

Filozofická fakulta Univerzity Palackého

**How do datives raise to our (dis)advantage?
Applied arguments in English and Czech
(Bakalářská práce)**

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How do datives raise to our (dis)advantage? Applied arguments in English and Czech
(Bakalářská práce)

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English abstract:

Applicatives are traditionally understood as morphemes increasing the valency of a verb via the addition of an argument (see e. g. Dixon and Aikhenvald 2000; Peterson 2007). An amount of generative literature, mainly in the Minimalist framework (Chomsky 1995, inter alia), has proposed an analysis based on the presence of applicative heads even in languages where these heads are non-overt (e. g. Pylkkänen 2008; Marvin and Stegovec 2012). This thesis adopts Pylkkänen's (2008) theory of high and low applicative heads, which are merged either above or below the VP respectively, and the latter of which she proposes to be involved in the case of English DOCs. Following earlier applicative approaches to Czech datives in ditransitive constructions by Dvořák (2010, et seq., inter alia), this thesis proposes Pylkkänen's (2008) low applicative heads to introduce a position in SPEC;AppIP where Czech affected datives reside in. Crucially, however, contrary to Pylkkänen's (2008) approach and in line with raising-driven approaches to datives (Landau 1999; Kayne 2024, among others), the analysis developed throughout this thesis notes the importance of raising, where Czech affected datives in Czech originate as SPEC;DP possessors and subsequently move into SPEC;AppIP. Raising and its importance in establishing a relation of possession between the applied object and the verbal/prepositional object, and notably the absence of such a raising operation in English, is proposed to be able to account for the idiosyncratic syntactico-semantic behavior of English indirect objects in some types of DOC constructions.

Key words: applicatives, datives, ditransitives, raising, English, Czech

Anotace:

Aplikativy jsou tradičně chápány jako morfémy, které zvyšují valenci slovesa přidáním dodatečného argumentu (viz např. Dixon a Aikhenvald 2000; Peterson 2007). V generativní literatuře, soustředěné převážně v Minimalistickém frameworku (Chomsky 1995, inter alia), byly navrženy aplikativní analýzy i pro jazyky, ve kterých se nevyskytuje fonologicky realizovaná aplikativní morfologie (např. Pylkkänen 2008; Marvin a Stegovec 2012). Tato práce přejímá teorii tzv. vysokých (high, merdžovaných nad VP) a nízkých (low, medržovaných pod VP) aplikativních hlav Liiny Pylkkänen (2008), a navazuje na předchozí analýzy dativů v distransitivních konstrukcích (Dvořák 2010, inter alia) s hypotézou, že české afektované dativa se nachází ve SPEC nízké ApplP. Klíčová je zde přítomnost posunu dativu ze SPEC;DP do SPEC;ApplP, přičemž posunu není využíváno v teorii Liiny Pylkkänen (2008)—tato práce zde tedy navazuje na přístupy založené na posunu (Landau 1999; Kayne 2024, mimo jiné). Posun je chápán jako důležitý derivační mechanismus, pomocí kterého dochází ke vzniku vlastnického vztahu mezi aplikovaným předmětem a předmětem slovesa či předložky. Jeho absence v angličtině je potom chápána jako možný původ odchylek v syntakticko-sémantických vlastnostech dativních předmětů některých anglických ditransitiv.

Klíčová slova: aplikativa, dativa, ditransitiva, posun, angličtina, čeština

Prohlašuji, že jsem tuto bakalářskou práci vypracoval samostatně, a že jsem uvedl úplný seznam citované a použité literatury.

V Olomouci dne 7. 5. 2024

Podpis:

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A preliminary discussion of the distribution of Czech dative DPs in unergative constructions has been presented at the OpenPodium of the 29th Central European Summer School in Generative Grammar (Kundrát 2023), and an earlier version of the analysis of Czech dative DPs has been presented as a poster at the 49^o Incontro di Grammatica Generativa (IGG49) conference (Kundrát 2024). I would like to express my gratitude to Karen de Clercq, Petra Mišmaš, Chris Reintges, and Adrian Stegovec, as well as the anonymous reviewers for IGG49, for their helpful questions and suggestions made during the above mentioned presentations.

Unless otherwise stated, the grammaticality judgements of the Czech data presented throughout this thesis are based on my knowledge of Czech as a native language.

Abbreviations

1 first person	INS instrumental
2 second person	LOC locative
3 third person	M masculine
ACC accusative	N neuter
AGR agreement	NOM nominative
AGT agentive	OBJ object
APPL applicative	OBL oblique
ASP aspect	PASS passive
CL clitic	PAST past tense
DAT dative	PL plural
DET determiner	POSS possessive
F feminine	PRS present
FIN Sawila final stem form	PST past
FV final vowel	RDR redirecive
GEN genitive	REFL reflexive
I Sawila set I person-marking prefix (see Kratochvíl 2014, 396–397)	S subject
II Sawila set II person-marking prefix (see Kratochvíl 2014, 396–397)	SG singular
IMPR imperative	SP subject prefix
INF infinitive	SUB subject
	TR transitive

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1 Introduction

Recently, Kayne (2024) articulated the very strong hypothesis that cross linguistically, all datives involve raising, while explicitly arguing against what I will throughout this thesis call the applicative hypothesis of Pytkänen (2008). In this thesis, following the Minimalist framework (Chomsky 1995, *inter alia*) and drawing from a rich body of cross-linguistic research on applicative structures which have been proposed to exist in English (e. g. Marantz 1993; Pytkänen 2008), as well as Slavic (Dvořák 2010, *inter alia*; Dyakonova 2009; Marvin and Stegovec 2012, among others), I show that the idea of “all datives raise” of Kayne (2024) is strongly supported by the syntactic behavior of Czech affected datives, while also showing the necessity of an applicative head in Pytkänen’s (2008) sense being present in structures involving affected datives in Czech.

First, the notion of an applicative must be discussed. Consider the Chichewa sentence in (1) below. The beneficiary object *mfumu* ‘chief’ can be added to it together with the affix *-ir* (Baker 1988b, 354), as is exemplified in (2).

- | | | |
|--------------------------|--------------------|---|
| | (2) Chichewa | (Baker 1988b, 353) |
| (1) Chichewa | (Baker 1988b, 353) | Mavuto <i>a-na-umb-ir-a</i> |
| <i>Mavuto a-na-umb-a</i> | <i>mtsuko.</i> | Mavuto SP-PAST-mold-APPL-ASP |
| Mavuto SP-PAST-mold-ASP | waterpot | <i>mfumu mtsuko.</i> |
| | | chief waterpot |
| | | “Mavuto molded the waterpot.” |
| | | “Mavuto molded the waterpot for the chief.” |

This type of a construction, seen in (2), seems to be frequent across linguistic families. In the Salish language Comox, the semantic interpretation of the role of this “added” object is ambiguous between having a malefactive and a benefactive reading (Kiyosawa and Gerdts 2010, 155–156; using data from Watanabe 2003, 251).

- | | |
|--|-------------------------------------|
| (3) Comox | (Watanabe 2003, 251) |
| <i>čəpχ-a[?]am-θ-as</i> | <i>ʔə tə t^θ ʔquesnaɨ</i> |
| dirty-RDR-TR:1SG.OBJ-3SUB | OBL DET 1SG.POSS dress |
| “She dirtied my dress [on me]./She dirtied my dress for me.” | |

Morphemes such as the Chichewa *-ir* (2) and the Comox *-a[?]* (3) are referred to as applicatives.¹ In the traditional literature, applicatives are understood as morphemes increasing the valency by “promoting” an adjunct into an argument position (see Dixon and Aikhenvald 2000, 2, 13–14; Peterson 2007, 1), either “transitivizing” an intransitive verb, or creating double object constructions out of transitive verbs (Peterson 2007, 2). This “promoted” argument is here referred to as the applied argument. The semantics of applicatives are not limited to malefactive/benefactive—they may introduce a wide variety of arguments, denoting locations, instruments, as well as recipients, among

1. The Comox applicative is glossed as a redirective (RDR) in (3). Redirectives are a type of applicatives, where “the role of direct object is redirected from the theme to the applied object” (Kiyosawa and Gerdts 2010, 150).

others.² Some of these are illustrated below in (4–5) on the examples from Sawila, a Papuan language belonging to the east Alor branch of the Timor Alor Pantar family, spoken in south-eastern Indonesia (Kratochvíl 2014). The applicative prefix *-li* in (4)³ introduces the location *siripine* ‘root’, and the applicative prefix *-wii* in (5) introduces the instrument *mu* ‘wood’ (Kratochvíl 2014, 398–400).

- | | | |
|--------------------------------------|---------------------------------|------------------------|
| | (5) Sawila | (Kratochvíl 2014, 400) |
| (4) Sawila (Kratochvíl 2014, 398) | <i>Niaraasine</i> | <i>mu</i> |
| <i>Nirre siripine litii.</i> | [ni-araasine] _P | [mu] _E |
| nirra [siripine] _E li-tii | 1.SG.II-house.FIN | wood |
| 1SG.AGT FIN.root APPL-dig | <i>wiigapi.</i> | |
| “I dig [a hole] along a root.” | wii-ga-pi | |
| | APPL-3.I-make | |
| | “My house was built with wood.” | |

Now consider the English (6) and Czech (7) transitive sentences below.

- | | |
|---|---------------------------------------|
| | (7) a. <i>Petr roztopil zmrzlinu.</i> |
| | Peter.NOM melted ice.cream.ACC |
| | “Peter melted the ice cream.” |
| (6) a. <i>Peter melted the ice cream.</i> | |
| b. <i>Peter bought the house.</i> | b. <i>Petr koupil dům.</i> |
| | Peter.NOM bought house.ACC |
| | “Peter bought the house.” |

Similarly to the applicative constructions found in Bukusu (Bantu), Chichewa (Bantu), Comox (Salish), and Sawila (Papuan), introduced above, it is possible to add an additional object to both of the sentences in (6–7), resulting in ditransitive sentences. This is exemplified in (8–9) below for (6) and (7) respectively.

- | |
|--|
| (8) a. <i>Peter melted Mary/her the ice cream.</i> |
| b. <i>Peter bought Mary/her the house.</i> |
| (9) a. <i>Petr Marii/jí roztopil zmrzlinu.</i> |
| Peter.NOM Mary.DAT/her.DAT melted ice.cream.ACC |
| “Peter melted Mary/her the ice cream.” |
| b. <i>Petr Marii/jí koupil dům.</i> |
| Peter.NOM Mary.DAT/her.DAT bought house.ACC |
| “Peter bought Mary/her the house.” |

The added object, appearing in the object form in the case of pronominals in the English examples in (8) and in the dative case in the Czech examples in (9), has the semantic

2. See Kimenyi (1978, Chapter 3) for a discussion of the diverse semantics of applicatives.

3. Some stems in Sawila feature an alternation in their forms depending on their position within some phrasal unit. For a discussion of this phenomenon, see Kratochvíl (2014, 360–363), or alternatively Kratochvíl et al. (2023).

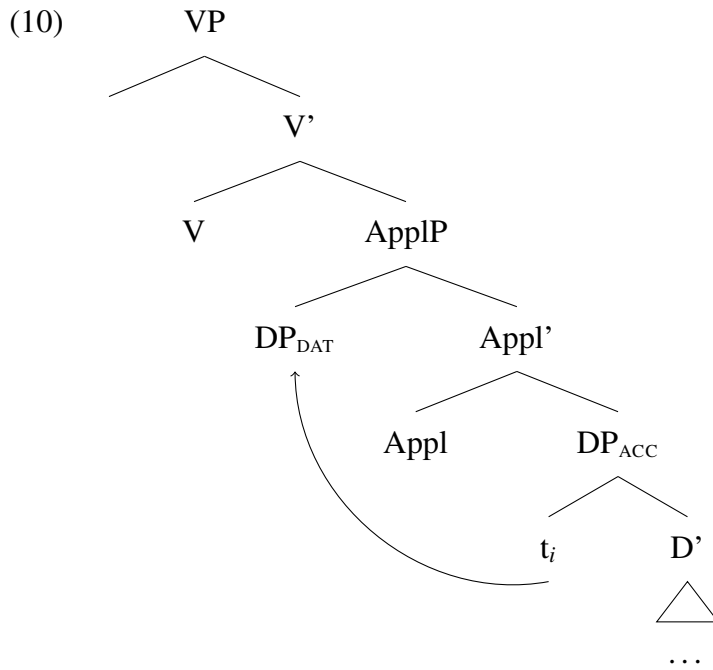
interpretation of a recipient of the direct object in both (8b) and (9b). The Czech dative in (9a) has the semantic interpretation of a participant that is in some way affected by the event of the melting of the ice-cream, either positively (with a benefactive reading), or negatively (with a malefactive reading); in fact, this interpretation is always ambiguous between a benefactive and a malefactive reading. These types of datives have been previously called maleficiary/beneficiary datives (by e.g. Dvořák 2010, et seq.), however, I opt for the term “affected dative” here instead, capturing not only the ambiguous reading, but also the syntactic behavior of these datives discussed throughout this thesis, which is distinct from that of “true” maleficiaries/beneficiaries as captured by Pylkkänen (2008).

The case of the added object in the English example in (8a) is slightly more complicated. If the object is interpreted as a recipient, not unlike those seen in (8b) and (9b), then it ends up possessing the direct object at a time where the direct object no longer exists; i.e. the ice-cream had been melted by the time it ended up in Mary’s possession. Still, (8a) does imply a transfer of possession, and it is thus not unreasonable to label this thematic role as a recipient as well.

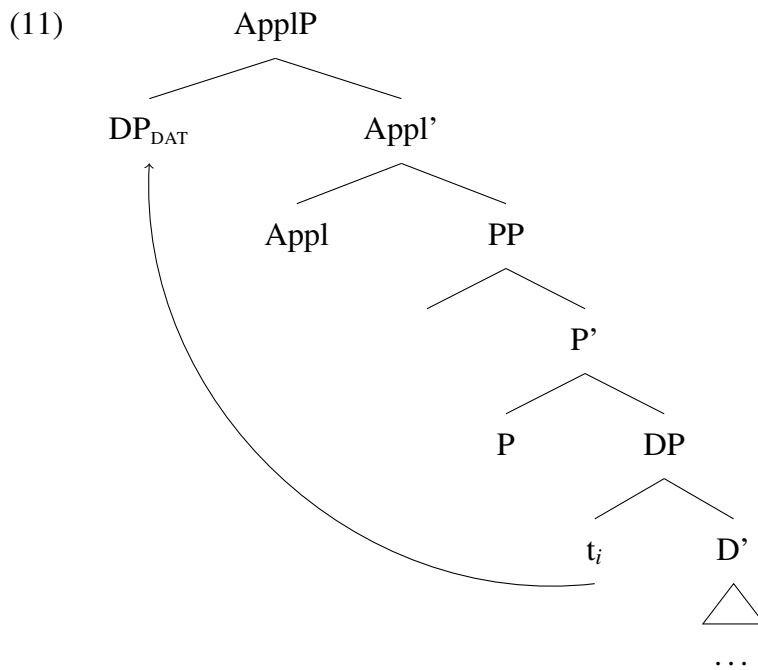
Although similar in many respects to the applicative constructions in the Bantu, Salish, and Papuan languages introduced above, the added objects in English and Czech discussed above differ in that they can be added without the presence of any overt (applicative) morphology on the verb. More typologically/descriptively oriented works, such as Peterson (2007), make explicit that this lack of overt applicative morphology on the verb, coupled with low productivity in the case of English, “eliminate from consideration constructions such as English dative shift” (Peterson 2007, 39).

There is, however, little reason to suppose that the lack of overt applicative morphology serves as any evidence for the absence of applicative heads in languages like English or Czech. All a criterion for applicativehood such as “[t]here must be overt marking of the construction in the verbal complex” (Peterson 2007, 39) does is that it sets up an arbitrary and irrelevant label excluding possible phonologically-null applicative heads introducing applied arguments from being classified as such, and, apart from completely missing a possible generalization concerning argument structure, faces the problem of cross-linguistically observed syntactic behavior of applied arguments strongly suggesting otherwise. The productivity criterion of Peterson (2007) is more reasonable, and although perhaps problematic for English, it presents no issue whatsoever for the claim that Czech affected datives are involved in an applicative structure, due to their extremely high productivity.

The above sketched out arbitrary criterion notwithstanding, this thesis follows the generative literature (see e. g. Marantz 1993; Pesetsky 1995; Cuervo 2003; Emonds and Whitney 2006; Pylkkänen 2008; Georgala 2012; Harley 2012; Citko et al. 2017), and especially Pylkkänen’s (2008) typology of low and high applicative heads, arguing for the presence of Pylkkänen’s (2008) low applicative head and its involvement in constructions involving Czech affected datives. The main proposal discussed throughout this thesis is that there are two such constructions involving a single Pylkkänen’s (2008) low applicative head. The first of these constructions is given in (10) below.



In addition to the V object DP providing a position for the dative to raise out of in the structure in (10), it is also possible for a PP to appear in COMP of the ApplP to supply a DP for the dative to raise out of in constructions lacking an internal argument, i. e. unergatives.



The thesis is structured as follows. Section 2 discusses the structure of English DOCs, introducing the applicative approach to ditransitives that has recently become a major topic in generative literature. Section 3 follows with a discussion on the idiosyncrasies regarding the distribution of applied objects in English ditransitives.

Section 4 offers a description of Czech datives generally, focusing then on affected datives and their distribution, noting especially their incompatibility with unergatives in

the absence of a PP, as well as the restriction on the number of affected datives in such constructions. A tentative non-applicative analysis, involving affected datives residing in SPEC;PP, is offered.

Section 5 then makes it explicit that the SPEC;PP analysis is inadequate, offering instead an applicative analysis involving possessor raising of the affected dative into Pylkkänen's (2008) low applicative head. The arguments for this analysis, involving patterns of possession between the possessor affected dative and the possessum P/V object, the restriction on distribution of DP possessor modifiers, and restrictions on movement, are discussed in turn.

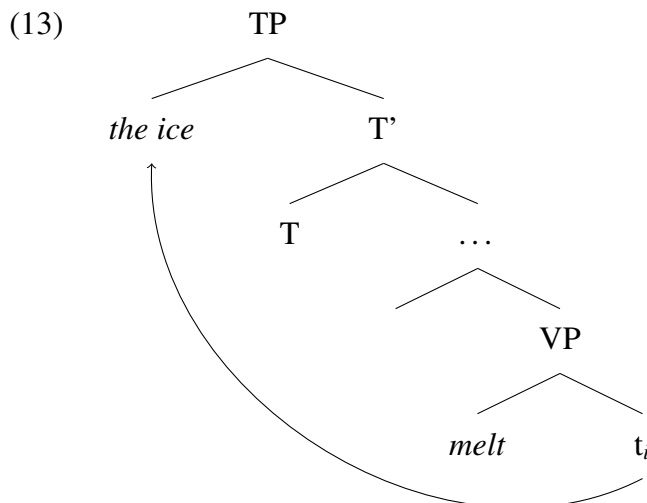
Section 6 provides concluding remarks on the main findings of this thesis and brings attention to notable questions that must be considered in further research in relation to applicative structures.

2 English double object constructions as applicatives

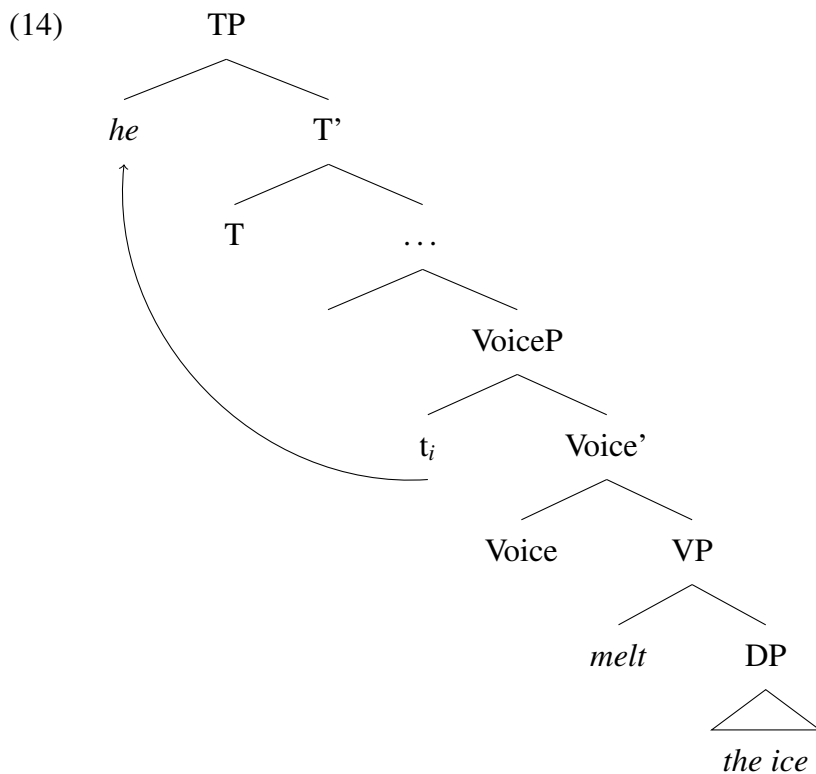
Consider first an alternation in the number of arguments of the verb *melt* (12a–12b).

- (12) a. *The ice melted.*
b. *He melted the ice.*

The verb *melt* is unaccusative in (12a), while being transitive in (12b). Furthermore, the patientive subject in (12a) is identical to the patientive object in (12b). Following the unaccusative hypothesis first sketched out by Perlmutter (1978) and arguably made further evident by the uniformity of theta-role assignment hypothesis (UTAH, Baker 1988b), the now standard approach to this shift is that the patientive argument *the ice* originates as an object of the verb in both (12a) and (12b), where it is assigned the patientive theta-role. The difference between (12a) and (12b) is thus one where the internal argument DP *the ice* moves into surface subject position (SPEC;TP, most commonly to satisfy the EPP feature) in (12a), while staying in-situ in (12b). This movement is shown in (13).



In (12b), the internal argument has to stay in-situ due to the presence of the internal argument DP *he*, merged in SPEC;VoiceP (Kratzer 1994), whose presence blocks the movement of the internal argument into SPEC;TP, the external argument then being the only DP that is eligible for movement into SPEC;TP (14). This is due to independent restrictions on movement (see e. g. the Minimal Link Condition in McGinnis 2008).

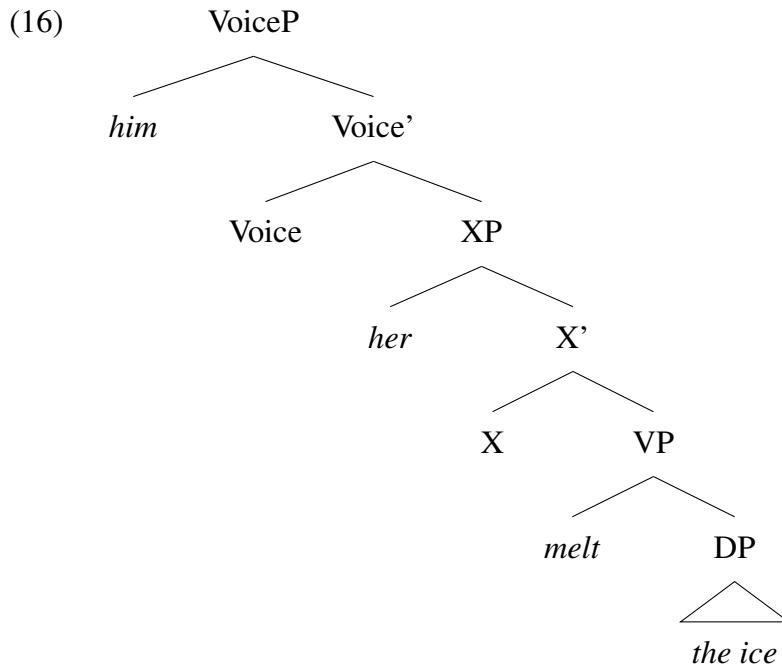


Kratzer's (1994) severing of the external argument from the verb and instead having it introduced into the structure in SPEC of a separate head, VoiceP, combined with the unaccusative hypothesis (Perlmutter 1978), Baker's (1988a) UTAH, and commonly assumed restrictions on movement, thus account for the fact why the internal argument appears in surface subject position in the absence of an external argument in (12a), as well as the absence of the external argument itself—as VoiceP can be assumed to be not merged into the structure. This alone paints a rather interesting picture concerning argument structure, mainly that there is always only a single argument per head in both (12a) and (12b).

It is also possible to add an additional argument into the structure in (12b), turning the verb *melt* into a ditransitive, as is shown below in (15).

(15) *He melted her some ice.*

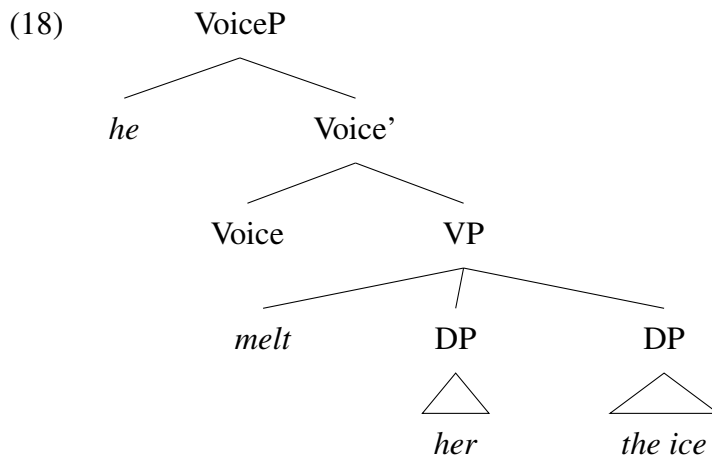
As this third argument *her* in (15) is absent in (12b), just as the external argument *he* in surface subject position is absent in (12a), it could be hypothesized that this argument is also introduced into the structure by yet another separate head, not merged in in both (12a) and (12b), X, as shown in (16).



There is, however, an immediate issue with the structure in (16), that being the fact that the structure in (16) cannot possibly derive the correct order in (15), instead deriving the impossible order in (17).

(17) **He her melted the ice.*

One possibility to pursue here would be adopting a flat structure for ditransitives in English (18). As Citko et al. (2017, 3) note, this approach was proposed by Oehrle (1976, as cited by Citko, Emonds, and Whitney 2017, 3) and later defended by Culicover and Jackendoff (2005, 109, as cited by Citko, Emonds, and Whitney 2017, 3).



Such a flat structure is, however, inherently flawed. Even if, in addition to a binary Merge operation, an n-ary Merge operation was allowed during the syntactic computation, the flat structure in (18) fails to account for the patterns of asymmetry between the IO and DO.

2.1 The IO/DO asymmetry and the structure of DOC

Citing work by Barss and Lasnik (1986), Citko et al. (2017) and Harley and Miyagawa (2017) make explicit the following arguments against a flat-structure analysis for English ditransitives:

- Only the IO can bind an anaphoric DO (Citko et al. 2017; Harley and Miyagawa 2017; based on Barss and Lasnik 1986):

(19) a. *I sent Mary_i a picture of herself_i. *I sent herself_i a picture of Mary_i.* (Citko et al. 2017, 4)

b. *I showed Mary herself. *I showed herself Mary.* (Harley and Miyagawa 2017, 2)

- Only a quantified IO can bind a pronominal DO (Citko et al. 2017; Harley and Miyagawa 2017; based on Barss and Lasnik 1986):

(20) a. *I sent every account owner_i his_i bank statement. *I sent its_i owner every_i bank statement.* (Citko et al. 2017, 4)

b. *I gave every worker_i his_i paycheck. *I gave its_i owner every paycheck_i.* (Harley and Miyagawa 2017, 2)

- Only the IO can bind an NPI in the DO (Citko et al. 2017; Harley and Miyagawa 2017; based on Barss and Lasnik 1986):

(21) a. *I sent no one anything. *I sent anyone nothing.* (Citko et al. 2017, 4)

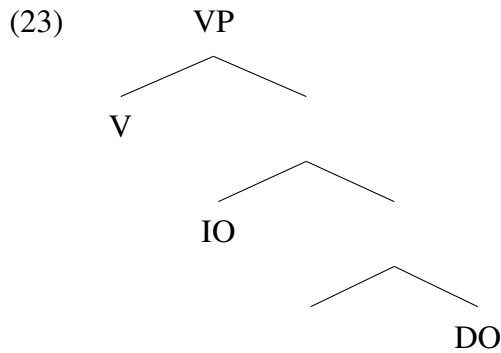
b. *I showed no one anything. *I showed anyone nothing.* (Harley and Miyagawa 2017, 2)

- The DO cannot cross over an IO with a coindexed pronoun (Citko et al. 2017; Harley and Miyagawa 2017; based on Barss and Lasnik 1986):

(22) a. *??Which account owner_i did you send t_i his_i paycheck? *Whose bank statement_i did you send his owner t_i?* (Citko et al. 2017, 4)

b. *Which man_i did you send his_i paycheck? *Whose_i pay did you send his_i mother t_i?* (Harley and Miyagawa 2017, 2)

Citko et al. (2017, 5) and Harley and Miyagawa (2017, 2) both note that Barss and Lasnik's (1986) findings suggest the following structure for ditransitives in English (23), where the IO c-commands the DO, but not vice-versa.

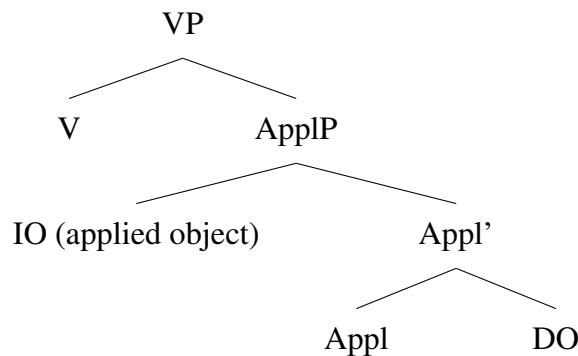


A more recent and very influential instantiation of the general idea of the structure in (23) has been proposed by Pylkkänen (2008). Following the line of thinking that applicative heads are involved in ditransitive constructions (first proposed by Marantz 1993; as noted by Harley and Miyagawa 2017, 8), Pylkkänen (2008) proposes that English IOs appear in SPEC of a low applicative head.

2.2 English IOs as low applied objects

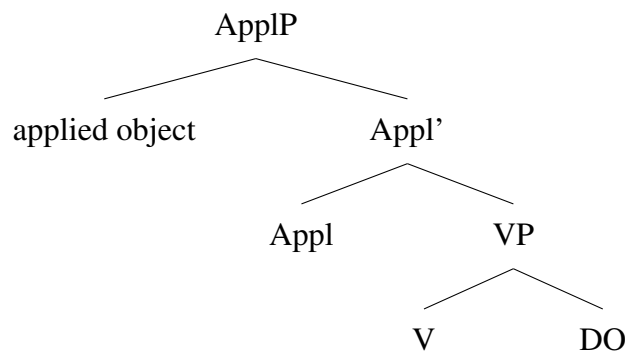
The low applicative head of (Pylkkänen 2008) is located below the VP and semantically relates the IO (the applied object) to the DO, involving the transfer of the applied object's possession of the DO (24).

(24) The structure of a low applicative (adapted from Pylkkänen 2008, 14)



Pylkkänen (2008) distinguishes low applicatives from another type of an applicative head—the high applicative head, located above the VP, which semantically relates the applied object to the whole VP (25).

(25) The structure of a high applicative (adapted from Pylkkänen 2008, 14)



Based on the proposal that low applicatives relate the applied object to the direct object, involving a transfer of possession, while high applicatives relate the applied object to the whole VP, Pylkkänen (2008, 18–19) expects that only high applicatives should be able to combine with unergative and stative verbs. She uses this (un)availability of an applicative head to combine with certain verb types as general diagnostics for determining the type of an applicative head (either low or high) being present in a given language.

Using these general diagnostics, Pylkkänen (2008, 20) shows that English IOs do pattern as low applicatives, as they are incompatible with both unergatives (26a) and stative verbs (26b).

- (26) a. **I ran him.* (Pylkkänen 2008, 20)
 b. **I held him the bag.* (Pylkkänen 2008, 20)

The strength of Pylkkänen’s (2008) theory of low and high applicatives comes from the fact that these patterns of distinct behavior of low vs. high applied objects hold cross-linguistically. Pylkkänen (2008, 20) shows the inability of Japanese (27) and Korean (28) applied objects to combine either with unergatives (27a, 28a) or stative verbs (27b, 28b), mirroring the behavior of the English IO.

- (27) a. Japanese unergative (Pylkkänen 2008, 20)
**Taro-ga Hanako-ni hasit-ta.*
 Taro-NOM Hanako-DAT run-PAST
 “Taro ran for Hanako.”
- b. Japanese stative (Pylkkänen 2008, 20)
**Taro-ga Hanako-ni kanojo-no kaban-o mot-ta.*
 Taro-NOM Hanako-DAT she-GEN bag-ACC hold-PAST
 “Taro held Hanako her bag.”
- (28) a. Korean unergative (Pylkkänen 2008, 20)
**Mary-ka John-hanthey talli-ess-ta.*
 Mary-NOM John-DAT run-PAST-PLAIN
 “Mary ran to/from John.”
- b. Korean stative (Pylkkänen 2008, 20)
**John-i Mary-hanthey kabang-ul cap-ass-ta.*
 John-NOM Mary-DAT bag-ACC hold-PAST-PLAIN
 “John held Mary her bag.”

On the other hand, if a language has an applied argument that can be combined with an unergative verb, as is the case in Albanian (29a) or the Bantu language Luganda (30a) (Pylkkänen 2008, 20–21), it is, following Pylkkänen’s (2008) generalization, expected that these applied arguments will be able to combine with stative verbs as well. This is

in fact the case, as seen in (29b) for Albanian and (30b) for Luganda (Pylkkänen 2008, 20–21).

- (29) a. Albanian unergative (Pylkkänen 2008, 21)

I vrapova.

him.DAT.CL ran.1SG

“I ran for him.”

- b. Albanian stative (Pylkkänen 2008, 21)

Agimi i mban Drites çanten time.

Agim.NOM CL holds Drita.DAT bag.ACC my

“Agim holds my bag for Drita.”

- (30) a. Luganda unergative (Pylkkänen 2008, 20)

Mukasa ya-tambu-le-dde Katonga..

Mukasa 3SG.PAST-walk-APPL-PAST Katonga

“Mukasa walked for Katonga.”

- b. Luganda stative (Pylkkänen 2008, 20)

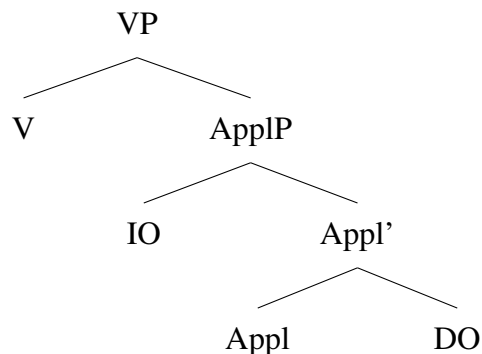
Katonga ya-kwaant-i-dde Mukasa ensawo.

Katonga 3SG.PAST-hold-APPL-PAST Mukasa bag

“Katonga held the bag for Mukasa.”

Adopting Pylkkänen’s (2008) treatment, this thesis takes the following structure (31), which involves a low applicative head, to be the structure of English DOCs, which will serve below as a starting point for a further comparison with Czech.

- (31) Pylkkänen’s (2008) structure of the English DOC



Notice, however, that the external argument has to be present in the structure in order for an English applied argument, *her* in the case of (32a), to have a recipient semantic reading. No other than patientive/thematic interpretation is available for (32b).

- (32) a. *I melted her the ice.*
 b. *The ice melted her.*

It thus seems that the added dative is dependent on the presence of an external argument. Although supported by the English data in (32) above, this is not the case in Czech. Compare the transitive sentence in (33) and the sentence lacking an external argument (unaccusative) in (34). The dative in (34) has the same reading as it does in (33).

- (33) *Petr ji roztopil led.*
 Peter.NOM her.DAT melted ice.ACC
 “Peter melted her the ice.”

- (34) *Led se ji roztopil.*
 ice.ACC REFL.CL her.DAT melted
 “The ice melted to her (dis)advantage.”

This may at a first glance suggest that Czech employs a hierarchy of functional elements different from the one in English, mainly one where Voice with its external argument combines with a structure containing the applicative head introducing the dative argument and the V with its internal argument (35). English, in contrary to the structure Pykkänen (2008) proposes for English DOCs (31), may thus be hypothesized to be one where the dative combines with a structure containing the external as well as the internal argument (36). Essentially, under the assumption that external arguments are introduced in Kratzer’s (1994) VoiceP, this would put these applied arguments way above the low applicative position of Pykkänen (2008).

- (35) external argument > dative argument > internal argument

- (36) applied argument > external argument > internal argument

This is, however, unlikely to be the case. den Dikken (2023) notes the cross-linguistic rarity of applied arguments combined with unaccusatives, ascribing it to various independent reasons.

Leaving aside the issue of the incompatibility of English applied datives and unaccusatives, a comment on the productivity of such datives in English is in order. Maleficiary/beneficiary readings of datives should be impossible in English; as Pykkänen (2008, 13) notes, the recipient reading is forced on indirect objects in English—as such, the sentence in (37) “cannot mean that Jane did the baking for Bill so that he wouldn’t have to” (Pykkänen 2008, 13).

- (37) *Jane baked Bill a cake.* (Pykkänen 2008, 13)

The strategy that English employs in order to express maleficiaries/beneficiaries instead is via the use of a PP headed by *on* in the case of the former (38) and *for* in the case of the latter (39).

(38) *The brave knight cheated on Mary.*

(39) *The brave knight fought the battle for Mary.*

Even then, however, the distribution of such PP maleficiaries/beneficiaries seems limited. Consider the sentence in (40), where it is hard, although not impossible, to elicit a maleficiary reading of *Mary*, instead of the more obvious locative reading.

(40) *The phone fell on Mary.*

Now contrast this with the Czech affected dative in (42), where the locative reading of the added object is impossible—thus lacking the ambiguity of (40).

(41) *Telefon spadl Marii.*
Phone.NOM fell Mary.DAT
“The phone fell on Mary.”

The way (41) has been glossed is a common way of glossing DPs with a maleficiary/beneficiary reading. However, due to the issue of the interpretation of maleficiary *on*-PPs in English, this thesis instead glosses such examples as exemplified in (42) below.

(42) *Telefon spadl Marii.*
Phone.NOM fell Mary.DAT
“The phone fell to Mary’s (dis)advantage.”

As such, the glosses used throughout this thesis better capture the semantics of such constructions.

3 Dative shift

Applicatives alternate with their adjunct counterparts (Peterson 2007, 1), as shown in (43), where the location is realized as a PP in (43a) and as an applied argument in (43b).

(43) a. Ainu (Peterson 2007, 1; based on Shibatani 1996, 159)

poro cise ta horari
big house in live

“He lives in a big house.”

b. Ainu (Peterson 2007, 1; based on Shibatani 1996, 159)

poro cise e-horari
big house APPL-live

“He lives in a big house.”

English ditransitives display an alternation which is on the surface similar to the one seen in Ainu in (43), where the recipient DP *Mary* appears inside a PP as seen in (44a)⁴, not dissimilar from 43a), or it may “shift” into a position immediately following the verb, as seen in (44b, not dissimilar from 43b).

(44) a. *John gave a book to Mary.*

b. *John gave Mary a book.*

The question that arises from the applicative/non-applicative alternation in (43) is thus what mechanism, if any, relates these two alternants together, possibly deriving one out of the other. A second question naturally follows—if English shifted datives (44b) are to be understood as applied objects, do the same mechanisms relate the alternants in (44), and is it possible that one of the alternants is derived from the other? Although a conclusive answer to these questions is not offered, the following subsections tackle questions raised in the literature and suggests that solutions based on purely syntactic grounds may be reached via the use of an applicative approach to English DOCs. The subsequent discussion with relation to the discussion of Czech affected datives, developed to its fullest extent in section 5, hints at the importance of possessor raising in establishing a relation of possession. Such a relation is argued to be absent when recipient arguments are involved, thus taking care of some unexpected and puzzling properties of recipient arguments in English—namely the fact that a recipient need not end up possessing the direct object in DOC constructions.

3.1 Symmetric and asymmetric applicatives

Applied objects, i. e. DPs introduced to the structure by an applicative head, share properties commonly observed with canonical arguments. Firstly, consider the English

4. Due to the abbreviation PDC being used for the so-called “personal dative constructions” later in section 3.4, I refrain from using the abbreviated term PDC for prepositional dative constructions throughout this thesis.

However, some languages display asymmetries in the behavior of applied objects under passivization, where one of the objects in a surface ditransitive construction is unavailable for passivization. For instance, in Chichewa, only the higher, benefactive applied object may passivize (51a–51b)⁵ (McGinnis 2008; citing Alsina and Mchombo 1993).

(51) a. Chichewa (Adapted from McGinnis 2008, 1232)

Atsíkána a-[nagúlíridwá] mphâtsó (ndí chítsîru).
 2-girls 2S-[buy.PST.PASS] 9-gift by 7-fool

“The girls were bought a gift.”

b. Chichewa (Adapted from McGinnis 2008, 1232)

**Mphâtsó i-[nagúlíridwá] átsíkána (ndí chítsîru).*
 9-gift 9S-[buy.PST.PASS] 2-girls by 7-fool

“A gift was bought for the girls.”

An asymmetry between the behavior of English direct and indirect objects during passivization has been long observed in the literature. As early as in Fillmore (1965), an observation was made that in English ditransitives that have a corresponding paraphrase involving the IO realized as an object of a *to*-PP (52), each of the objects may passivize (53), while in those that have a corresponding paraphrase involving the IO realized as an object of a *for*-PP (54), neither of the objects may passivize (55) (Fillmore 1965, 13).

(52) a. *He offered me a job.* (Fillmore 1965, 10)

b. *He offered a job to me.* (Fillmore 1965, 10)

(53) a. *I was given a hat.* (Fillmore 1965, 13)

b. *A hat was given me.* (Fillmore 1965, 13)

(54) a. *I saved your sister some cake.* (Fillmore 1965, 11)

b. *I saved some cake for your sister.* (Fillmore 1965, 11)

(55) a. **I was bought a hat.* (Fillmore 1965, 13)

b. **A hat was bought me.* (Fillmore 1965, 13)

It is clear, however, that there is dialectal variation concerning the possibility of either object of the English DOC to passivize, in addition to the patterns observed by Fillmore (1965) discussed above. As Citko et al. (2017, 28) note, the possibility for either object of the kind illustrated in (53) is generally observed in British English and some dialects of American English,

5. Square brackets indicate where the gloss was modified.

3.2 Prevention-of-possession verbs

Apart from DOCs showing distinct patterns of passivization, some verbs appearing in DOC constructions display contrasting behavior concerning the realization of the indirect object either as a dative or a PP object. Harley and Miyagawa (2017, 16) note a class of verbs forming DOC constructions they label prevention of possession verbs. These include *cost*, *spare*, and variably *deny*, which appear only with an applied object, and do not alternate with constructions involving the dative argument being realized as a PP object (56).

(56) Prevention of possession verbs (Harley and Miyagawa 2017, 16)

- a. *The accident cost John \$2,000.*
- b. **The accident cost \$2,000 to John.*
- c. *Can you spare John \$10?*
- d. **Can you spare \$10 to John?*
- e. *Ann denied Beth the ice cream.*
- f. *%Ann denied the ice cream to Beth.*

As Harley and Miyagawa (2017, 16–17) note, this impossible alternation has been dealt with in the literature in relation to the lexical semantics of the verb itself (see Harley and Miyagawa 2017, and the references cited there; mainly Krifka 2001). Turning to the framework used throughout this thesis, dealing with the impossibility of the sentences in (56) using a slight modification of Pylkkänen’s (2008) typology of applicatives seems straightforward at first. Suppose that the head in whose SPEC the dative argument in English appears is unspecified for the directionality of possession, rather than displaying the binary choice of being either a low recipient applicative head (Appl_{TO}, Pylkkänen 2008, see p. 18) or a low source applicative head (Appl_{FROM}, Pylkkänen 2008, see p. 18). The role that is assigned to the object of a *to*-PP, on the other hand, is specified—it is always a recipient.

3.3 The unavailability of the DOC alternation

While the verbs discussed in section 3.2 disallow the realization of the recipient argument as a PP object, there are verbs which conversely may appear only with the recipient argument realized as a PP object, and never as an applied object. Famously, such verbs, examples of which are given in (57), are of Latinate origin (Harley and Miyagawa 2017, 15; Emonds 2022, Chapter 3).

- (57) a. *Bill conveyed his regards to Sue.* (Harley and Miyagawa 2017, 15)
b. **Bill conveyed Sue his regards.* (Harley and Miyagawa 2017, 15)
c. *A visitor showed/ *demonstrated the staff the new procedure.* (Emonds 2022, 108)

Emonds (2022, 109) gives an exhaustive list of verbs (58) displaying the pattern observed in (57), which he labels as belonging to “secondary vocabulary”; meaning they are essentially English verbs of non-Germanic origin (Emonds 2022, 97).

(58) **Verbs unavailable to take the dative recipient:** “attribute, barbeque, compose, concoct, confess, contribute, construct, delegate, dedicate, demonstrate, dictate, distribute, donate, explain, fabricate, introduce, locate, permit, present, pronounce, refer, repair, report, reveal, submit, suggest, supply, translate, transmit, transport” (list taken from Emonds 2022, 109)

Another puzzling construction is one where sentential elements which essentially look like PP adverbials display the obligatoriness to be present in a sentence (59).

(59) *I put the books *(on the shelf).*

Now consider constructions like (60).

(60) *I shelved the books.*

While it is possible to derive a verb (60) out of a PP object (59), the same is not the case if a non-PP adverbial is used instead (61).

(61) a. *I put the books away.*

b. **I awayed the books.*

Moreover, consider causative constructions, such as (62b–62c).

(62) a. *The table moved.*

b. *I moved the table.*

c. *I caused the table to move.*

Assuming that the unaccusative embedded clause in (62c) involves the same movement of the internal argument into SPEC of a higher projection, as it does in (62a), a conclusion in the literature (see the discussion in Adger 2003, 131–136) has been made that (62b) and (62c) are derivationally related, namely that (62b) involves a causative head.

Interestingly, (63) is impossible.

(63) **I caused the books to shelve.*

It is not immediately clear what the role of an applicative head would be in such a construction—i. e. whether it is the absence of, or possibly the presence of, an applicative head (with the possibly PP in its SPEC in the latter case), that is blocking the formation of (63), or whether some other factor is at play here. Although this thesis is not able to give an explanation, a closer examination of this phenomenon in future research which would adopt the treatment of recipients in DOCs in English might reveal as to why canonical objects, and not PPs, can appear in structures showing the type of alternation as seen in (62a–62c). It is, however, likely that applicative heads play no role here and that both the required presence of the PP in (59) and the impossibility of the sentence in (63) are due to some separate phenomenon, as neither display canonical semantics of Pylkkänen’s (2008) low applicatives.

3.4 Personal dative constructions

Having so far covered cases where constructions involving either an applied object (DOCs) or a PP object do not allow alternation—notably the case of prevention-of-possession verbs where only the applied object (DOC) realization is possible—the discussion now turns to another type of a ditransitive construction, which lacks recipient semantics; the so-called personal dative construction (PDC). The PDC is a DOC-like construction (64), attested in Southern and Appalachian American English, which has recently been given much attention in the literature (see Lee 2016, and the references cited therein).

- (64) a. *John_i killed him_i/*Tom a bear.* (Lee 2016, 40; citing Horn 2008)
b. *John_i's gonna bake him_i a cake.* (Lee 2016, 43)
c. *John_i's gonna bake him_i a cake for his mom.* (Lee 2016, 43)

Unlike in English DOC, the applied object in English PDC “must be co-referential with the subject” (Lee 2016, 42), as is illustrated in (64a). It lacks possessive semantics (Lee 2016, 42), “express[es] a special, remarkable involvement of the subject in the event or situation described in the sentence” (Lee 2016, 42), and the presence of the applied objects “highlight[s]” the “satisfaction of the actual or perceived intention, goal, or preference of the subject” (Lee 2016, 42).

Lee (2016) furthermore shows that the applied object in the PDC must be pronominal (64a), that its semantics illustrated in the paragraph above do not survive if a reflexive pronominal is used instead (compare the PDC in 64b and the standard DOC in 65), and that unlike the DOC, the applied object in the PDC lacks a prepositional variant (66), while being able to co-occur with prepositional variants of standard recipient indirect objects (64c, 67).

- (65) *John_i's gonna bake himself_i a cake.* (Lee 2016, 43)

- (66) **John_i killed a bear to him_i.* (Lee 2016, 43)

- (67) *I_i am gonna write me_i a letter (to the president).* (Lee 2016, 43)

It should be furthermore noted that the applied object in PDCs shares distributional properties with the applied object in DOCs, and that the cooccurrence of a PDC applied object and a DOC applied object is not permitted (Christian 1991, 17), as is shown in (68).

- (68) **He was looking to buy him his family a house.* (Huang and McCoy 2011)

Lee (2016) points out that the PDC displays properties of both low and high applicatives of Pylkkänen (2008), arguing against Pylkkänen’s (2008) typology of high vs. low applicatives, opting instead for Georgala’s (2012) competing model, where, crucially, no low applicative heads are present.

3.5 Interim summary

The previous sections have established important points concerning the structure of English DOCs and its treatment as an applicative head in the literature, notably in Pykkänen (2008), who claims the English indirect object in the DOC to be an applied argument of a low recipient applicative head. The subsequent discussion has brought up cases reported in the literature where the indirect object carries no recipient semantics (indirect objects in prevention-of-possession ditransitives and the case of the PDC). While Lee’s (2016) treatment of PDCs in Georgala’s (2012) framework, which, contrary to Pykkänen’s (2008) involves only a single high applicative position, seems rather promising, this thesis has instead raised the idea that low applicative heads in English are not specified to be recipients.

This accounts for the intriguing semantics of PDCs, as well as for why the prevention of possession verbs in (56) cannot appear with the dative as an object of a PP—as that position is available to recipients only, and a sentence like (56a) cannot possibly mean that \$2,000 end up in *John’s* possession, only the SPEC;ApplP, and not the COMPL;PP, is the position that is available for the dative argument to get realized in. Furthermore, such an approach also accounts for the “puzzling” nature of the lack of possessive entailment in sentences like (69), noted by Harley and Miyagawa (2017, 17)

(69) *Mary mailed Sue the sweater (but she never received it).* (Harley and Miyagawa 2017, 17)

If the direction of possession is not specified for the SPEC;ApplP position, it follows that a sentence like (69) is fine, as the fact that the indirect *Sue* should end up in possession of the direct object *the sweater* is not specified. The issue that arises with this approach is that it wrongly rules out cases like (70).

(70) *Mary mailed the sweater to Sue (but she never received it).*

The same holds true for other ditransitives, such as *give* (71).

(71) *John gave Mary a sweater (but she never received it).*⁶

At the present moment, this thesis cannot give a full explanation of cases like (69–70). The possible solution to be noted here is the one involving lexical semantics of the verb (of Krifka 2001; as cited by Harley and Miyagawa 2017). However, the discussion of Czech in the subsequent sections highly hints at the fact that possession may truly be established only via possessor raising (72).

(72) ???*Petrovi se rozbilo auto, i když auto nikdy neměl.*
Peter.DAT REFL.CL broke car.NOM even.though car.NOM never not.have.M.SG
“(Peter’s) car broke down to Peter’s (dis)advantage, even though Peter never had a car.”

6. Although (i) clearly does not show this pattern.

(i) *#*John gave Mary an STD/covid but she never got it.*

However the use of *give* here is idiomatic, with its semantic interpretation being along the lines of *be infected by* in the context where the COMP of the V is semantically some sort of a contagious disease.

Thus, recipients, not involving possessor raising, are never specified for ending up in possession of the direct object. As such, recipients, unlike raised (possessor) datives, allow sentences like (69–70). The following sections develop the idea of possessor raising being present in Czech in these types of constructions, hinting at the fact that the possible absence of possessor raising in English alone may account for the above stated idiosyncrasies.

4 Czech dative DPs

Consider the sentences in (73a–73c) below, which feature an unergative verb (73a), an unaccusative verb (73b), and a transitive verb (73c).

- (73) a. *Jan-a spal-a v postel-i.*
Jane-SG.NOM slept-AGR in bed-SG.LOC
“Jane slept in a bed.”
- b. *Telefon-∅ spadl-∅*
Phone-SG.NOM fell-AGR
“The phone fell.”
- c. *Martin-∅ koupil-∅ knih-u.*
Martin-SG.NOM bought-AGR book-SG.ACC
“Martin bought a book.”

It is possible to add an optional dative DP to all of the sentences above, which is exemplified below in (74a–74c). The datives in (74a) and (74b) are examples of affected datives⁷, the semantics of whose are ambiguous between a beneficiary and a maleficiary reading, and in (74c), the dative DP is a recipient.

- (74) a. *Jan-a Petr-ovi spal-a v postel-i.*
Jane-SG.NOM Peter-DAT slept-AGR in bed-SG.LOC
“Jane slept in Peter’s bed to Peter’s (dis)advantage.”
- b. *Telefon-∅ Petr-ovi spadl-∅*
Phone-SG.NOM Peter-DAT fell-AGR
“(Peter’s) phone fell to Peter’s (dis)advantage.”
- c. *Martin-∅ Petr-ovi koupil-∅ knih-u.*
Martin-SG.NOM Peter-DAT bought-AGR book-SG.ACC
“Peter bought Peter a book.”

There have been numerous attempts in the literature to analyze Slavic datives as being involved in some type of an applicative structure. Among others, such proposals have been made for Russian (Dyakonova 2009), Slovenian (Marvin and Stegovec 2012), as well as Czech (Dvořák 2010, 2011; Kunderát 2024), among others (see Slavkov 2008, for Bulgarian; Gogłóza 2021, for Polish; although see Gračanin-Yuksek 2006, for argumentation against an applicative analysis based on data from Croatian). This section expands on the analysis of Czech ditransitives offered in Dvořák (2010) and later extended to monotransitives in Dvořák (2011), who divides Czech dative objects into two groups based on the base generated order of the DAT and ACC objects. Dvořák (2010) offers the following list of ditransitives belonging these two classes (75).

7. Also called benefactives/malefactives, see the list in 75

(75) Examples of Acc-Dat Verbs and Dat-Acc Verbs given in Dvořák (2010):

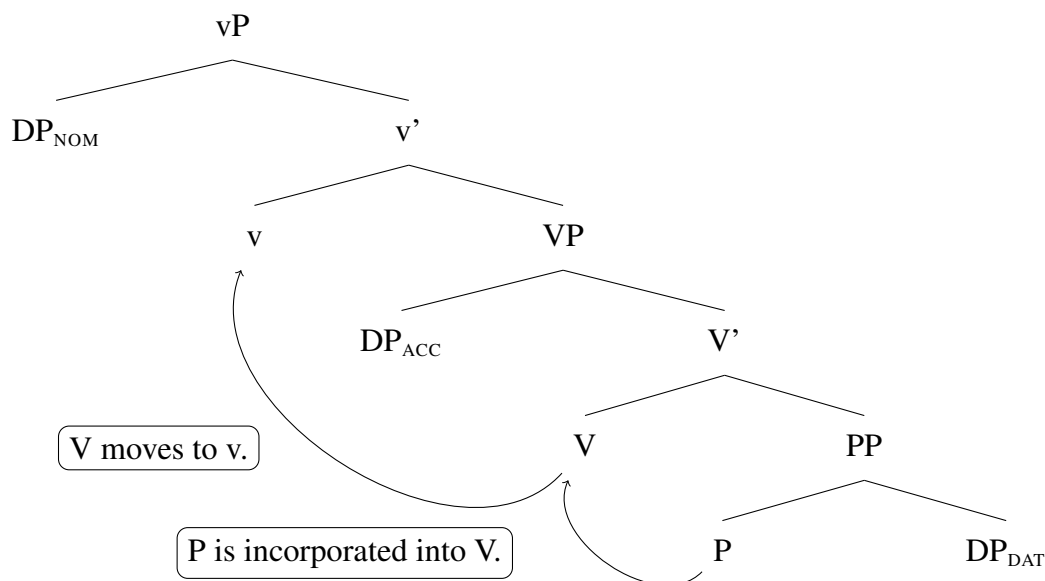
Acc-Dat Verbs: vystavit ‘expose’, zasvětit ‘devote’, svěřit ‘entrust’, zanechat ‘leave’, podřídít ‘subordinate, accommodate’, podrobit ‘put sb. through sth.’, přizpůsobit ‘adjust’, připodobnit ‘liken’, předurčit ‘predestine’, etc.

Dat-Acc verbs with recipient meaning: dát, darovat ‘give as a gift’, věnovat ‘in-scribe/dedicate’, poslat ‘send’, připsat ‘assign’, odpustit ‘forgive’, vrátit ‘return’, poskytnout ‘provide’, přidělit ‘allot’, zadat ‘place an order’, zakázat ‘forbid’, etc.

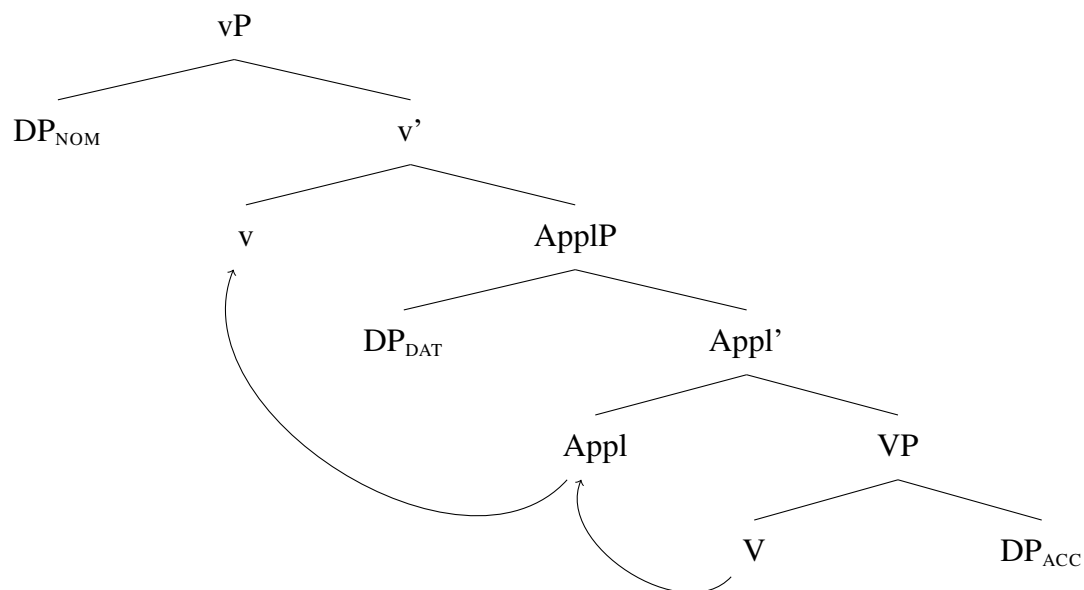
– **with benefactive/malefactive meaning:** dělat (naschvál) ‘do (on purpose)’, vyrábět ‘make’, věřit ‘believe’, vařit ‘cook’, vybojovat ‘fight out’, ukrást ‘steal’, ztratit ‘lose’, zranit ‘wound’, chválit ‘praise’, popřít ‘deny’, připomenout ‘re-mind’, etc.

Dvořák (2010, 2011) proposes that structures where the ACC object precedes the DAT object (Acc-Dat verbs in 75 involve a covert P head (76), whereas structures where the DAT object precedes the ACC object (Dat-Acc verbs in 75) involve an applicative head (77).

(76) ACC precedes DAT (adopted from Dvořák 2010, 2011)

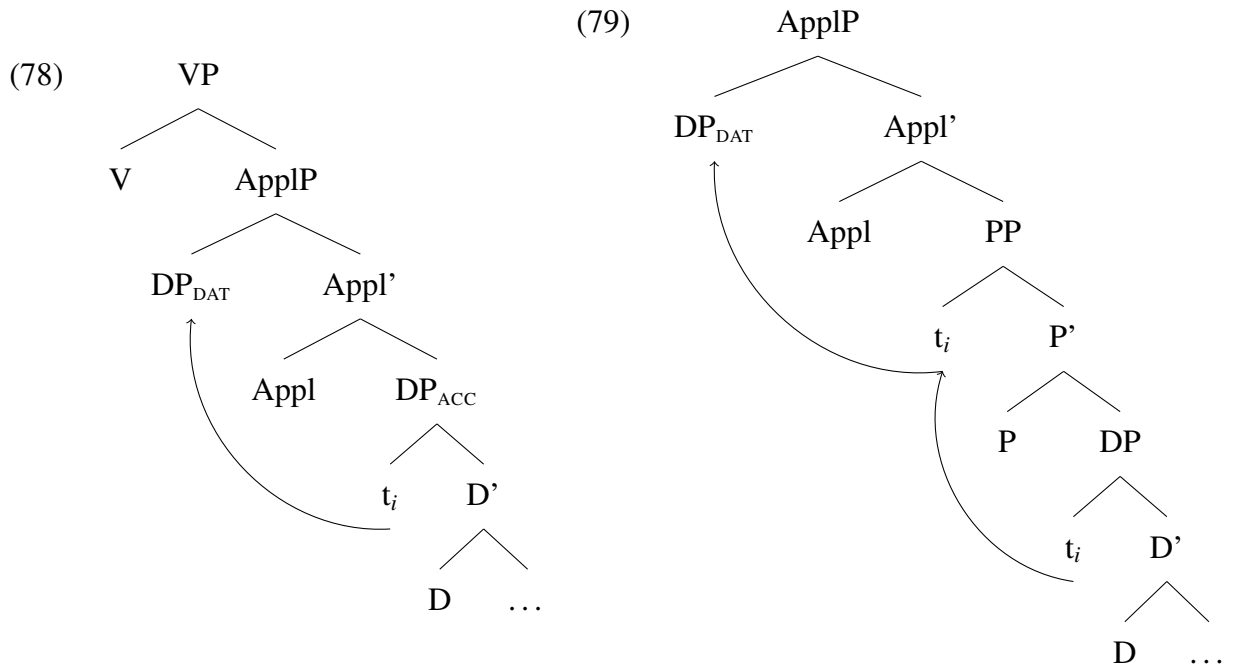


(77) DAT precedes ACC (adopted from Dvořák 2010, 2011)



Dvořák (2010) notes that while the dative DP is obligatory in the ACC >> DAT class (76), it is optional in the DAT >> ACC (77) class. This seems to generally reflect the behavior of applicative heads sketched out in the introduction above, where applicative heads together with the applied argument they introduce into the structure may optionally appear in the structure.

This section explores the structures which involve productive affected datives further, presenting novel data prompting a reanalysis of the original insights offered by Dvořák (2010, 2011). The analysis here proposes that optional affected dative DPs in Czech raise from a possessor position of the lower DP into specifier positions of at least two distinct heads: in SPEC of a low applicative head (78) in the sense of Pylkkänen (2008), in contrary to a high applicative head in Dvořák (2010, 2011), but also in SPEC of a phonologically overt locative P, before raising further to an applicative head above the PP (79).



The reason for such a reanalysis is twofold. Firstly, there are restrictions on the distribution of affected datives in structures lacking an internal argument (unergatives), where an element semantically related to location (either a pro-form or a full PP) is necessary for the dative DP to appear. If this locative element is a full PP, then the P object must always be interpreted as a possessum of the dative DP.

Secondly, there are no restrictions on the distribution of affected dative DPs in unaccusative and transitive constructions—unlike in unergatives, no presence of a locative element in the structure is necessary for the dative to be present in the structure. Furthermore, while it is the P object that is always interpreted as a possessum of the dative in unergatives, there are asymmetric patterns of possession observed in unaccusative and transitive structures. If there is no locative PP present in the structure, then the possessor-possessum relation holds between dative DP and the base-generated V object (ie. the thematic surface subject in unaccusatives and the thematic V object in transitives). If, however, a locative PP is present in the structure, then it is the P object which may be interpreted as a possessum of the dative instead—this relation between the dative and the P object then being identical to that found with unergatives.

While both datives that raise out of a V object DP (78) and datives that raise out of a P object DP (79) are generally compatible with structures involving an internal argument (ie. unaccusatives and transitives), only datives that raise out of P object DPs (79) are compatible with structures lacking an internal argument (i. e. unergatives).

4.1 Czech dative DPs combined with unergatives

Dvořák (2010; 2009, 34) observes that unergatives seem to require some “complement” in order to be combined with affected datives (80b–80a)⁸.

8. Although Dvořák (2010) does not mark the example in (80b) with a star, she does say that it is not “perfectly good” to say (80b), and as this coincides with my own judgements, I have starred this example.

- (80) a. *Karel spí Marii v posteli.* (Dvořák 2010; 2009, 34)
 Charles.NOM sleeps Mary.DAT in bed.LOC
 “Charles sleeps in Mary’s bed.”
- b. **Karel spí Marii.* (Dvořák 2010; 2009, 34)
 Charles.NOM sleeps Mary.DAT

This is, however, only partially correct. As can be seen below, only an element semantically related to location, either a full PP (81a–81c) or a pro-form (82a–82d), may suffice.⁹

- (81) a. *Jan-a Petr-ovi spal-a v aut-ě.*
 Jane-SG.NOM Peter-DAT slept-AGR in car-SG.LOC
 “Jane slept in (Peter’s) car to Peter’s (dis)advantage.”
- b. **Jan-a Petr-ovi spal-a velice dobře.*
 Jane-SG.NOM Peter-DAT slept-AGR very well
 “Jane slept very well to Peter’s (dis)advantage.”
- c. **Jan-a Petr-ovi spal-a odpoledne.*
 Jane-SG.NOM Peter-DAT slept-AGR afternoon
 “Jane slept in the afternoon to Peter’s (dis)advantage.”
- (82) a. *Jan-a Petr-ovi tady/tam spal-a.*
 Jane-SG.NOM Peter-DAT here/there slept-AGR
 “Jane slept here/there to Peter’s (dis)advantage.”
- b. **Jan-a Petr-ovi tak spal-a.*
 Jane-SG.NOM Peter-DAT so slept-AGR
 “Jane slept in such a way to Peter’s (dis)advantage.”
- c. **Jan-a Petr-ovi sama spal-a.*
 Jane-SG.NOM Peter-DAT alone slept-AGR
 “Jane slept alone to Peter’s (dis)advantage.”
- d. **Jan-a Petr-ovi tehdy spal-a.*
 Jane-SG.NOM Peter-DAT then slept-AGR
 “Jane slept to Peter’s (dis)advantage then.”

In addition to locative PPs, the *with*-PP is sufficient as well (83). These cases, however, are syntactically divergent from those where a locative PP appears—for instance, while

9. L. Taraldsen Medová (personal communication) notes that these examples sound more natural if the dative DP is the linearly first element in the sentence. The non-starred examples presented are however still perfectly grammatical according to my judgement as a native speaker of Czech. Note, however, that the position of the dative DP within a sentence is quite variable in Czech.

Furthermore, as L. Taraldsen Medová (personal communication) and F. Kratochvíl (personal communication) note, cases where a dative combines with an unergative without the presence of a PP are fine if the subject of that sentence denotes a baby/child. Such datives differ from regular affected datives in that their reading is benefactive and they may combine only with a narrow set of unergative verbs (like *spát* “sleep”, *mluvit* “talk”, *chodit* “walk”...) whose subject is semantically restricted to be a “baby” or display baby-like properties (as such, subjects that denote e.g. elderly people or pet animals are marginally permitted as well). The syntactic behavior of these datives, which is in contrast to that of regular affected datives, highly suggests that these may be restricted, unproductive high applicatives.

the dative is interpreted as possessing the P object of a locative PP, as will be discussed at length in the following sections, the P object in (83) on the other hand may be ambiguously related either to the nominative subject (i.e. (83) means that the friend was Mary's) or the dative object (i.e. (83) means that the friend was Peter's). Such cases are not given due diligence in the present thesis and require further research.

- (83) *Marie spala Petrovi s kamarádem.*
 Mary.NOM slept Peter.DAT with friend.INS
 “Mary slept with a friend to Peter’s (dis)advantage.”

It should be furthermore noted that it is the dative that is reliant on the presence of the locative element, and not vice versa. Locative elements may appear in the structure without the presence of the dative (84a–84b).

- (84) a. *Jan-a spal-a v aut-ě.*
 Jane-SG.NOM slept-AGR in car-SG.LOC
 “Jane slept in the car.”
 b. **Jan-a spal-a Petr-ovi.*
 Jane-SG.NOM slept-AGR Peter-DAT
 “Jane slept to Peter’s (dis)advantage.”

The obligatory locative element is observed only with Czech unergatives. As can be seen in the example in (85) below, unaccusatives can freely combine with the dative DP *Petrovi* ‘Peter.DAT’ without necessitating a locative PP to be present in the structure.

- (85) *Babičk-a Petr-ovi umřel-a.*
 grandma-SG.NOM Peter-DAT died-AGR
 “(Peter’s) grandma died to Peter’s (dis)advantage.”

The same is true for transitive verbs, as seen in (86) below.

- (86) *Petr-∅ Martin-ovi zabil-∅ ps-a.*
 Peter-SG.NOM Martin-DAT killed-AGR dog-SG.ACC
 “Peter killed (Martin’s) dog to Martin’s (dis)advantage.”

The necessity for a locative PP to be present in the sentence in order for a Czech verb to be combined with a affected dative might thus be related to whether or not the verb has an internal argument. This initial observation seems consistent with the behavior of Czech zero-place predicates combined with affected datives, such as the weather verbs in (87a-87b), which also require a locative PP (88a-88b).¹⁰

10. The presence of an overt aspectual morpheme seems to play a role in whether a zero-place predicate may be combined with a dative without the presence of any locative element (i). As to why this is the case is outside of the scope of the present study.

(i) *Za-sněžilo Petr-ovi.*
 ASP-snowed Peter.DAT
 “It has snowed for Peter.”

- (87) a. *Sněželo Petr-ovi na chat-ě.*
 snowed Peter-DAT at cottage-SG.LOC
 “It snowed at (his) cottage to Peter’s (dis)advantage.”
- b. *Pršelo Petr-ovi na výlet-ě.*
 rained Peter-DAT at trip-SG.LOC
 “It rained to Peter’s (dis)advantage on (his) trip.”
- (88) a. *?Sněželo Petr-ovi.*
 snowed Peter-DAT
 “It snowed to Peter’s (dis)advantage.”
- b. *?Pršelo Petr-ovi.*
 rained Peter-DAT
 “It rained to Peter’s (dis)advantage.”

In the case of the weather verbs in the examples in (87a) and (87b), the locative PP may be omitted and the verb still may be combined with a affected dative, but this is only the case if the whole sentence is a short answer to a question that contains a locative PP—compare (89a) and (89b).

- (89) a. *Co se Petr-ovi stal-o na chat-ě? Pršelo Petr-ovi.*
 what CL Peter-DAT happen-AGR at cottage.LOC rained Peter-DAT
 “What happened to Peter at the cottage? It rained to Peter’s (dis)advantage.”
- b. *Co se Petr-ovi stalo? ???Pršelo Petr-ovi.*
 what CL Peter-DAT happen-AGR rained Peter-DAT
 “What happened to Peter? It rained to Peter’s (dis)advantage.”

The same behavior, however, is not observed with unergatives. Even if a sentence containing an unergative combined with a dative is used as a short answer to a question containing either a locative PP (90a) or the *tam* “there” pro-form (90b), the short answer is still ungrammatical, if the locative element (either the full PP or the pro-form) is omitted.

- (90) a. *Co Petr-ovi dělal-a v postel-i? Spal-a (*tam) Petr-ovi*
 what Peter-DAT did-SG.F in bed.SG.LOC slept-SG.F Peter-DAT there/in
 *(v postel-i).
 bed-LOC
 “What did she do to Peter in his bed? She slept to Peter’s (dis)advantage.”
- b. *Co tam Petr-ovi dělal-a? Spal-a Petr-ovi *(v postel-i).*
 what Peter-DAT there did-SG.F slept-SG.F Peter-DAT there/in bed-LOC
 “What did she do to Peter there? She slept to Peter’s (dis)advantage.”

Such obligatory locative elements are however not observed with verbs that might optionally have an internal argument, such as *krást* “steal” (91a–91b).

- (91) a. *Petr-∅ Martin-ovi kradl-∅.*
 Peter-SG.NOM Martin-DAT stole-AGR
 “Peter was stealing on Martin.”
- b. *Petr-∅ Martin-ovi kradl-∅ knih-y.*
 Peter-SG.NOM Martin-DAT stole-AGR book-PL.ACC
 “Peter was stealing (Martin’s) books on Martin.”

These can be combined with an applied dative argument without necessitating a locative element, further suggesting that the locative element is obligatory only when combining dative applied arguments with verbs that cannot have an internal thematic argument (unergatives and zero-place predicates). A similar observation is made by Dvořák (2009, 21), noting that verbs like (91a) contain an implicit internal argument.

The same holds for verbs that have a single dative argument, suggested by the fact that a dative in such constructions is always either compulsory (92a–92b) or implicit when not overt (93a–93b), as noted by Dvořák (2009, 32).

- (92) a. *Dino holduje sportu.* (Dvořák 2009, 32)
 Dino.NOM revels sport.DAT
 “Dino revels sport.”
- b. **Dino holduje.* (Dvořák 2009, 32)
 Dino.NOM revels
- (93) a. *Petr pomáhá Lenka.* (Dvořák 2009, 32)
 Peter.NOM helps Lenka.DAT
 “Peter helps Lenka.”
- b. *Petr pomáhá.* (Dvořák 2009, 32)
 Peter.NOM helps
 “Peter helps *somebody*.”

Based on the observations presented above, the following hypothesis might be drawn for Czech (94).

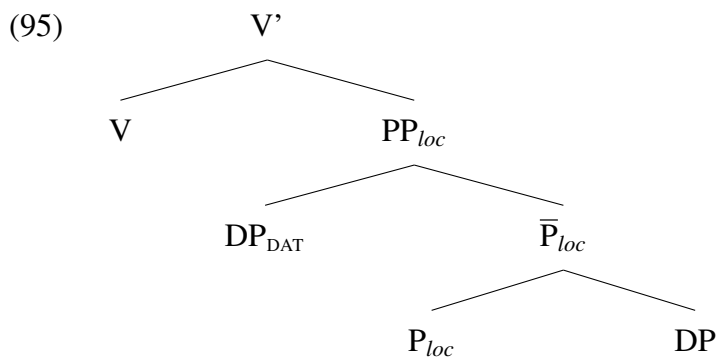
- (94) **Internal argument hypothesis:** Verbs lacking an internal argument position (unergatives and zero-place predicates) may be combined with a dative argument if and only if a PP or a locative pro-form is also present in the structure.

Such restrictions are to be expected if affected datives are involved in applicative structures. Low applicative heads of Pylkkänen (2008) are in principle barred from combining with unergatives. Pylkkänen’s high applicative heads, which correspond to the applicative head proposed by Dvořák (2010, 2011), do not face this issue—in fact, they are the only type of applicative heads that have the ability to be combined with unergatives in Pylkkänen’s theory.

However, proposing that datives combined with Czech unergatives are introduced in SPEC of high applicative heads makes exactly the wrong prediction, mainly that sentences like (80b), (81b–81c), or (82b–82d), lacking a locative element, should be fine—contrary to fact. A high applicative analysis of Czech affected dative DPs combined with unergatives notwithstanding, this thesis proposes a different analysis, involving possessor rising first into SPEC of PP, before possibly moving further into SPEC of an applicative head above the PP. This section discusses the structure involving datives and PPs, the applicative hypothesis is developed further in section 5.

4.2 Dative DPs in SPEC of P

Due in part to conversions with J. Emonds, I will initially suggest the hypothesis that the compulsory presence of the locative PP in some unergatives can be formally modelled by postulating that the affected dative DP is merged in SPEC of P, as can be seen in (95) below, although this hypothesis will be revised heavily in the subsequent sections.



This proposal seems supported in two ways. Firstly, applicatives have been associated with P-heads both in the traditionally-grammatical (in relation to applicatives “promoting” the so-called “peripheral arguments;” or PP adjuncts, Dixon and Aikhenvald 2000, 2, 13–14), as well as theoretical (see e.g. Baker 1988b, for his canonical treatment of Chichewa applicatives as incorporated Ps) literature. Secondly, it allows for the unergative-applicative structures that do require a locative element to not be analyzed in terms of the structure involving a low applicative head, but instead have the dative argument merged in SPEC of P.

However, a question that immediately arises is how can this approach account for the Czech cases like the one in (96) below, which features the deictic spatial adverbs *tady/tam*.

- (96) *Jan-a tady/tam Petr-ovi spal-a.*
 Jane-SG.NOM here/there Peter-DAT slept-AGR
 “Jane slept here/there to Peter’s (dis)advantage.”

It is conceivable that these pro-forms are P-heads, behaving similarly to the English *mine, yours...* possessor D-heads (as is apparent from their distribution in 97), which appear with a zero NP as their complement (98).

(97) **the yours, *a their, *mine theirs, *my hers*

(98) **mine car, *yours car, *theirs car, *hers car*

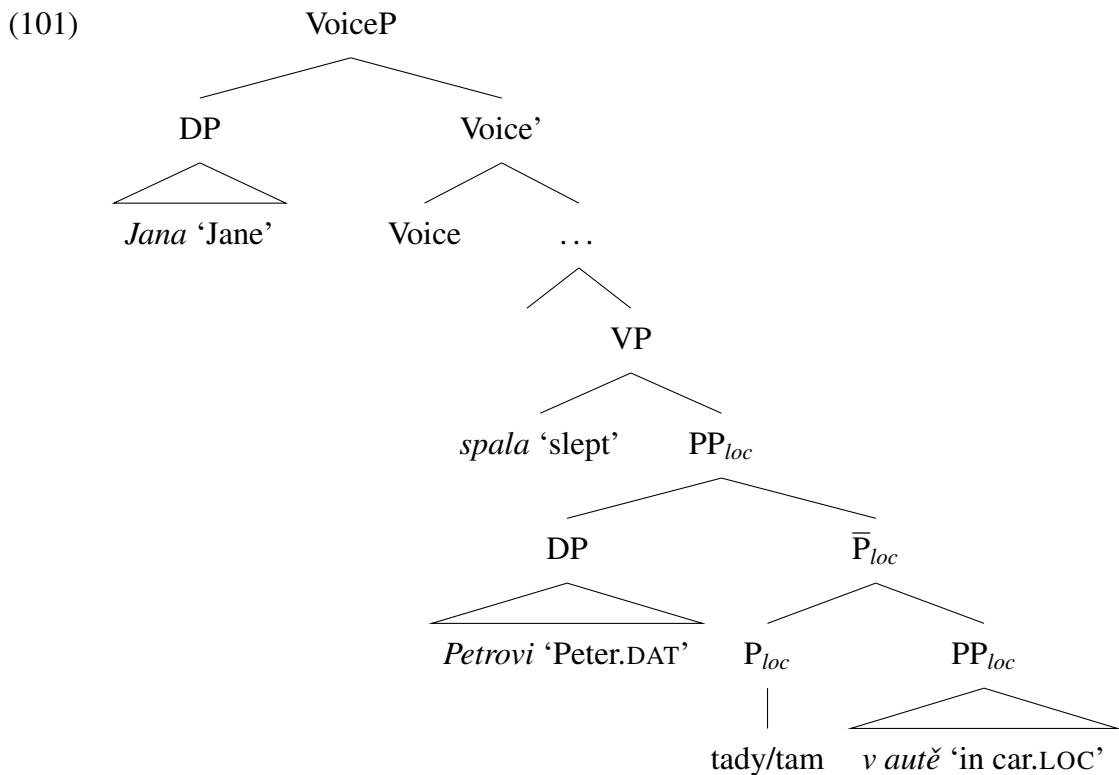
Such an analysis is in line with the observation that the *tady/tam* pro-forms cannot appear with an overt DP complement (99).

(99) **Jan-a Petr-ovi tady/tam aut-ě spal-a.*
 Jane-SG.NOM Petr-DAT here/there car-SG.LOC slept-AGR
 “Jane slept here/there to Peter’s (dis)advantage.”

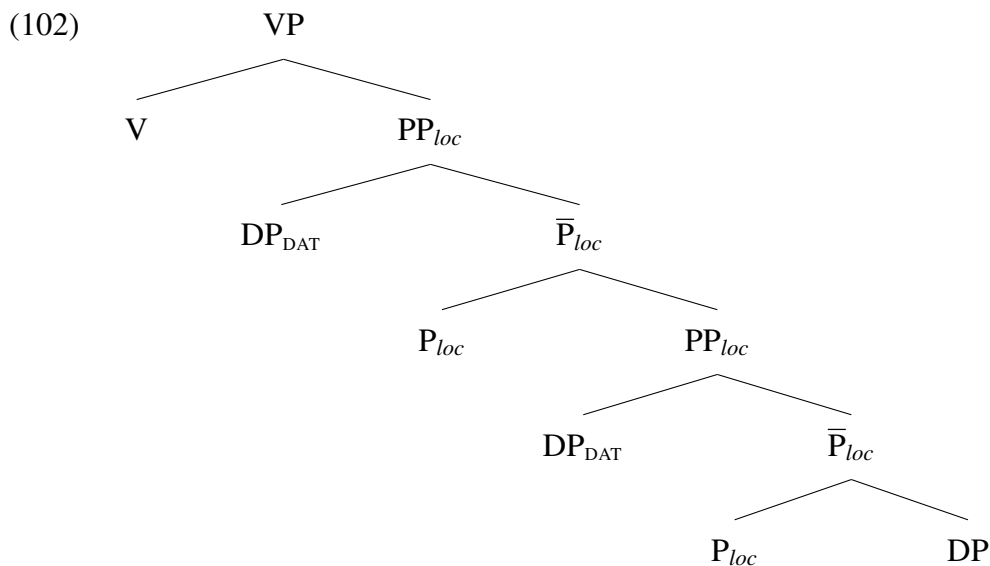
Moreover, it is possible for either of the *tady/tam* pro-forms and a locative PP to both appear in the same structure, as in (100).

(100) *Jan-a Petr-ovi tady/tam v aut-ě spal-a.*
 Jane-SG.NOM Peter-DAT here/there in car-SG.LOC slept-AGR
 “Jane slept here/there in a car to Peter’s (dis)advantage.”

It can be hypothesized that these *tady/tam* pro-forms project a PP and select another locative PP as its complement in (100), with the dative appearing in SPEC of this higher locative PP, following the SPEC of P analysis of Czech dative applied arguments combined with unergatives. The hypothesized structure is represented in (101) below.



This hypothesized structure (101) makes further empirical predictions—namely that it in theory should be possible for the lower PP to contain its own respective dative as well (102).



However, as the next section shows, this is impossible.

4.2.1 One dative per PP

Dvořák (2009, 8–9) observes that two dative DPs cannot co-occur (103).

- (103) **Karel konečně mámě poslal pojišťovně ten dopis.*
 Charles.NOM finally mum.DAT sent insurance company.DAT that letter.ACC
 “Intended: Charles finally sent the insurance company that letter (and he did it) for his mum.” (Dvořák 2009, 9)

Although the sentence in (103) above does not involve any PP_{loc} , the impossibility for datives to co-occur holds even in sentences featuring PP_{loc} , like (104) below. This is the case for both full DPs and affected dative clitics.

- (104) **Jan-a mu tady/tam jí v aut-ě spal-a.*
 Jane-SG.NOM he.DAT here/there she.DAT in car-SG.LOC slept-AGR
 “Jane slept here/there in a car (to his and her disadvantage).”

Having two dative DPs, each in SPEC of PP_{loc} , appearing in a structure like (102) above, is impossible in Czech.¹¹ Nonetheless, there are structures where two dative clitics appear in Czech, shown below in (105), (106), and (107).

- (105) *Dej si mu přes hubu, jak chceš,*
 give.IMPR.2SG REFL.DAT 3SG.DAT on mouth.ACC.SG.F as want.PRS.2SG
mně je to jedno.
 3SG.DAT is that.NOM.SG.N one.NOM.SG.N
 “[Help yourself] and beat him up [if it makes you feel good]—as you want, I don’t care.” (Fried 2011; citing Janda 1993, 103)

11. Although it should be noted that it is possible to coordinate two such PPs, in which case there are two affected datives in the entire sentence, each in SPEC of separate PPs.

(106) *Von ti mi jí celou sežral.*
 3SG.M.NOM 2SG.DAT 1SG.DAT 3SG.F.ACC whole.ACC.SG.F gobble.up.PST.SG.M
 “He, [can] you [believe it], gobbled up the whole [thing] on me.”

(Fried 2011, 9)

(107) *Von_i mi/mu_j/jim/*ti/*vám ti,*
 3SG.M.NOM 1SG.DAT/3SG.DAT/3PL.DAT/2SG.DAT/2PL.DAT 2SG.DAT
představ si, začal líbat ruce.
 imagine.IMPR.2.SG REFL.DAT start.PST.SG.M kiss.INF hand.ACC.PL.F

“[You know], just imagine, he_i started to kiss my/his_j/their/*your(pl/sg) hands.”

(Fried 2011, 8)

However, as (Fried 2011) notes, these two datives are not the same—the *si* dative in (105), and the *ti* dative in (106) and (107) are both examples of what she calls “datives of empathy” (DE), a type of an ethical dative (Fried 2011, 3). Unlike the affected dative in the examples in (105–107) above, the DE can only appear in pronominal or clitic forms (Fried 2011, 4). The DE furthermore differs in its semantic interpretation—it “indexes the hearer as a participant in the present discourse, not in the reported event itself” (Fried 2011, 2). This strongly suggests that the structure in (102), with two SPEC positions for two affected datives, is impossible in Czech.

4.3 The structure of PP_{loc}

It is therefore unclear why, if *tady/tam* ‘here/there’ project a PP with a dative in its SPEC and another PP in its COMP, as is suggested by the structure in (102), cannot both of these PPs have a dative in their respective SPEC positions. This section examines the structure of PPs more in depth, noting first the similarity of Czech datives co-occurring with locative PPs in unergatives and the so-called p-dative constructions found in Latin (Acedo-Matellán 2017).

4.3.1 P-datives in Latin

Acedo-Matellán (2017) observes a construction found in Latin, where a type of a dative that he labels p-dative is, similarly to Czech datives co-occurring with locative PPs, also related to location (108).

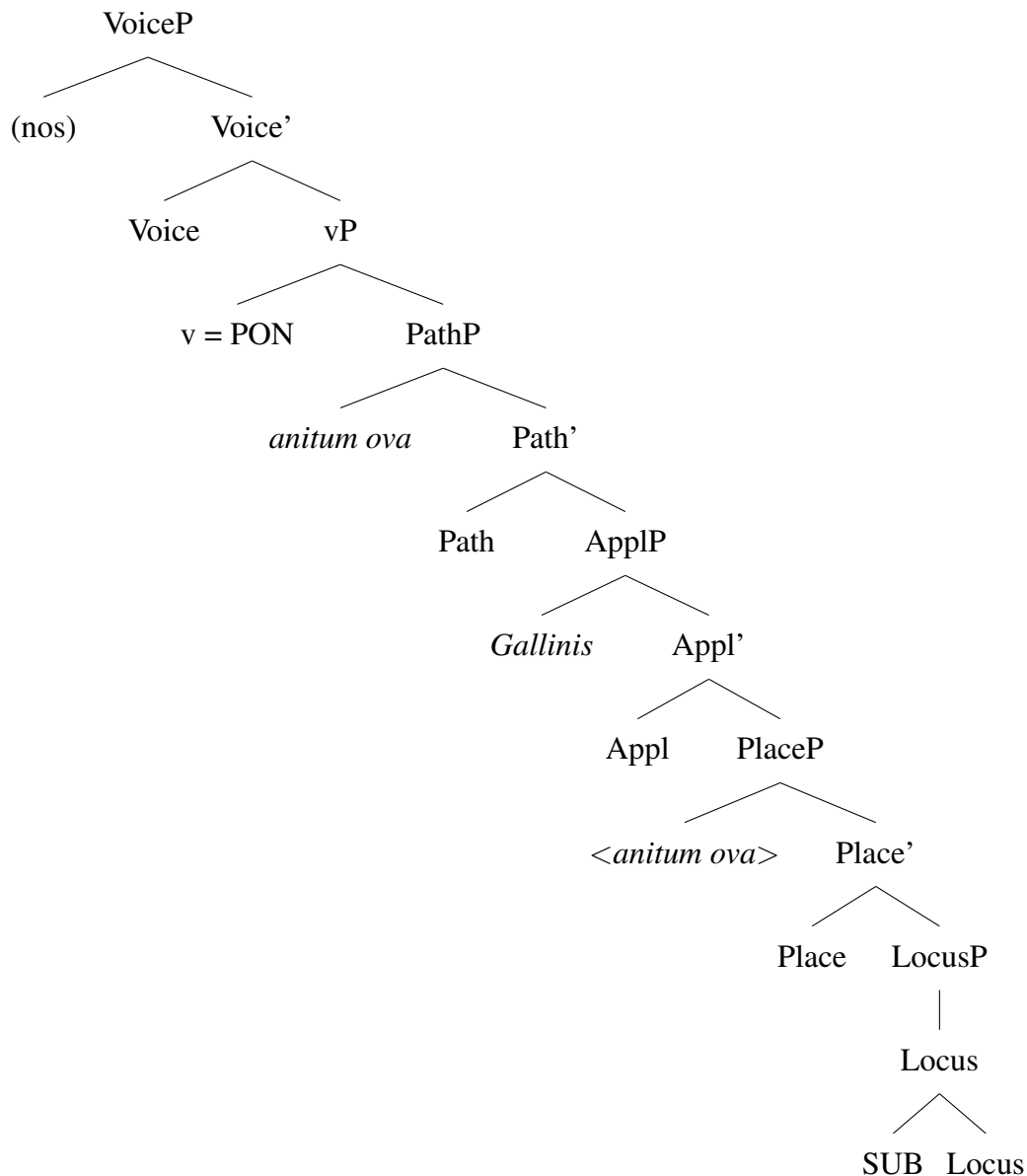
(108) Latin (Acedo-Matellán 2017, 36)

Gallinis anitum ova saepe sup-ponimus.
 hen.DAT.PL duck.GEN.PL egg.ACC.PL often under-put.1PL

“We often place ducks’ eggs beneath the hens.”

Acedo-Matellán (2017) notes that although the p-dative is interpreted as the Ground of the preverb *sub-* ‘under’ prefixed to the verb *ponimus* ‘put.1PL’, it is, following Cuervo (2003) and Pylkkänen (2008), introduced into the structure in SPEC of an applicative head, which assigns the dative case to it (109).

(109) The structure of Latin p-datives (adapted from Acedo-Matellán 2017, 36)¹²



This is in contrary to previous approaches, which analyzed these p-datives as either an argument of the pre-verb (Lehmann 1983; Acedo-Matellán 2017, 24–26), or as a affected dative (Rubio 1982; Théoret 1982; Acedo-Matellán 2017, 26–28).

P-datives in Latin, as described by Acedo-Matellán (2017), although very similar, do not seem to constitute the exact same phenomenon as datives appearing together with a locative PP in Czech. While similar in that the Latin p-dative is not selected by the prepositional prefix (Acedo-Matellán 2017, 20), just as the Czech affected dative is not selected by the locative PP that is necessary for the dative to appear in unergatives, the Latin p-dative *gallinis* ‘hen.DAT.PL’ in (108) “refers to an entity inalienably possessing the region of space denoted by the set of preverb plus null nominal” (Acedo-Matellán 2017, 21). Compare this to the Czech dative DPs (110). Here, it is the P object which refers to the region under which the V object *kachní vajíčka* ‘duck egg.ACC.PL’ has been put.

12. Acedo-Matellán (2017) employs the structure of locative PPs of Terzi (2010a).

- (110) *Často dáváme kachní vejčička pod slepice.*
 often put.1PL duck egg.ACC.PL under hen.ACC.PL
 “We often place ducks’ eggs beneath the hens.”

However, a sentence similar to (108) and (110) is possible with a dative and a PP (111).

- (111) *Často dáváme kachní vejčička slepicím pod nohy.*
 often put.1PL duck egg.ACC.PL hen.DAT.PL under legs.ACC.PL
 “We often place ducks’ eggs beneath the hens’ legs.”

In (111), similarly to the Latin example in (108), the dative inalienably possesses the P object, which, as in (111) constitutes the region under which the V object has been put. Unlike in the Latin data discussed by Acedo-Matellán (2017), this region possessed by the dative is a phonologically-overt full DP.

The analysis pursued in this thesis generally follows Acedo-Matellán (2017) in proposing that applicative heads in the sense of Pylkkänen (2008) are involved in the structure. The introduction of such a head into the structure solves a number of issues detailed in the following subsection.

4.3.2 Silent noun PLACE and movement of DAT into SPEC;ApplP

Recall that *tady/tam* “here/there” alone is sufficient for a dative to appear in an unergative structure, as was shown in (112) below.

- (112) *Jan-a Petr-ovi tady/tam spal-a.*
 Jane-SG.NOM Peter-DAT here/there slept-AGR
 “Jane slept here/there to Peter’s (dis)advantage.”

Notice also the close similarity in meaning of the sentences in (113), involving the dative DP *Petrovi* “Peter.DAT”, and (114), involving a the possessor *Petrově* “Peter.POSS” modifying the locative P object *autě* “car.LOC”. In both cases, the locative P object *autě* “car.LOC” is interpreted as a possessum of *Petr* “Peter”, but only (113), involving the dative, has the additional semantics of *Petr* “Peter” being ambiguously positively/negatively affected by the action denoted by the verb *spala* “slept.SG.F”.

- (113) *Jan-a spal-a Petrovi v aut-ě.*
 Jane-SG.NOM slept-AGR Peter.DAT in car-SG.LOC
 “Jane slept in (Peter’s) car to Peter’s (dis)advantage.”

- (114) *Jan-a spal-a v Petrově aut-ě.*
 Jane-SG.NOM slept-AGR in Peter.POSS car-SG.LOC
 “Jane slept in Peter’s car.”

Importantly, the only possible order of the elements inside the PP is the one given in (113–114); the possessor must follow the P, and cannot precede it (115a), while the dative must precede the P, and cannot follow it (115b).

- (115) a. **Jana spala Petrově v autě.*
 grandma.NOM died Peter.POSS in car.LOC
 b. **Jana spala v Petrovi autě.*
 Grandma.NOM died in Peter.DAT car.LOC

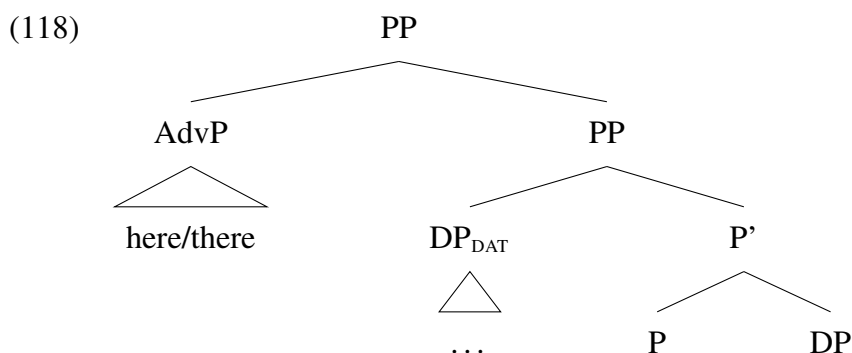
The question now comes to the internal structure of a locative PP involving both a dative and *tady/tam* “here/there”. Apart from *tady/tam* “here/there” being sufficient to license the presence of a dative (112), they may also co-occur with both a dative and a full locative PP, as discussed previously. Notice that the syntactic position of *tady/tam* “here/there” is quite flexible—all of the orders in (116) are possible; the adverbs/pro-forms *tady* ‘here’ and *tam* ‘there’ can both follow or precede the dative, or precede the verb.

- (116) *Jana (tady/tam) spala (?tady/tam) Petrovi (tady/tam) v autě.*
 Jane.NOM (here/there) slept (here/there) Peter.DAT (here/there) in car.LOC
 “Jane slept here/there in (Peter’s) car to Peter’s (dis)advantage.”

The position of the adverb/pro-form that is of interest here is the one where the adverbs/pro-forms follow the dative. I will begin with the assumption that the bolded *tady/tam* “here/there” in (116) are adverbials adjoined to PPs. This assumption is based on the preliminary observation of the syntactic distribution of *tady/tam* “here/there”, which is often seen modifying a PP (117).

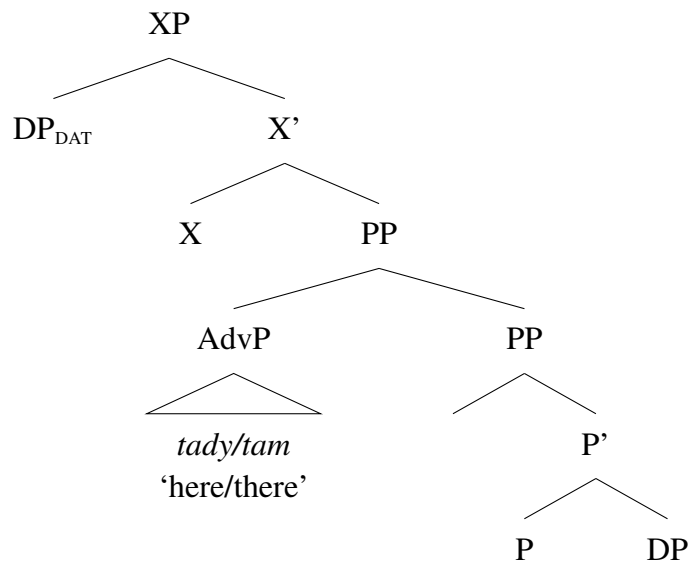
- (117) *Jana spala tady/tam v autě/na střeše/u domu...*
 Jane.NOM slept here/there in car.LOC/on roof.LOC/next.to house.LOC
 “Jane slept here/there in the car/on the roof/next to the house...”

If affected datives appear in SPEC of PP (118), as previously hypothesized, then it would be expected that sentences where *tady/tam* ‘here/there’ intervenes between the dative and the P may not be generated, contrary to fact, as is illustrated on the bolded part of (116).



The only way to derive this order is for the dative to appear in some higher projection (119), possibly moving there (as will be seen in the upcoming sections). It will be argued in the subsequent discussion that that the projection above the PP in (119) is a projection of an applicative head.

(119)



Another issue that arises here is with *tady/tam* ‘here/there’ being alone sufficient for a dative to appear in an unergative construction, without the presence of any overt PP, as the approach sketched out in (119) would require the presence of a phonologically null PP, both for the dative to move out of and for *tady/tam* ‘here/there’ to be adjoined to. Instead of proposing this ad-hoc phonologically null PP, a closer examination of the structure of PPs is necessary.

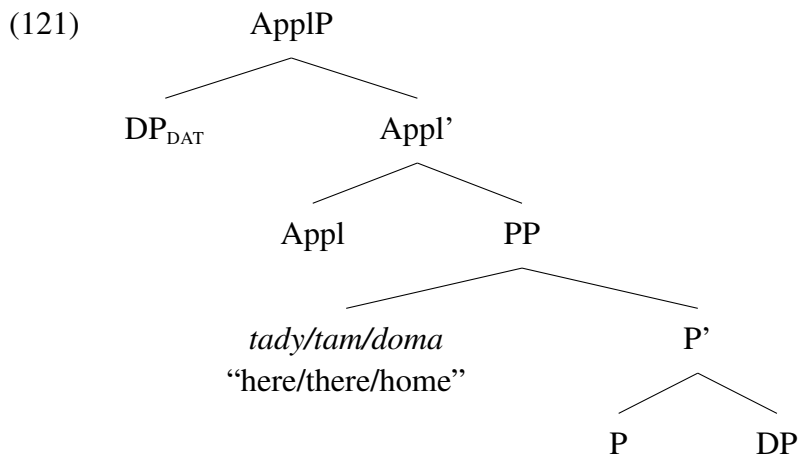
Terzi (2010b), following Kayne (2004, 2005), proposes an analysis of such constructions as instantiating/modifying the silent noun PLACE, which moves into SPEC of a P which is then subsequently exponed as a zero. Terzi (2010b) also extends this analysis onto adverbials such as *home*, which are said to modify the silent noun PLACE. As is expected following Terzi’s (2010b) analysis, the Czech adverbial *doma* ‘home’ is, just like the *tady/tam* ‘here/there’ adverbials, alone sufficient for a affected dative to appear with an unergative (120).

- (120) *Babička seděla Petrovi doma.*
Grandma.NOM sat Peter.DAT home
“Grandma sat at home to Peter’s (dis)advantage.”

However, if cases like (112) and (120) involve movement of the null PLACE into SPEC of a phonologically-null PP_{loc} , then it is immediately problematic if this SPEC is to also be the position where affected datives appear (if only briefly, to be later moved to some higher position). Only either the dative or the DP *doma* ‘home’ would be able to occupy SPEC;PP. Whether *tady/tam* ‘here/there’ appear as adjuncts on PPs, or whether they are moved into SPEC of PP as suggested by Terzi (2010b) is of little consequence to the fact that both hypotheses make it impossible for the dative to reside in SPEC of PP, each in their own right.

Introducing a separate functional head, or more precisely an applicative head in the sense of Pylkkänen (2008), above the PP accounts for the above illustrated observations (121). Firstly, even though *tady/tam* ‘here/there’ may alone license the presence of a

dative without the presence of an overt PP (112), it may never license an “additional” dative if an overt PP is present as well (104)—the number of affected datives is thus limited to one per clause¹³ due to there being a single position for the dative to appear (SPEC of ApplP). Secondly, the order of elements inside the PP—the structure in (121) correctly predicts the order illustrated in (116), and furthermore makes this analysis compatible with that of Terzi (2010b).



A null hypothesis that can be drawn based on the data discussed throughout this section thus should reflect three ways in which affected dative DPs differ from possessors modifying a DP. These include:

- Syntactic position—if the dative appears with a PP, then it precedes the P. A possessor modifying a P object DP, on the other hand, has to follow the P.
- Morphology—an affected dative shows dative morphology, while a possessor modifying a DP appears with a possessive suffix.
- Semantics—in addition to the affected dative being interpreted as being affected in some way (which is ambiguous between a malefactive and a benefactive reading), it also possesses the P object (and, as will be seen in the following section, also the V object in transitives/unaccusatives).

The null hypothesis that can be thus drawn from this evidence is one where affected dative DPs and possessors modifying DPs appear in two distinct syntactic positions, where the syntactic position in which the affected dative DP appears is also the position where the dative case is assigned (accounting for the distinct morphology these two grammatical objects show) and where the semantic interpretation for affected datives arises (accounting for the affected interpretation not present with possessors modifying DPs).

It has been hypothesized that the syntactic position where affected datives appear is the SPEC position of an applicative head. This thesis follows Acedo-Matellán (2017) in that the dative case is assigned in SPEC;ApplP, the way in which case is assigned in this construction thus being accounted for. An interesting question need be raised

13. Unless coordinated ApplPs are involved.

here concerning the realization of English applied objects appearing, as has been argued here, in the same syntactic position as Czech datives, namely SPEC;ApplP. These always appear in the oblique form in DOC constructions (122).

(122) *I bought him/*he a car.*

Parrott (2021), following Emonds (1986), concludes that the distinction between the subject and oblique form, constituting the *him/*he* in (122), does not involve any case features being exponed, but rather that this morphophonological alternation involves allomorphy, where subject forms are exponed in a specific syntactic environment, and where oblique forms are exponed under the elsewhere condition. The Czech data discussed above, however, make it clear that in contrast to English, Czech datives, in addition to involving possessor raising into SPEC of ApplP, also involve the assignment of the dative case by the Appl head, and that this assigned case feature plays a role during a spellout operation that expones this DP located in SPEC;ApplP.

Concerning the semantic interpretation, there are two possibilities. The first one, developed by Pylkkänen (2008, 46–60), explains the “affected” semantics of the dative as a result of it residing in SPEC of a low source applicative, by virtue of the “affected” dative “*actually [having] the entity named by the direct object at the time of the event*” (Pylkkänen 2008, 60). The other possible treatment of the semantics of affected datives found in the literature involves possessor raising of the dative (Landau 1999)—this being the approach that Pylkkänen (2008) militates against. In the subsequent section, I show that both applicative heads and possessor raising of the dative are necessary, expanding upon the proposed structure in (121) and extending the present analysis onto constructions including an internal argument in either the surface subject position (unaccusatives), or the surface object position (transitives).

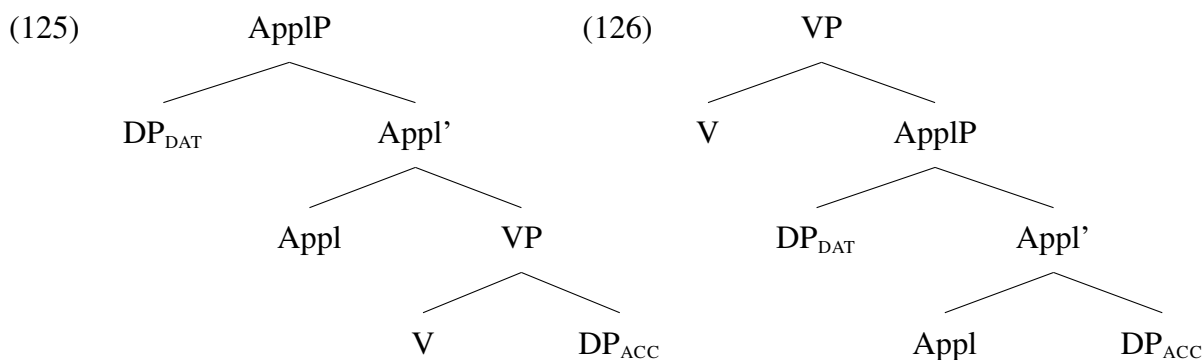
5 Applicative analysis of Czech dative DPs

As was shown above in (85–86) and repeated in (123–124) for convenience, unaccusatives and transitives can be combined with datives without the presence of a PP.

- (123) *Babičk-a umřel-a Petr-ovi.*
 grandma-SG.NOM died-AGR Peter-DAT
 “(Peter’s) grandma died to his (dis)advantage.”

- (124) *Martin zabil Petr-ovi žen-u.*
 Martin.NOM killed Peter-DAT his
 “Martin killed (his) wife to Peter’s (dis)advantage.”

Adapting the structure sketched out in (121) involving Pylkkänen’s (2008) applicative head seems straightforward at first—it is expected that the dative will appear in SPEC of ApplP. The question then is whether this Appl head is high, mirroring exactly the structure in (121), with P essentially being “substituted” for by V (125), or whether the Appl head is low, with the verbal (deep) object appearing in COMP of ApplP (126).¹⁴



The behavior of datives combined with unergatives discussed at length in section 4 hints at these datives being Pylkkänen’s (2008) low applied objects, the applicative head in Czech thus being low and appearing in the structure in (126). This seems to be confirmed by the restriction of low applicatives not being able to combine with stative verbs as observed by Pylkkänen (2008)—Dvořák (2009, 34) notes that a number of Czech stative verbs result in ungrammaticality if combined with a dative (127a–127b).

- (127) a. *Karel zná (*učiteli) odpověď.* (Dvořák 2009, 34)
 Charles.NOM knows teacher.DAT answer.ACC
- b. *Karel nesnáší (*Marii) tchýni.* (Dvořák 2009, 34)
 Charles.NOM hates Mary.DAT mother-in-law.ACC

14. Notice that neither of the structures in (125–126) reflect the linear order of the constituents in (123–124) and neither is it necessary for them to do so at this point, due to the assumption of further movement operations, like the movement of the (deep) V object into SPEC of TP in (123), together with G-movement of Kučerová (2007) or other scrambling-like operations, giving rise to the final surface order.

Some sentences involving dative verbs in Czech, however, are perfectly fine when combined with a dative. This behavior is unexpected and cannot be captured by Pylkkänen’s (2008) generalization alone.

- (128) *Petr držel Marii tašku.*
 Peter.NOM held Mary.DAT bag.ACC
 “Peter held (Mary’s) bag to Mary’s (dis)advantage.”

This section builds upon Landau’s (1999) dative raising and develops the idea that datives actually raise into SPEC of an applicative head. Such an approach combines those of Pylkkänen (2008) and Landau (1999), but unlike the former does not get completely rid of dative raising, and unlike the latter shows that datives actually raise into SPEC;ApplP, and not SPEC;VP.

In the following subsection, the differences between Landau’s (1999) and Pylkkänen’s (2008) approaches to possessor raising are discussed, while the proposal for the structure involving both raising in the general sense of Landau (1999) and applicative heads in the sense of Pylkkänen (2008) is subsequently developed.

5.1 Possessor datives

Notice that similarly to datives combined with unergatives that co-occur with locative PPs (129) sharing similar semantics with almost string-identical sentences involving a possessor modifying the P object DP (130), as discussed in section 4.3.2, the unaccusative sentences in (131a–131b) are also very similar in meaning. The way in which (131a) differs from (131b) is identical to how (129) differs from (130)—in each pair, the sentence involving a dative (129, 131a) has the additional semantics of *Petr* ‘Peter’ being affected in some way by the event of his grandma dying, be it negatively (with a malefactive reading), or positively (with a benefactive reading), which are not present in the former.

- (129) *Jan-a spal-a Petrovi v aut-ě.*
 Jane-SG.NOM slept-AGR Peter.DAT in car-SG.LOC
 “Jane slept in (Peter’s) car to Peter’s (dis)advantage.”

- (130) *Jan-a spal-a v Petrově aut-ě.*
 Jane-SG.NOM slept-AGR in Peter.POSS car-SG.LOC
 “Jane slept in Peter’s car.”

- (131) a. *Petrova babička umřela.*
 Peter.POSS grandma.NOM died
 “Peter’s grandma died.”
 b. *Petrovi babička umřela.*
 Peter.DAT grandma.NOM died
 “Peter’s grandma died to Peter’s (dis)advantage.”

Furthermore, as L. Taraldsen Medová (personal communication) notes, datives are often extremely similar in their morphophonological form to their possessor equivalents. This can be seen especially with masculine singular datives and masculine possessors showing masculine animate plural agreement, which can result in an ambiguity between the dative reading and the possessive reading due to the string-identical nature of both constructions (132).

- (132) *Petrovi draci uletěli.*
 Peter.DAT dragon.NOM.PL flew.away
 Peter.POSS dragon.NOM.PL flew.away
 “(Peter’s) dragons flew away to Peter’s (dis)advantage.” or “Peter’s dragons flew away.”

Similar constructions, called possessor datives, are found in various languages, such as Hebrew (133).

- (133) Hebrew (Pylkkänen 2008, 46; citing Landau 1999)

Ha-yalda kilkela le-Dan et ha-radio.
 the-girl spoiled to-Dan ACC the-radio
 “The girl broke Dan’s radio on him.”

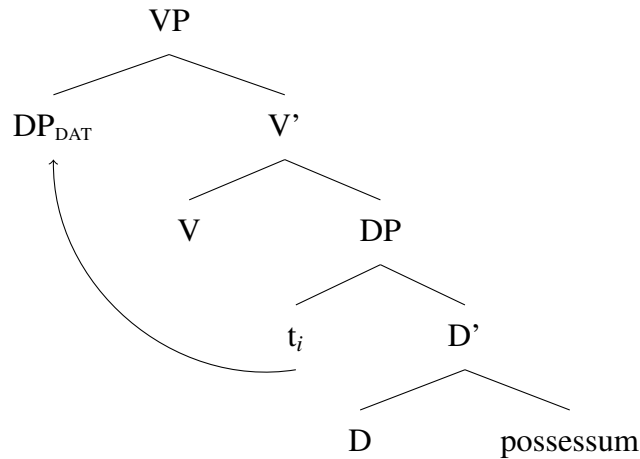
Possessor datives in Hebrew share a similar property of Czech datives cooccurring with locative PPs in unergatives, mainly that they possess the P object (Pylkkänen 2008, 59), as can be seen in (134).

- (134) Hebrew (Pylkkänen 2008, 59; citing Landau 1999, (4c))

Gil gar le-Rina ba-xacer.
 Gil lives to-Rina in-the-yard
 “Gil lives in Rina’s yard.”

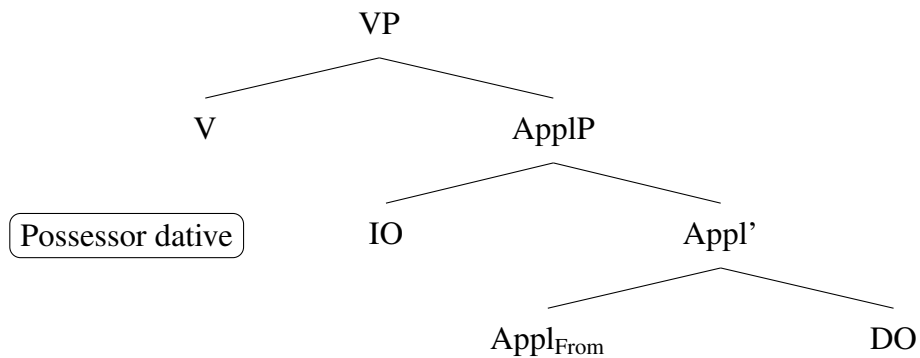
There are several competing approaches to possessor datives in Hebrew. Following up on earlier, control-driven approaches (such as Borer and Grodzinsky 1986), Landau (1999) proposes that possessor datives originate from inside the possessum DP and raise to SPEC of VP.

(135) Possessor raising analysis of possessor datives (based on Landau 1999)



A competing approach to possessor raising, offered by Pylkkänen (2008), involves a type of a low applicative head; the low source applicative head ($\text{Appl}_{\text{From}}$, 136). By reversing the recipient relation between the applied object and the direct object, Pylkkänen (2008, 49) arrives at the dative possessor interpretation.

(136) Low source applicative analysis of possessor datives (Pylkkänen 2008, 48)



Crucially, the approach in Pylkkänen (2008) does not involve any possessor raising. Pylkkänen (2008) argues against the possessor raising analysis of Landau (1999) based on the observation that in Hebrew, the DO may appear with an overt possessor (Pylkkänen 2008, 49–50).

(137) Hebrew (Pylkkänen 2008, 50; citing Landau 1999, (9))

Gil šavar le-Rina et ha-miskafayim šel Sigal.
 Gil broke to-Rina acc the-glasses of Sigal

“Gil broke Sigal’s glasses on Rina.”

Furthermore, Pylkkänen (2008, 61) notes that the Hebrew constructions, where the dative possesses the P object, cannot be low applicatives, and that they cannot involve possessor raising, as the P object may feature an overt possessor (138). Based on such observations, Pylkkänen (2008, 61) concludes that these constitute a separate phenomenon.

(138) Hebrew (Pylkkänen 2008, 61)

Gil gar le-Rina ba-xeder šel savta šel-o.
Gil lives to-Rina in-the-room of grandmother of-him

“Gil lives in Rina’s grandmother’s room.”

The following section provides a description of contrasting patterns of possession of Czech to those found in Hebrew. Furthermore, an argument against Pylkkänen’s (2008) conclusion that instances involving P object possession constitute a separate phenomenon is made, based on the observation of ambiguous V/P object possession.

5.1.1 V/P object possession in Czech

Consider the relation between the dative and the V object from the examples in (123–124) above. The base generated V object *babička* ‘grandma’ in the surface subject position in the unaccusative in (123) is interpreted as being possessed by the dative *Petrovi* ‘Peter-DAT’, without the presence of any overt possessive pronoun (139).

(139) *Babičk-a umřel-a Petr-ovi.*
grandma-SG.NOM died-AGR Peter-DAT
“Grandma died to Peter’s (dis)advantage.”

It is marginally possible for a possessor to modify the deep V object DP, as is shown in (140). Here, however, the relation of the dative *Petrovi* ‘Peter-DAT’ and the deep V object *babička* ‘grandma’ cannot be interpreted as being identical as to that in (139). *Petrovi* ‘Peter-DAT’ does not “truly” possess the DP *babička* ‘grandma’; in fact, it is possible no relation of possession may be present in such a construction. The presence of the dative in (140) is highly marked, where the dative, although related to the DP *babička* ‘grandma’, does not possess it (i.e. the grandma is not Peter’s, but Peter may be e.g. her caretaker), as does the possessor *Martinova* ‘Martin’s’—it is impossible, for instance, to interpret (140) in such a way that Martin and Peter are brothers.

(140) *Petrovi umřela (?Martinova) babička.*
Peter.DAT died.AGR Martin.POSS grandma.SG.NOM
“Martin’s grandma died to Peter’s (dis)advantage.”

The contrasting semantics of affected datives appearing in constructions where the V/P object has or does not have its own respective possessor modifying it can furthermore be shown on examples like (141a–141b) below.

- (141) a. *Petrovi se rozbilo auto.*
Peter.DAT REFL.CL broke car.NOM
“(Peter’s) car broke down to Peter’s (dis)advantage.”
- b. *Petrovi se rozbilo Martinovo auto.*
Peter.DAT REFL.CL broke Martin.POSS car.NOM
“Martin’s car broke down to Peter’s (dis)advantage (as Peter might have possibly caused the car to break down).”

The affected dative in (141a) is affected via the fact that the car which is in his ownership has broken—it is not implied that Peter caused the car to break, whereas the affected dative in (141b) is not affected via the ownership of the car, but via having been associated with the car at the time of its breaking; and furthermore the sentence does highly imply that it was Peter who caused the car to break

Moreover, in such a cases, it is still more acceptable to have the “true” possessor appear as a a genitive DP (142).

- (142) *Petrovi umřela babička od Martina.*
 Peter.DAT died.AGR grandma.SG.NOM from Martin.GEN
 “Martin’s grandma died to Peter’s (dis)advantage.”

The same applies for the V object of the transitive in (124), as can be seen in (143). Note that here once again it is impossible to interpret the example as having the dative “truly” possess the DP modified by another possessor, and the genitive possessor solution is preferable to one where a pre-nominal possessor is used.

- (143) *Martin zabil Petr-ovi (???Mark-ovu) žen-u (od Marka).*
 Martin.NOM killed Peter-DAT Martin-POSS wife-ACC (from Mark.DAT)
 “Martin killed Mark’s wife to Peter’s (dis)advantage.”

Interestingly, as discussed previously, the same relation of possession holds between the dative and the P object in unergatives, as can be seen in (144) below. Here, the genitive possessor solution seems to be the only possible way to express that the car is in possession of an entity other than the dative.

- (144) *Jan-a spal-a Petrovi v (*Mark-ově) aut-ě (od Marka).*
 Jane-SG.NOM he.DAT slept-AGR in Mark-POSS car-SG.LOC from Mark.DAT
 “Jane slept in Mark’s car to Peter’s (dis)advantage.”

If an unaccusative (145) or a transitive (146) appears with a locative PP, however, then the possessed object may optionally be the P object DP instead, whereby the V object DP may be modified by an over possessor DP.

- (145) *Martinova babička umřela Petrovi v (*Martinově) autě.*
 Martin.POSS grandma.NOM died Peter.DAT in Martin’s car.LOC
 “Martin’s grandma died to Peter’s (dis)advantage in (*Martin’s) car.”

- (146) *Martinovu ženu zabili Petr-ovi v (*Martinově) autě.*
 Martin.POSS wife.ACC killed Peter-DAT in Martin’s car.LOC
 “They killed Martin’s wife to Peter’s (dis)advantage in (*Martin’s) car.”

It should be made explicit that in unaccusatives/transitives, the possessum of the dative is variable between the P object and the V object. Although either of them may be possessed by the affected dative, at least one of them has to be possessed. Whether this possession is alienable or inalienable seems to be of little consequence, as can be seen in the example in (147).

- (147) *Noha se zasekla Martinovi v záchodě.*
 Foot.NOM REFL.CL got.stuck Martin.DAT in toilet.DAT
 “(Martin’s) foot got stuck in the toilet to Martin’s (dis)advantage.” or “The foot got stuck in (Martin’s) toilet to Martin’s (dis)advantage.”

One of the options for the interpretation of (147) is that it is the V object in surface subject position *noha* ‘foot.NOM’ which is possessed by the dative DP *Martinovi* ‘Martin.DAT’, where the dative inalienably possesses the V object. In this instance, the P object *záchodě* ‘toilet.LOC’, but not the V object, may feature an overt possessor (148).

- (148) *(*Petrova) noha se zasekla Martinovi v Petrově záchodě.*
 Peter.POSS foot.NOM REFL.CL got.stuck Martin.DAT in Peter.POSS toilet.DAT
 “(*Peter’s) foot got stuck in Peter’s toilet to Martin’s (dis)advantage.”

The other possible interpretation is that it is the P object *záchodě* ‘toilet.LOC’ which is possessed by the dative, where the dative alienably possesses the P object. As expected, in such an instance the V object in surface subject position, but not the P object, may appear with an overt possessor (149).

- (149) *Petrova noha se zasekla Martinovi v (*Petrově) záchodě.*
 Peter.POSS foot.NOM REFL.CL got.stuck Martin.DAT in Peter.POSS toilet.DAT
 “Peter’s foot got stuck in (*Peter’s) toilet to Martin’s (dis)advantage.”

The examples above featured a V object which may be inalienably possessed by the dative and a P object which may be alienably possessed by the dative. However, the same ambiguity is observed even in cases where the V object may be alienably possessed and the P object inalienably possessed. Consider for instance the the sentences in (150) below.

- (150) a. *Martinovo jídlo dali slepicím pod (*Martinovy)*
 Martin.POSS food.NOM put chicken.DAT.PL under Martin.POSS
nohy.
 foot.ACC.PL
 “They put Martin’s food under (the chicken’s/*Martin’s) feet to the chickens’ (dis)advantage.”
- b. *(*Martinovo) jídlo dali slepicím pod Martinovy*
 Martin.POSS food.NOM put chicken.DAT.PL under Martin.POSS
nohy.
 foot.ACC.PL
 “They put (the chickens’/*Martin’s) food under Martin’s feet to the chickens’ (dis)advantage.”

The possession relations between the dative and either the V object or the P object is summarized in the table below in (151).

(151) Which object is a possessum of the dative?

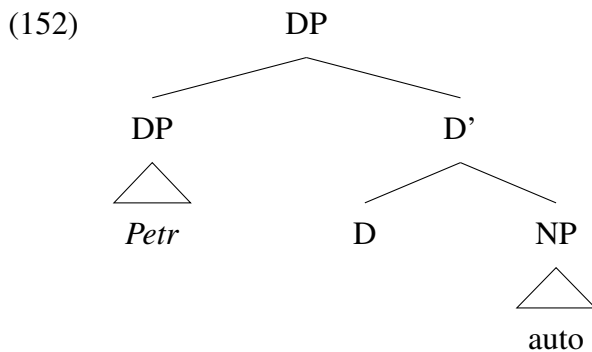
Verb type	PP _{loc} not present	PP _{loc} present
Unergatives	n/a	P object
Unaccusatives	V object (surface subject)	P object (optionally)
Transitives	V object	P object (optionally)

Thus, the structural relations between the base-generated V object and the dative differ depending on whether a locative PP is present or not.

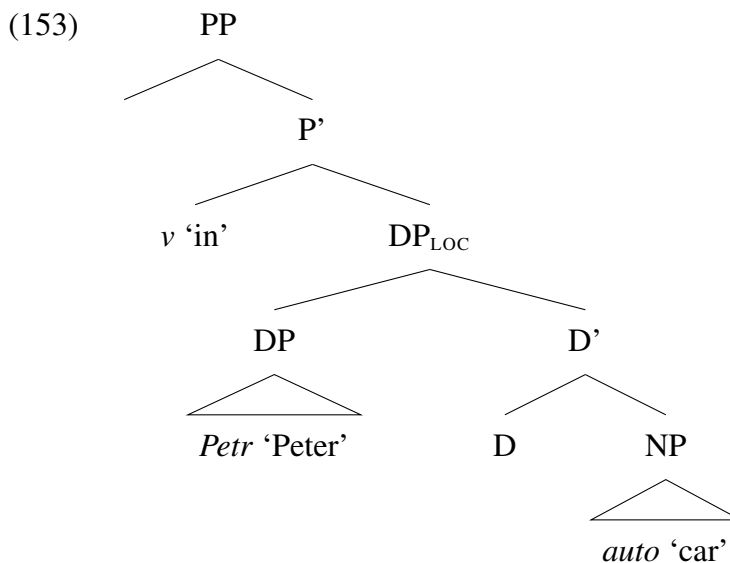
5.2 Possessor raising into SPEC;ApplP

The hypothesis sketched out below proposes that the approaches to possessor datives featuring either possessor rising in the sense of Landau (1999) or low applicative heads in the sense of Pylkkänen (2008) are not incompatible. In fact, both are necessary to explain the behavior of Czech affected datives.

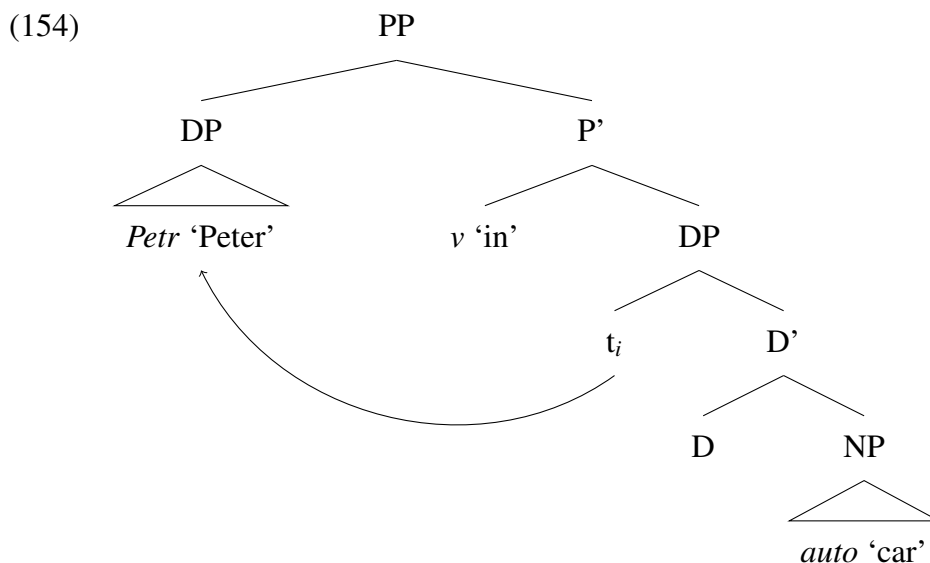
The derivation of the PP option that is available to both unergatives and unaccusatives or transitives could then proceed as follows. First, the possessive DP is merged in SPEC of the DP *auto* ‘car’ (152).



The DP is then merged with the P *v* ‘in’ (153), assigning locative case to it.



This DP can then stay in-situ, getting spelled out with the POSS suffix. Nonetheless, as the DP *Petr* ‘Peter’ is in SPEC, there is nothing blocking its movement into SPEC of P (154), leaving a trace in its original position.



(154) accounts for the fact that in both (155–156), where in (155) the possessor *Petrově* ‘Peter’s’ stayed in situ, while in (156) it moved to SPEC of P, the car is interpreted as belonging to Peter. Similarly, it accounts for the fact that no other possessor can appear in this position, as it the position is already occupied by a trace. It furthermore makes correct predictions concerning word order—mainly that in (155), the possessor follows the P, while in (156), the possessor dative precedes the P.

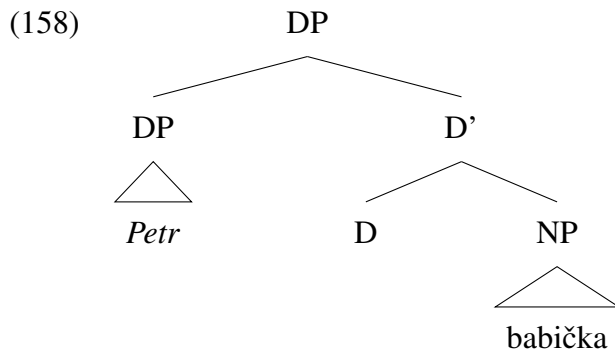
(155) *Babičk-a umřela v Petr-ově aut-ě.*
 grandma-NOM died in Peter-POSS car-LOC
 “Grandma died in Peter’s car.”

(156) *Babičk-a umřela Petr-ovi v aut-ě.*
 grandma-NOM died Peter-DAT in car-LOC
 “Grandma died to Peter’s (dis)advantage in Peter’s car.”

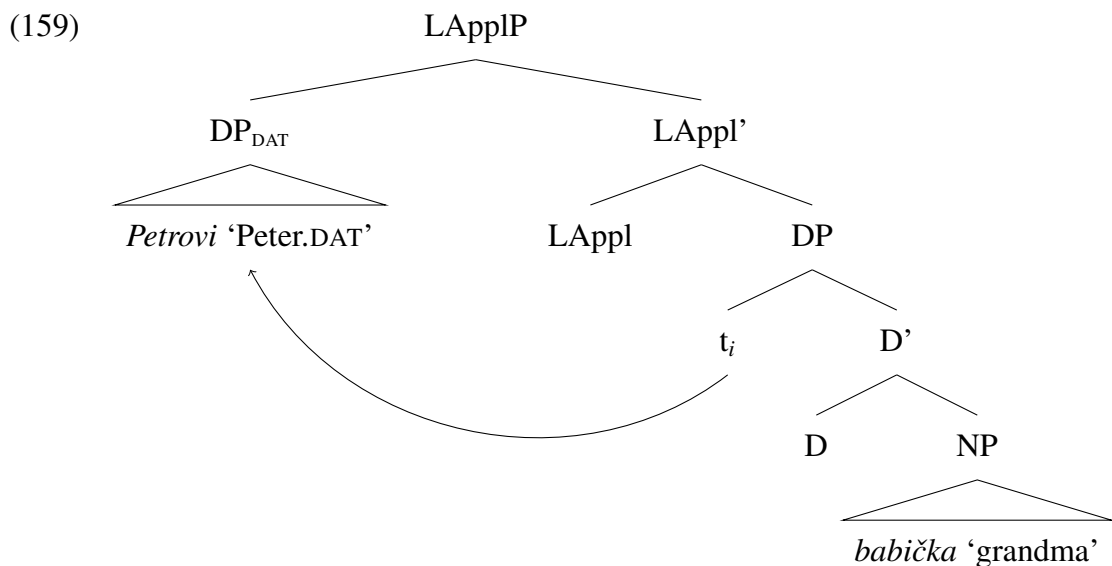
What is not however clear is how does the structure in (154) account for the fact that *Petr* ‘Peter’ has the extra semantics of being a maleficiary/beneficiary in (156), which are not present in (155). In order to account for why this is the case, the derivation available only to unaccusatives and transitives, involving a low applicative head, must be discussed first. Such a derivation again begins with merging a structure similar to (158), represented below for the sentence in (123), for which it is assumed that the DP *babička* ‘grandma’ is moved into some higher, focus position, with the base order given below in (157).

(157) *Petr-ovi umřela babičk-a.*
 Peter-DAT died grandma-NOM
 “(Peter’s) grandma died to Peter’s (dis)advantage.”

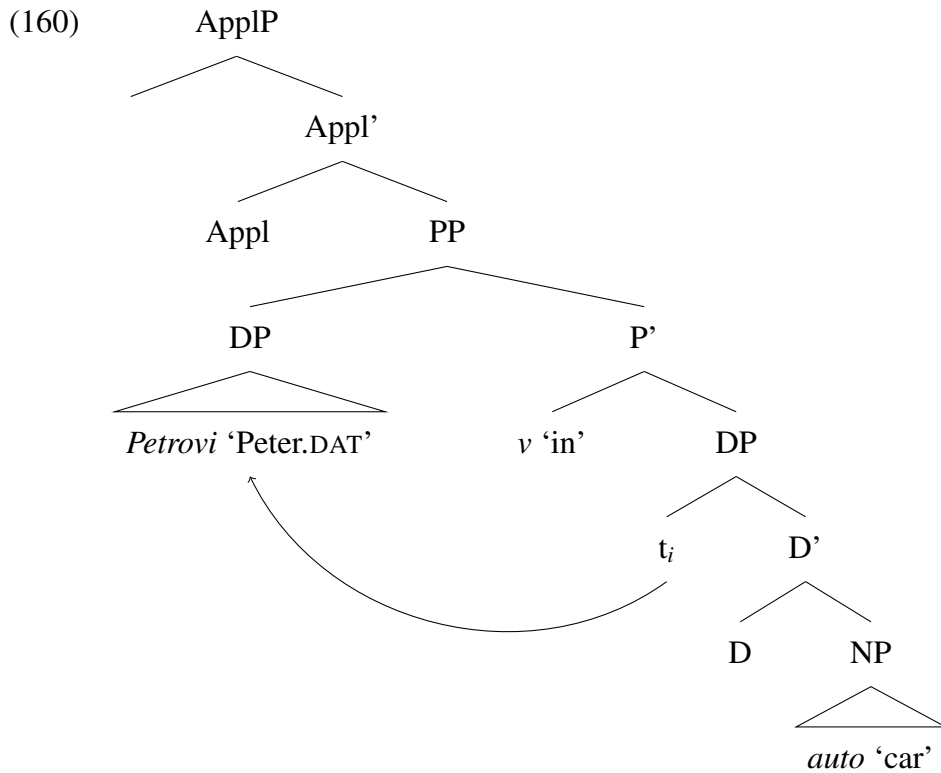
The derivation once again begins with merging the DP possessor *Petr* ‘Peter’ in SPEC of the DP *babička* ‘grandma’ (158).



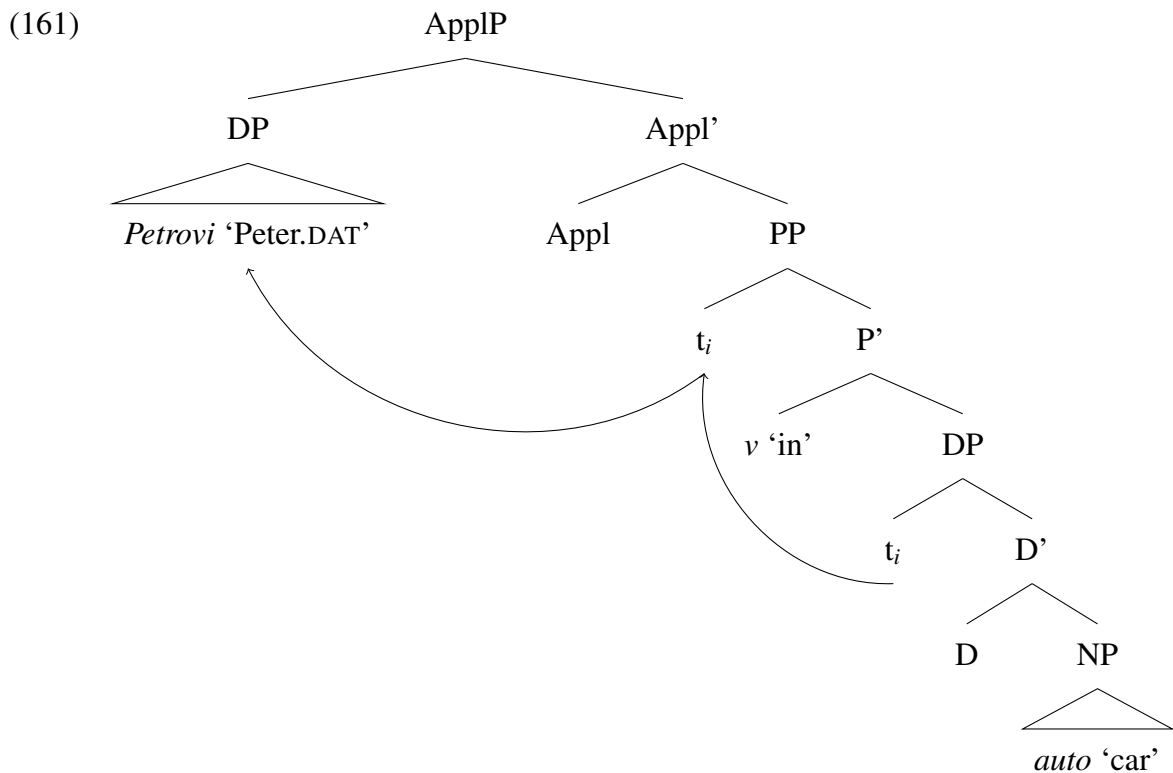
Instead of merging with a P, as in (153), the DP in (158) is merged with a low applicative head. The DP *Petr* ‘Peter’ moves to SPEC of this low applicative head, where it is assigned dative (159). This accounts for the fact that no overt possessor can appear in SPEC of the lower DP *babička* ‘grandma.’



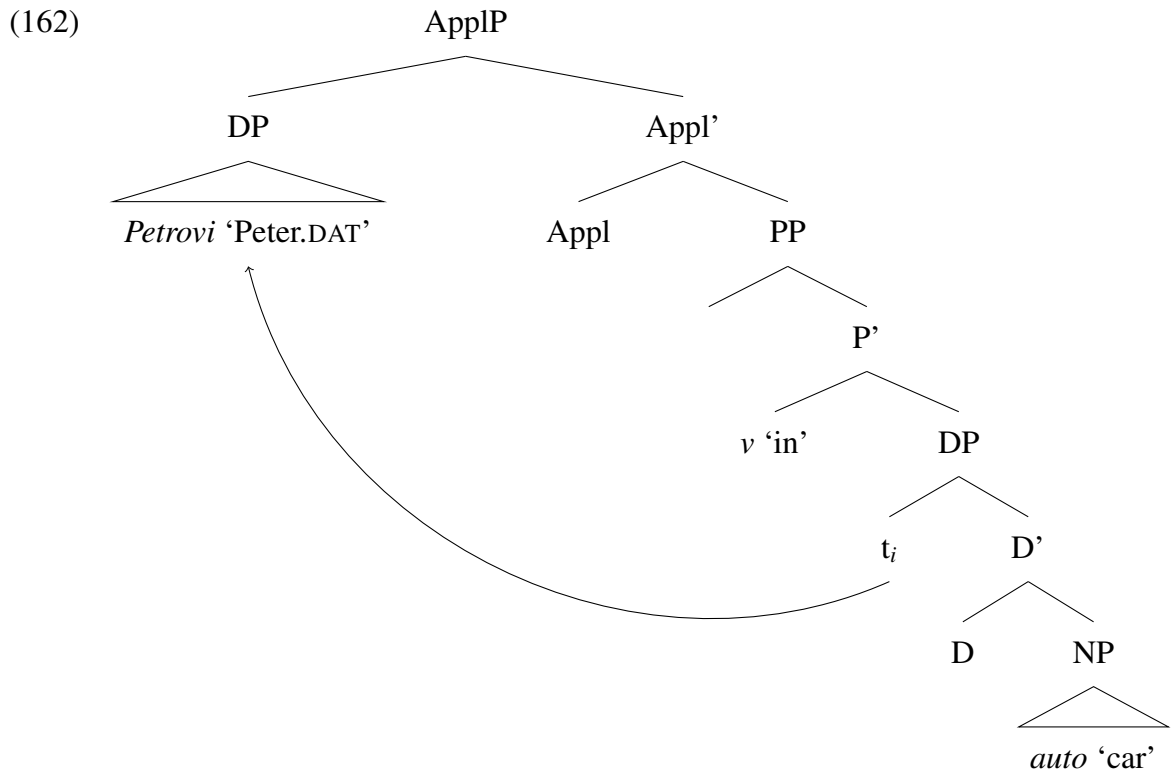
Returning now to the issue with how can a affected dative in SPEC of PP receive its affected semantics that are not present in possessors of P objects, consider that an additional functional head, Appl, is merged above the PP in (154), as shown below in (160).



The DP *Petr* 'Peter' then moves into SPEC of this Appl (161).



Another possibility is that the possessor does not move into SPEC;PP at all, instead moving straight into SPEC;Appl (162).



Moving the possessor straight into SPEC;Appl has the advantage in that it accommodates Terzi's (2010b) theory, where the null noun PLACE moves into SPEC;PP. In order to achieve a compatibility with Terzi (2010b), the structure in (162), where the dative raises into SPEC;ApplP while skipping the intervening SPEC;PP, is here taken as the preferred one.

5.2.1 Restrictions on movement as evidence for possessor raising

Consider coordinated P objects, which are possible in Czech (163).

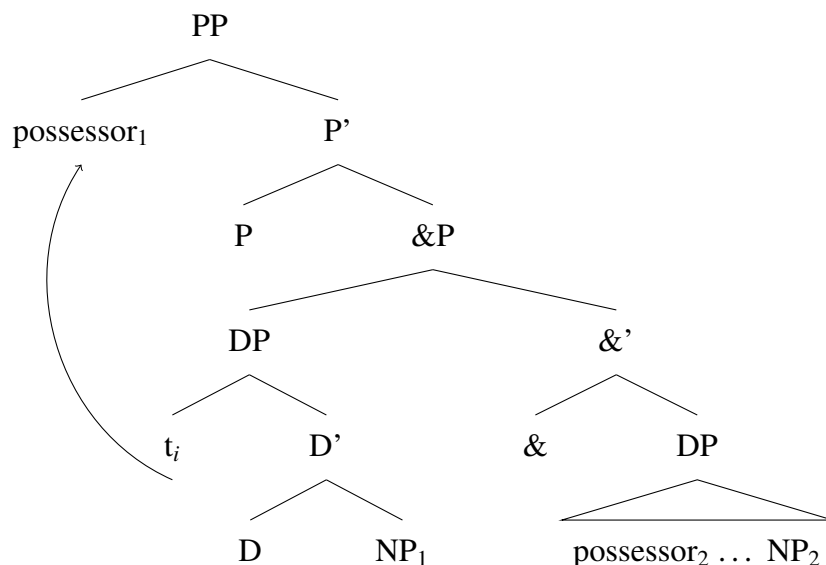
- (163) *Babička seděla v domě a autě.*
 Grandma.NOM sat in house.LOC and car.LOC
 "Grandma sat in the house and the car."

If Czech affected datives involve possessor raising, then it should be expected that a movement of a possessor out of the coordinated P object in (163), such as is exemplified in (165), should be impossible.¹⁵ This is due to a general restriction on the extraction of conjuncts, first described as the Coordinate Structure Constraint (164) by Ross (1967), the mechanisms of which will not be discussed here into further depth due to space constraints (see e.g. Bošković 2020, for a recent discussion).

- (164) **Coordinate Structure Constraint:** "In a coordinate structure, no conjunct may be moved, nor may any element contained in a conjunct be moved out of that conjunct." (Ross 1967, 161)

15. The view that conjuncts are in SPEC and COMPL of a conjunction phrase is adopted here (see Progovac 1998). Following Progovac (1998), this conjunction phrase is here labeled as &P.

(165) Impossible movement out of a conjunct.



This is indeed the case, as can be seen in (166).

- (166) **Babička seděla Martinovi v domě a Petrově autě.*
 Grandma.NOM sat Martin.DAT in house.LOC and Peter.POSS car.LOC
 “Grandma sat in (Martin’s) house and Peter’s car to Martin’s (dis)advantage.”

The fact that it is impossible to move a possessor out of a &P may serve as indirect evidence for possessor movement taking place in this construction (166). Another interesting case arises in coordinated V objects (167).

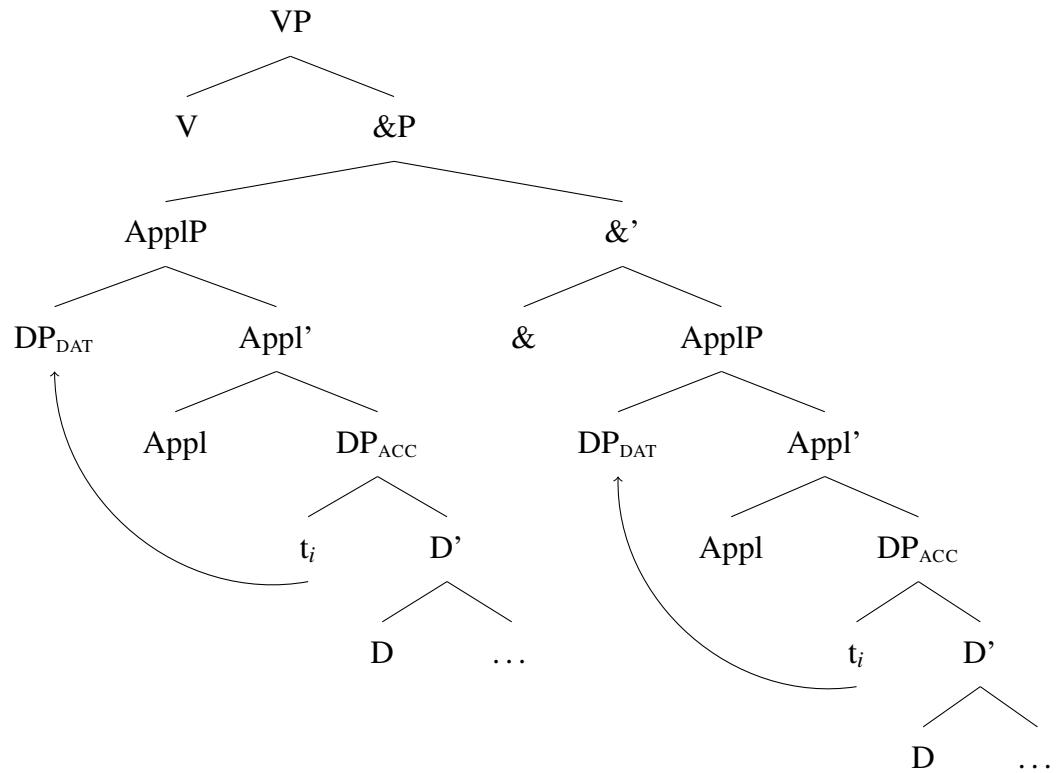
- (167) *Zabili Petrovu babičku a Martinova psa.*
 Killed.PL Peter.POSS grandma.ACC and Martin.POSS dog.ACC
 “They killed Peter’s grandma and Martin’s dog.”

Both of the possessors in (167) may appear as affected datives (168).

- (168) *Zabili Petrovi babičku a Martinovi psa.*
 Killed.PL Peter.DAT grandma.ACC and Martin.DAT dog.ACC
 “They killed (Peter’s) grandma to Peter’s (dis)advantage and (Martin’s) dog to Martin’s (dis)advantage.”

However, this behavior should be expected—if possessor raising is involved, then neither of the possessor datives in (168) move out of the &P. There are two possible loci into which the dative moves while not crossing the &P boundary in the process, unlike in the case of possessor datives of coordinated P objects (165). One possibility is that they move into SPEC of the individual coordinated ApplPs (169).

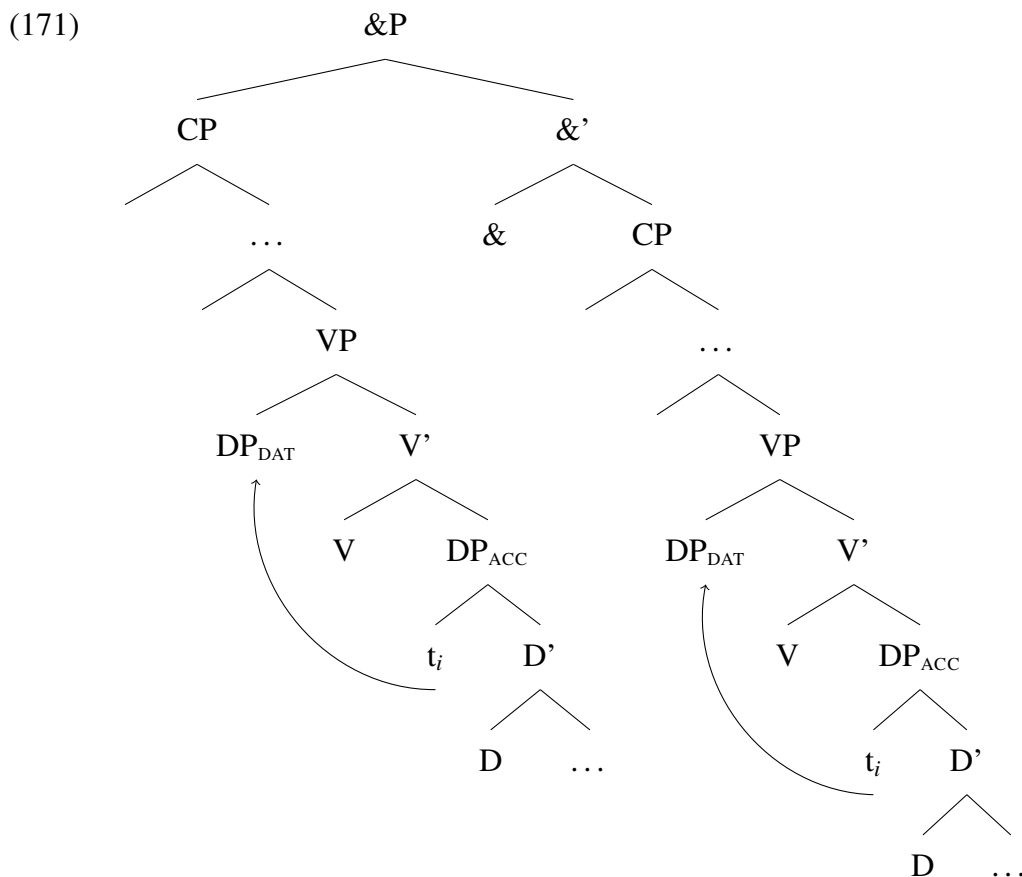
(169)



This suggests that instead of SPEC of VP, as in Landau (1999), Czech possessor datives move into SPEC of a low applicative head in the sense of Pytkänen (2008). However, there also exists a possibility that what is being coordinated in (168) are not two ApplPs, but instead two whole CPs, with V in the second CP elided.

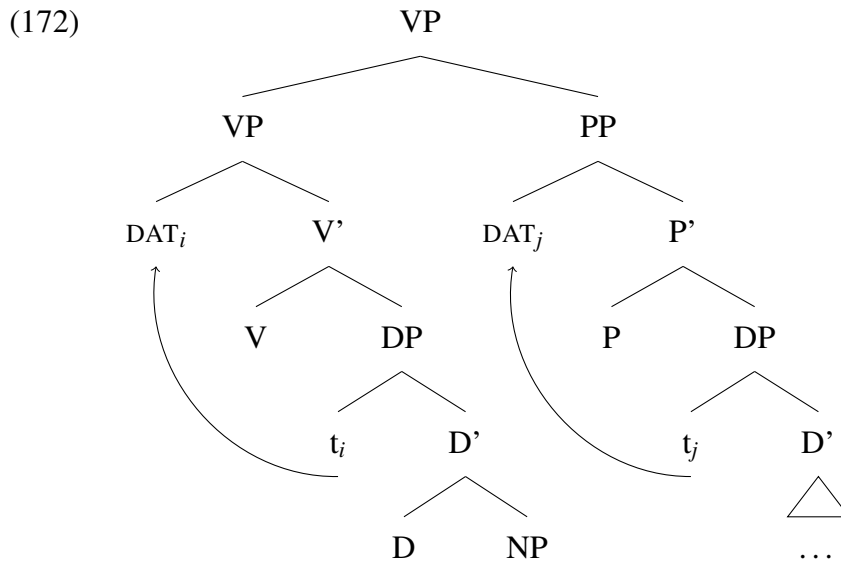
- (170) *Petrovi zabili babičku a Martinovi zabili psa.*
Peter.DAT killed grandma.ACC and Martin.DAT killed dog.ACC
“They killed (Peter’s) grandma to Peter’s (dis)advantage and they killed (Martin’s) dog to Martin’s (dis)advantage.”

In such a case, movement of the possessor dative also does not cross &P (171) and it is possible to move it into SPEC of VP à la Landau (1999).



In fact, the latter structure (171), where it is always two CPs, and not two ApplPs, that are coordinated, is preferable. This conclusion is based on the observations that the affected dative can in fact undergo further movement higher up in the structure, as is suggested by the sentence in (170), where the affected dative precedes the verb. If this is the case, there appears to be no reason to postulate Pylkkänen's (2008) low source applicative heads to be present in the structure at all, with the possessor dative moving into SPEC of VP, as it does in Landau's (1999) approach. There is, however, evidence to suggest that not only is it possible to coordinate two ApplPs, corresponding to the structure in (169), but that it must in fact be ApplPs that are coordinated.

As was already mentioned in section 4 and elaborated on later in section 5.3, there is a limit on the number of affected datives permitted in a clause, that being only a single affected dative per clause. It is not immediately clear what the analysis would be for affected datives cooccurring with PPs in unergatives, but it can be assumed that if Landau's (1999) datives raise into SPEC;VP, that the affected datives cooccurring with PPs in unergatives would analogously raise into SPEC;PP—however, this possibility was already discarded in section 4.3.2 due to independent reasons. Even if these independent reasons were to be overlooked for now for, it would be still impossible for these kinds of affected datives to raise into SPEC;PP, as such a hypothetical derivational process, sketched out in (172), would possibly permit two datives per clause containing a V with an internal argument and a PP, contrary to fact (173).



- (173) **Petrovi zabili ženu Markovi v autě.*
 Peter.DAT killed.PL wife.ACC Mark.DAT in car.LOC
 Intended: “They killed (Peter’s) wife to Peter’s (dis)advantage in (Mark’s) car to Mark’s (dis)advantage.”

Independent reasons thus clearly show the necessity for Pylkkänen’s (2008) low applicative heads, in addition to Landau’s (1999) raising.

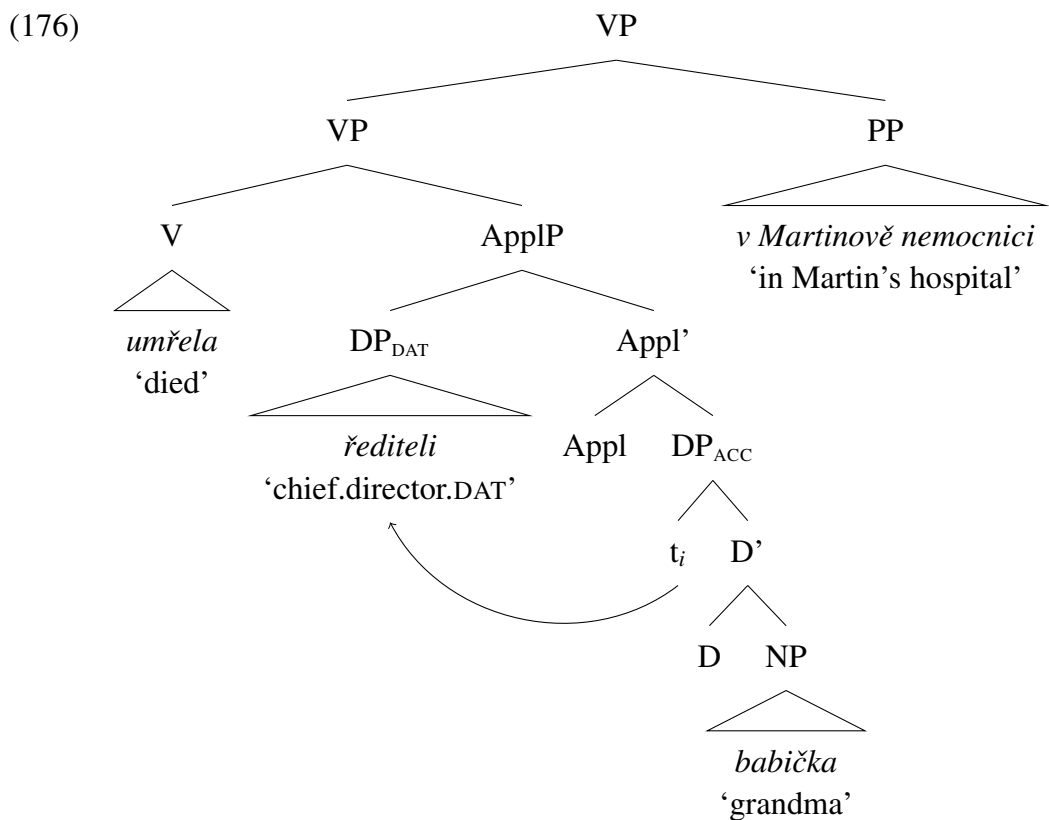
5.3 Ambiguous V/P object possession and the ban on double datives

Returning now to the ambiguous V/P object possession, consider the ambiguous sentence in (174).

- (174) *Babička umřela řediteli v nemocnici.*
 grandma.NOM died chief.director.DAT in hospital.LOC
 “Grandma died in the (chief director’s) hospital to the chief director’s (dis)advantage.”
 or “(The chief director’s) grandma died in the hospital to the chief director’s (dis)advantage.”

The ambiguity arises from the variable possession of either the V object or the P object by the dative. In the former case, it is the chief director’s grandma who has died, while in the latter case, it is the chief director’s hospital where the grandma has died. This ambiguity arises from two different syntactic structures underlying the linear order in (174)—in the first structure (176), the dative originates as a possessor inside the V object, whereby the P object, but not the V object, may appear with an overt possessor (175).

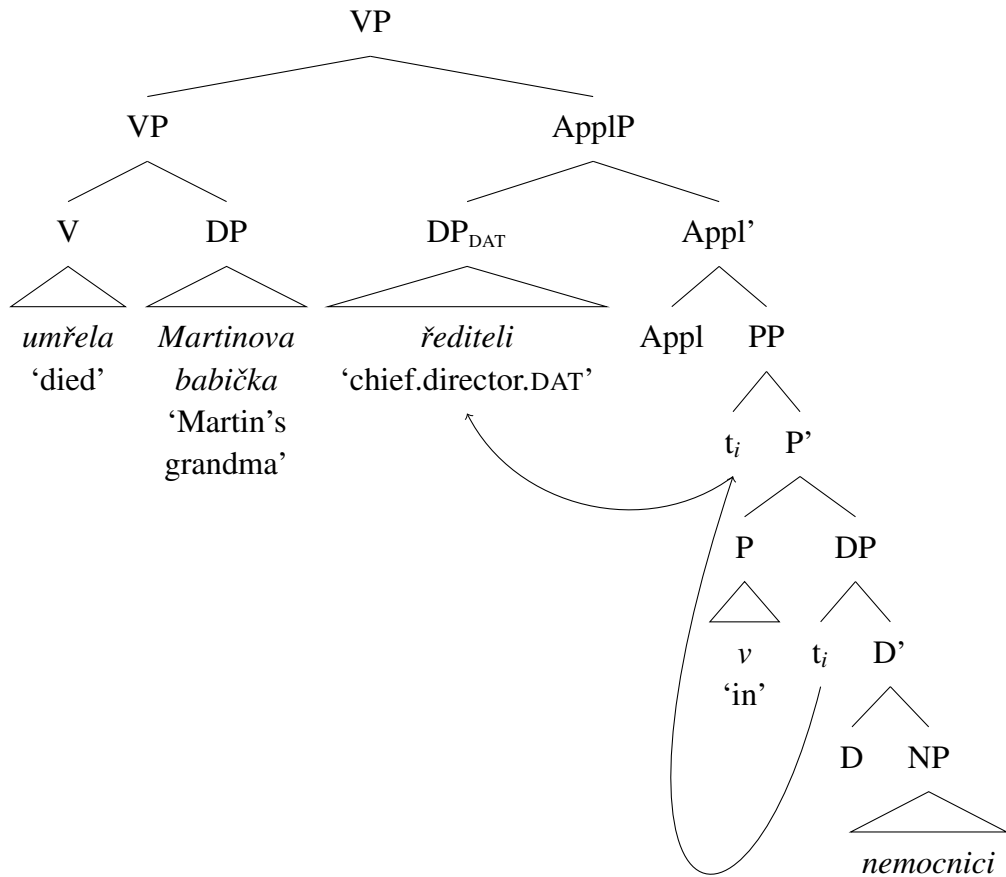
- (175) (**Martinova*) *babička* *umřela* *řediteli* *v* *Martinově*
 (Martin.POSS) grandma.NOM died chief.director.DAT in Martin.POSS
nemocnici.
 hospital.LOC
 “(The chief director’s grandma) died in Martin’s hospital to the chief director’s
 (dis)advantage.”



In the second structure (178), the dative originates as a possessor inside the P object, whereby the V object, but not the P object, may appear with an overt possessor (177).

- (177) *Martinova* *babička* *umřela* *řediteli* *v* (**Martinově*)
 Martin.POSS grandma.NOM died chief.director.DAT in (Martin.POSS)
nemocnici.
 hospital.LOC
 “Martin’s grandma died in (the chief director’s) hospital to the chief director’s
 (dis)advantage.”

(178)



As is expected, while either the V object or the P object may be possessed by the dative, it is impossible for both the V object and the P object to appear with respective (non-dative) possessors modifying them (179). This is due to the dative originating as a possessor inside either the V object or the P object.

(179) **Martinova babička umřela řediteli v Petrově nemocnici.*
Martin.POSS grandma.NOM died chief.director.DAT in Peter.POSS hospital.LOC

“Martin’s grandma died in Peter’s hospital to the chief director’s (dis)advantage.”

Interestingly, it is impossible for the V object possessor and the P object possessor to both raise and become affected possessor datives (180).¹⁶ This reflects the general im-

16. Notice that this sentence is fine in very specific circumstances—if *Petrova nemocnice* “Peter’s hospital” is a type of a hospital (as in an institution whose full legal name is *Petrova nemocnice*). In this case, however, it is not the Peter to whom the hospital is related in the event described by the sentence, ie. it is the dative who is the director of the hospital, not Peter. Consider a less contextually-specific sentence, like (i) below.

(i) **Martinova babička umřela Petrovi v Markově autě.*
Martin.POSS grandma.NOM died Peter.DAT in Mark.POSS car.LOC

“Martin’s grandma died in Mark’s car to Peter’s (dis)advantage.”

This sentence has the same structure as (180), the only difference being is that *Markově autě* ‘Mark’s car’ is not a type of a car, but rather a car that is possessed by Mark, making the case at present clear.

possibility for two dative DPs to appear in a Czech sentence, discussed previously in section (4.2.1).

- (180) **Martinovi babička umřela řediteli v nemocnici.*
Martin.POSS grandma.NOM died chief.director.DAT in hospital.LOC
“(Martin’s) grandma died to Martin’s (dis)advantage in (the chief director’s) hospital to the chief director’s (dis)advantage.”

(180) is however different from Dvořák’s (2009, 8–9) example in (103), repeated below in (181).

- (181) **Karel konečně mámě poslal pojišťovně ten dopis.*
Charles.NOM finally mum.DAT sent insurance company.DAT that letter.ACC
“Intended: Charles finally sent the insurance company that letter (and he did it) for his mum.” (Dvořák 2009, 9)

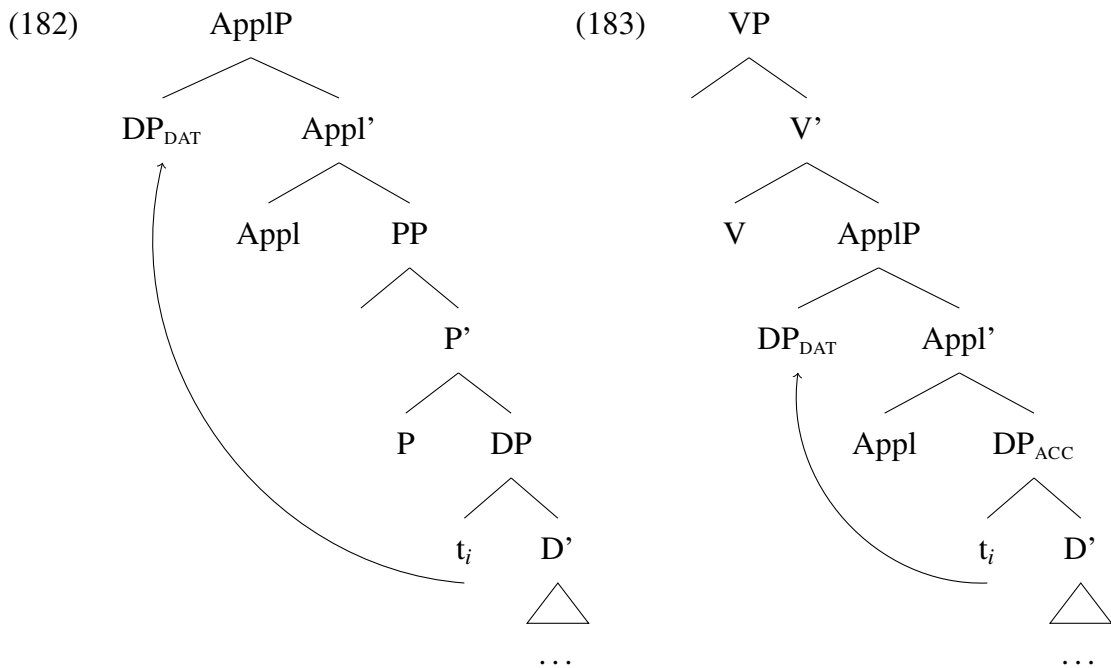
The sentence in (181), unlike the one in (180), does not feature any locative PP, and thus the only possible source for the dative to raise out of is the V object DP, limiting the number of affected possessor datives to 1. This is not the case in (180), which features both a V object and a P object, thus providing two possible sources for a affected possessor dative to raise out of. If these datives raised to SPEC of VP as they do in Landau (1999), and by extension to SPEC of locative PPs, then it should be expected that a sentence like (180) be grammatical, contrary to fact. If, however, the locus of movement of these possessor datives is the SPEC of a single Pylkkänen’s (2008) low applicative head, then the number of affected possessor datives per CP is accounted for.

6 Conclusion

This thesis has attempted to develop a comprehensive analysis of Czech affected datives on the background of English DOC constructions, adopting Pylkkänen's (2008) influential theory of applicatives, which follows the tradition of treating English datives in DOC constructions as applied arguments going back to Marantz (1993).

This thesis began by discussing empirical observations concerning the English DOC, namely the IO/DO asymmetry, the optionality/unavailability of the dative argument (indirect object) in specific constructions, and its semantic interpretation, situated in the context of applicatives and applied arguments cross-linguistically. As was shown, the idea that English IOs in DOCs display syntactically analogous behavior to canonical applicatives (widely attested in, among others, Bantu and Papuan languages) found in the generative literature (e. g. Marantz 1993; Pylkkänen 2008, *inter alia*) is on the right track.

Adopting the theory of applicatives proposed by Pylkkänen (2008), this thesis proposed the following structures (182–183) for the Czech affected dative, an applied argument whose semantic interpretation is that it is a) either positively or negatively affected by the event described by the sentence, and b) that it is affected via the possession of either a P or a V object.



These structures differ in their distribution. The structure in (182) is available to all verbs irregardless of whether they have an internal argument, whereas the structure in (183) is unavailable to verbs lacking an internal argument (unergatives; following the typology of Pylkkänen 2008, where low applicative heads are incompatible with unergatives). Crucially, unlike in Pylkkänen's (2008) approach, the applied dative here originates as a possessor in SPEC of a lower possessum DP, before raising/moving into SPEC of the low applicative head. The applicative heads in both (182) and (183) are here taken to be identical, only the origin of the dative differs. In essence, the structures in (182–183)

differ only in that it is possible for a PP to supply a DP object for the dative to raise out of.

The evidence for this claim comes from the following:

Firstly, datives combined with unergative verbs are dependent on the presence of a locative PP (184). Although Pylkkänen's (2008) typology of applicatives can capture the impossibility to combine unergatives with applied objects, it falls short of accounting for why locative PPs can "rescue" an applied object in structures like (184). This thesis argued that this constitutes evidence for possessor raising from P object DP SPEC position, as seen in the proposed structure in (182), suggesting that Pylkkänen's (2008) removal of possessor raising is a step in the wrong direction.

- (184) *Marie spala Janovi *(v zahradě).*
Mary.NOM slept John.DAT in garden.LOC
"Mary slept in the garden to John's (dis)advantage."

Secondly, the number of non-ethical datives is limited to one per clause (185). It was argued here that this constitutes evidence for the presence of Pylkkänen's (2008) low applicative head, arguing against a possessor raising analysis à la Landau (1999), where datives raise into SPEC of VP, instead claiming that although possessor raising is involved, the dative is raised into SPEC of a low applicative head instead.

- (185) **Marie zabila Petrovi ženu Janovi v zahradě.*
Mary.Nom killed Peter.DAT wife.ACC John.DAT in garden.LOC
"Intended: Mary killed (Peter's) wife to Peter's (dis)advantage in the garden to John's (dis)advantage"

Thirdly, the lower DP (the direct object) is interpreted as being possessed by the affected dative (186).

- (186) *Marie zabila Petrovi ženu.*
Mary.NOM killed Peter.DAT wife.NOM
"Mary killed (Peter's) wife to Peter's (dis)advantage."

Although captured by Pylkkänen's (2008) low source applicative head alone, related evidence from Czech suggests that a low source applicative analysis in the sense of Pylkkänen (2008) is insufficient here. On the one hand, the affected dative is always ambiguous between possessing a P object or a V object in structures involving both an internal argument and a locative PP (187), and on the other hand, P/V object DPs possessed by the affected dative cannot appear with their own respective possessor modifiers (188). It is argued here that this serves as strong evidence for possessor raising.

- (187) *Marie Petrovi zabila zajíce v zahradě.*
Mary.NOM Peter.DAT killed hare.ACC in garden.LOC
"Mary killed Peter's hare in the garden to Peter's (dis)advantage." or "Mary killed the hare in Peter's garden to Peter's (dis)advantage."

- (188) **Marie Petrovi zabila Martinova zajíce v Janově zahradě.*
 Mary.NOM Peter.DAT killed Martin.POSS hare in John.POSS garden.LOC
 “Intended: Mary killed Martin’s hare in John’s garden to Peter’s (dis)advantage.”

In unaccusative constructions, this is not always the case, as can be seen in (189). Such cases are however marked and do not feature “true” possession in the same way that other affected datives do—for instance, (189) cannot mean that Peter and Martin are brothers; Peter may not be interpreted as being a family member of Martin, but e. g. a caretaker of the grandma. This serves as a problem for the generalization offered in this thesis; although tentative solutions were offered, these idiosyncrasies need to be given closer treatment in the subsequent research of datives.

- (189) (**Petrova*) *babička umřela Martinovi.*
 Peter.POSS grandma.NOM died Martin.DAT
 “*(Peter’s) grandma died to Martin’s (dis)advantage.”

- (190) *Mariin telefon spadl Petrovi.*
 Mary.POSS phone.NOM fell Peter.DAT
 “Mary’s phone fell to Peter’s (dis)advantage.”

Lastly, common restrictions on movement, such as extraction from conjuncts being impossible, apply (191). This serves as indirect evidence for possessor raising.

- (191) a. *Babička seděla v Martinově autě a Petrově domě.*
 grandma.NOM sat in Martin.POSS car.LOC and Peter.POSS house.LOC
 “Grandma sat in Martin’s car and Peter’s house.”
 b. **Babička seděla Martinovi v autě a Petrově domě.*
 grandma.NOM sat Martin.DAT in car.LOC and Peter.POSS house.LOC
 “Intended: Grandma set in (Martin’s) car and Peter’s house to Martin’s (dis)advantage.”

By exploring the syntax of affected datives in Czech and arguing for the presence of raising in such constructions, this thesis has also offered a solution for problems concerning the syntax and semantics of English DOCs centered around an (absence of) raising analysis. As was demonstrated, an object in an applied position in English is not restricted to recipient semantics; these are in fact blocked both in the case of prevention-of-possession verbs and the PDC construction. This thesis argued that a purely syntactic model where the “recipient” resides in a SPEC;ApplP position which is unspecified for the direction of possession (whether the DO originates in the possession of the IO or vice versa), and where the relation of possession may be truly established only via syntactic movement, is able to account for these idiosyncrasies.

What remains unanswered is how this approach accounts for cases like (192), demonstrating the need for further research of this phenomenon. It is impossible for the applied object to co-occur with a co-referential possessor in the direct object DP (193a) or if the direct object DP that is to be possessed by the applied object is headed by a definite article (193b).

(192) *He melted her heart.*

(193) a. **He melted her her heart.*

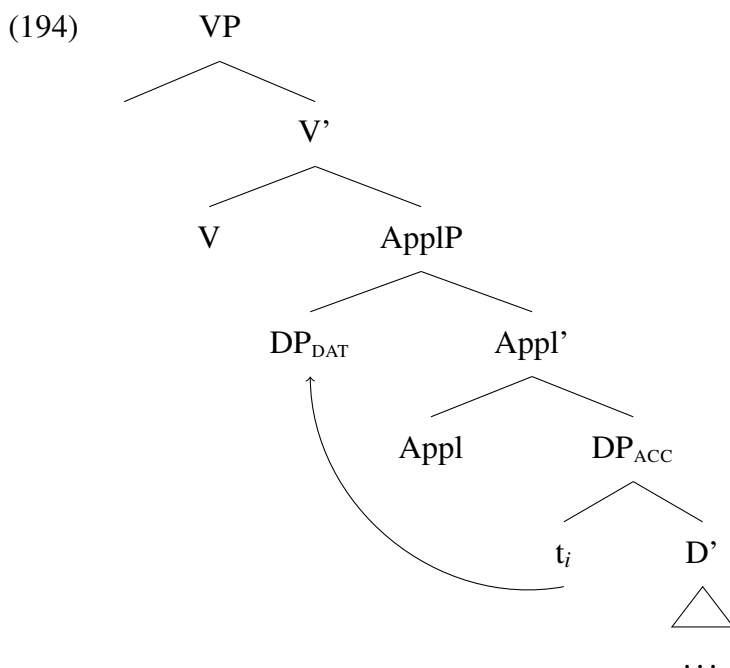
b. **He melted her the heart.*

The data in (193a–193b) may serve as evidence for the presence of possessor raising in English. Nonetheless, it is unclear why the co-reference (193a) or the presence of a definite article (193b) would prevent the applied object from being merged in SPEC;ApplP. As the approach presented in this thesis is fully compatible with late-insertion models of syntax/morphology, like Distributed Morphology (Halle and Marantz 1993; Embick and Noyer 2007; see also Embick 2015, for an introduction; and Harley 2012, for applicatives in the context of argument structure in Distributed Morphology), employing Harley’s (2014) \sqrt{P} and situating an applicative head within the projection of \sqrt{P} , essentially resulting in a very fine-grained syntactic structure, may perhaps serve as a promising starting point for developing a solution to the above stated problem.

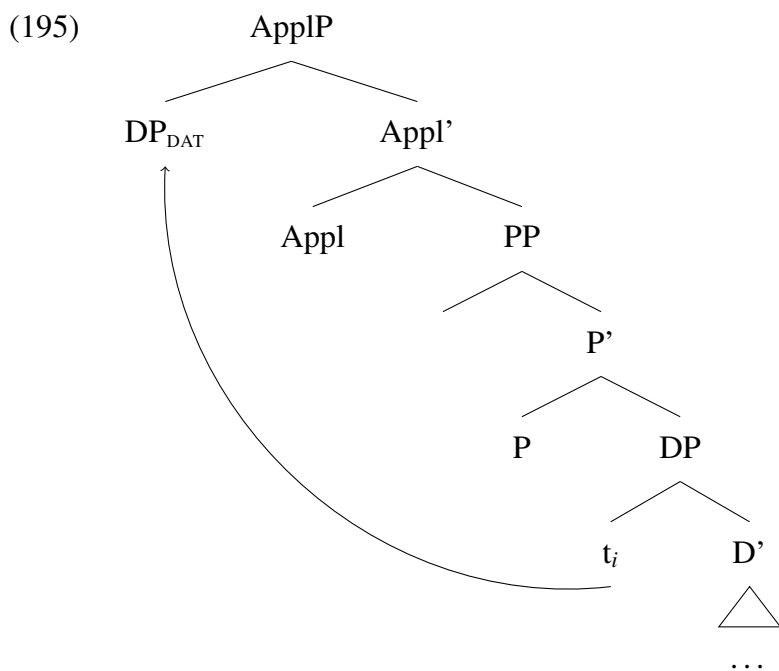
České resumé

Aplikativy jsou v tradiční literatuře (Dixon a Aikhenvald 2000; Peterson 2007) chápány jako morfémy afixované na lexikální sloveso, které zvyšují valenci celé konstrukce přidáním dodatečného argumentu. Výzkum aplikativních struktur je předmětem dlouhé tradice bádání v rámci generativní gramatiky (Marantz 1993; Cuervo 2003; Emonds a Whitney 2006; Pykkänen 2008; Georgala 2012; Harley 2012; Citko et al. 2017), přičemž byla vypracována řada hypotéz o přítomnosti aplikativních struktur i v jazycích, ve kterých se nevyskytuje fonologicky realizovaná aplikativní morfologie; m. j. se jedná o angličtinu (Marantz 1993; Pykkänen 2008; viz také Emonds a Whitney 2006; Citko et al. 2017), ale i řadu slovanských jazyků (Slavkov 2008; Dyakonova 2009; Marvin a Stegovec 2012; Gogłozza 2021), včetně češtiny (Dvořák 2010, inter alia; Kunderát 2024).

Tato práce navazuje na generativní přístup k aplikativním strukturám, zejména potom na teorii nízkých a vysokých aplikativních hlav (Pykkänen 2008), na základě kterého navrhuje hypotézu, že české přivlastňovací (posesivní) dativa a dativní malefaktiva a benefaktiva jsou do struktury merdžována v pozici specifikátoru DP. Z této pozice následně dochází k posunu do specifikátoru ApplP, tj. maximální projekce aplikativní hlavy, která koresponduje s nízkou aplikativní hlavou Liiny Pykkänen (2008). Tato struktura je ilustrována v příkladu (194), kde dochází k posunu dativu ze specifikátoru interního DP argumentu slovesa.



Součástí hypotézy je i možnost, že DP, z jehož specifikátoru se dativ posouvá výše do specifikátoru v rámci projekce aplikativní hlavy, je argumentem předložkové fráze. Tato možnost, která je kompatibilní i se strukturami v nichž není přítomný interní argument, je uvedena v příkladu (195).



Součástí práce je srovnávací popis recipientních konstrukcí v angličtině, na základě kterého je vypracována hypotéza, že za nepřítomnosti posunu aplikovaného argumentu z pozice ve specifikátoru aplikovaným argumentem vlastněného nižšího DP nedochází k ustanovení vlastnického/posesivního vztahu mezi aplikovaným argumentem a nižším DP. Na základě srovnávacího popisu angličtiny a češtiny je tudíž zdůrazněna role posunu aplikovaných argumentů, jejíž absencí v angličtině lze vysvětlit řadu empirických pozorování vlastností recipientních argumentů v rámci anglických ditransitiv, a to za použití pouze derivačních komponent syntaktického modulu.

První sekce této práce situuje české a anglické dativa v širším kontextu aplikativních struktur a uvádí hlavní hypotézu, tj. posun českých dativ z specifikátoru DP do specifikátoru ApplP. Druhá sekce se věnuje struktuře anglických ditransitiv a uvádí teoretické přístupy generativní literatury, které tyto konstrukce analyzují jako aplikativní. Třetí sekce se blíže věnuje rozdílům mezi anglickými konstrukcemi, kde je recipientní argument realizován jako frazální předmět lineárně následující po slovesu (Double Object Construction; DOC), a naopak kdy je realizován jako předmět předložkové fráze lineárně následující po interním argumentu slovesa, a uvádí problematiku sémantické interpretace recipientního argumentu v kontextu dativních argumentů v češtině. Čtvrtá sekce obsahuje empirický popis distribuce českých non-recipientních dativů, jejichž analýza jakožto aplikovaných předmětů je plně vyvinuta v páté sekci. Šestá sekce obsahuje shrnutí klíčového poznatku této práce, tj. důležitosti role posunu při vytváření vlastnických/posesivních vztahů mezi aplikovanými argumenty a argumenty slovesa. Tuto roli situuje v rámci diskuze potřeby navazujícího bádání, především tedy derivačního vztahu mezi DOC a ekvivalentními ditransitivy, kde je recipientní argument realizován jako předmět předložky, a to konkrétně v kontextu aplikativních teorií.

References

- Acedo-Matellán, Víctor. 2017. "Latin datives with prefixed verbs and beyond: A view from the theory of applicatives." *Catalan Journal of Linguistics* 16: 19–49.
- Adger, David. 2003. *Core syntax: A minimalist approach*. Oxford: Oxford University Press.
- Alsina, Alex, and Sam A. Mchombo. 1993. "Object asymmetries and the Chichewa applicative construction." In *Theoretical aspects of Bantu grammar*, edited by Sam A. Mchombo, 17–45. Stanford, CA: CSLI Publications.
- Asudeh, Ash, Gianluca Giorgolo, and Ida Toivonen. 2014. "Meaning and valency." In *Proceedings of the LFG14 Conference*, 68–88. CSLI Publications.
- Baker, Mark. 1988a. *Incorporation: A theory of grammatical function changing*. University of Chicago Press.
- . 1988b. "Theta theory and the syntax of applicatives in Chichewa." *Natural Language & Linguistic Theory* 6: 353–389.
- Barlow, Russell. 2019. "Agent demotion through inverted word order: Syntactic passives in Ulwa." *Studies in Language* 43 (4): 1015–1037. <https://doi.org/https://doi.org/10.1075/sl.19010.bar>.
- Barss, Andrew, and Howard Lasnik. 1986. "A note on anaphora and double objects." *Linguistic inquiry* 17 (2): 347–354.
- Borer, Hagit, and Yosef Grodzinsky. 1986. "Syntactic Cliticization and Lexical Cliticization: The Case of Hebrew Dative Clitics." In *The Syntax of Pronominal Clitics*, edited by Hagit Borer, 175–217. Brill.
- Bošković, Željko. 2020. "On the Coordinate Structure Constraint, across-the-board-movement, phases, and labeling." In *Recent developments in phase theory*, edited by Jeroen van Craenenbroeck, Cora Pots, and Tanja Temmerman, 133–182. Berlin: De Gruyter Mouton.
- Chomsky, Noam. 1995. *The Minimalist Program*. Cambridge, MA: MIT Press.
- Christian, Donna. 1991. "The personal dative in Appalachian speech." In *Dialects of English*, edited by Peter Trudgill and J. K. Chambers, 11–19. Routledge.
- Citko, Barbara, Joseph Emonds, and Rosemarie Whitney. 2017. "Double object constructions." In *The Wiley Blackwell Companion to Syntax, Second Edition*, edited by Martin Everaert and Henk C. van Riemsdijk, 1–46. John Wiley & Sons.
- Cuervo, María Cristina. 2003. "Datives at large." PhD diss., Massachusetts Institute of Technology.
- Culicover, Peter W., and Ray Jackendoff. 2005. *Simpler syntax*. Oxford: Oxford University Press.

- den Dikken, Marcel. 2023. “High and Low Applicatives of Unaccusatives: Dependent Case and the Phase.” *Linguistic Inquiry* 54 (3): 479–503. https://doi.org/10.1162/ling_a_00450.
- Dixon, Robert MW, and Aleksandra Y. Aikhenvald. 2000. *Changing valency: Case studies in transitivity*. Cambridge University Press.
- Dvořák, Věra. 2009. *Ditransitive verbs in Czech and their nominalizations*. Qualifying paper. Department of Linguistics Graduate School, New Brunswick Rutgers, The State University of New Jersey.
- . 2010. “On the syntax of ditransitive verbs in Czech.” In *Formal Approaches to Slavic Linguistics 18: The Second Cornell Meeting 2009*, 161–177. Michigan Slavic Publications Ann Arbor.
- . 2011. “Inherent case and locality requirement: Evidence from ditransitives and their nominalizations.” *University of Pennsylvania Working Papers in Linguistics* 17 (1): 12.
- Dyakonova, Marina. 2009. “A phase-based approach to Russian free word order.” PhD diss., Netherlands Graduate School of Linguistics.
- Embick, David. 2015. *The morpheme: A theoretical introduction*. Walter de Gruyter.
- Embick, David, and Rolf Noyer. 2007. “Distributed Morphology and the Syntax-Morphology Interface.” In *The Oxford Handbook of Linguistic Interfaces*, edited by Gillian Ramchand, 289–324. Oxford: Oxford University Press.
- Emonds, Joseph. 1986. “Grammatically deviant prestige constructions.” In *A festschrift for Sol Saporta*, edited by Michael Brame, Heles Contreras, and Fredrick J. Newmeyer, 93–129. Seattle: Noit Amrofer.
- . 2022. *The Syntax and Morphology of English Verbs: Patterns that Matter*. Walter de Gruyter.
- Emonds, Joseph, and Rosemarie Whitney. 2006. “Double object constructions.” In *The Blackwell companion to syntax*, edited by Martin Everaert and Henk C. van Riemsdijk, 73–144. Blackwell.
- Fillmore, Charles J. 1965. *Indirect object constructions in English and the ordering of transformations*. The Hague: Mouton & Co.
- Fried, Mirjam. 2011. “The notion of affectedness in expressing interpersonal functions.” In *Slavic linguistics in a cognitive framework*, edited by G. M. Grygiel and L. A. Janda, 121–143. Frankfurt am Mein: Peter Lang [Preprint version, accessed on November 14, 2023: https://ling.ff.cuni.cz/wp-content/uploads/sites/143/2017/10/DE_draft.pdf].
- Georgala, Efthymia. 2012. “Applicatives in their structural and thematic function: A minimalist account of multitransitivity.” PhD diss., Cornell University.
- Gogłóza, Aleksandra. 2021. “Polish datives-an applicative analysis.” PhD diss., Humboldt-Universität zu Berlin.

- Gračanin-Yukse, Martina. 2006. “Double object construction in Croatian: Arguments against Appl0.” *Formal approaches to Slavic linguistics* 15: 94–112.
- Halle, Morris, and Alec Marantz. 1993. “Distributed Morphology and the Pieces of Inflection.” In *The View from Building 20*, edited by Kenneth Hale and Samuel Jay Keyser, 111–176. Cambridge, MA: MIT Press.
- Harley, Heidi. 2012. “Semantics in Distributed Morphology.” In *Semantics - Interfaces*, edited by Claudia Maienborn, Klaus Heusinger, and Paul Portner, 143–168. De Gruyter Mouton. <https://doi.org/doi:10.1515/9783110589849-005>.
- . 2014. “On the identity of roots.” *Theoretical linguistics* 40 (3-4): 225–276.
- Harley, Heidi, and Shigeru Miyagawa. 2017. “Syntax of ditransitives.” In *Oxford research encyclopedia of linguistics*, 1–25.
- Horn, Laurence R. 2008. ““I love me some him”: The landscape of non-argument datives.” *Empirical issues in syntax and semantics* 7 (1): 169–192.
- Huang, Nick, and Tom McCoy. 2011. “Personal datives.” *Yale Grammatical Diversity Project: English in North America*. Available online at <https://ygd.yale.edu/phenomena/personal-datives>. Accessed on April 3, 2024. Updated by Katie Martin (2018).
- Janda, Laura A. 1993. *A geography of case semantics: The Czech dative and the Russian instrumental*. Walter de Gruyter.
- Kayne, Richard S. 2004. “Here and There.” In *Syntax, Lexis and Lexicon-Grammar. Papers in Honour of Maurice Gross*. Edited by C. Leclère, E. Laporte, M. Piot, and M. Silberstein, 253–275. Amsterdam: John Benjamins.
- . 2005. *Movement and silence*. New York: Oxford University Press.
- . 2024. “The DP-Internal Origin of Datives.” Presented at 49° Incontro di Grammatica Generativa (IGG49), Pavia, Italy, February 22–23, 2024.
- Kimenyi, Alexandre. 1978. *A relational grammar of Kinyarwanda*. University of California Press.
- Kiyosawa, Kaoru, and Donna B. Gerds. 2010. “Benefactive and malefactive uses of Salish applicatives.” In *Benefactives and Malefactives: Typological perspectives and case studies*, edited by Spike Gildea, 147–184. John Benjamins Publishing Company.
- Kratochvíl, František. 2014. “Sawila.” In *The Papuan Languages of Timor, Alor and Pantar: Volume 1. Sketch Grammars*, edited by Antoinette Schapper, 351–438. Berlin: De Gruyter Mouton.
- Kratochvíl, František, Matěj Kunderát, and Jeffrey Parrott. 2023. “Stem Change in Sawila.” Presented at Current Trends in Papuan Languages II, Paris, France, February 15–17, 2023.
- Kratzer, Angelika. 1994. “On external arguments.” *University of Massachusetts occasional papers in linguistics* 20: 103–130.

- Krifka, Manfred. 2001. "Lexical representation and the nature of the dative alternation." Presented at DIP Colloquium, University of Amsterdam, November 11, 2001.
- Kučerová, Ivona. 2007. "The syntax of givenness." PhD diss., Massachusetts Institute of Technology.
- Kundrát, Matěj. 2023. "Czech dative DPs in unergative constructions." Presented at OpenPodium of the 29th Central European Summer School in Generative Grammar (EGG), Novi Sad, Serbia, July 24–August 4, 2023.
- . 2024. "Czech Maleficiary and Beneficiary Datives as Specs of Appl and overt P." Presented at 49° Incontro di Grammatica Generativa (IGG49), Pavia, Italy, February 22–23, 2024.
- Landau, Idan. 1999. "Possessor raising and the structure of VP." *Lingua* 107 (1-2): 1–37.
- Lee, Ju-Eun. 2016. "English Personal Dative constructions and applicative theory." *English Language and Linguistics* 22 (1): 39–66.
- Lehmann, Christian. 1983. "Latin preverbs and cases." In *Latin linguistics and linguistic theory. Proceedings of the 1st International Colloquium on Latin Linguistics. Amsterdam, April 1981*, edited by Harm Pinkster, 145–165. John Benjamins, Amsterdam.
- Marantz, Alec. 1993. "Implications of asymmetries in DOC." In *Theoretical aspects of Bantu grammar*, edited by Sam A. Mchombo, 113–150. Stanford, CA: CSLI.
- Marvin, Tatjana, and Adrian Stegovec. 2012. "On the syntax of ditransitive sentences in Slovenian." *Acta Linguistica Hungarica* 59 (1-2): 177–203.
- McGinnis, Martha. 2008. "Applicatives." *Language and Linguistics Compass* 2 (6): 1225–1245.
- Oehrle, Richard Thomas. 1976. "The grammatical status of the English dative alternation." PhD diss., Mass. Cambridge.
- Olsson, Bruno. 2023. "Valency-changing constructions in Papuan languages." Current Trends in Papuan Languages II, Paris, France, February 15–17, 2023.
- . Forthcoming. "Valency Change." In *The Oxford Handbook of Papuan Languages*. Oxford: Oxford University Press.
- Parrott, Jeffrey Keith. 2021. "Post-syntactic mechanisms of pronominal case variation in Germanic." *Acta Linguistica Hafniensia* 53 (2): 132–159.
- Perlmutter, David M. 1978. "Impersonal passives and the unaccusative hypothesis." In *Annual meeting of the Berkeley Linguistics Society*, 4: 157–190.
- Pesetsky, David. 1995. *Zero Syntax*. Cambridge, MA: MIT Press.
- Peterson, David A. 2007. *Applicative constructions*. Oxford: Oxford University Press.
- Progovac, Ljiljana. 1998. "Structure for coordination." *Glott international* 3 (7): 3–6.

- Pylkkänen, Liina. 2008. *Introducing Arguments*. Cambridge, MA: MIT Press.
- Ross, John Robert. 1967. “Constraints on variables in syntax.” PhD diss., Massachusetts Institute of Technology.
- Rubio, Lisardo. 1982. *Introducción a la sintaxis estructural del latín*. Barcelona: Ariel.
- Shibatani, Masayoshi. 1996. “Applicatives and benefactives: A cognitive account.” In *Grammatical Constructions*, edited by M. Shibatani and S. A. Thompson, 157–194. Oxford: Oxford University Press.
- Siewierska, Anna. 2013. “Passive Constructions.” In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology.
- Slavkov, Nikolay. 2008. “Formal consequences of dative clitic doubling in Bulgarian ditransitives: An applicative analysis.” *Journal of Slavic linguistics* 16 (1): 139–166.
- Terzi, Arhonto. 2010a. “Locative Prepositions and Place.” In *Mapping Spatial PPs: The Cartography of Syntactic Structures, Volume 6*, 196–224. Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780195393675.003.0006>.
- . 2010b. “On null spatial PPs and their arguments.” *Catalan Journal of Linguistics* 9: 167–187.
- Théoret, Michel. 1982. *Les discours de Cicéron: la concurrence du tour casuel et du tour prépositionnel*. Montréal: Université de Montréal.
- Watanabe, Honoré. 2003. “A Morphological Description of Sliammon, Mainland Comox Salish, with a Sketch of Syntax.” In *Endangered Languages of the Pacific Rim Publication Series A2-040*. Osaka: Osaka Gakuin University, Faculty of Informatics.