cross-referenced on the infinitive. Differing from the nominalizations considered in the preceding section, the infinitive must be regarded as a nominalized VP, i.e. all other arguments receive their case from the verb.

- (34) *bevalla-ni-a* : λv λu^{ϕ} ADMIT (u,v)
 +hr,+lr
 DAT

The predicates that select an inflected infinitive can be analyzed as either of the raising type (35a) or the control type (35b,c). The clausal argument of a raising verb is represented by a proposition variable *p* (with the option that one argument is raised), whereas the clausal argument of a control verb is represented by a predicate variable *P* together with the controlled argument.

- (35) a. *kell*: λp MUST (*p*)
 INF

- b. *kellemetlen*: λP λx UNPLEASANT (x,P(x))
 INF DAT
- c. *illetlenség*: λP λx IMPOLITE (x,P(x))
 INF ABL

It follows from these representations that *kell* inherits the dative from the embedded infinitive, whereas both *kellemetlen* and *illetlenség* control the dative argument of the embedded infinitive. In particular, the ablative complement of the matrix predicate in (33b) controls an argument that would be dative in its own environment (hence, forces the predicative adjective to be dative); thus, a dative argument can be omitted under control, which indicates a structural case property. The nominal complements themselves are optional. For this reason, ablative can alternate with dative in (32). The examples in (36) show that also the dative argument can be omitted. The inflected infinitive calls for a specific control, while the bare infinitive is only compatible with arbitrary (unspecific) control.

- (36) a. *Kellemetlen az igazság-ot bevalla-ni-a.*
 unpleasant the truth-ACC admit-INF-3sgP
 ‘It is unpleasant for him/her to admit the truth.’ (Tóth 11: 3a)
- b. *Kellemetlen az igazság-ot bevalla-ni.*
 unpleasant the truth-ACC admit-INF
 ‘It is unpleasant to admit the truth.’ (Tóth 12: 4a)

One question that arises is whether a verb such as *tetszik* ‘like’, whose highest argument is lexically marked for dative, can enter the construction with an inflected infinitive. As (37a) shows, it is not possible to select the argument that is already marked for dative to agree with the infinitive, neither can the infinitive agree with a nominative argument staying in the infinitive phrase. However, (37b) is grammatical (even if two datives appear), with the interpretation that the girls like Peter. This interpretation is reverse to that of (37c) with a canonical transitive verb.⁸

- (37) a. **Péter-nek fontos/nehéz lányok tetszeni-e/u3k.*
 Peter-DAT important/difficult girls.NOM like-3sgP/3plP
 ‘For Peter it is important/difficult to like girls.’
- b. *Péter-nek fontos/nehéz lányok-nak tetszeni-e.*
 Peter-DAT important/difficult girls-DAT like-3sgP
 ‘For Peter it is important/difficult to be liked by girls.’

⁸ Thanks to Chris Piñon, who helped me with the data.

- c. Péter-nek fontos/nehéz lányok-at szeretni-e.
 Peter-DAT important/difficult girls-ACC love-3sgP
 ‘For Peter it is important/difficult to love girls.’

This shows that it is always the designated argument that is marked on the infinitive, regardless of whether it is the higher or lower argument. The designated argument is nominative with finite verbs, but dative with inflected infinitives, and it is always this argument that is cross-referenced by agreement.⁹ It is obvious that the inflected infinitive always involves nominative-dative alternation, thus, the criterion (C) for structural dative (discussed in the beginning of this paper) is fulfilled.

For convenience, the full representation of the two inflected infinitives phrases in (37b,c) is given in (38).

- (38) a. *a lányok-nak tetszeni-e:* λy^{3sg} LIKE([the girls],y)
 ‘to be liked by the girls’ DAT
 b. *a lányok-at szeretni-e:* λx^{3sg} LIKE(x, [the girls])
 ‘to love the girls’ DAT

All the cases considered so far involve impersonal matrix predicates, lacking any agreement. The structure of infinitive-dative agreement becomes even more obvious with a matrix verb that inflects for agreement. Tóth (2000) discusses in chapter 5 of her dissertation the Hungarian permissive constructions with *hagy* ‘let’ and *enged* ‘allow’. These verbs have two alternative constructions with a dependent transitive verb. Either they assign accusative to the permittee (ECM or raising to object), as in (39a,b), or they undergo clause-union with the dependent verb, as in (39c,d).

- (39) a. Nem hagy-om o3t megnéz-ni (*-e) egy filmet sem.
 not let-1sg.DEF he-ACC watch-INF (-3sgP) a film-ACC not
 ‘I do not let him watch a single film.’
 b. Nem hagy-om o3t megnéz-ni azt a filmet.
 not let-1sg.DEF he-ACC watch-INF that the film-ACC
 ‘I do not let him watch that film.’
 c. Nem hagy-ok neki megnéz-ni-e egy filmet sem.
 not let-1sg.INDEF he-DAT watch-INF-3sgP a film-ACC not
 ‘I do not let him watch a single film.’

⁹ ‘Designated argument’ is a more neutral term than ‘subject’. Only designated arguments have subject properties such as control and raising. In Hungarian, as well as in German, the designated argument may not be the semantically highest argument (but the verb must agree with it), whereas in Icelandic the semantically highest argument is designated, even if it is non-nominative and the verb does not agree with it, see example (6) above (Wunderlich 2000b).

- d. Nem hagy-om neki megnéz-ni-e azt a filmet sem.
 not let-3sg.DEF he-DAT watch-INF-3sgP that the film-ACC not
 ‘I do not let him watch that film either.’ (Tóth 228: 19b-e)

In the first construction, the matrix verb shows definite object agreement with the raised element, and there cannot be an inflected infinitive because no dative argument is available. In the second construction, the matrix verb shows object agreement with the object of the dependent verb, hence, clause-union takes place. As a result, the permissée becomes the medial argument, to be marked by dative, and the infinitive can be inflected. With intransitive verbs, these two constructions collapse, and no inflected infinitive is possible. Deviating from the analysis given by Tóth (2000), I propose that the verb *hagy* ‘let’ has a quite simple representation.

- (40) $\lambda P \lambda y \lambda x \text{ LET}(x, P(y))$
 INF

The INF-complement can be a phrase (VP) or a word (V).

With a phrasal infinitive, the permissée (‘y’) is [+hr] (accusative) by default. However, if the infinitive of a transitive verb is embedded as a word (‘clause-union’), the permissée is [+hr,+lr] (dative) by default. It seems that the following generalization is possible: The infinitive is inflected if either the designated argument of the verb (or its controller) is dative-marked for external reasons, or if no other argument is present that controls the designated argument, which happens with impersonal matrix predicates. However, this generalization has to be worked out in more detail, which is not possible here.

The observations discussed in this section clearly indicate a nominative-dative alternation with structural aspects; the verb agrees with the designated argument not only if it is nominative but also if it is dative. Thus, the Hungarian dative turns out to be a structural case also under the perspective of alternation.

6. Datives suppressed

In the Hungarian comparative, the dative patterns with nominative and accusative rather than with semantic cases. There are two types of comparative constructions: a phrasal type in which the complement is realized with adessive case, and a clausal type in which it is introduced by the particle *mint*. If the comparative complement is realized with adessive, any other case must be suppressed. This can lead to ambiguities, and therefore some speakers generally favor the *mint* construction. All the following examples, repeated from Wunderlich (2001a), are accepted (or rejected) by those speakers who do not generally favor the *mint* construction.

The adessive phrase can always be contrasted with nominative or accusative:

- (41) (Én) Péter-t jo-bb-an szeret-em nál-ad.
 I Peter-ACC good-COMP-ADV love-1sg ADE-2sgP
 ‘I love Peter more than (I love) you’ (preferred) [mint téged_{ACC}]
 ‘I love Peter more than you (love Peter)’ [mint te_{NOM}]

In the following, all readings in which the adessive contrasts with the nominative argument are neglected, because these readings are expected, and maybe even strongly preferred if the given word order is shifted. (As mentioned above, some speakers do only accept these readings.) (42a) shows that the adessive phrase can be contrasted with dative being the medial argument, while the word order in (42b) favors the contrast with nominative.

- (42) a. Anna több könyv-et ad-ott Ferenc-nek Péter-nél.
 Anna more book-ACC give-PAST Ferenc-DAT Peter-ADE
 ‘Anna gave more books to Ferenc than to Peter.’
 b. Anna Péter-nél több könyv-et ad-ott Ferenc-nek.
 Anna Peter-ADE more book-ACC give-PAST Ferenc-DAT
 ‘Anna gave more books to Ferenc than Peter (did).’

The adessive phrase cannot be contrasted with a semantic case, although some of the following sentences with adessive might be improved by a different word order.

- (43) a. Inkább a kert-ben ült, mint a ház-ban /*ház-nál.
 more the garden-INESS sat.3sg than the house-INE /house-ADE
 ‘She sat more in the garden than in the house.’
 b. Béla-tól több level-et kap-t-am, mint Péter-to3l /*Péter-nél.
 Bela-ABL more letter-ACC receive-PAST-1sg than Peter-ABL /Peter-ADE
 ‘I received more letters from Béla than from Peter.’
 c. Jo-bb-an szeret-nék Karcsi-val táncol-ni, mint Péter-rel
 good-COMP-ADV like-1sg.COND Charlie-INSTR dance-INF than Peter-INSTR
 /*Péter-nél.
 /Peter-ADE
 ‘I more like to dance with Charlie than with Peter.’

However, the adessive phrase can be contrasted with a lexically marked dative.

- (44) a. Nek-i jobban tetszik a könyv nál-am.
 DAT-3sg better like the book ADE-1sgP
 ‘He/she likes the book more than I.’
 b. Anná-nak Péter-nél nehéz-ebb franciául olvas-ni.
 Anna-DAT Peter-ADESS difficult-COMP French read-INF
 ‘For Anna it is more difficult to read French than for Peter.’

- c. Anná-nak több level-et kell ír-ni-a Péter-nél.
 Anna-DAT more letter-ACC need write-INF-3SGP Peter-ADESS
 ‘Anna has to write more letters than Peter.’
- d. A GB fontos-abb volt Anná-nak Péter-nél.
 the GB important-COMP was Anna-DAT Peter-ADE
 ‘GB was more important for Anna than for Peter.’

The adessive phrase can also be contrasted with a dative possessor, but never with a possessor which is inside the NP.

- (45) a. Dániel-nek érdekes-ebb könyv-e-i vannak Péter-nél.
 Daniel.DAT interesting-COMP book-3SGP-PL are Peter-ADE
 ‘Daniel has more interesting books than Peter.’
- b. Ez inkább Péter feladat-a, mint az enyém /*nál-am.
 DEM more Peter task-3sgP than the mine /ADE-1sgP
 ‘This is more Peter’s task than mine.’

The following minimal pair shows that the contrast with a lexically marked dative is grammatical, while that with an instrumental is not.

- (46) a. Gyakra-bb-an telefonál-t-am nek-i Péter-nél.
 often-COMP-ADV telephone-PAST-1sg DAT-3sgP Peter-ADE
 i. ‘I called him up more often than (I called up) Peter’
 ii. ?? ‘I called him up more often at Peter’
- b. Gyakra-bb-an telefonál-t-am vel-e Péter-nél.
 often-COMP-ADV telephon-PAST-1sg INSTR-3sgP Peter-ADE
 i. ‘I called him up more often at Peter’ (no contrast between him and Peter)
 ii. * ‘I called him up more often than (I called up) Peter’

Thus, in the phrasal comparative all instances of dative clearly pattern with accusative and nominative in that the dative can be suppressed, in contrast to any of the semantic cases. Therefore, the Hungarian dative also satisfies criterion (E) from above, and in this respect, there is no difference between lexical and nonlexical datives.

7. Conclusions

I have argued in this paper that the Hungarian dative is a structural case. From the five diagnostic criteria outlined in the introduction the Hungarian dative satisfies four: the dative is found with basic transitive verbs, it can be coindexed with an agreement morpheme, it alternates with nominative, and it can be suppressed in the comparative construction (as well as in examples like (32a), where a matrix predicate selects ablative). Moreover, dative can be systematically marked for the highest or the lowest argument

of verbs, and this lexical dative behaves in important aspects similar to the dative in basic verbs (discussed in section 6). Only one criterion fails: the causee in derived causatives can never be realized by dative; but this fact could follow from a specific property of the causative morpheme. Such a suggestion is even more convincing in the light of the permissive construction, where the permissée *can* receive dative. Hence, there is overwhelming evidence that the Hungarian dative *is* structural.

I have tested the behavior of the verb *tetszik* 'like' with a reversed argument realization; from this it follows that the nominative rather than the highest argument of the verb is the designated one (the 'subject') in Hungarian. It is exactly this argument that can be coindexed with subject agreement on finite verbs and with possessor agreement on infinitives.

Probably no one would dispute that the dative in inflected infinitives is a structural dative. This construction inherits important features from the nominal possessor construction. Therefore, a dative possessor should be regarded as structural, too, a conclusion that is probably not shared by every linguist who just considers dative possessors.

One has to admit that medial datives as well as lexically marked datives of Hungarian do not undergo any alternation, and do not agree with inflected infinitives (except medial datives in the permissive construction). I think that there are independent reasons that this is so: only designated arguments undergo the nominative-dative alternation, and lexical features should be preserved.

One might claim that medial datives and lexically marked datives are in fact semantic, which is not wrong given that they are motivated by semantic constellations in the verb. In the theory advocated here they are nevertheless regarded as structural because they do not contribute a specific semantic relation to the interpretation of the sentence, but can be captured by abstract case features (which are based on semantic constellations). In this respect, they are similar to datives in other languages, which may display more structural properties. The need for cross-linguistic comparison forces us to capture similar things with the same notions.

There is some reason in the statement that even the Hungarian adessive is a structural case because it is the target of various semantic roles in the comparative construction. Also, one might consider the ablative to be structural because it can control the subject of an dependent inflected infinitive. However, these suggestions probably would not find consent among linguists because the properties in mind are too much construction-dependent, and do not meet any cross-linguistic confirmation.

In my view, a case morpheme such as Hungarian *-nek* 'dative' should be given a unique characterization, unless there are strong reasons to assume a polyfunctional morpheme. I proposed such a characterization, and in all instances of Hungarian dative I

have discussed it proved reasonable. A language that coins a dative, which is the most marked possible structural case in our theory, can of course make several uses of it.

There are some more general aspects about the syntax of Hungarian that deserve further elaboration. I have argued that possessors do not move outside of the DP but instead are base-generated datives with a larger variety of interpretation when they appear in the VP. By contrast, datives agreeing with an inflected infinitive can (and mostly must) be raised. However, in many instances these datives are not raised but controlled by an argument of the matrix predicate. The possibility of inflected infinitives seems to be a typological alternative for raising structures, because they allow the designated argument to stay in the infinitive phrase. Indeed, raising structures are comparatively rare in Hungarian.

References

- Barss, Andrew & Howard Lasnik (1985) A note on anaphora and double objects. *Linguistic Inquiry* 17, 347-354.
- Chomsky, Noam (1981) *Lectures on Government and Binding*. Dordrecht: Foris.
- Ehrich, Veronika & Irene Rapp (2000) Sortale Bedeutung und Argumentstruktur: ungnominalisierungen im Deutschen. *Zeitschrift für Sprachwissenschaft* 19, 245-303.
- Fanselow, Gisbert (2000) Optimal exceptions. In Barbara Stiebels & Dieter Wunderlich (eds.) *Lexicon in Focus*, 173-209. Berlin: Akademie Verlag.
- Gamerschlag, Thomas (1996) Kasus, Alternationen und Argumentlinking im Japanischen. *Working Papers Theorie des Lexikons*, Nr. 80. Univ. of Düsseldorf.
- Haider, Hubert (1985) The case of German. In Jindrich Toman (ed.) *Studies in German Grammar*, 65-101. Dordrecht: Foris.
- Haider, Hubert (2001) Alternating and non-alternating cases. Handout, Workshop on case. University of Cologne.
- Joppen, Sandra & Dieter Wunderlich (1995) Argument linking in Basque. *Lingua* 97, 123-169.
- Kenesei, István, Robert M. Vago & Anna Fenyvesi (1998) *Hungarian*. London: Routledge. [KVF]
- Koptjevskaja-Tamm, Maria (1993) *Nominalizations*. London: Routledge.
- Laczkó, Tibor (1995) *The syntax of Hungarian noun phrases*. Frankfurt: Peter Lang.
- Marantz, Alec (1984) *On the nature of grammatical relations*. Cambridge, Mass.: MIT Press.
- Schuercks, Lilia & Dieter Wunderlich (2000) Determiner-possessor relation in the Bulgarian DP. Proceedings of the Conference on the syntax and pragma-semantics of noun phrases. Antwerp. To appear.

- Stiebels, Barbara (2000) Linker inventories, linking splits and lexical economy. In Barbara Stiebels & Dieter Wunderlich (eds.) *Lexicon in Focus*, 211-245. Berlin: Akademie Verlag.
- Szabolcsi, Anna (1994) The noun phrase. In Ferenc Kiefer & Katalin É. Kiss (eds.) *The syntactic structure of Hungarian*, 179-274. New York: Academic Press.
- Tóth, Ildikó (2000) *Inflected Infinitives in Hungarian*. Ph.D dissertation, University of Tilburg.
- Vogel, Ralf & Markus Steinbach (1998) The dative - an oblique case. *Linguistische Berichte* 173, 65-90.
- Woolford, Ellen (2001) On structurally licensed dative case. Handout, workshop on case. University of Cologne.
- Wunderlich, Dieter (1997) Cause and the structure of verbs. *Linguistic Inquiry* 28, 27-68.
- Wunderlich (2000a) Predicate composition and argument extension as general options. In Barbara Stiebels & Dieter Wunderlich (eds.) *Lexicon in Focus*, 247-270. Berlin: Akademie Verlag.
- Wunderlich, Dieter (2000b) The force of lexical case. German and Icelandic compared. In Kristin Hanson & Sharon Inkelas (eds.) *The Nature of the Word: essays in honor of Paul Kiparsky*. MIT Press. To appear.
- Wunderlich, Dieter (2001a) Two comparatives. In István Kenesei & Robert M. Harnish (eds.) *Perspectives on semantics, pragmatics, and discourse. A Festschrift for Ferenc Kiefer*, 75-89. Amsterdam: Benjamins.
- Wunderlich, Dieter (2001b) Optimal case patterns. German and Icelandic compared. In Ellen Brandner & Heike Zinsmeister (eds.) *New perspectives on case theory*. Stanford: CSLI Publications. To appear.
- Wunderlich, Dieter & Renate Lakämper (2001) On the interaction of structural and semantic case. *Lingua* 111, 377-418.
- Zimmer, Karl E. (1976) Some constraints on Turkish causativization. In Masayoshi Shibatani (ed.) *The grammar of causative constructions*, 399-412. New York: Academic Press.

email: wdl@phil-fak.uni-duesseldorf.de

<http://web.phil-fak.uni-duesseldorf.de/~wdl>